



Ahmad-Khan, Anfaal (2022) *Geography, accountability and capital: an ethnography of ecological accountabilities in Gilgit-Baltistan*. PhD thesis.

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**Geography, Accountability and Capital:
an Ethnography of Ecological Accountabilities
in Gilgit-Baltistan**

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**Submitted in the Fulfilment of the Requirements for the Degree of Doctor of
Philosophy (PhD)**

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June 2022

This thesis is dedicated to the women of Gilgit-Baltistan.

Abstract

This thesis concerns the ideas of geography, accountability and capital; it seeks to explore the construction and articulation of accountability relationships in complex and sensitive spaces of cultural geography — in this case, Gilgit-Baltistan, a region in Northern Pakistan. In doing so, it broadly contributes to our understanding and framing of the notion of ‘*ecological accountabilities*’: a form of accountability that emanates from one’s connection with the ecologies of ‘place’ or *stan*, as in *Pakistan* or *Gilgit-Baltistan* (i.e., nature and land) to which they belong. This geographical/spatial dimension of accountability forms the thrust of this thesis.

The empirical data supporting the arguments put forward in this thesis were derived from intensive ethnographic fieldwork, constituted of in-depth interviews and observations in some of the most remote regions of Northern Pakistan. By drawing on Haraway’s (2015) ‘chthulucene’ and the theoretical notion of ‘assembly’ and assembly thinking, an attempt is made to illustrate five themes: how ecological nature infiltrates body-performing via local belief systems and values; how this permeates ecology as a powerful mediator and governor of all aspects of rural social life, including gendered relations of accountability; how nature underpins the organisation of the social into financial (e.g., micro-saving groups); how capital is produced and circulated in a setting of ecological accountabilities (defined above); and finally, how nature nurtures resilience traits — adapting and enduring — which form the substratum of ecological accountabilities. These themes intersect and overlap in various ways, constituting the contested and oblique nature of ‘ecological accountabilities’; hence they are organised and presented throughout the chapters of the thesis, which intersect and overlap in various aspects, in some cases reinforcing interconnections and in others challenging one another.

This thesis makes several contributions to current research. **First**, it advances our understanding of *accountability-in-nature*. It frames ‘ecological accountability’ as a social apparatus of power which, resisting between the modern and pre-modern social formations at the margins, assembles networks of production and relations of ecological accountability that can still allow for the contemporary neoliberal global order. This is a contribution to what I call the ‘geo-political economy of accountability’. **Second**, it adds to the discussion of *capital-in-nature*. It brings out the ecological ‘limits to capital’ (Harvey, 1982), and provides an insight into how capital subjugates nature in order to work in geographically and culturally complex and fragile places (*stan*).

Keywords: Ecological Accountability, Chthulucene, Land, Nature, Landability, Naturability, Micro-saving, Assembly, Geopolitical Economy, Gilgit-Baltistan

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Acknowledgements



First and foremost, I am grateful to God for bestowing this wonderful opportunity upon me. My beautiful religion has taught me to be patient, determined and grateful in all walks of life; without doubt, nurturing these values has not only bought me countless success, peace and contentment in all my endeavours, but has also instilled a sense of self-determination and resilience within me, which were integral to the completion of my thesis.

I would like to thank my wonderful supervisor, Professor Danture Wickramasinghe, who initially sparked my love for accounting literature in my undergraduate years. He has always been a tremendous source of rich knowledge, inspiration and guidance. I am also grateful to my second supervisor Professor Chandana Alawattage, for later joining me on my journey. His engagement with my empirical findings and help in framing them as ‘stories’ was much appreciated.

I will be forever grateful to the University of Glasgow, the Accounting Cluster and the Wards Trust Scholarship.

I would also like to express my appreciation and gratitude to the people of Gilgit-Baltistan, for their love and hospitality, in particular the women of Danyore and the Chipursan Valley. Amidst their hectic routine of land management, animal husbandry, business responsibilities and family duties, they found precious time to engage with me. Their way of life, personal stories and experiences all formed the foundations of my research and allowed me to ‘see’ the ecological nature of both accountability and capital. I would also like to extend my gratitude to the NGO AKRSP (Aga Khan Rural Support Programme), particularly to Muzaffar Ud Din, its General Manager, along with Aesar Ali, the Lead Access to Finance. Their support and guidance in facilitating my trip to the most remote Northern

¹ In the name of God, the most gracious, the most merciful.

parts of Pakistan will never be forgotten. I would also like to thank the Hussain family for making me feel at home in the faraway mountains of Gilgit-Baltistan. I extend my regards to Muhammad Ilyas from Karakoram International University who was an initial point of support and assistance in my fieldwork.

My most heart-felt appreciation goes to my incredible parents, Aftab Ahmad and Rehana Ahmad, for their unconditional love and support and all their sacrifices. They have always been and always will be my greatest source of strength and motivation.

I am also thankful to my amazing friends, Mengyuan Feng and Najla Alrefaei, who became my PhD family and provided me with moral support throughout this journey.

And last but most importantly, I am forever grateful to my dearest husband and best friend, Sajjad Khan. Thank you for all the countless sacrifices you have made which enabled me to complete my PhD. From sacrificing many career opportunities, to accompanying me on my very long and demanding fieldwork trip, for listening and re-listening to me connect the dots of my fieldwork story, and for spending your weekends in the library with me. These are just a few of the countless things for which I will be forever grateful. Your continuous support and encouragement from the beginning to the very end are truly what enabled me to complete my thesis. I could not have done this without you.

Author's Declaration

I declare that, except where explicit reference is made to the contribution of others, this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Signature:

Printed name: Anfaal Ahmad-Khan

Prologue

Seeing from the agency of geography itself, how does the geography of the Earth interact with humans? What type of relationships do ecologies nurture and fabricate between themselves and humans? Is the physical a part of the social, if so, how does the physical become a part of the social? How does nature organise and assemble the social? How does physical geography underpin individual subjectivity, identity and accountability? Does capital work in remote and culturally complex and pre-modern ecologies? How does capital penetrate and operate within such ecologically and culturally complex spaces? Are these cultural-geographical terrains non-capitalist spaces?

These are some of the deep questions which initially provoked my interest in pursuing research in the field of accounting and accountability. Although they are broad and varied, they are interconnected by three over-arching themes: **capital**, **nature** and **accountability**. Fundamentally, they seek to understand one thing: the inter-relationship between humans, capital and the geographies of their surroundings. My inquisitive nature and desire to understand how these systems coexist and how humans are implicated within earthly geographies was fuelled by a combination of several things.

First, I was intrigued by the disciplinary apparatuses of my previous education. I was fascinated by the interdisciplinary nature of Accounting, in particular, how it draws knowledge from several different fields, including geography, anthropology and sociology to name but a few. This taught me that accounting, especially when contextualised within accountability, extends beyond the organizational setting and has a much wider social and political significance in everyday life. It is not just an academic field, but also provides us with new ways of seeing, perceiving, and doing. In addition, it not only has a profound role in enabling the structuring of society through societal relations (accountability relationships) but is implicated in varying geographical spaces. This geographical characteristic of accounting sparked my desire to undertake accounting research with an acute geographical element to it. My love and passion for geography stemmed from my early years of education, where I was captivated by the phenomenon of the Earth, including its physical features and how human societies are organised and spread across its surface.

My close connectedness to nature was nurtured by my upbringing in the picturesque Ayrshire village of Mauchline. Our home overlooked the idyllic landscape of never-ending

acres of farm crops and lush green fields, scattered with grazing animals, which were divided by ancient drystone walls. The serene landscape of my countryside has always reminded me that I'm not apart from nature, but a part of it, and therefore I grew up to give the natural world appreciative attention.

With regards to this thesis, the context of the study arose out of curiosity about my own country of origin, Pakistan. Its rich geography — including its varied topography, from plains to deserts, forests, plateaus, and snow-capped mountains in the Himalayan North — embedded within its current socio-economic environment had always fascinated me. Moreover, the organic nature of rural society, the cardinal role played by NGOs and the overpowering role of rural woman and their tremendous contributions to Pakistan's financial landscape enthralled me. During visits to rural villages in Pakistan, I had been amazed by the drive, passion, determination, and most importantly the trust and loyalty with which rural females carried out their work. In these geographically harsh, complex and fragile spaces, I discovered life to be simple, the truth to be spoken and nature to be in its purest form. There was definitely something that made these women want to inhabit these harsh, remote, rural territories. Perhaps something spiritual, something non-capitalistic, something beyond our apprehension. My research stemmed from my passion in animating this very village perplexity. Although their environment is commonly perceived as impoverished and mundane, I aspired to explore how these rural females and their ecologies were interrelated. How did they cultivate capital? Why did they do what they did? To whom were they accountable? And ultimately, what governed life on the periphery? Surely their glorious natural surroundings must have some role to play.



أَلَمْ نَجْعَلِ الْأَرْضَ مَهْلًا . وَالْجِبَالَ أَوْتَادًا

“Have we not smoothed out the earth like a bed and made the mountains as its pegs”.

(Quran, 78:6-7)

Chapter 1 | Introduction

1.1 Background

The objective and functionalist view of accounting has understood well how governance and accountability link to everyday operations within capitalistic enterprises (e.g., Roberts, 1991; Ahrens and Chapman, 2002). It has also embraced the way in which accounting connects enterprises with the accountability apparatuses of capital markets. Critical accounting scholarship which embraces subjective and political views of accounting has embraced the way accounting plays a wider political-economic role, connecting, regulating and governing the economy, polity and society (e.g., Unerman and O'Dwyer 2006; Goddard and Assad, 2006; Alawattage and Wickramasinghe, 2009). With the evolution of accounting dialogue, attempts have also been made to understand how accounting operates in the realm of day-to-day life, beyond economic enterprises such as popular culture (e.g., Davison, 2007; Jeacle, 2012; 2017), religion (e.g., Jayasinghe and Soobaroyen, 2009; Carmona and Ezzamel, 2006; Mutch, 2016; Joannides, 2012), charities (e.g., Dhanani and Connolly, 2012;), and NGOs (e.g., Cordery et al, 2019; Uddin and Belal, 2019; Grey et al., 2006; Unerman and O'Dwyer, 2006; O'Dwyer and Boomsma, 2015; O'Dwyer and Unerman, 2008). In effect, there have been various attempts to expand the domains in which accounting can be located and studied. However, accounting scholarship has not paid sufficient attention to understanding how accounting and accountability play out in varying geographical spaces. Despite the vast interdisciplinary nature of accounting, we have very much neglected geography in its entirety, including its socio-cultural, political and financial significance in everyday life. Therefore, we know little about the socio-ecological systems in which accountability relationships are cultivated, acted and re-enacted, and how these accountabilities are intertwined with their surrounding geographies.

Concern for the ecological and natural environment has begun to occupy a prominent role in accounting scholarship in the name of social and environmental accounting (e.g., Grey et al., 1994; Chung and Cho, 2018; Jones, 2011; Soobaroyen and Ntim, 2013; Wong et al., 2021; Hassan, 2022; Qian et al, 2021; Tregidga and Laine, 2022), but little attempt has been made to explore and synthesise accountability as a much 'wider critical accountability' that

explores ‘environmental issues of real concern’ (Gray, 2007, p.181) to our world. However, the limited appreciation of the momentous role local geographies play in accountability relationships can be overcome by understanding and reimagining ‘ecological accountability’ (Russell et al., 2017). Broadly, this can be defined as *the obligation of people(s)² to provide an ‘account’ to nature(s) and in turn nature’(s) ‘ability’ to make people(s) accountable to themselves*. This two-folded characterisation of ecological accountability enables a much ‘wider, wilder and more vivid’ (Loftus, 2016, p.499) account of accountability by seeking to understand accountability beyond social enclosures, in the varying geographical landscapes of the *stan* (places). This ecological dimension of accountability is critical and must be addressed, as ecologies are complex configurations, containing a plethora of actors, systems, interconnections, interdependencies and co-evolving systems. However we know little about how accountability is formed, acted, and re-enacted in these spaces. By reimagining ecological accountabilities, we can begin to untangle the relationships and economies of people on the margins. In these peripheral parts of the world accountability is more than a divisive dialogue between humans, rather it extends to include complex ecological aspects, including the “more-than-human, other-than-human, inhuman and human-as-humus”³ (Haraway 2015, p.160). By recognising the diverse ecological as actors in accountability relationships within socio-ecological landscapes, we can begin to widen the horizons for accountabilities and understand alternative ways to be held accountable to nature. Ecological accountability thereby enables an understanding, not just what Shearer (2002) calls an “accounting for-the-self” and an “accounting for-the-other”, but also an accounting for-the-ecological.

This thesis is an attempt to unravel and reimagine ecological accountability. Ethnographic fieldwork in some of the most rural and remote regions of Gilgit-Baltistan, a Northern province of Pakistan, reveals some interesting characteristics of ecological accountability. Through highlighting these peripheral economies and their local microfinancing arrangements, I not only attempt to demonstrate how accountability is a powerful manifestation of its local geographies (e.g., land, weather, mountains etc), but I also attempt to unveil some fascinating insights into contemporary neoliberal capitalism. I learn that

² People(s) includes the human, more-than-human, other-than-human and human-as-humus (Haraway, 2016).

³ Haraway’s (2015) assemblage ‘human-as-humus’, refers to the oneness of humans with the earth. It includes humans’ entanglement with all various modes of life, including animals, plants, rocks, water, soil, air, etc.

capital penetrates ecologically fragile and complex territories through the exploitation of local geographies and pre-existing nature-embedded accountability relationships.

1.2 Ecological Accountabilities

Amongst many of the inexhaustible themes rooted in the accounting craft, accountability has received a great deal of attention. This is in part due to its inherently polymorphic and multidimensional nature, but also because it takes one beyond disciplinary knowledge to places where varied histories (e.g., Hoskin and Macve, 1988; Fowler, 2010; Godfrey and Hooper, 1966), languages (e.g., Coy et al, 2001; Armstrong and Tomes, 1966), ecologies (e.g., Kuruppu and Lodhia, 2019), politics (e.g., Wickramasinghe and Hopper, 2005; Coy and Pratt, 1988) and cultural traditions (e.g., Efferin and Hopper, 2007) shape worlds. Therefore, there are many rich, varied and inter-disciplinary accounts of accountability. More recently, there has been the growing intervention of ecological thought within accountability literature. As such, accountability is now also encroaching on geographical aspects in the name of ‘ecological accountability’⁴ (see Russell et al., 2017; Belal et al., 2015; Weir, 2019). However, such attempts to ‘ecologise’ accountability (Russell et al., 2017) fail to probe deeply into ecologies to capture the profoundly and ecologically embedded cultures, values, norms and belief systems which characterise ecological accountability relationships. This gap may be attributed to the unapproachable and complex nature of ecologies, or the dominant conception of ‘ecology’, mostly in the context of environmental accounting as a global physical phenomenon of ‘balance’ and ‘imbalance’, and destruction, as human activities exploit and despoil the ecological. Ecology thus appears as a ‘normative’ or desirable status of the ‘external environment’, as a global phenomenon in which we operate. We have yet to frame the ecological, in the context of accountability, as more-than and beyond the physical, by understanding the ecological as:

- i. A socio-cultural phenomenon, as people become attached to physical aspects of ecologies (e.g., the land, mountains, soil etc.). This topophilia⁵ produces and

⁴ See AAAJ Special Issue, ‘Exploring the Historical Roots of Environmental and Ecological Accounting, Auditing and Accountability’ (2021), ‘Accounts of Nature and the Nature of Accounts: Critical reflections on environmental accounting and propositions for ecologically-informed accounting’ (2017) and ‘Ecological Accounts: making non-human worlds (in)visible during moments of socio-ecological transformation’ (2017).

⁵ The ‘affective bond between people and place or setting’ (Tuan, 1974, p.4)

reproduces traditions, values and norms etc. These socio-cultural schemas which emanate from ecological physicalities, permeate a form of ecological accountability between the physical, social and psychological, which produces one's identity and (ecological accountability) relationships with one another.

- ii. An embodied and spiritual force, as localised belief systems attribute sacrality to ecologies. Such sacred beliefs and traditions enable ecologies to become embodied and internalised by inhabitants of ecologies, creating powerful and sacred relationships of ecological accountability.
- iii. Geopolitical as ecologies play an active role in assembling the social into networks of production and relations of accountability.

Thereby recasting the ecological as a socio-cultural, sacred and geopolitical phenomenon, we can begin to understand and envision the ecological as more than a physical feature of our world. This enables a much more diverse understanding of the ecological and the multiple ways in which it has become enmeshed into relationships of ecological accountability. We can begin to foster discussions on ecological accountability, as a cultural, spiritual and geopolitical construction and cohesive mechanism for instilling social, political and economic stability in varying geographical landscapes.

Ecological accountability penetrates all facets of the social, political, economic and financial. It thereby works in a variety of ways, some of which include nature-embodiment, social assembling, self-inspired governance and networks of production. More broadly speaking, ecological accountabilities interconnect ecologies, humans and capital, which one can argue are the three basal elements of the Earth's neoliberal system. Therefore, ecological accountabilities are more than a divisive dialogue between human and non-human, economy and ecology, they are a cardinal mechanism for sustaining and stabilising life in socio-ecological⁶ territories. In order to understand the *ways* in which ecological accountabilities are produced, re-produced and articulated, we must centralise the notion of 'ecology' in accounting studies, so that we can apprehend the over-arching, penetrating, and triumphant role the ecological plays in influencing and dictating 'accountability' and 'capital'. As such,

⁶ I refer to socio-ecological territories as a coherent system of biophysical and social factors that regularly interact in a resilient, sustained manner.

we need to foster more discussions of *accountability-in-ecologies*, *capital-in-ecologies*, *governance-in-ecologies* and so on.

1.2.1 Territorialising accountability vs ecologising accountability

In the recent past, accountability research has found its relevance in new, complex geographical territories. Such studies, mainly in two streams of research, come close to recognising ‘ecological accountability’. First is the set of literature that identifies the ways in which capitalist and neoliberal dynamics of accountability penetrate and (mal)function in specific territories often identified as nation states or specific parts of them, for example rural Sri Lankan villages or Bangladeshi garment factories (see Alawattage and Wickramasinghe, 2009; Wickramasinghe et al., 2021; Jayasinghe and Wickramasinghe 2011; Hopper et al., 2009 etc.). A large majority of such accounting research is centred on emerging economies (see Wickramasinghe et al., 2021), resulting in what almost amounts to territorialisation of accountability. Such territoriality, illustrated through western, post-colonial, capitalist and neoliberal forms of accounting and accountability systems and practices, implies an openness and permeability of accountability to being enacted and re-enacted in physical spaces. Second is the stream of literature which explores ‘indigenous’ thoughts and practices of accounting/accountability. This micro and localised form of accountability is also a type of territorialisation of accountability but differs in that it looks at territory from the bottom-up, exploring accounting/accountability possibilities which arise through local and indigenous systems of thoughts and practices (e.g., Gallhofer and Chew, 2000; Gallhofer et al., 2011). Such studies of accountability depict an ‘enabling’ (Masquefa et al., 2017) form of accountability in varying indigenous settings.

Such studies, perhaps unintentionally, also make a profound contribution to the proposition of ecological accountability research, as their empirical contexts are geographically sensitive and play an integral part in crafting the type of accountability presented. Adopting this perspective, we can conclude that a few studies of ecological accountability have emerged, but they merely inform the geographical context or micro forms of social accountability that are enacted in varying territories or localised indigenous groups. Such ecological accountabilities expand to consider localised, grassroots (Unerman and O’Dwyer, 2006; O’Dwyer, 2005; O’Leary, 2017; Martinez and Cooper, 2017; Dixon et

al, 2006), and micro-accountability (Alawattage et al., 2019) relationships but they do not probe deeply into the ‘ecological’ to understand how specific aspects of it (ecologically informed and premised cultures, values, beliefs, traditions etc.) become directly or indirectly implicated in relationships of accountability. In this framing, ecological accountability is not implicated in environmental/sustainable accounting, which attempts to universalise and generalise ecology-human interactions through a universal set of doctrines and principles such as the United Nations Sustainable Development Goals (e.g., Bebbington and Unerman, 2018; 2020 etc.). Instead, it is an ecology-specific, place-bound, localised and personal relationship, which gives way to multiple varieties and possibilities of human-nature relationships, which are formed, acted and re-enacted based on the ecological facets of its environment.

There has also been an increasing circulation of ecological-related concepts such as ‘socio-nature’, ‘socio-ecology’ and the ‘human-nature’ nexus which have become burgeoning concepts in recent years and have promoted the view that humans and nature share an inexorable relationship. In doing so, they have highlighted the interdependencies between the social and the ecological. The next logical step would be to extend this relationship in order to help us understand the connections between accountability relations with and within ecological complexes.

In order to understand accountability-in-ecologies and reimagine localised and ecology-specific ecological accountabilities, we must first open up the limited borders of accountability thought. As Munro and Mouritsen (1996) have suggested, accountability should be understood as a much broader concept, one that extends beyond formal accounts to embrace concepts of how individuals give account of and for their daily lives and in so doing produce and reproduce their individual and collective identities. Moreover, to examine the diverse aspects of accountability, we must explore different organisational settings (Roberts and Scapens, 1985), such as the fragile and complex ecological terrains of our economies. Only then are we able to understand how local identities, beliefs, values and the lived realities of rural communities are linked to their ecologies, and craft unique forms of accountability. Only then are we able to understand how accountability plays out in varying geographical spaces.

Based on my empirical findings, I conclude that in rural eco-systems ecological accountability networks are mushrooming. In these spaces, accountability is a collective product of social cultures, ideologies and power struggles which in turn are all by-products of the ecological. As such, we can see how the notions of ‘ecological’ and ‘accountability’ come together. Although stating the obvious, it is important to note that ecological externalities are ‘ecology-specific’, and therefore each and every ecological territory produces its *own* unique and varied ‘ecological accountabilities’ (as empirically illustrated in **Chapters 4 & 5**).

Discussion around *accountability-in-ecologies* is important at a micro-scale as they bring to the surface the increasingly social nature of ecologies, and illustrate how ecologies extend beyond the physical, non-human world. Nature operates not only outside and inside our bodies, but ‘also through our bodies, including our embodied minds’ (Moore, 2017) and therefore the ecological becomes a powerful instrument, influencing our actions and decisions. In this way, ecologies exercise their inherent natural governing powers, by embodying or becoming affiliated with the social. This is also how the ecological weaves through the interstices of societies and becomes implicated in networks of accountability. However, ecological accountabilities resonate beyond the peripheral, as they play a fundamental role in linking ecological spaces to the global centre (a point elaborated on in the chapters to follow). Several modern neoliberal agendas such as micro-financing, global capitalism and neoliberal governmentality, then become ramifications of small, localised ecological accountabilities.

1.2.2 Capital-in-Ecologies

The concept of capital-in-ecologies challenges the widely held superficial view that capital is triumphant, hegemonic, encompassing, expansive and penetrating and fabricates all aspects of social and economic life. This notion of ‘unstoppable capital’, the great ‘empire’, or more recently, ‘global financialization’ and ‘neoliberal capitalism’ all promote the inexorable shift towards a perpetual, global, reigning capitalism. Capital-in-ecologies opposes this widely held fatalistic viewpoint. It argues that this ‘capitalocentric’ way of thinking limits the imagining of ‘other worlds’ (Gibson-Graham, 1996, p. 6), in particular, the geographies of capitalism. Instead, capital-in-ecologies promotes an ‘anti-capitalocentric

narrative' (Gibson-Graham,1996; Gibson and Pretes, 2008), and looks beyond the heroic reifications of capitalism to address how capital works in ecological territories. This represents a shift from the violent, powerful, and politically dominant role of capital to one that is much more organic, fluid, innate and naturally produced, thereby highlighting an alternative depiction of capital, one that unfolds in ecologically complex and sensitive spaces.

Neoliberalism has propelled capital to travel to uncharted territories, producing new and unexplored spaces and relations of capital accumulation. Such neoliberal transformations have made the Earth a contemporary domination with productive powers (Hardt and Negri, 2017). This is looking at the world through the geographical diffusion of market relations, producing 'varieties of capitalism' (Hall and Soskice, 2001). A particularly interesting form of 'Earthly capital' is produced in this process: a form of capital extrapolated by the nature of relationships between local geographies and its inhabitants. Capital-in-ecologies thereby works in the name of neoliberal operations, such as microfinance, and micro-saving practices. Within these micro-financial systems, we can see how capital is entwined with its ecological environment, be it the local land, weather or animals. These nature-elements both directly and indirectly assemble micro-saving groups into geographically distinct segments and control the flow of capital. They do so directly in a variety of ways. For example, in cold regions, heavy snowfall prevents agricultural activities which are the basis of earning, or in remote mountainous regions access to markets is blocked. In these ways, capital flows are hindered by nature. And indirectly, the ecological becomes a part of the social. For example, in rural villages such as those where I carried out my fieldwork, local land acts as collateral in microfinancing activities as only the possession of land permits micro-borrowing. Therefore the ecological plays an important role in assembling networks of capital production. As a site and means of extraction and production, ecologies thus become central to the operation of economic systems in ecological spaces. Capital-in-ecologies therefore depicts capitalism not as an economic system but as a situated and multispecies world-ecology of capital, power and re/production (Moore, 2016; Haraway, 2016). This fairly new economic representation of capitalism is "not an economic system ... not a social system; it is a way of organizing nature" (Moore, 2017) and all its constituents.

Therefore, capital-in-ecologies situates capital in the wider world of social practices, values and phenomena (Castree, 2010). In ‘more-than-capitalist’ worlds—one populated by a plethora of non-capitalist economic practices (Gibson-Graham et al., 2013)—local beliefs, mysterious tales and social identity are only some of the mechanisms which dictate the flows of capital (illustrated in the empirical chapters to follow). Similarly, Karl Polanyi advocated that capital must be embedded and located within the greater social landscape as a social phenomenon, as values, traditions and cultures influence how capitalism functions. As such, capital has many ‘diverse concrete forms and is always embedded’ (Polanyi, 1994 as cited in Castree, 2010, pg.1739) in its ecological environment. Capitalism is a highly adaptive and constantly mutating formation (DeLanda, 2002). Capital-in-ecologies therefore embellish varied ‘ecological capitals’, and thus there is no such thing as a universally consistent ‘capitalism’ unaffected by its ecological environment.

Accordingly, one can argue that capital has certain ‘ecological limits’ to growth. We have long known that geological forces are capable of affecting and altering the Earth’s systems, but we know much less about how systems of capital can be affected and altered. Some works have emerged pointing to the ‘limits of capital’ (Harvey, 2018; Jessop, 2004; Leyshon, 2004; Moore, 2015), ‘deconstruction of capital’ (Gibson-Graham et al., 2013; Day, 2002), and ‘end of capitalism’, alternatively suggesting we look ‘beyond capitalism’, towards ‘more-than-capitalist’ economies (Gibson-Graham, 2006). Such works are a step towards opening dialogue for a different ecological imagination of capitalism.

In essence, one way or another, despite its functionality, capitalism is simultaneously enacted, enabled and constrained by the ecological context within which it operates. Capital is critical in understanding ecological accountabilities and hence throughout this thesis, capital will appear and reappear at certain times as a “way of organizing nature” (Moore, 2017), and at other times as a political phenomenon which fails to work in ecologies because of its own limits.

1.3 Framing Geography in the Study: Cthulucene and telling geostories

Geographies are quite often hard to grasp because their representation is usually abstract and unapproachable. We observe physical geographies such as weather, seasons, natural

disasters that are constantly around us, but we know little about how these phenomena are involved in everyday relationships between humans and their communities, economies and natural environments. Donna Haraway's (2015) proposed ecological epoch '*Chthulucene*' is the conceptual frame I have used to broadly position geography in the thesis, as it helps to explore some of these socio-ecological perplexities. Unlike the more well-known *Anthropocene*⁷ (Crutzen, 2002, 2006, 2010, 2016; Steffen et al., 2011) and *Capitalocene*⁸ (Moore, 2016, 2017, 2018) discourse, Chthulucene looks beyond humans and capital as being centre-stage in terms of power on Earth. Instead, it recognises the tentacular interconnections that make up our world and "entangles myriad temporalities and spacialities and myriad intra-active entities-in-assemblages – including the more-than-human, other-than-human, inhuman and human-as-humus"⁹ (Haraway, 2015, p.160). Chthulucene therefore offers new ways to reconfigure relations to the Earth and all its inhabitants, including all biotic and abiotic factors.¹⁰ There is no hierarchy between humans and the non-human world, instead there are overlapping interdependencies as processes and relationships are tightly interwoven.

Using the chthulucene framework, I attempt to show — in the form of two empirical geostories — *how* varied geographies across different spatial scales produce a plethora of different practices, beliefs, cultures, traditions and relationships of beings with their environments, which give way to different ecological accountabilities and systems of capital. By placing 'geography' alongside 'accountability' and 'capitalism', one can draw on the ecologically deep-rooted values (such as stories, mysterious tales, traditions, beliefs, and cultures etc.) and interdependencies (such as relations of accountability and spheres of capital production) found to exist in fragile and complex ecologies. After all, each ecology represents:

⁷ This view regards humans as the core and most significant entity in the universe, and nature as an object for humans to use and exploit (see Kortenkamp and Moore, 2001).

⁸ This is a way of understanding capitalism as a connective geographical and patterned historical system. It articulates capitalism as a world-ecology of power and re-production in the web of life (Moore, 2019).

⁹ Haraway's (2015) assemblage 'human-as-humus', refers to the oneness of humans with the earth. It includes humans' entanglement with all various modes of life, including animals, plants, rocks, water, soil, air, etc.

¹⁰ Biotic factors are living organisms in the eco-system which are capable of reproduction. Examples include animals, plants, fungi, birds, and other similar organisms. Whereas abiotic factors are non-living physical and chemical elements in the ecosystem, and examples include soil, air, sunlight, water, temperature and minerals.

[an] *accumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations' bicultural transmission, about the relationship of beings (including humans) with one another and with their environment... [it] is a way of knowing; it is dynamic, building an experience and adapting to changes. It is an attribute of societies...* (Berkes, 2017, p.8)

This indicates the 'patchiness' (Tsing, 2015) of ecologies. Many prior works have recast ecologies as heterogenous assemblies (see Anderson et al., 2012) of actors, processes and natures. This embedded diversity of each and every ecology not only opens up dialogue about 'ecological accountabilities' and the varied 'geographies of capitalism' but also reveals how the imperatives of socio-ecological territories exclusively craft the peripheral, producing ecological alternatives to governance, constellations of power and social assemblies. By exploring these phenomena, we are able to shed light on the 'lost geographies of power' (Allen, 2011) that put our societies and relationships in place. As such, I argue that geography is certainly not exogenous to the social, rather it is deeply embedded in biophysical, social and cultural processes (Sheppard, 2016; Moore, 2015 (b)) which shape spaces, communities, societies and nations. Therefore, geography provides a conceptual framework to indicate the ecological interdependencies and deep dynamics of accountability and capitalism in ecologically fragile and complex spaces.

Putting this geographic fascination into the context of our study, **two** geostories of ecological accountability in Gilgit-Baltistan are explained and illustrated:

1. **Danyore (see Chapter 4):** a rural village, full of greenery and acres of fertile fields, surrounded by glaciers and snow-capped mountains. In Danyore, land is the central mechanism, implicated in an array of tentacular connections, directly and indirectly mediating relationships of capitalistic accumulation and ecological accountability.
2. **Chipursan Valley (see Chapter 5):** a dry, remote valley containing huge snow-capped mountains and fast-flowing rivers filled with glacier torments and boulders. Potato plantations, scarce wheat fields and apricot trees are scattered across the valley floor. In Chipursan, nature is the overarching, hegemonic force, and becomes implicated in tentacular connections by embodying its inhabitants in the way of nature-stories. Ultimately capital and accountability are premised on nature's precarity and volatility.

Both places contain different geographies and therefore different practices, beliefs and relationships of beings with their environments. As such, these geographies cultivate different ecological accountabilities and ways for capital to work (see Chapters 4 & 5). Therefore, placing geography at the centre of the thesis allows us to understand how ecological accountabilities are extremely heterogenous and rely upon non-capitalist and ecological forms (i.e., nature, land, weather and so on).

1.4 Research Gap & Aims of the Thesis

As established above, this thesis contends that ecological accountabilities are fabrications of varying geographies which come to the surface in local capitalistic arrangements. Adopting approaches from anthropology, gender studies and economic geography, this thesis offers both an ethnographic account and an overarching narrative of the role and workings of ecological accountability.

Geographical spaces (ecologies) are fascinating sites where there is an interesting dynamic between the traditional, natural way of life and modern, neo-liberal interventions and yet they remain largely unexplored in accountability terms. We know that local traditions (such as values and beliefs) are beautiful yet irreplaceable features of ecologies which have long been intertwined with their natural surroundings. However, we have yet to understand *how* neoliberal capital in the form of NGOs and microfinance institutions overcome these spatial complexities (e.g., through nature-governance, ecological accountabilities etc.) and essentially make capital ‘work’ in these fragile and complex territories. In these territories where it becomes difficult to sustain human life, how does capital establish its ‘residence’? (Marx, 1973)

Accordingly, this thesis seeks to address how these two paradoxes — pre-existing geographies and neoliberal capital — come together in organic, rural territories. In doing so we attempt to understand how ecological accountabilities are formed, acted and re-enacted. Subsequently, the aims of the thesis are threefold:

1. to extend the **accountability** debate in the accounting literature beyond its current territorialisation and ecologising, to capture and frame a new and alternative

ecological accountability, which is localised, personal and both directly and indirectly related to the ecologies of its surroundings;

2. to empirically explore and explain how the local **geographies** of ecologies, in the way of ecology-human interdependencies play out in the construction of ecological accountabilities; and
3. to understand how these ‘ecological accountabilities’ are manifested in structures and relations of **capital** (including microfinancing and localised, micro-borrowing arrangements), thereby connecting ecological accountability with the broader dynamics of global capitalism.

Addressing these issues not only better informs us about the geographies of accountability and the accountability of geography, but also contributes to our understanding of human-human, human-nature and nature-capital relationships of accountability.

1.5 Ethnographic ‘Geostories’

Following the objective of exploring accountability in a natural, earthly landscape, this study adopts an ethnographic approach. The process of ethnography involves the researcher being immersed in their chosen fieldwork site to:

...participat[e], overtly or covertly, in people’s daily lives for an extended period of time, watching what happens, listening to what is said, and/or asking questions through informal and formal interviews, collecting documents and artefacts—in fact, gathering whatever data are available to throw light on the issues that are the emerging focus of inquiry (Hammersley and Atkinson, 2007, p.3).

Ethnographic fieldwork was thus conducted in Gilgit-Baltistan, a Northern Province of Pakistan, in two different geographical settings —the rural village of Danyore and the remote valley of Chipursan (the demography and geography of fieldwork sites are detailed in Chapter 3) — over an extensive six-month period.

It is generally accepted that ethnographies provide insights into the processes and meanings that sustain and motivate social groups (e.g., Herbet, 2000; Anderson, 2021). These processes and meanings are central to the construction and transformation of

ecologies, communities, societies and landscapes; they are both ‘place-bound and place-making’ (Herbet, 2000). Therefore, ethnographies tell us about the geographies of places—how cultures, traditions, norms, values, relationships, interdependencies and localised systems make and re-make their surroundings. Ethnographies thus entail rich ‘stories’¹¹ of the human population, including accounts of their daily lives, their topophilia¹¹ (see Tuan, 1974) and their reasons for acting and living life in certain ways. Such ‘stories’ are more than mere anecdotes (Skjørshammer 2002), in actual fact, they provide a useful framework through which we can investigate experience (Webster and Mertova 2007) and gain access to the complexity of human affairs and human activity (Rooney et al., 2016). Thus, ethnographic stories unpack the ‘nitty gritty’ of how societies/ecologies/landscapes/territories operate (Wills and Trondman, 2000 p.11). As my stories contain an acute geographical element and attempt to re-narrate the ecological world as a powerful, influential, penetrating and dominant aspect of the Earth, it is perhaps more appropriate to identify my stories as ‘geostories’.¹²

Geostories provide a way to explore and understand the geographical architecture of our societies. The prefix ‘geo’ encompasses the vastness of the Earth’s surface, and all its varied topography¹³ (i.e., mountains, rivers, lakes, glaciers, valleys, roads, cities, villages etc.). As a suffix, ‘stories’ address the lived realities, ways of life, embedded cultures, traditions, values and norms along with a host of other of socio-ecological matters. I adopt this ‘ethnographic geostory’ method to present my fieldwork findings in the form of two distinct set of ‘geostories’ (Chapter 4 & 5, see below). This method was inspired by Latour’s (1998; 2004) encouragements to ‘feel’, ‘follow’ and ‘experiment’ when ‘ecologising’ experiences and moments. Through storytelling, it is possible to frame these intimate experiences, the relationship between the human and non-human world, the biotic and non-biotic, and sentiments, along with an array of particular problems and thoughts that surfaced during my fieldwork through detailed narratives, pictures, observations and diagrams. In doing so, I was able to not only theoretically, but also empirically illustrate the inter-relationships between local geographies, relations of accountability and assemblages of capital.

¹¹ The ‘affective bond between people and place or setting’ (Tuan, 1974, p.4)

¹² This term is borrowed from ‘Geostories: Another architecture for the Environment’ (Ghosn and Jazairy, 2017)

¹³ Topography refers to the arrangements of the natural and artificial physical features of an area.

1.6 Plan of Exposition

Essentially, this thesis attempts to illustrate the ecological accountabilities that were experienced, observed, acted and re-enacted in the ecologies of Danyore and Chipursan in Gilgit-Baltistan, Pakistan. In these ecologies, ecological accountability manifested as a cohesive, localised, personal and ecology-specific relationship of accountability, assembling the social, political and financial facets of the ecological. The following six chapters contain empirical and theoretical materials which intersect and overlap in various sections, moving between inquiry and exposition, geography and feminism, ecological and social, social and political and economic and ecological. In bringing together this cornucopia, the forthcoming chapters ultimately attempt to showcase the richness and profundity of ecological accountabilities in creating and reaffirming all aspects of the ecological.

Chapter 2, ‘Accountability and Critical Geographical’ navigates the current accountability literature to understand how aspects and accounts of ecological accountability have been both directly and indirectly articulated. It does so by first reflecting on the seminal work of Russell et al (2017), ‘Accounts of nature and the nature of accounts: Critical reflections on environmental accounting and propositions for ecologically informed accounting’ and identifies their propositions for reimagining an ecologically informed accountability. These are then used to reflect on the current body of literature to identify themes, discussions, ideas and studies that have contributed to our understanding of the ‘ecological’ and how this confers meaning upon the notion of ‘accountability’. In the process, the chapter identifies how we can strengthen and better articulate the idea of ecological accountability. Finally, the chapter ends with making clear the ecological accountability contributions the remaining chapters intend to make.

Chapter 3, ‘Telling Geostories: theoretical and methodological underpinnings’ articulates the theoretical and methodological underpinnings of the thesis. To begin with, the chapter elucidates the terms ‘ecology’ and ‘assembly’, those felt, experienced and observed in Gilgit-Baltistan. Such illustrations unveil how local geographies, organic capital, and accountability relationships work together to create strong, resilient and independent ecological assemblies. Assembly, as a critical theoretical lens, describes how ecological variations produce varying political, economic and ecological alternatives, which can then produce a heterotopia (Foucault and Miskowiec, 1986; Miller, 2015) of possible different

ecological assemblies. The multiplicity of ecological assemblies is foregrounded. Gibson-Graham's (2002; 2007; 2008; 2014; 2016; Gibson-Graham et al., 2013; 2020; Gibson-Graham and Rolevink, 2016) acclaimed 'diverse economy', 'community-economy', 'alternative economy' and 'post capitalist' economy perspectives, as well as Tsing's (2016) notion of 'pericapitalist' spaces and Harraway's (2015) 'chthulucene' bring alive the ways in which capital (mal)functions within the ecological assemblies of Gilgit-Baltistan. In developing ecological assemblies, full of weaving interconnections, interdependencies, actors and systems, the beautiful ecological accountability relationships which are being produced and reproduced in these arrangements is elaborated upon. The chapter then progresses to highlight the methodological approaches adopted, including the philosophical stances, research approaches and methods. Finally, and perhaps most importantly, the chapter concludes with the backstory of the forthcoming geostories (presented in Chapters 4 and 5). This introduces some insightful details, such as the overall geography and demography of the region of Gilgit-Baltistan, and most importantly, it provides background on the fieldwork sites (ecologies) — the rural village of Danyore and the remote Chipursan Valley.

Chapter 4, 'Savaging, Salvaging and landability', is a geostory of how land becomes implicated in relationships of ecological accountability and local capitalistic systems. This geostory explains the superiority of land as a powerfully operating, governing, and enforcing mechanism of a local *tanzeem* (micro-saving group) in Danyore. This setting is closely connected to nature, and the local women possess a natural way of life, as does the local capital. Anna Tsing's (2017) conceptualisations, 'savaging' and 'salvaging', are used to show how land simultaneously destroys and reconstructs the socio-economic landscape through enabling relationships of ecological accountability and systems of capitalistic accumulation to work. The two-folded paradoxical process of savaging and salvaging is identified as 'land-ability'. Land's 'ability' to: (1) savage the traditional way of living by retaining the female and taking the male away from the land, and (2) to salvage it through harnessing capital, both at a micro level through the *tanzeem* and at macro level through circuits of capital, is illustrated through a series of conversations, observations, pictures and interviews, all which act as valuable sources of data. Land-ability is premised on land's ability to embody the 'heart, soul and mind' of its rural female possessors. This land embodiment therefore is found to nurture interesting relationships of ecological

accountability — relationships enacted and re-enacted based on land values e.g., integrity, resilience, patience and so on. Finally, the geostory reveals how ecological accountability relationships flourishing in this peripheral rural village are fascinating yet disturbing realities of people, capital and its geographies as ultimately, Capital, Land and Accountability are central interlocking issues, socially assembled and manifested.

Chapter 5, ‘Adapting, Enduring and Naturability’, is another geostory of ecological accountability. This geostory brings to the surface the compelling relationship between nature and the female possessors of the extremely remote Chipursan Valley in Northern Pakistan. Ethnographic fieldwork coupled with a series of focus groups in the 11 villages scattered along the valley floor reveal the ways in which nature, in its many forms (weather, nature-stories, natural disasters and so on) is crafting interesting and precarious ecological accountability relationships of naturability. Nature is the dominant, penetrating and hegemonic force; it nurtures female resilience traits of ‘adapting’ to and ‘enduring’ the valley’s extremely harsh weather and living conditions. ‘Adapting’ is the capacity to respond to adversity, individually or through collective action after sudden nature-inflicted threat and to re-establish a stable condition, whereas ‘enduring’ is the capacity to carry forward, live life and reaffirm the social–ecological system in place, including the social, financial and ecological conditions that underpin the stability and foundations of life in the valley. Jacob’s (2000) resilience dynamics of habitat maintenance, diversity, self-refuelling, co-evolving, dependence and interdependence are essential phases of adapting and enduring. Through these resilience dynamics, nature produces strong, resilient ‘community economies’ (Gibson-Graham and Miller, 2015) and powerful relationships of ecological accountability which enable women to maintain a liveable life within the extremely remote and isolated Chipursan valley. The harsh geographical conditions there (snowfall, freezing temperatures, infertile soils), make it difficult or almost impossible for capital to be penetrated and ‘performed’ (Aitken, 2007). This presents an enchanting economic representation of capitalism, one in which nature inhibits the growth and accumulation of capital. Capital ‘freezes’ like its surroundings and is subjugated to nature. The geostory essentially reveals that capital, nature and accountability are central interlocking issues, ecologically assembled and manifested.

Chapter 6 ‘Ecological Accountabilities: Towards a geo-political economy of accountability?’ synthesises the empirical findings of the geostories narrated in Chapter 4 and 5. The chapter shows how the fascinating yet particular ecological assemblies which are unveiled in the rural villages of Danyore (Chapter 4) and the remote Chipursan Valley (Chapter 5), enable us to understand how the social (relationships of ecological accountability) and economic (systems of local capital) are being acted and re-enacted in nature-rich spaces, where nature is the dominant, powerful and hegemonic force of the everyday. By closely studying these peripheral and marginalised parts of our world, the chapter challenges the re-thinking of the profundity of local geographies, namely their powerful yet subtle role in governing, mediating, influencing and controlling the flows of capital and relationships of accountability. This chapter engages in a discussion on how nature, embodied and enacted via deep and engrained histories, ancestral values, local traditions and spiritual beliefs of Danyore and Chipursan’s ecologies, collectively permeate and nurture relationships of ecological accountability and orchestrate systems of capital. The chapter then progresses to discuss how these ecological accountabilities and the diverse, more-than-capitalistic community economies in which they are being acted and re-enacted can lead us to consider and imagine a possible geopolitical economy of accountability. The idea of a geopolitical economy of accountability is elaborated upon. The chapter contends that local geographies can organise, structure and assemble the social and the economic in places where nature is loved, appreciated and respected. This paves the way towards a dialogue on ecological accountabilities.

Chapter 7, ‘Conclusion’, concludes the thesis by reflecting on the geostories of Danyore and Chipursan and how these lead to the consideration of reimagining economies and relationships of ecological accountability in the peripheral and neglected corners of our world. Finally, the chapter concludes with directions for future research and some concluding ethnographic reflections.

Figure 1-1: Village in Danyore, Gilgit-Baltistan



Source: Photograph taken by author

Melted geographies of the past are being recast, resolidified and remade as new expressions of reconstructed constellations of social [accountability] relations. (Smith, 2010)

Chapter 2 | Accountability and Critical Geography

2.1 Introduction

The previous chapter outlined the key elements of this thesis. In doing so, it centralised the notion of ‘ecological accountability’, thereby situating this study in the domain of accountability research. It broadly defined ecological accountability as *the obligation of people(s) to provide an ‘account’ to nature(s) and in turn, nature’(s) ‘ability’ to make people(s) accountable to itself*. However, in this relationship, ‘people(s)’ extends beyond the human, to capture the “more-than-human, other-than-human, inhuman and human-as-humus” (Haraway, 2015, p.160). This two-folded characterisation of ecological accountability extends accountability beyond social enclosures and recognises the ecological as an equally significant actor in accountability relationships within socio-ecological landscapes. It was also contended that ecological accountabilities are fabrications of their surrounding geographies, and work in a variety of ways (as social, political and financial mechanisms) instilling socio-ecological and financial stability in ecologies/ecosystems/communities/rural societies. Many aspects of ecological accountability have thus been briefly introduced. The notion of geography was also introduced. This chapter seeks to review the current accountability literature and understand how geography has been assimilated into work on accountability. In doing so, the niche green/social and environmental/ecological work in this research domain is reviewed in attempt to better understand ecological accountabilities i.e., how they work, how they are produced, reproduced and enacted. Therefore, this chapter has two objectives — first, to understand *how* physical geographies (e.g., nature, land, weather) permeate accountability relationships and second, to theoretically illustrate how geographies, through these ecological accountability relationships play a pivotal role in creating powerfully binding relations of accountability. Overall, the chapter aims to bring to the surface and strengthen the relationship between accountability and ecologies.

2.2 The Social Foundations of Accountability

In order to crystallise the conceptual framing of ecological accountability, it is important to first understand accountability. After all, ecological accountability is an exclusive ‘type’ (Ritchie and Richardson, 2000) of accountability. Quite simply, accountability is a central mechanism that disseminates discipline (Roberts, 1991; Hoskin and Macve, 1988) and enhances the organisation (Lindkvist and Llewellyn, 2003), transparency (Gallhofer et al., 2011; Gray, 1992) and the functioning of organisations and societies. It does so by situating people in a relationship where they are made to take responsibility for their actions and decisions: ‘the giving and demanding of reasons for conduct’ (Roberts and Scapens, 1985, p.447). In other words, accountability can be viewed as the ‘duty to provide an account (not necessarily financial) or reckoning of the actions for which one is held responsible’ (see Dixon et al., 2006, p.408).

The social nature of accountability has long been endorsed in the accounting literature (e.g., Roberts and Scapens, 1985; Roberts, 1991), predominantly in relation to human actors such as individuals, societies, tribes, colonies, populations and organisations. Seminal works in this domain are centred around the permeation of accountability in everyday life (e.g., Alawattage et al. 2019, Unerman et al, 2010, Ahrens and Chapman, 2002, Jacobs and Walker, 2004), positioning accountability as a societal construction. Following these conceptualisations, quite arguably, the most critical function of accountability is the role of ‘binding’ (Giddens, 1979) social places together, making it a ‘chronic feature of daily conduct’ (Giddens, 1979, p.57). As such, many studies have provided evidence for accountability as an everyday practice (e.g., Joannides, 2012; Ahrens and Chapman, 2002; Alawattage et al., 2019), integrated into all aspects of social life — including decision-making, self-governance and the constitution of the self (e.g., Roberts, 1991; Goffman, 1971). These empirically rich and inherent themes have undoubtedly given accountability its character and complexity. As such, the concept of accountability exists in a multitude of fields — politics (e.g., Sinclair, 1995; Nelson, 1993; Grant and Keohane, 2005; Coy and Pratt, 1998; Scobie et al, 2020; Humphrey, 2002), economics (e.g., Mayston, 1993; Pahl, 2000), history (e.g., Sargiacomo and Gomes, 2011) and philosophy to name but a few. Accountability is thus a highly interdisciplinary concept, and can be interpreted in a variety

of ways, including its old legal definition and newly emergent conceptions, which have taken accountability to new spaces and crystallised new relations of accountability.

2.3 New enclosures: towards an Ecologically informed Accountability

While these emerging discussions around accountability are useful, and are both theoretically and empirically rich (e.g., Sinclair, 1995; Roberts, 1991; Gray, 1992) there have been many calls to explore accountability beyond such social enclosures (e.g., Messner, 2009). Roberts (1991) highlights the need for more ‘inclusive concepts’ of accountability, perhaps one that goes beyond human-human relations of accountability? Similarly, Munro and Mouritsen (1996) suggest that accountability should be understood as a much broader concept, one that extends beyond formal accounts to embrace concepts of how individuals give account of and for their daily lives and in so doing produce and reproduce their individual and collective identities. Hopwood (1976, 1994) have also emphasised the need for increased research on accountabilities in the everyday lives and cultures of people. In order to examine these diverse aspects of accountability, we must explore beyond the boundaries of organisational settings (Roberts and Scapens, 1985; Unerman et al., 2010), and broaden out our narrow classification of stakeholder groups (see Unerman et al 2006; 2010) to consider other ‘keystone’¹⁴ actors (see Bebbington et al, 2019 below) such as physical geographies (i.e., natural landscapes, species, nature, eco-systems and weather). This geographical extension of accountability dialogue responds to some of these concerns and broadens the horizons of ‘account’ and ‘account-giving’ in accountability relations (Russell et al., 2017; Boltanski and Thevnot, 2006).

There is a niche, but growing area of ‘green’ accounting literature, in which several attempts have been made to “ecologise” accounting, the majority of which, nevertheless, are centred around Corporate Social Responsibility (CSR) and Social Environmental Accounting (SEA) (e.g., Maunders and Burritt, 1991; Rubenstein, 1992; Owen et al, 1997; Gallhofer et al, 2000; Cho and Pattern, 2013). Although nature and ecological thought were originally introduced into accounting literature in the 1970s (Matthews, 1997), since then accounting works have seldom explored the intriguing linkages between geography and

¹⁴ The keystone actor nomenclature originates from the idea of ‘keystone’ species in ecology works - see Paine, 1966 and 1969. It largely refers to those species in ecosystems that have an outsized influence despite being few in number.

accountability. The Accounting Auditing and Accountability Journal (AAAJ) Special Issue ‘Ecological accounts: making non-human worlds (in)visible during moments of socio-ecological transformation’ (which includes the notable works of Russell et al., 2017; Sullivan and Hannis, 2017; Laine and Vinnari, 2017; Feger and Mermet, 2017; Ferreira, 2017; Cuckston, 2017; Böhm et al, 2017; Gaia and Johns, 2017) is perhaps one major step towards reimagining an ‘ecologically informed accountability’ (Russell et al., 2017). Although they argue that there is ‘little or no environment in environmental accounting, and certainly no ecology’ in the current literature, their paper, along with the others in this AAAJ Special Issue provides empirical, practical and theoretical material to advance further work in this area. In the remainder of this chapter, we elaborate on some propositions put forward by Russell et al., (2017) for better understanding and scripting ecological accountability (see Table 2-1):

Table 2-1: Propositions for understanding ecological accountability

Russel et al’s (2017) future propositions for understanding ‘ecological accountability’	Examples of current themes in AAAJ, AOS and CPA *geography themes are in red
<i>‘contemporary case studies of calculative practices that mediate human-nature relations...[how] they become embedded in environmental governance, [and] critical examinations of how they work (or not) are needed.’ (p. 1443)</i>	Social Environmental Accounting (SEA), NGO and Microfinance studies, NGO/ downwards/grounded/localized/ grassroot/horizontal/ surrogate/micro accountability
<i>‘socio-ecological controversies, what classifies as accounts... [such as] complex non-human entities (e.g., animals, rivers, forests, lakes) [how these] feature at the center of the justification and articulatory practices-different forms of accounts’ (p.1443)</i>	Different forms of accounts (e.g., species extinction, mother nature and nature), stakeholder group studies, human-nature nexus , deep green position, systems theory, Anthropocene, stewardship accountability, key-stone actors
<i>‘narratives expressed through photographs, sculpture, or fiction, in collaboration with others from environmental humanities, recognizing the messy, contingent and complex qualities of social-ecological change’ (p.1444)</i>	Critical ethnographies , generative metaphors, stories of response-ability , self-nature relationship studies
<i>‘generate a wider, wilder, more vivid interdisciplinary mosaic that is fully representative of the political and moral concerns at play in “accounts” of “nature” and which may also prove more enchanting to our scholarship, to our lives, and to the lives and relations we have with the non-human entities that make up our planet’ (p.1444)</i>	Systems perspective, other-than-human persons , chthulucene , informal/invisible accountable, topophilia , socio-spatial relation framework , TPSN (territory, places, scales, and network) framework, neoliberalising nature , biopolitics, neoliberal governance

These propositions are used to navigate through existing themes within the accounting, and in some cases, the geography literature (highlighted in red above), that indirectly or unintentionally contribute to the development of ‘ecological accountability’. Several analogies, vocabularies and theoretical viewpoints are borrowed from the geography discipline in order to introduce depth to the existing human-societal knowledge in accounting, particularly concerning accountability relations with and within their complex, fragile geographical settings. In reviewing the niche body of work in of ecological studies, we attempt to show how matters of ecology (such as nature, weather and so on) become implicated in accountability relationships. The theoretical analysis of ecological accountability not only ultimately brings to the surface the over-powering, dominating, infiltrating and controlling characteristics of nature, but also reveals that geographies form an unavoidable part of accountability relationships.

2.4 Accountability: a view from SEA, Microfinance and NGO works

In the accounting literature, and even in work that engages with the ecological dimensions of accountability, there is only limited appreciation of the momentous role local geographies play in accountability relationships. Perhaps Gray et al. (1990; 1996; 1997; 1987, 1988, 1992; 2014), in their important works on Social, Environmental Accountability (SEA hereafter), come closest to recognising the penetration of the ecological into social relations of accountability. In Gray’s attempts to characterise ‘accountability’, he advocated a critical concern for the natural environment. Moreover, his SEA praxis is also useful for considering polyvocal voices (such as nature, species, habitats and so on) and broadening out the notion of accountability from the organisation/ entity to ecosystems, ecologies and natural landscapes (see Section 2.4.1). Aspects of ecology are also somewhat, although not intentionally, present in ‘contemporary case studies of calculative practices’ (Russell et al., 2017, p.1443), namely microfinance and NGO studies (see Section 2.4.2) which empirically illustrate how accounting can organise non-human life within socio-ecological systems (see Cuckston, 2017). These studies not only open doors to addressing the ‘complexity and messiness’ (Dey and Russell, 2014, p.263) of ecological systems, but also provide a useful context for understanding how local ‘microaccountability’ (Alawattage et al., 2019) relationships become entangled with local geographies and give way to channels of ‘environmental’ governance and ecological accountability.

2.4.1 Social, Environmental Accountability (SEA)

The human-nature nexus most prominently infiltrates the accounting literature through Gray and his colleagues' 'social accounting'¹⁵ project (Gray et al, 1997; 2002; 2009; 2014) in the name of Social Environmental Accounting. Gray (1992) highlighted over many years the issue that the natural environment had not occupied a prominent role in accounting scholarship. As a result, many of his works adopted principles of the 'deep green'¹⁶ (*see Section 2.5.1 for more*) position which recast accountability as an environment-centred, community construction (e.g., Gray, 1992; Gray et al, 1987; 1988; 1991; 2009). A clear illustration of this 'environmental accountability' came up in Gray's (1990) study of small-scale companies in New Zealand. Given the small population of the country and their strong sense of belonging and concern for their local communities and environments, accountability manifested itself in a very natural and self-disciplined manner. Gray found that individuals and communities were able to identify the organisations, including their employees and senior management, that were involved in causing environmental harm to their local communities (through polluting rivers, flooding areas, destroying wildlife habitats and over-cropping causing soil degradation). Because of this social transparency, the miscreants were unable to conceal their poor corporate social responsibility and therefore over time they were forced to adopt community values which promoted care for the natural environment. These values gradually became diffused throughout organisational structures and challenged aspects of formal accountability. Eventually, in this localised setting, accountability became premised on community and environmental concern. This study is a notable illustration of how social values and principles extend, to encompass the natural environment and in turn, permeate formal organisational accountability relationships.

Without doubt, Gray et al (1997; 2010) and their praxis for SEA is a preliminary move towards critical ecological accountability research. Their work proves not only useful to encourage discussion of polyvocal and 'minority' (Allard-Poesi, 2005) voices — including a variety of stakeholders (Gray and Owen, 1996), communities (Gray, 1990), and species

¹⁵ Social accounting 'is the opening up of new spaces, of new accountings, not simply reacting to old ones. The project seeks engagement and the changing of practice' (Gray, 2002, p. 698).

¹⁶ The deep green theory asserts that our human societies and industrial civilisations are unsustainable and must be reconfigured and challenged in order to preserve ecosystems and allow for a sustainable future for species and habitats to thrive on our planet.

(Gray and Milne, 2018) — in social environmental accountability relations, but it also encourages us to propose new imaginings¹⁷ (Gray, 2002) by reconsidering and reconfiguring the environment in order to contribute to a ‘wider critical accountability’ that explores ‘environmental issues of real concern’ (Gray, 2007, p.181) to our world. After all, SEA is a moving social construction of accountability relationships that responds to both ecological and societal changes (see Owen, 2008), and it therefore should bring together diverse aspects of the social and the ecological, producing a utopia of ‘heterogeneous’ (Baker and Schaltegger, 2015) accountabilities and ‘heteroglossic accounting’ (Macintosh and Baker, 2002; Macintosh and Hopper, 2005). Following Gray’s dictum of social accounting,¹⁸ perhaps SEA is also the universe of all possible accountabilities, with no single environmental accountability — instead there are ‘many [social, environmental accountability] projects each with different theoretical, social and political allegiances’ (Gray, 2002, p.69).

Aside from Grey’s work on bridging the environment with the social, Social Environmental Accounting Research (SEAR) on the whole has been well documented and critiqued (e.g., Milne, 1996; Matthews, 1997; Bebbington, 1997; Parker, 2005; 2011; Owen, 2008; Chung and Cho, 2018). However, critical understandings of ecology, nature and local geographies (e.g., nature-stories, nature-myths, weather, land, mountains, soil, and nature-relations) and how they are enacted in accountability relationships remain scant. After all, ecological spaces contain ‘*non-standard organizational forms*’ (e.g., eco-systems, species life cycles, community economies) and as a result, peculiar and complex ‘governance structures emerge’ (Laine et al., 2020), ones that are intertwined with diverse aspects of ecologies. As such, Laine et al (2020) quite rightly argue that we need more engaged, reflective, critical and radical research in the field of SEA which seeks to understand the dichotomy between the social and the complex ecological. Baker and Schaltegger (2015) propose some new directions for future SEAR. They argue for enhanced pragmatic¹⁹ research, particularly around the “role of accounting in providing accountability to a variety of stakeholders” (p. 270). Following the pragmatist reality that “people enact their

¹⁷ In accounting research, ‘imaginings’ has been used to reference ‘new forms of accounting innovations that can provide more accurate representations of organisational performance for stakeholders’ (Baker and Schaltegger, 2015, p.277).

¹⁸ Gray (2002) identifies ‘social accounting’ as the universe of all possible accountings.

¹⁹ Pragmatic research draws on practical, sensible and realistic aspects as opposed to theoretical principles and considerations.

environment rather than discover it” (Wicks and Freeman, 1998, p. 132 cited in Baker and Schaltegger, 2015), they call for greater understanding of how accounting processes, systems and accounts reflect the natural environment in stakeholder accountability relationships. Similar calls have been echoed by Cuckston (2017), who says that “extant accounting literature has not theorised how accounting [and accountability] can organise non-human life within socio-ecological systems” (p.1534).

2.4.2 Grassrooting accountability: a view from Microfinance & NGO studies

However, despite many avenues that still do not venture into the SEA research agenda, it has another great merit. It gave a major impetus to a burgeoning area of studies exploring the victims of neoliberal economics, for example, studies on microfinance, NGOs and charities, all of which emerged to ‘help’ the poor in peripheral societies. These studies not only illustrate a shift in accountability from its normative origins (see Roberts Scapens, 1985), to increasingly empirical and pragmatic conceptualisations (see Baker and Schaltegger, 2015; Messner, 2009), but also reveal how accountabilities — such as NGO accountability (O’Dwyer and Unerman, 2006; 2008, Boomsma and O’Dwyer, 2014; 2015; O’Dwyer, 2010), downwards accountability (Agyemang et al, 2017; Ebrahim, 2003; Dixon et al 2006; Goddard and Assad, 2006; Marini et al, 2017), grounded accountability (Scobie et al, 2020), localised accountability, grassroots accountability (O’Leary, 2017), horizontal accountability, surrogate accountability (Rubenstein, 2017) and microaccountability (Alawattage et al., 2019) — exist beyond the organisational, and are in fact, implicated in close-knitted communities, and in rural, uncharted territories (Alawattage et al., 2019) and intricate socio-ecological settings within varying geographical locations.

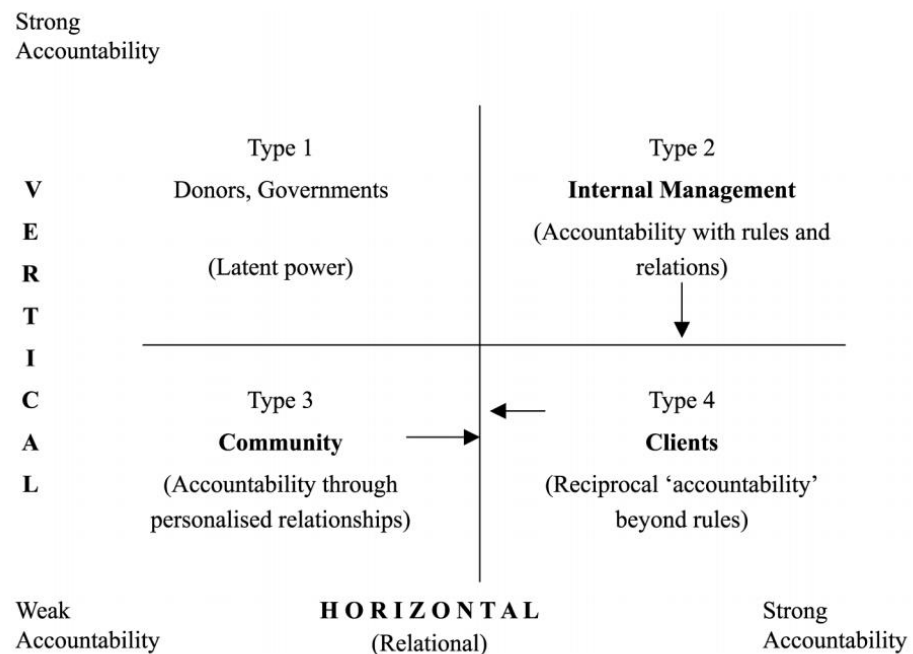
Thus, this body of literature allows us to situate accountability in the ‘wider civic sphere’ (Brown and Dillard, 2013, p.1) of the Earth, and most importantly, it allows us to empirically view accountability as a more complex ‘relational concept’ (Robert, 1996), reflective of the relationship between social (such as NGOs, microfinance lenders and borrowers) and ecological actors. This paves ways to exploring and understanding ecological accountabilities. Although there is little mention of ecology in such studies, we can see bright prospects for ecology.

Most notably in this regard, is the work of Alawattage et al. (2019). Their micro-level study of microfinance in a rural Sri Lankan village brings to the fore the intricate, inter-dependent and socio-spatial nature of accountability, which they call ‘microaccountability’. Their conceptualisation of microaccountability — the ‘*structuring and formalization of convivial relationships into a capillary system of accountability*’ (p.38) — illustrates how microfinance arranges and mobilises interpersonal accountability relationships that already exist between family members, neighbours, and the tight-knitted communities to ensure financial discipline in lending and repayment arrangements. In doing so, they highlight Messner’s (2009) concern for incorporating non-rational aspects of communication, such as emotions and affection, into informal accountability relations. Adopting this social-centric approach to accountability, they identify microaccountability as a ‘tool of social governance’ as it permeates local traditions, cultures, values, norms and beliefs in order to assemble the social and financial landscape of micro finance. One can therefore argue that micro finance exploits what is already in place, what is already customary and what is already happening in localised spaces. As a result, Alawattage et al (2019) identify that under the realm of neoliberalism, microfinance institutions are no longer “enclosed sites for the organization of bodies” (p. 40), instead they are part of “flexible networks for the circulation of capital” (p. 40). They cite Foucault’s (2008) ideas that “neoliberalism represents an extension of economic rationalism into areas of life that have not previously been considered in economic terms” (p. 40). Building on Foucault’s (2007) ideas, that neo-liberal governance is an expansionary, centrifugal force, pushing market logic to the end of the Earth, Alawattage et al. (2019) provide us with a provocative starting point to consider how micro finance, NGOs and neoliberal capitalism become implicated in networks that extend beyond the social and the economic, to the ecological.

Re-embedding economies into ecologies (Gibson- Graham, 2009) and understanding how such ‘community economies’ are ‘creating other worlds’ (Gibson-Graham, 2007; 2016; Gibson-Graham et al, 2013; 2016; 2019; 2020) through the instructive context of, for example microfinance, we can better understand the open, pervasive, and adaptable (Alawattage et al., 2019) nature of accountability, namely how it ‘accommodates’ ecological profundities and complexities. After all, microfinance is premised on its ability to be tailored to individuals, communities (Alawattage et al., 2019) and ecologies (i.e., what is proposed, see Chapters 4 and 5). If it does not do so, it may threaten the survival of microfinance

institutions and NGOs (see Gray et al., 2006). Such an account is illustrated by Dixon et al (2006), who seek to explore why microfinance in Sub-Saharan Africa had not evolved as expected. They conduct a case study on an emerging Zambian microfinance project and employ Ritchie and Richardson's (2000) fourfold typology to derive an accountability framework (see Figure 2-1) which locates diverse forms of NGO accountability models.

Figure 2-1: Accountability Framework



Source: Dixon et al (2006, p.418)

Type 4 accountability (i.e., representing clients) represents 'socializing accountability', or alternatively, one could argue, 'surrogate accountability'²⁰ (Rubenstein, 2007) as essentially, clients are part of social networks within the local Zambian community and therefore possess the power to act as 'surrogates' (Rubenstein, 2007), maintaining discipline and governing relations of accountability through their strong 'mutual ties'. However, Dixon et al (2006) postulate that accountability becomes problematic when NGOs attempt to 'customise' borrowing arrangements at a grassroots level within communities (i.e., Type 3

²⁰ According to Rubenstein (2007), surrogate accountability involves an actor—a surrogate—who substitutes for the presence of one or more key accountability holders that cannot represent themselves effectively and 'powerfully' during one or more phases of the accountability process which includes, for example, setting standards, finding and interpreting information and so on.

accountability), where accountability exists as an informal arrangement that is usually ‘spoken or unrecorded’. Perhaps here, the ‘second-best’ (Rubenstein, 2007) alternative to accountability in these ‘community-economies’ (see Gibson-Graham 2012) would be to consider the natural enforcement mechanisms that exist in these communities, such as spiritual beliefs (see Yasmin et al., 2018; O’Dwyer, 2010); Hawariyuni and Kassim, 2019) and matters of ecology. NGOs could also strive to enhance their ‘physical, value or epistemic closeness’²¹ (see Grey et al, (2006) for Rawl’s (1972) notion of closeness) with their socio-ecological communities in order to understand the fine workings and intricate geographies of these communities. Therefore, enhancing what Dixon et al. (2006) call ‘weak accountability’ in the community setting requires a better understanding of community beliefs, values, norms and traditions which permeate actions and decisions and influence relations of accountability. In this regard, Alawattage et al (2019) explore how individuals are networked into capillary systems, one distinct aspect of Hardt and Negri’s theory for immaterial labour²² in their account of micro accountability (see above). However, perhaps we need to go beyond social phenomena, in order to understand how ‘*the production and manipulation of affects in the body*’ (Hardt and Negri, 2000 p.27, cited in Alawattage et al., 2019, p. 41) are connected to the deep ecologies of social spaces?

Aside from Dixon et al. (2006) and their study of NGO accountability, it is generally well known that the accountability “*relationship[s] become more complicated...and apparently more mysterious*” in capitalistic arrangements (Marx, 1976, p.1054) where the social, political and ecological overlap. However, from above, we can see how microfinance and NGO studies provide a useful basis for exploring *how* “accounting [technologies and accountability relationships] can organize non-human life within socio-ecological systems” (Cuckston, 2017, p.1534) as ultimately, microfinance institutions and NGOs depend on ‘self-regulation’ (Ebrahim, 2003) and the ‘self-determination’ (O’Leary, 2017; Scobie et al,

²¹ See also Unerman and O’Dwyer for an account of NGOs and ‘closeness’ - ‘a global opinion poll of 37,572 people in 32 countries, commissioned by the BBC World Service in January 2006, showed the level of approval for a variety of institutions to be highest for NGOs (60 per cent of respondents felt NGOs had a mainly positive influence, only 12 per cent thought they had a mainly negative influence) (Globescan/PIPA, 2006). This placed NGOs higher in terms of public approval than the United Nations, the World Bank, “World Public Opinion” (i.e., perceptions of the positive or negative impact of world public opinion), news media, the International Monetary Fund, and global companies’ (p.306).

²² Hardt and Negri’s theory of immaterial labour focuses on three distinct aspects: ‘communicative labour through information networks, interactive labour of symbolic analysis and problem solving, and the production and manipulation of affects in the body’ (Hardt and Negri, 2000, p.27, cited in Alawattage et al., 2019, p. 41)

2020) of their recipients, something known as the ‘raison d’être of NGOs’ (Dewi et al, 2019, p. 1118). It therefore becomes crucial to understand what drives self-accountability at the grassroots level in rural territories and remote communities.

This is illustrated by Scobie et al (2019) in their fascinating account of ‘grounded accountability’ within the indigenous Māori community. The authors find that local NGOs orientate their practices and operations towards the ‘culture of the communities’ that they serve. In doing so, they devolve full responsibility for setting accountability standards to the Māori community so that they may ‘realise their own self-determination’. As a result, their shared *Whakapapa* — “which views a structured genealogical relationship between all things including contemporary Māori, one another, ancestors, descendants, land and resources, and results in obligations to people and place across generations” (p.105) — creates a localised accountability that is grounded in “kinship, place and inter-generational relationships” (p.106). In this study, accountability extends from ‘people to place’ as their shared *whakapapa* instils a sense of communal care to maintain and enhance their ecological environment for future generations to come, and therefore accountability encompasses their genealogical relationship with land and water. This is one notable study (see also Marini et al., 2017 who explore how accountability depends on ‘sensitivity to local cultures’), but further NGO and microfinance studies that devolve accountability to the local, indigenous, and rural communities will allow us to probe into the deep ecologies of these spaces in order to understand how accountability and capital (as understood by NGOs and microfinance institutions) work in these settings.

2.5 Understanding Ecological Accountability

Following the onset of the SEA, microfinance and NGO research agenda which (re)activated the significance of environmental issues — something that had been very much neglected since the 1970s (Matthews, 1997) — we came to see how accountability is also beginning to encroach on geographical perspectives. Accountability networks are now also mushrooming in the landscapes of rural, uncharted and indigenous territories (e.g., Alawattage et al., 2019; Scobie et al., 2019; Dixon et al., 2006; Belal et al., 2015; Marini et

al., 2017 etc.), producing a variety of ‘ecological accountabilities’.²³ In this thesis, as mentioned previously, ecological accountability is broadly defined as: *the obligation of people(s) to provide an ‘account’ to nature(s) and in turn, nature’(s) ‘ability’ to make people(s) accountable to itself*. Using such a conceptualisation, ecological accountability therefore becomes wholly concerned with the ecological and how it becomes implicated in relations of accountability. Apart from the few studies previously mentioned, we currently know little about the interrelationship between accountability and deep aspects of ecology (Russell et al., 2017), namely how they come together to create ecological accountabilities, bring to the surface new visibilities between nature and humans, and most importantly, how are they enacted within their settings.

2.5.1 The deep green position

Adopting the “deep green” position provides a useful basis for understanding how we can overcome the challenge of accounting for accountability in ecologies.²⁴ We can see elements of this argument riffle through the early works of Gray (1992), where he introduces the “deep green” position as a way of articulating and understanding accountability and producing non-financial accounts of the biosphere. He centralises the notion of the ‘deep green and the principles of environmentalism’ by first reinforcing the principles of ecology²⁵ (see Table 2-2), and then by establishing their resonance with systems theory and its related ideologies.

²³ These studies are regarded as producing eminent practices of ecological accountability as their geographical locations, and its arising cultures, traditions, values, norms etc are all a product of their socio-ecological environment. These arising, local, contextual factors are then translated into their actions, discussions and relations of accountability.

²⁴ Aside from the deep green position, there are similar approaches such as the ‘people and environment’ perspective (Castree, 2001), otherwise known as the ‘social-nature perspective’ (Castree, 2001) where “the social and the natural are seen to intertwine in ways that make their separation – in either thought or practice – impossible” (Castree, 2001, p.3). This recognises the interconnectedness of society and nature and such approaches are useful positions that should be employed in accountability studies in order to understand ecological accountabilities.

²⁵ The four principles of ecology in Table 2.2 were advocated by Barry Commoner, one of the founding fathers of ecology.

Table 2-2: Principles of Ecology

The Four principles of ecology

- Every separate entity is connected to all the rest
 - Everything has to go somewhere
 - You cannot get something for nothing from it
 - Nature knows best
-

Source: Commoner (1972) as cited in Gray (1992)

Like the principles of ecology, Gray purports that systems thinking has two principles: first, that it recognises “that all things are connected and thus total understanding of any one thing requires a complete understanding of all other things” and second, that a “complete understanding is impossible and that issues must be addressed through the consideration of bounded subsystems — a complex process by which the universe of all possible events or things is reduced to more manageable systems” (p.405). In following this trail of thought, he depicts the Earth as a ‘subset’ of a “complex interacting set of systems which support life”, including the subsystems of “rain, cloud and water; of birth, growth, death and decay; of creatures and species interdependence; of species and habitat dependencies; and so on” (p.406). He emphasises that the removal of or interference with any of these elements can have an impact on several, if not all aspects of ecosystems, including humans and the social. Therefore, in such “systems” and “subsystems”, where everything (including aspects of ecology and humans) is complex and interdependent and where ‘holism’²⁶ pervades (see Maunders and Burritt, 1991), accountability becomes blurred (Gibbon, 2012). In such settings, Gray (1992) argues that the ‘deep green view’ calls for the development and duty of personal accountability, to understand ““for what?”, “who?”, “to whom?” and “how?”” (p. 414) one is held to account. This “increases the number of things which are made visible, increases the number of ways in which things are made visible and, in doing so encourages

²⁶ Generally, holism theory asserts that parts of a whole are in continuous intimate interconnection and can therefore not exist or be understood without the whole. Maunders and Burritt (1991) in their AAAJ paper assert that ‘ecology’ is systemic discipline, ‘concerned with holism and multiple interactions among elements’ (p.16).

an increasing openness” (p. 415) for transparency and accountability, not just in ‘organizations’ as Gray (1992) states, but also in ecosystems.

Therefore, really internalising the principles of ecology/systems thinking can help make the ‘inside’ of ecosystems — such as human-ecological interdependencies, nature and species-cycles, ecological actors — visible. Moreover, the deep-green position allows us to engage in new ways of thinking about accounts, particularly how they are vivid, complex and entangled within many socio-ecological ‘meshworks’ (DeLanda, 2006).

2.5.2 Accountability to Nature: narratives of the planet

Adopting such perspectives also allows us to understand how ‘*complex non-human entities* (e.g., animals, rivers, forests, lakes)’ (Russell et al., 2017, p.1443) become centralised in different forms of accounts and accountability relations.

This is illustrated in Chew and Greer’s (1997) study, where they adopt a systems perspective (see Grey, 1992 above) to synthesise a suitable form of accountability for the Australian Aboriginal and Torres Strait Islanders (ATSI), an indigenous group of people that are closely intertwined with their pre-ancestral and natural ways of living. Many Aboriginal and indigenous cultures believe that Mother Earth is ‘*the beginning and end of all life on Earth*’ (Walker, 1988, p. 339) and therefore such communities attribute sacrality to Nature. Similarly, the authors find that the ATSI people attribute worship and sacrality to their marine and river eco-systems. The ATSI people thus believe in a ‘*powerful rainbow serpent*’ called ‘*Thuwathu*’ which lives in their surrounding seas, and part of their belief is that failure to comply with the Law, which involves ‘*protecting the environment from pollution*’ will result in the *Thuwathu* taking retribution and killing everyone (see p.285). This is known as their ‘Dreaming Law’: the laws and principles set out by the action of mythical beings, which travelled from place to place creating the geographical landscape and its people. Arguably this is a representation of (ecological) accountability to a river eco-system which diffuses self-governance, self-discipline and accountability from its people to its ecological environment.

Therefore, using a systems perspective as in the study above, we can better see the complex entanglements between people and their ecologies in rural and indigenous spaces.

This is also evidenced in the local 'Dreaming Law' which emphasises the significance of 'kinship'. In the Dreaming Law, 'kinship' not only includes social actors such as families and communities, but also extends the concept of 'kinship' to include all elements of the universe, such as the stars, animals and plants. It also proclaims that these universal elements and its people are '*interconnected*' and '*interrelated*' (p.287). This further complicates the notion of accountability, as social and geographical features are inexorably tied. Thus, Western forms of (financial) accountability fail to work in these localised contexts, as Chew and Greer (1997) find that there is a clash between the financial codes of accountability and the local Aboriginal culture: it "penalises initiatives, stops development and cuts across our Aboriginal way of doing things", and therefore it becomes "ineffective, disabling and alienating" (p.277) to indigenous and rural communities. In these settings, an "accountability that includes complexity and the non-calculative is more appropriate" (Gibbon, 2012, p. 201). Systems perspectives, as evidenced above, offer one suitable way in which we can frame the ecologically embedded relationships of people with their surrounding nature to cultivate a more organic and suitable ecologically informed accountability. After all, in these settings *people give accounts to nature*, not to each other.

Outside the accounting literature, it has long been understood that there are 'other-than-human persons' (Hallowell, 1963, p. 23) with which human can maintain 'social relations', such as large and small mammals, insects, birds, fish, some plants, the wind, stars, forest spirits, lakes and so on (see Black, 1977 and Lovelock, 2000). To some extent, nature has been attributed human-like characteristics, as is noted in the works of Miller and Davidson-Hunt (2013), who contend that rivers, glaciers and mountains also have agency. However, aside from the previously mentioned study by Chew and Greers (1997), accounting studies have not fully comprehended the 'non-human' in accountability relations. Some studies have taken account of species extinction (Gray and Milne, 2018), mother nature (Cooper, 1992), biodiversity (Cuckston, 2017) and nature (Grey 1992; Cuckston, 2018), but they have neglected the accountability relationship between people and nature.

2.5.3 Beyond human: ‘Keystone actors’ and accountability

One way in which we can incorporate the ecological into accountability relationships is through Bebbington et al. (2019) and their ‘keystone actors’ ideology. Considering ‘keystone actors’ in accountability relations, beyond the human and organisational within the ‘planetary boundaries’²⁷ (Antonini and Larrinaga, 2017) offers new ways to explore the ‘wider social and economic environment’ (Robson et al., 2017) in which ecological accountability relationships are formed and re-formed.

This is illustrated by Bebbington et al. (2019) in their study of accountability in the Anthropocene (see section 2.6 for more details).²⁸ They show how accountability can thrive in ‘telecoupled spaces’:²⁹ places where there are interdependent, socioeconomic and environmental interactions between human and natural systems. In doing so, they engage with Osterblom et al (2015) and their case study of biodiversity changes within the ocean engendered by different seafood production companies. Such companies are ‘keystone actors’ in the seafood sector as they control significant percentages of catches and turnover in the marine industry (see Österblom et al., 2015). They are not just economically but also ecologically embedded in their operating environments. As such, for several reasons this poses many difficulties in assessing individual accountability and responsibility: it becomes difficult to hold an individual actor/entity accountable as there is often an ‘entanglement of responsibilities’ between the keystone actors; collective impacts from their actions may impact different geographical locations in the sea and therefore tracing responsibility again becomes difficult; and, finally, their actions can have system-wide effects on sea life, causing disturbance to food-chains and other marine eco-systems. In response to this, Bebbington et al. (2019) propose ‘stewardship accountability’ (also see Vollmer, 2020) as a ‘stronger’ and more suitable way of assessing ocean governance and (ecological) accountability. This articulates the duty to nurture and take care of the ocean not only for current but also for future generations, inspiring economic and organisational transformations towards a

²⁷ ‘Planetary boundaries’ is a concept that involves the Earth system processes that contain environmental boundaries. It is commonly used to define the environmental limits within which humanity can safely operate.

²⁸ Bebbington et al. (2019) broadly characterise the Anthropocene as a period in which environmental changes drive changes in our social and economic systems and vice versa. Generally speaking, Anthropocene refers to the geological epoch when humans had power and impact on the Earth’s eco-systems.

²⁹ This term is derived from telecoupling, a term borrowed from Liu et al., (2015) that seeks to identify how a change in one part of a socio-economic-ecological system creates effects elsewhere.

sustainable future. In this way, ‘keystone’ actors are made to feel a sense of moral accountability and fear repercussions for ocean damage in the years to come. In this way, stewardship accountability not only allows the ‘discharge of responsibility to relevant others’ that materially affect the Earth’s eco-systems, but it also allows accountability to be enacted amidst the complex interconnections of human entities and natural systems (in this case the ocean).

Aside from Bebbington’s work, there is a niche cluster of studies that also consider other keystone actors in relation to ecological accountability. Egan (2014) explores how a large university was held accountable for drought conditions and water scarcity throughout large parts of Australia between the 1900s-2000s. They found that ‘water accountability’ was successfully diffused across the university management by broadening out the classification of actors to include human and non-human participants, such as water. This gave rise to enhanced ‘water efficiency decision-making’ and led to the implementation of ‘water principles’ within building developments. Similarly, Atkins and Thomson (2014) explore how forest conservators should be made accountable for the destruction of forest biodiversity through nurturing ‘nature-based principles’ of accountability, ones that promote a duty of care towards the natural environment and encourage a harmonious relationship with nature. They argue that such accountability principles should ‘make visible the natural damage and educate individuals on their responsibilities to nature in order to inspire and/ or force individuals and institutions to change their behavior and respect nature’ (p.282). ‘Without [such] accountability mechanisms that represent the natural environment, nature will be destroyed’ (p.278). Dey and Russell (2014) also encourage aspects of moral accountability in order to restore the geological status of the River Garry in Scotland.

Therefore, keystone actors link organisations, entities and corporations (such as seafood companies, universities, forest conservators and water wardens), matters of ecology (such as the ocean, water, forest, and rivers) and people into tri-accountability relationships and hold each of them accountable to the other. Through considering other ‘keystone actors’ that are either directly or indirectly related to matters of ecology, we are able to widen the horizons for ecological accountabilities and understand alternative ways to be held accountable to nature. In other words, in settings where accountability would usually become a lost and disintegrated concept, ‘keystone’ actors ensure accountability to ecologies is restored.

Ecological accountability is therefore not only what Shearer (2002) calls an “accounting for-the-self” and an “accounting for-the-other”, but also an accounting for-the-environment.

The deep-green position, narratives of the planet and keystone actors (all discussed above) give an insight into the ‘complexity and messiness’ (Dey and Russell, 2014, p.263) of ecologies and ecological accountabilities. We not only learn that humans and their environments are assembled on many scales, such as scales of culture (Adams, 1988), ecosystems (Holling, 1987, Ulanowicz, 1986), earth systems (Earnst, 2000) and even the universe (Layzer, 1991) but on these scales, there is a plethora of polycentric governance systems, which further complicates the idea of ecological accountability.

2.6 Accountability in the Chthulucene: our current geological epoch

Perhaps we need to reframe the recent debates and discussions around ecological accountability in the desired /resistive geological epoch, the ‘Chthulucene’³⁰ (Haraway, 2015) so that we can grasp the inherently multidimensional, polymorphic and socio-ecologically complex nature of ecological accountability. Unlike the more well-known and dominant *Anthropocene*³¹ (Crutzen, 2002, 2006, 2010, 2011) and *Capitalocene*³² (Moore, 2016, 2017, 2018) discourse, *Chthulucene*³³ looks beyond humans and capital as the centre of power on Earth. Instead, it recognises the tentacular interconnections that make up our world and ‘entangles myriad temporalities and spacialities and myriad intra-active entities-

³⁰ The word ‘chthulucene’ is derived from the Greek work ‘chthon’ which means Earth and denotes all things that dwell in and under the Earth (see Haraway, 2015).

³¹ The anthropocene dates as early as 1610 (Lewis and Maslin, 2015) and alludes to the idea that humans are solely responsible and have shaped life on earth for thousands of years. The melting of glaciers, the rise in carbon dioxide emissions following the industrial revolution and global warming is all a result of intensified human impacts on the natural environment resulting in system-wide effects such as global climate change and biodiversity loss. Therefore this view regards humans as the core and most significant entity in the universe, and nature as an object for humans to use and exploit (see Kortenkamp and Moore, 2001).

³² The capitalocene gained significance following the birth of global capitalism, recognising global capitalism as the driver of today’s ecological crisis, through the destruction and exploitation of nature to enable its mass accumulation. This view depicts capitalism as a connective geographical and patterned historical system. It articulates capitalism as a world-ecology of power and re-production in the web of life (Moore, 2019).

³³ The chthulucene provides an alternative way for thinking about (or thinking-with) humans and non-humans in response to the current ecological crisis. Haraway (2015) critiques the anthropocene and calls for an alternative to the capitalocene as she argues that humans and capital are not the sole actors responsible for understanding our planetary crisis (which she calls wounded terra) and the precarity of our ecological world. Instead, her vision of the chthulucene argues that humans and capital are with and of the earth along with a plethora of diverse biotic and abiotic powers which are responsible for our wounded terra.

in-assemblages — including the more-than-human, other-than-human, inhuman and human-as-humus³⁴ (Haraway, 2015, p.160). Chthulucene therefore offers a critical path that one can take to reconfigure relations to the Earth and all its inhabitants, including all biotic and abiotic factors.³⁵ There is no hierarchy between humans and the non-human world, instead there are overlapping interdependencies as processes and relationships are tightly interwoven. String figures (SF),³⁶ the metaphor used by Haraway (2015) to denote figures of practice, thinking, making, doing, and the multiple ways of engaging with each other, encourages us to rethink the ‘how’ and ‘who’ of making kin not just with humans but also with diverse aspects of the ecological, such as God, nature, multispecies and so on. Therefore, in light of the chthulucene, we can generate a ‘wider, wilder, and more vivid’ (Loftus, 2016, p.499) account of ecological accountability and see how it is being continuously recreated and reinvented as humans and non-humans interact in myriad ways (Cuckston, 2017).

2.6.1 Making non-human worlds visible

An emerging theme within this domain is making the ‘informal’ and ‘invisible’ accountable (e.g., Russell et al., 2017; Gray et al., 2006; Collier, 2005). Such works have introduced an array of new sites and actors to the accountability discourse waiting to be explored (e.g., Russell et al., 2017). Thereby, emerging contributions to accountability literature have become ever more detailed, compelling and momentous, resulting not only in the need to recognise new practices but also to understand how it extends beyond societies to the nature of the very environment it is created within.

Arguably, one way in which we can make ecological accountabilities ‘visible’ is by looking at alternative narratives, expressed through photographs, sculpture, fiction, poems,

³⁴ Haraway’s (2015) assemblage ‘human-as-humus’, refers to the oneness of humans with the earth. It includes humans’ entanglement with all modes of life, including animals, plants, rocks, water, soil, air, etc.

³⁵ Biotic factors are living organisms in the eco-system which are capable of reproduction; examples include animals, plants, fungi, birds, and other similar organisms. Abiotic factors on the other hand are non-living physical and chemical elements in the ecosystem, and examples include soil, air, sunlight, water, temperature and minerals.

³⁶ Haraway (2015) uses ‘string figures (SF)’ as an idea/attempt to outline a practice for generating imaginative patterns of thinking, based on the ongoingness of never-innocent relationships. It captures the relationships we know “so far” (Haraway, 2013, p.12), and is also an opening for what is yet-to-come.

local stories and individuals (e.g., Loftus, 2016; Cuckston, 2017) such as the work of Cuckston (2017) and critical ethnographies such as Anna Tsing's *'Mushroom at the End of the World'* (2015), *'Friction'* (2011) and James Scott's *'The Art of not being Governed'* (2009). These critical, ethnographic styles of writing express the world and the entangled relationships between nature and humans through detailed animations of local settings, cultures, practices, traditions, governance systems, and belief systems. Moreover, they bring to life peripheral settings and all that they contain (including biotic and abiotic factors) and reveal how these micro, ecological settings influence the world through 'global connections' (Tsing, 2015) and circuits of capital (Chiapello, 2018) — this is the Chthulucene. In revealing the 'tentacular interconnections' (Harraway, 2015) that make up our world, we can craft, unique, place-based and vivid accounts of ecological accountabilities.

Within the accountability literature, a notable example of understanding a deeper view of accountability through unique experience is provided by Gibbon (2012) in her autoethnographic account. She uses the generative metaphors³⁷ 'jigsaw' and 'garden' to generate a wider account of accountability. In doing so, she draws on her personal insights and experiences with both metaphors and reflects on how they depict an image of accountability:

A jigsaw for me in this context is a puzzle of many pieces, in a box with a lid depicting a picture. The aim of a jigsaw puzzle is to complete the picture by putting together all the pieces. I consider engaging with accountability through social accounting as similar to producing a picture of the organization, by constructing the pieces of a jigsaw (p. 206)

She also comments:

...wild gardens where the links between the garden and the natural world were not severed whilst also understanding and appreciating that perfection in the garden can never be achieved. A garden can be seen as a place of human caring and a shared

³⁷ The idea of generative metaphors was coined by Schön (1993). It contends that metaphors are central to setting the frame in which we are going to make sense of a problem. For Gibbon (2012), the problem is understandings of accountability. Hence, she decides to use two metaphors (jigsaw puzzle and garden) to frame, reflect and question the problem of accountability within social accounts. "Jigsaw puzzle" is descriptive, whilst "garden" develops generative themes by drawing on the experience. The reflection 'opens up a space that recognises the non-calculative and develops broader understandings of approaches to a complex, multiple and fragmented accountability in practice' (p.202).

environment where human beings can grow and flourish. My understanding of accountability includes many of these characteristics and is blurred, multiple, fragmented and continually being constructed... (p.208).

Gibbons therefore uses generative metaphors to understand connections through ‘lived and felt experience’ to open spaces that recognise the ‘non-calculative, complex, multiple and fragmented nature of accountability’ (p.210). In doing so, she draws on Kamuf’s (2007) ‘accounterability’, in which the ‘er’ represents a stop and pause to reflect on what accountability means or could mean.

Generative metaphors can therefore provide a unique way to think about objects, experiences, relationships, memories and so on. These things can then be utilised to animate the ‘more-than-human, other-than-human, inhuman and human-as-humus’ (Haraway, 2015, p.160) and embellish accounts of ecological accountability. As the Chthulucene purports that our relationship with the Earth is constantly being recreated through changes in species cycles, hydrological cycles, life cycles, biomes³⁸ (communities of plants and animals that share a common environment) etc, generative metaphors allow us to translate all aspects of non-human into accounts of ecological accountability in our shifting world.

2.6.2 Stories of ‘Response-ability’

Therefore, stories and unique narratives can provide a useful basis for reimagining the notion of ecological accountability. After all, stories that contain “only more and more openings and no bottom lines” (Haraway, 2015, p.115) allow space for questioning and creativity of the various types of ecological accountabilities arising between non-humans and humans in the chthulucene. According to Haraway (2015, 2008), such stories also strengthen “definitive response-abilities” (p.115). Her conceptualisation of ‘response-ability’ extends from social obligations and accountability between people(s) to an enhanced, collective “praxis of care and response... in ongoing multispecies worlding on a wounded Terra” (2016, p.105). Like Bebbington’s (2019) ‘stewardship accountability’,

³⁸ For the new interconnections between biomes, see Deutsch et al, 2007 and Naylor et al, 2000.

Harraway's idea of 'response-abilities' encourages collective care and the idea of being held to account when it comes to the Earth and its ecological matters and beings.³⁹

The idea of 'response-ability' resonates through Bebbington et al (2019) and their study of accounting and accountability in the Anthropocene. For them, the '*Anthropocene relates to the nature and functioning of the earth system and the role of human actions in driving those dynamics*' (p. 155) and hence they argue that we need to focus on the human 'interactions' that arise within our adaptive Earth system and understand the responsibilities and accountabilities that arise from such interactions. In their exploratory paper, they develop the idea of accountability in the Anthropocene and highlight the issue of increased opportunity of discharging 'responsibility' to 'relevant others' (see Gray, 1992 for share and stake-holders) as humans enter complex networks with the Earth and therefore accountability can easily be 'off-loaded' (Broadbent and Laughlin, 1998) to others. In response to this, they propose the idea of 'stewardship accountability'. They contend that stewardship thinking extends accountability to take care of and nurture resources for current and future generations and therefore it inspires a sense of moral accountability towards planetary and eco-system damage (see Section 2.5.2 for Bebbington et al (2019) and their case-study of accountability in the marine and seafood sector). Finally, they conclude that stewardship accountability is not merely a stronger form of accountability, but reflects a fundamentally different set of relations that are outside the scope of their paper.

Perhaps stories of response-abilities in the chthulucene can open doors to understanding the plethora of relationships in our world. Like the anthropocene, the chthulucene also recognises that humans inhabit a "tightly intertwined social-environmental planetary system" (Donges et al., 2017, p. 153) but it develops the debate by placing the ecological Earth at the centre of power. Therefore, localised case studies of ecologies can perhaps surface and strengthen accounts of ecological accountability to nature(s) instead of people(s).

³⁹ In Harraway's (2016) book '*Staying with Trouble*', she reflects on her personal experience of accountability to her dog that is diagnosed with urinary incontinence. She purchases the drug diethylstilbesterol (DES) knowing that it has a previous history of increasing the complications of childbirth when given to pregnant woman. It also increased the chances of cancer for newborns. She asks herself "Did I forget, never know, not look - or just not care?" (p.111) when purchasing DES for her dog. Following her story, she reiterates the fact that such personal accounts, experiences and stories of kin (stories that consider more than human actors) bring to the surface accountabilities that we would otherwise not have considered.

2.7 Geography, Governance & the Constitution of the Self

To fully comprehend how humans are made accountable to nature, we must first understand how the geographies of the Earth permeate the self, govern it and thereby produce and reproduce humans, including their actions, decisions, accountability relationships, beliefs and values. In this way, we can better explore the ‘human-nature nexus’ (Castree, 2003) and understand how ecological accountability relationships are enacted and re-enacted on a daily basis. To address these concerns, we must open up the limited borders of accountability (Munro and Mouritsen, 1996) to encompass intangible aspects such as one’s beliefs and values, that are very often rooted in nature and its externalities.

Roberts’ (1991) seminal paper on the ‘Possibilities of Accountability’ is a useful starting point to understand the greater relationship between accountability and the constitution of the self.⁴⁰ Roberts articulates that accountability is a ‘*flow of experiencing; it acknowledges and confirms self, and the fact that one’s actions make a difference*’ (p. 356), and therefore accountability ‘sharpens’ one’s sense of self and one’s actions. Also, different forms of accountability produce different senses of self and relations to others (Roberts, 1991). In this way, accountability relations contain the power to influence the constitution of the self. The paper also builds on the work of Goffman (1971), Laing (1961), Berger and Luckman (1967) and their idea that the ‘self’ is constantly reproduced throughout stages of life, and hence people hold varied attitudes, beliefs and values. Relationships of accountability are therefore multiple, fragmented and subject to continual reconstruction (Sinclair, 1995, p.231). Following Roberts’ (1991) work, it can therefore be argued that accountability and the self share a dynamic relationship as they both contain the capacity to influence and mould each other.

In this way, we can view (ecological) accountability as an individually inspired self-governance that is reproduced by the ‘inner nature of the self’ and the ‘interiorisation of certain disciplines’ (see Taylor, 1985, p.160). After all, the individual is a ‘fictitious atom’

⁴⁰ The self represents the person as a whole. It includes personal beliefs, personality, experiences and the regulatory self (Leary & Tangney, 2011), which includes factors that discipline, control and influence an individual e.g., weather. Kleine, Kleine and Kernan (1993, p.209) describe the self as “a sense of who and what we are.” The self therefore encompasses both physical and symbolic properties such as physical appearance, roles, experiences, values, beliefs and goals (Kunchambo et al, 2017).

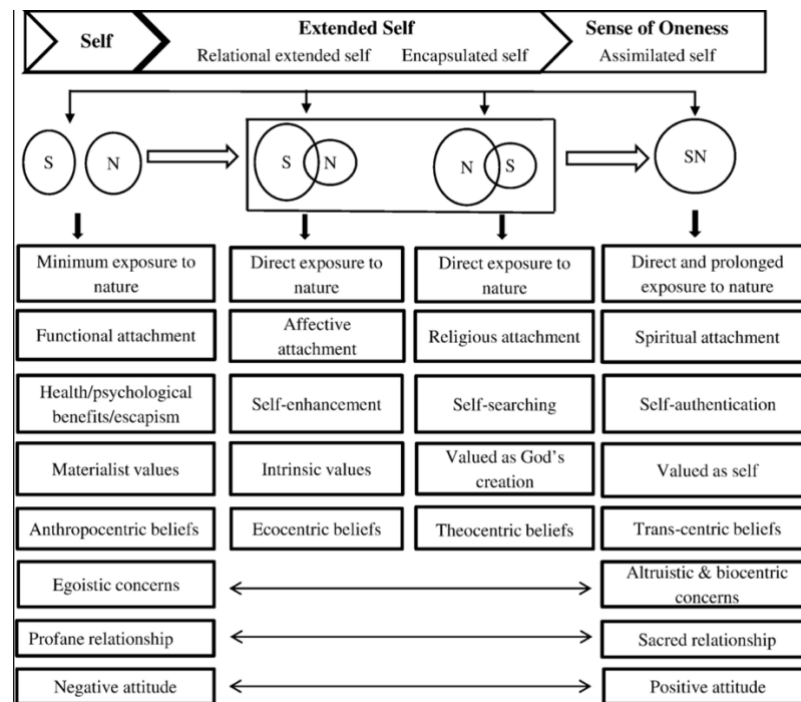
(see Foucault, 1979, p.194) that is fabricated by its ecological environment⁴¹ (see Lewin, 1936; Maslow, 1962). However, this idea that the self is influenced by its ecological environment, or even the fact that accountability relationships are products of their ecologies is largely absent from the critical accounting literature.

2.7.1 The Self-Nature Relationship

In order to develop the notion of ecological accountability, we need to better understand the self-nature relationship. Studies outside the accounting domain have long shown that external natural objects, including physical environments (e.g., Belk, 1988) such as gardens (Freeman et al., 2012) are strongly associated with the self and self-identity. Moreover, it has long been evidenced that people form an attachment, otherwise known as topophilia (see Tuan, 1974) with ecological spaces and matters of geography (e.g., Wong and Hogg, 2011; Belk, 1988; Freeman et al., 2012; Kunchambo et al., 2017). The work of Kunchambo et al (2017) is particularly useful in this regard as they dig deep to understand how intangible aspects of nature, which they refer to as ‘inner motivational enablers’, influence the self-nature relationship. In doing so, they articulate that nature becomes part of the extended self in three dimensions: the **relational extended self**, the **encapsulated self**, and the **assimilated self** (see Table 7 below). Each of these dimensions (discussed below) illustrates the different intensities to perceive nature as part of the self.

⁴¹ If we probe into the depths of the human psyche, we can see how self-psychology is hugely influenced by natural environment i.e., nature, weather etc. Lewin (1943) argues and provides evidence that a person’s behaviour, actions and decisions are all a function of their physical environment.

Figure 2-2: Dimensions of the Self-Nature Relationship



Source: adapted from Kunchambo et al., (2017)

(i). *The Self*

The first conception of self in the above schema is a self which is separate from nature. Kunchambo et al (2017) argue that anthropocentric⁴² values and beliefs dominate this dimension of the self. Arguably this view can be used to describe the Anthropocene (see 2.6 and 2.6.2 above), as it posits human superiority, and the idea that humans share a 'functional' relationship with nature and therefore regard nature as a 'commodity' (Castree, 2017) that is merely there to be used and exploited (Kortenkamp and Moore, 2001).

(ii) *The Relational Extended Self*

In the second form of the self, the relational extended self, nature is an outward extension of the self. According to Kunchambo et al. (2017), the self is perceived to be greater and more significant than nature, and therefore it dominates nature. They also find that individuals symbolically define nature as "mother" as it provides "food, shelter, beauty, and health as well as a place to improve personal characteristics" (p.217), and only engage with

⁴² Anthropocentrism is the belief that human beings are the central or most important entity in the universe.

nature for their own benefit e.g., to enhance mental and physical strength. This was illustrated in accounts of interviewees who said that they climbed mountains either to re-affirm their physical ‘ability’ to handle the journey, or to enhance their ‘maturity’, ‘self-confidence’, and ‘discipline’. Some also said that reaching mountain peaks was solely an “act of conquering nature” (p.128). Some others also expressed that they sought closeness to nature during times of distress, as nature provided a means of finding “emotional stability” and provided a “space for communication” (p.128). Nature was therefore regarded as a ‘companion’ which helped to reduce ‘loneliness’. Kunchambo et al. (2017) thus depict the relational extended self as one in which individuals begin to form a relationship with nature, but their level of emotional attachment is low as ‘situational factors’ govern the self-nature relationship. However, over time, these situational factors become meaningful nature experiences as the individual begins to ‘internalize’ nature and form ‘eco-centric beliefs’.⁴³ Therefore, nature’s own worth extends beyond being useful to humans. This is the first level of perceiving nature as part of the extended self.

(iii) The Encapsulated Self

The encapsulated self feels ‘insignificant’ in relation to nature. Kunchambo et al. (2017) argue that nature’s “beauty, vastness, power and mysteries are beyond an individual’s ability to comprehend” (p.128). They also find that such individuals regard nature as a superior power, and therefore often feel a sense of “smallness and powerlessness” (p.128) when in nature. These individuals attribute respect and often fear to nature. From their discussions, individuals also claimed that their relationship with nature was driven by ‘religious spirituality’ as ‘witnessing’ nature reinforced views of God being the creator of all things, including nature (p.129). Individuals also expressed a “sense of responsibility towards the natural environment, and blame[d] human negligence for the occurrence of natural catastrophes” (p.129). Therefore, these people were inclined to preserve, respect and understand nature, both out of love and in fear of God’s wrath. These theocentric beliefs⁴⁴ explain why such individuals perceive nature as greater than the self and essentially, feel “nature’s dominance over the self” (p.129).

⁴³ Ecocentric beliefs contend that the Earth’s ecosystems and ecologies (including all forms of life, species, the atmosphere, water, soil etc) hold intrinsic value, and therefore they should always be valued and protected by humans, even if they cannot be utilised as human resources.

⁴⁴ Theocentric belief is where an individual places God at the centre in all aspects of their life.

(iv) The Assimilated Self

Finally, the assimilated self feels a ‘oneness with nature’ as a result of prolonged and direct exposure to it. Kunchambo et al. (2017) find that such individuals strive to create a characteristically natural appearance by selecting earthy, natural colours for their clothes and furniture in order to blend in with the Earth. They also believe that nature is untouched and perfect, and reflect aspects of nature, such as its natural “messiness” in their homes and personal lives. Aspects of nature are also perceived to be their “friends” or “relatives”, which highlights how they are socially intertwined with nature. Their ‘oneness’ and ‘belonging’ to nature prevents them from ‘disturbing or challenging nature’; instead, they worship sacred nature and build strong psychological relationships with it i.e., they believe that “nature suffering equates to their own suffering” (p. 129). Within nature, they also spend time soul searching to connect with themselves and utilise aspects of nature to ‘purify’ their souls. At this level, these trans-centric beliefs⁴⁵ and spiritual attachments⁴⁶ inexorably tie the self to nature in such a way that ‘strong positive attitudes’ and ‘intentions’ to protect and care for nature are nurtured, irrespective of social norms, incentives and punishments. Therefore, Kunchambo et al. (2017) depict the assimilated self as the epitome of the self-nature relationship; nothing can exceed this level of oneness with nature and embodiment with it.

Understanding the self-nature relationship in **each** of these dimensions is crucial to the development of ecological accountabilities. From Kunchambo et al. (2017) and their articulation of these three distinct dimensions of nature as part of the extended self, one can presuppose that ecological accountability relationships intensify as we progress from the relational extended self to the assimilated self and the relationship between the individual and nature strengthens. People will therefore be more inclined to give accounts to nature within these self-nature relationships. Their work also brings to the surface the fact that in varying ecological spaces, the role and involvement of nature in the daily lives of people varies. We can therefore postulate that ecological accountabilities are transgeographical (not

⁴⁵ Trans-centric belief is one in which nothing is comparable to the power of nature. Nature is the ultimate, supreme and overriding power. According to Kunchambo et al (2017), trans-centric refers to ‘rising above the self to minimize boundaries that separate the self from nature’ (p.129).

⁴⁶ There are an array of groups and beliefs that are categorised as an Earth religion, such as animism (the view that all living things, including plants and animals, contain a spirit) and paganism (a polytheistic, nature-based religion). Hindus also very commonly nature-worship the moon, stars, trees and mountains etc. They are all regarded as sacred things, and therefore a very clear relationship of accountability can be seen between humans and nature. In this regard, humans have long attributed virtue to nature and made themselves accountable to Nature as an elevated, superior and naturally existing power.

comparable) across different geographical areas; instead, each ecology must produce ecology-specific accountability relationships.

2.7.2 Ecological Accountability: a sociospatial relation

Adopting such views, one way to unpack the notion of ecological accountability in varying geographical spaces is through Jessop et al. (2008) and their ‘sociospatial relation’ framework. They argue that territories (T), places (P), scales (S), and networks (N) are “mutually constitutive and relationally intertwined” (p.389) and therefore their ‘TPSN framework’ is useful for understanding ecological assemblies, namely how the social and geographical overlap and inform each other. In particular, we can use their framework to study how ecologies (T & P) are situated in a ‘broader set of social relations’ (Creswell, 2004; Hudson, 2002, cited in Jessop et al., 2008) and therefore understand the dynamic between ‘ecological’ and ‘accountability’. Apart from Jessop et al (2018), research on the geographies of networks and relationships is rich in various social-science fields, particularly in human geography studies (e.g., Wangbao, 2015; Zambon et al., 2017; Petrović et al., 2020 etc). These frameworks are also starting to appear in accounting studies. A notable example is the work of Cuckston (2017) who utilises the TSPN framework in analysing the multiple roles of ecology-centred accounts of biodiversity in producing sustainable socio-ecological systems. Similarly, sociospatial frameworks such as the TSPN can be useful for understanding how ecologies permeate the self, give way to governance systems (see next section) and thereby inform the social relations of ecological accountability.

2.7.3 Neoliberalising Nature

As illustrated above, relations between humans and each human with herself/himself are constantly produced and reproduced through the web of life, and therefore nature operates not only outside and inside our bodies, but also through our embodied minds (Moore, 2017; Kunchambo et al., 2017). This challenges the way in which we can understand ecological accountability relationships, as governance systems extend beyond what is tractable and manageable, to things that are invisible and difficult to account for, such as ‘nature-thoughts’ (Katz, 2002) and ‘nature-morals’ (Ansley and Pritchard, 1987). However, geographical research is now beginning to explore the ‘complex’ (Mertz et al., 2012), ‘multi-faceted’ (Fatti and Patel, 2013; Ali-Khan and Mulvihill, 2008) and ‘messy’ (Dicken and Malberg,

2001) governance systems between humans and nature, in the name of ‘neoliberal approaches’ —recently termed ‘neoliberalising nature’ (see Castree, 2008; 2010). Such studies advocate that neoliberalism as a form of governance has “mutated” (e.g., Springer 2010; Gautreau and Bruslé, 2019; Parnell and Robinson, 2012) into geopolitically distinct territories and ecologies, thereby producing ‘bespoke’ (Castree, 2008) forms of neoliberal/earthly/geographical/ecological governance.

Castree (2008) claims that such forms and systems of (neoliberal) governance provide three distinct advantages: first, they pay close attention to the non-human world, namely how aspects of nature become biophysical actors and contain the power to influence relationships, governance systems and mechanisms in ecologies; second, they take into account ‘scale-crossing’ and ‘scale-jumping’, the idea that there are different social assemblies at varying geographical scales, implying that humans are networked and clustered together in various ways, giving rise to various governance regimes (also see Bakker, 2005); and finally, as neoliberalism has travelled to a ‘remarkable array of places, regions and countries’ (Castree, 2008, p.133), there is rich understanding of how it operates and is place-based and ecology-specific (see Brenner and Theodore, 2002). Neoliberal governance can help us to understand *how* nature becomes implicated in governance systems and ecological accountability relationships on various scales, across varying geographical territories.

Within the accounting literature, Alawattage et al (2019) perhaps come closest to recognising this ‘geographical’ dimension of neoliberal governance in their framing of ‘microaccountability’. Although geography is not explicitly recognised, they depict neoliberal governance as a tool for governing ‘categories of populations’ within ‘rural, uncharted territories’. They argue that hierarchal controls such as global capital as deployed by microfinance institutions set the medium whereby people can manage themselves and others through accountability relations. Their study sets the context of how neoliberal governance penetrates rural territories, and assimilates the minds and bodies of rural females. Further work is however required to extend the development of ecological accountabilities and the geographical dimension to neoliberal governance and give an understanding of how ecologies, natures, and matters of geography govern, control and manage people. Therefore, geography needs to be placed at the centre of power, control and influence. This would provide fruitful accounts of ecological accountability.

2.8 Conclusion and Contributions to reimagining Ecological Accountability

After critically reviewing the accountability literature and its respective geographical ideas, framings and perspectives, several gaps were identified. The proposals to reimagine an ecologically informed accountability put forth by Russell et al (2017) helped identify these gaps. It was identified that accountability has not yet grasped the detail, complexity and messiness of ecologies. This poor understanding of the human-nature relationship therefore makes it difficult to understand how ecologies can permeate and influence relations of accountability.

Arguably, this gap is mainly attributed to the difficulty in obtaining traditional ecological data, which consists of ecological knowledge gathered by researchers living and experiencing the ecological terrain themselves. In order to engage in new ways of humans thinking about their natural ecosystems, we need “wider, wilder, more vivid interdisciplinary mosaic” (Russell et al., 2017, p.1444) of stories and unique narratives (Harraway, 2015; Loftus, 2016, p.499) that tell how physical geographies (e.g., mountains, species, lakes, forests) form (accountability) relationships with humans. Such novel excursions into the messy, complex, fragile, enclosed, peripheral corners of our world —where nature plays an integral, influential and critical role in the constitution of the self and the environmental/geographical/neo-liberal governance of community-economies — allow us to reimagine ecological accountability.

In attempting to address some of these issues, this thesis provides two geostories of aspects of ecological accountability, organised into two empirical chapters as follows:

1. **Chapter 4:** a geostory of how land becomes a central platform for accountability relationships in the rural village of Danyore, using ethnographic data, such as conversations, observations and pictures. Land becomes implicated in relationships of ecological accountability, through simultaneously ‘savaging’ and ‘salvaging’ (Tsing, 2016) all aspects of the ecological. These paradoxical and reciprocal processes, identified as ‘landability’, as ‘land’ contains the ‘-ability’ to make a woman accountable to itself before capital or each other, in a local grassroots

borrowing arrangement (*tanzeem*) by existing as a symbol of prestige, pride, respect and love. In this way, land embodies the rural woman and becomes implicated in powerful, self-governing relationships of ecological accountability.

2. **Chapter 5:** a second geostory of how nature (such as the weather, nature stories, species, mountains) embodies women residing in the extremely remote valley of Chipursan, and makes them resilient, strong and nature-loving individuals that imbue their surrounding nature(s) with sacrality. In this way, they naturally become accountable to nature. This permeates a unique form of ecological accountability in the valley which is essential to the survival of their local *tanzeem* arrangement.

Thus, these chapters arguably make three inter-related contributions to the ecological accountability literature:

1. We study how ecological accountabilities are **produced** through local geographies, permeating and embodying rural woman through tales, beliefs, traits and values;
2. As these aspects of ecologies permeate the heart, body and soul of these women, they naturally hold themselves accountable to nature. This is how ecological accountabilities are **acted** upon on a day-to-day basis;
3. These ecological accountability relationships extend beyond the self-nature relationship to all aspects of their lives, including their financial arrangements (*tanzeem*). This is how ecological accountability relationships are **re-enacted**. They underpin the social, political and financial arrangements of ecologies.



“If you have one stick, you can break it with your hands very easily, but when you have lots of sticks bundled together, they won’t break, no matter how hard you try...this is what happens when we all come together in our village, just like this we are strong...we are all like-minded, we all hold the same values and most importantly, we all care for the blessings that have been bestowed upon us, these natural things— such as these big mountains, this fresh flowing water, our land, our crop, and our fresh air” (female interviewee)

‘When we try to pick out anything by itself, we find that it is bound fast by a thousand invisible cords that cannot be broken, to everything in the universe’ (Muir, 1869)

Chapter 3 | Telling Geostories: theoretical and methodological underpinnings

3.1 Introduction

Ecological Accountabilities provide fascinating insights into ecologies and their messy, complex, and beyond-human governance systems, which provide social, political, and economic stability (or instability) to remote and geographically fragile territories. Within these spaces, human and non-human actors (including diverse aspects of ecologies, such as nature-myths, mountains, species and so on) come together to produce and reproduce their ecologies through ecological accountability relationships. This thesis aims to understand how these things come together in some of the most remote parts of Gilgit-Baltistan, a Northern Pakistani region. In order to do so, this chapter elaborates on the methods and theoretical trajectories adopted in explaining how the social, political, financial, and geographical dynamics of accountability come together to form site-specific ‘ecological accountabilities.’ The chapter ultimately has two objectives — first, to clearly articulate the theoretical underpinnings of the forthcoming geostories, and second, to provide a detailed insight into the methodological underpinnings of the ethnographic fieldwork that cultivated beautiful and rich geostories.

To begin with, the chapter elucidates the terms ecology and assembly, which I felt, experienced, and observed in Gilgit-Baltistan. Such illustrations unveil how local geographies, organic capital, and accountability relationships work together to create strong, resilient, and independent ecological assemblies. They also indicate that assembly is a critical theoretical concept, one that informs and underpins many aspects of this thesis. Assembly thinking allows us to understand and grasp the peculiarity of local capital, namely how it circulates in the ecologies of Gilgit-Baltistan. From this theoretical lens of Assembly, I also describe how ecological variations produce varying political, economic, and ecological alternatives, which produce a heterotopia (Foucault and Miskowiec, 1986; Miller, 2015) of ecological assemblies. The multiplicity of ecological assemblies is foregrounded. Such

ecological assemblies are illustrated using Gibson-Graham's (2008; 2014; 2016; 2020) acclaimed 'diverse economy', 'community-economy', 'alternative economy' and 'post capitalist' economy perspectives. Tsing's (2016) notion of 'pericapitalist' spaces and Harraway's (2015; 2016) 'chthulucene' are also used to illustrate the ways in which ecological assemblies work. In looking closely at these ecological assemblies, full of weaving interconnections, interdependencies, actors and systems, the relationships of ecological accountability that are being produced and reproduced in these arrangements are brought to life. The chapter then progresses to highlighting the methodological approaches adopted, including the philosophical stances, research approaches and methods which brought to the fore the fine details of Gilgit's ecologies. Finally, and perhaps most importantly, the chapter concludes with the backstory to the forthcoming geostories (presented in Chapters 4 and 5). This introduces some helpful details, such as the overall geography and demography of the region of Gilgit-Baltistan, and most importantly, it explains how and why the fieldwork sites (ecologies) — the rural village of Danyore and the remote Chipursan Valley — were discovered, explored and animated.

3.2 Unravelling Ecologies: Gaia, making kin, and the chthulucene

The ecologies of Gilgit-Baltistan are rich, multiplex and mosaic-like assemblies composed of an array of interacting actors, both human and non-human. The dynamics of these actors, including their interactions with each other, give rise to a plethora of interconnections, interdependencies, relationships, and co-evolving systems which are 'sacred' (Berkes, 2017) and intertwined with deep aspects of nature, culture, values and traditions (Sheppard, 2011) that are ancestral and intergenerational. Gilgit's ecologies, therefore, become very difficult to grasp as their representation is extremely complex, abstract and usually unapproachable. Unravelling ecologies is a slow process that takes commitment. Tsing (2016) argues that an ethnographic eye is essential to bringing to light the diversity of ecologies. Similarly, Latour (1998; 2004) expresses the need to become immersed in and 'feel' ecologies. This is important as each and every ecology is unique, both 'place-bound and place-making' (Herbet, 2000), creating a heterotopia⁴⁷ of

⁴⁷ Foucault uses 'heterotopia' to represent almost mythical 'other spaces' that are disturbing, intense, incompatible, contradictory or transforming. These 'worlds within worlds' are spaces which have more layers of meaning and relationships to other places than what is apparent and visible. Derived from Foucault's idea, heterotopia is used throughout this thesis to denote the multiplicity and 'tentacular' (Harraway, 2015) nature of ecologies.

heterogeneous ecological assemblies (see Anderson et al., 2012). I thus followed an ethnographic approach and immersed myself in the ecologies of Gilgit-Baltistan to unveil some of its beautifully rich ecologies.

‘Gaia’ (Lovelock, 1979; 1989; 1991; 2003; 2016) provides one new way of thinking about ecologies, namely how they are assembled and mediated. Given the infinite variations of ecologies that proliferate all over the surface of the Earth, Lovelock’s (1979) Gaia paradigm asserts that all ecologies are composed of biotic and abiotic life which interact to form synergistic, self-regulating and interdependent ecosystems. This self-regulating feature of ecologies, brought out by Gaia, reinforces the innate power of ecologies to self-assemble and thrive. In particular, it sheds light on forgotten inorganic elements such as soil pH, the nutrients of the soil, the length of the working day, and the altitude of the land, which all play an integral role in stabilising ecologies. Gaia, therefore, draws attention to both the overarching and visible as well as the minute and invisible aspects of ecologies that perpetuate the conditions for life on the planet. In Gilgit-Baltistan, Gaia brought to light the obvious geographies, from the glorious snow-capped mountains and extensive acres of lush green fields to the fragile geographies of soil temperature and soil fertility, showing how these profound and subtle geographies come together to strengthen and mediate their ecologies. However most fundamentally, the concept of Gaia reinforces the idea of the ‘living Earth’. It recasts the Earth as an active organism, actively creating, re-creating and self-sustaining its geographies in relation with all Earth actors. In Gilgit’s ecologies, nature truly manifested as a relational force — it was loved, appreciated, respected and embodied by its inhabitants.

In the process of unravelling the relational, self-regulating and interdependent systems of Gaia, we learn more about the complex, tentacular interconnections (Haraway, 2015) that make Gilgit’s ecologies widely heterogeneous. The fundamental principles of ecologies advocate that every aspect of ecologies is connected to all the rest; everything must go somewhere; you cannot get something for nothing from it; and nature knows best (see Commoner, 1972; Gray, 1992). In other words, ecologies are ‘telecoupled spaces’⁴⁸ (Bebbington et al., 2019), as any one part of an ecology has multiple, direct and indirect

⁴⁸ Bebbington et al (2019) derive the term ‘telecoupled spaces’ from Liu et al (2015) and their concept of ‘telecoupling’ which denotes that change in one part in a socio-ecological system creates change elsewhere in the system.

impacts on other parts. This creates myriad temporalities and spatialities and myriad intra-active entities-in-assemblages — including the more-than-human, other-than-human, inhuman and human-as-humus⁴⁹ (Harraway, 2015, p.160), demonstrating the multiplicity of actors — animate, inanimate, human and otherwise — that come together to make and strengthen ecologies. Ecologies can therefore be viewed as ‘subsets’ (Gray, 1992) of the multiple ‘complex interacting systems which support life’ (ibid). These systems include the subsystems of ‘rain, cloud and water; of birth, growth, death and decay; of creatures and species interdependence; of species and habitat dependencies’ (ibid, p.406). Again, these systems are manifestations of the ‘living Earth’, its living ecologies and its interrelationships and interdependencies with diverse aspects of Nature (Lovelock, 1979). Such systems make and re-make ecologies. Such self-regulating systems also bring to life ecologies that perpetually undergo the processes of savaging (destruction) and salvaging (reconstruction) (adapted from Tsing, 2016) with the support and enablement of ‘keystone actors’ (see Bebbington, et al., 2019), both organic and inorganic.

Ecologies, therefore, present themselves as capricious and unlimited. Harraway’s (2015) ‘chthulucene’ helps capture the open-endedness of ecologies. It sheds light on their multiple possibilities and varieties, some known and many yet to be known. Harraway (2015) shifts humans and capital from centre-stage and, instead, places multispecies (more-than-human, other-than-human, inhuman and human-as-humus), at the heart of ecological analysis. In this depiction, there are no hierarchies between humans and non-humans; none is superior to another; instead, there are only overlapping interdependencies as ecological processes and relationships are tightly interwoven. Harraway’s (2015) ‘chthulucene’ reinforces that we must think-with, live-with, and be-with nature so that we can make ‘kin’⁵⁰ with the Earth and all its inhabitants, including all biotic and abiotic factors. By ‘making kin’ (Harraway, 2015), and unravelling these kin relationships, we can generate ‘wider, wilder, and more vivid’ (Loftus, 2016) accounts of the accountabilities and relationships that exist within ecologies as humans and non-humans interact in myriad ways (Cuckston, 2017). Harraway (2015) asserts that our relationships as well as those to be made by our descendants are often shaped by deep aspects of ecologies, including geological accretions over billions of years.

⁴⁹ Harraway’s (2015) assemblage ‘human-as-humus’, refers to the oneness of humans with the earth. It includes humans’ entanglement with all various modes of life, including animals, plants, rocks, water, soil, air, etc.

⁵⁰ Harraway’s (2016) ‘kin’ encompasses all relations, including human and non-human.

Harraway (2016) articulates that we inherit intergenerational relationships with nature, which often compel humans to act in certain ways. This may explain how nature organises, controls, embodies, and governs in a profound yet subtle manner through enmeshing all its actors into ‘kin networks’ (see Harraway, 2016). These kin networks contain ‘enduring relationships’ and ‘attachment sites’ (Harraway, 2016) as actors nurture resilience-traits and develop ‘topophilia’ (Tuan, 1974) towards their ecologies. Therefore Harraway’s ‘tentacular thinking’ (see Harraway, 2016, p.30-44) enabled me to unravel some of the multi-layered and complex relationships that keep Gilgit-Baltistan’s ecologies together.

Lovelock’s (1979) ‘Gaia’ and Harraway’s ‘chthulucene’ help bring to life the ecologies of Gilgit-Baltistan. Indeed, Gilgit-Baltistan’s ecologies are relational. They are synergistic, self-regulating and interdependent sites, enriched with a plethora of kin relations. Moreover, these ecologies are deeply associated with social identity, lineage, respect and relationships, and play a fundamental role in binding intergenerational identities (elaborated in Chapters 4 & 5). Gilgit’s ecologies are complex; as a local AKRSP representative declares, “*you can’t understand Gilgit without understanding Gilgit’s ‘kudrathi nizaam’*” (nature’s system). ‘*Kudrathi*’ denotes all things that are natural or set in place by God and ‘*nizaam*’ is a system, order, assembly or arrangement of things. The ‘*kudrathi nizaam*’ of Gilgit is complex, some of it is grasped and elaborated within this thesis, but much of it is beyond apprehension. However, central to *kudrathi nizaam* is that nature prevails in all aspects of life. The *kudrathi nizaam* of each ecology is unique, spiritual, integrational and complicated. This is perhaps what makes ecologies so heterogenous. Shedding light on ‘ecologies’ has helped forge an understanding of Gilgit’s detailed and complex ‘*kudrath*’.⁵¹ ‘Assembly’ helps forge an understanding of ‘*nizaam*’.

3.3 Assembly thinking: a lens to capture ecologies

Before the term assembly is elucidated, it is first important to clarify the difference between assembly and assemblage. Although there is no fundamental difference, and both terms are used interchangeably, assembly broadly denotes things which work together whereas assemblage denotes things which have come together as part of a greater system

⁵¹ ‘*Kudrath*’ is nature and ‘*kudrathi*’ is nature’s/of nature.

and the manner in which they have done so. Assembly thinking is rather diverse and fragmented, but its diversity and open-endedness is what makes it so compelling and so suitable for capturing the systems, structures, processes, flows and spheres, or in other words, the '*nizaam*' of Gilgit's ecologies.

In recent years, assemblage thinking has gained much recognition. In particular, geographical literature has noticed a remarkable proliferation in adoption of the term assemblage as part of a broader 'relational turn' (Anderson et al., 2012) within the field of human geography. Assemblage has thus been used as a broad descriptor to capture the rich historical and intergenerational relationships and diverse energies that come together to reproduce space and its spatial relations (e.g., Hinchliffe, 2007; McFarlane, 2009; Anderson and McFarlane, 2011). The notable works of Anderson et al (2012) on assemblage thinking recast assemblages as empirical constructions which inform how spatial forms and processes are assembled, held in place, and work together in multiple ways to open up (salvage) and close down (savage) possibilities. Such thinking provides a useful framework for understanding how assemblages emerge and function.

Deleuze and Guattari's (1980; 2003) ontological framework of assemblages is perhaps the most notable contribution to assembly thinking. Although it presents ambiguity surrounding the referential frames of the term assemblage, their meticulous attempt to articulate assemblage provides a bottom-up framework for analysing and conceptualising the fluidity, exchangeability, and multiple functionalities of ecologies. Drawing on dynamic systems theory, Deleuze and Guattari posit the ways in which assemblages are formed and self-organised through the process of coding, stratification and territorialisation. These three processes make a profound contribution to assemblage thinking and enable us to reflect on how ecologies, as parts of assemblages, come together and work beyond their limitations. To begin with Deleuze and Guattari use coding as a process that broadly refers to the manner in which heterogenous elements or objects enter into relationships with one another (see DeLanda, 2010). This includes the organic, the inorganic, the social, the natural, the visible and the invisible (Anderson and McFarlane, 2011), creating intriguing assemblages which are simultaneously human and non-human, as well as social and ecological. Deleuze and Guattari's assemblage, therefore, captures the multiplicity of actors that interact in myriad ways. Such interactions form an important part of the assemblage. Their notion of stratification also aids our understanding of assemblages and their emergent properties. For

Deleuze and Guattari, stratification broadly refers to the way in which assemblages organise themselves in non-hierarchical networks. What is important here is not the individual elements that come together to make an assemblage but rather what is ‘between’ them. The in-between set of relations between the constituents of an assemblage are inseparable from each other (Deleuze and Parnet, 1987); one could argue that they are assemblage-bound and assemblage-making. Deleuze and Guattari contend that each assemblage is composed of different sets of relations, which come together in varying ways, under different conditions, thus creating unique assemblages. This denotes the ongoing nature, endless possibilities and multiple varieties of assemblages. In this way, assemblage theory implies that assemblages are never pre-given, fixed, or forever stable in their location, rather they are dynamic, durable and precarious. Finally, Deleuze and Guattari’s territorialisation casts assemblages as rich socio-spatial configurations (Anderson et al., 2012, p.503-504) place-bound or in other words, ecology-specific. They argue that every assemblage is territorial as the territory itself makes the assemblage — the territory being a tightly woven fabrication of the social and spatial, interacting together to make resilient and flexible assemblages. This inseparability of sociality and spatiality, frames assemblages as a complex configuration between deep aspects of people and place. Without a doubt, Deleuze and Guattari provide some deeply intriguing views on assemblage. Although a lot of their metaphorical imagery is difficult to grasp, it lends depth and elasticity to assemblage thinking. Overall, Deleuze and Guattari depict an assemblage as a deeply complex configuration. While they preserve some concepts of the structural, they depict assemblage more as an anti-structural concept (see Marcus and Saka, 2006) by implying the perpetual heterogeneity, fluidity and mosaic-like patchwork of assemblages and their complex interactions. These notions of heterogeneity, fluidity and multiplicity help characterise and make comprehensible the intricate and complicated ‘*nizaam*’ (system) of ecologies. Following Deleuze and Guattari’s assemblage thinking, we can postulate that assemblages cannot be reduced to a few key components/actors; instead, they are shaped by multiple and interacting processes, only some of which can be apprehended. This description helps illustrate ecologies as multifaceted sites containing multiple interacting actors, processes and relationships. It also brings to the surface the inherent power of deep aspects/parts of ecologies such as the invisible and inorganic, which would otherwise be regarded as small and insignificant. Moreover, it helps frame ecological accountabilities, relationships and interdependencies with ‘earth others’ (e.g., species, landscapes, spirits).

Following Deleuze and Guattari's assemblage theory, assembly thinking has spawned and reproduced varying theoretical dimensions of assemblage thinking. A notable illustration is the work of Hardt and Negri (2017; 2020), who break new theoretical ground regarding the concept of assembly, conceptualising it as a diverse yet interconnected sphere held together by a supreme force: the multitude. Although Hardt and Negri understand assembly as a political term situated in a broad web of political ideologies, their notion of assembly represents a coming together of actors (the multitude) in expansive networks to produce, reproduce and make their surroundings. Therefore, they also capture the element of plurality, relationality and interconnections of an assembly. Another notable illustration is Tsing's (2015, viii) notion of assemblage, which resonates closely with Deleuze and Guattari, illuminating assemblages as open-ended gatherings, full of entanglements, gesturing that there is so much more out there to be discovered, explored and synthesised. A central feature of Tsing's (2015) use of assemblage is precarity and indeterminacy, which contend that the instability of assemblages is what transforms spaces, creates new relationships and most importantly, creates polyphonic assemblages, ones that are shifting, configuring and reconfiguring new assemblages. Like Deleuze and Guattari, Tsing emphasises the infinite and unknown possibilities of assemblages.

Such theoretical framings of assemblages are rich and provide an alternative and exploratory way to unravel, capture and comprehend the complex nature of ecologies, each one unique and exclusive, composed of multiple actors, both human and non-human, with unique relationships between them. This thesis does not intend to make a high-order theoretical contribution to assemblage thinking. Instead, it uses assemblages/assembly as a lens to bring to life the ecologies of Gilgit-Baltistan. Thinking through assemblages enables us to simultaneously highlight the open-endedness yet exclusiveness, patchiness yet harmonisation, and the durability yet precarity of ecologies.

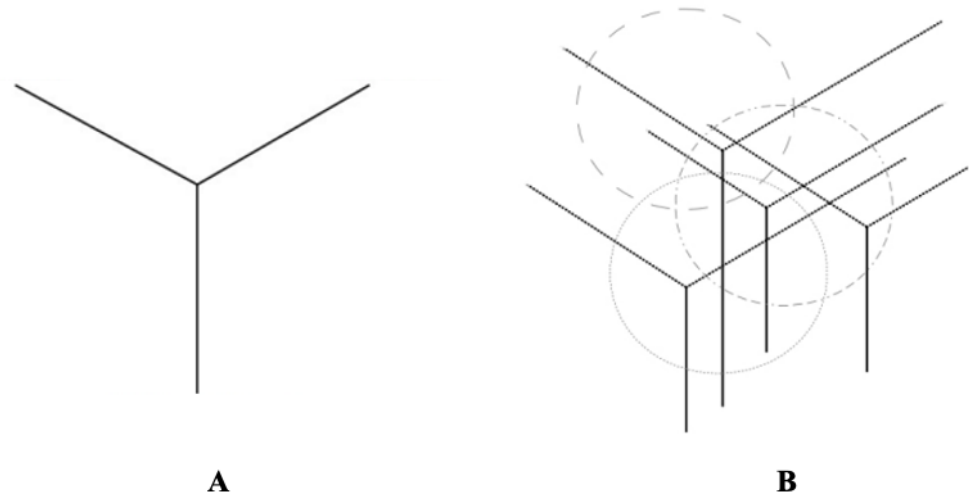
3.4 Ecological Assemblies

The Gilgit-Baltistan word '*kudrathi*' captures ecologies and '*nizaam*' encapsulates assemblage's theoretical notion; therefore, '*kudrathi nizaam*' can be considered an 'ecological assemblage'. Keeping in mind the framing of ecology and assembly, an

‘ecological assemblage’ can be identified as one that captures the plethora of interconnections, interdependencies, relationships, and co-evolving systems of an ecology, all of which characterise an ecology-specific assemblage. Each and every ecological assembly contains ecology-specific local practices, traditions, beliefs, values, modes of governing and ways of living, all of which collectively characterise unique and diverse ecological assemblies. Therefore ecology-specific assemblages show how deep aspects of ecologies (such as ecological accountability relationships) play out beyond their micro setting and give way to distinct social, political and economic practices in varying geographical spaces. In other words, ecological assemblies bring ecologies to life beyond their micro settings and help explain how local, varying geographies make and influence their surroundings.

What is important here is the plurality of ecological assemblies. This highlights the multiplicity, diversity and possibility of different ecological assemblies (see Figure 3-1). The concept of ecological assemblies, therefore, does not attempt to capture the totality or generality of ecologies but the impossibility of any such generality. A, in figure 3-1 illustrates an ecological assembly, where the centre point represents the ecology, and the three lines departing from the centre are a representation of the effects/processes/relationships that emanate from an ecology. Whereas B in figure 3-1 illustrates ecological assemblies. The multiple, overlapping and co-constitutive spheres represent the tentacular nature of ecologies, illustrating the multiple interconnections, interdependencies and influences that occur between ecological assemblies.

Figure 4-1: Ecological Assembly and Ecological Assemblies



Source: adapted from Miller and Gibson-Graham (2019)

Within this thesis, an attempt is made to study two ecological assemblies (ecologies): the rural village of Danyore and the remote Chipursan Valley (see Chapters 4 and 5). Within these two ecologies, there are many fascinating yet disturbing, powerful yet subtle, and unique yet peculiar things happening, all of which are impossible to capture and explain within the thesis. Therefore, only three extremely apparent, prevalent and central aspects of these ecologies are focused upon: their nature, capital, and accountability relationships. Collectively, these things are simultaneously savaging (destructing), salvaging (reconstructing), strengthening and re-affirming their ecologies, thereby informing some of the ways in which nature, capital and accountability work in close tight-knitted ecologies. Using the theoretical lens of assembly, it is possible to pave the way for a dialogue on some captivating ecological perspectives of capitalism and accountability.

3.4.1 An alternative perspective on Capital

Using the theoretical lens of assembly, the intricate and unique ways in which capital penetrates, works, and circulates in the peripheral economies of Gilgit-Baltistan can be studied. Assembly thinking enabled me to probe deeply into the ecologies of Gilgit Baltistan to untangle the web of local capitalism, embedded and implicated within deep aspects of its

ecologies, such as nature-beliefs, nature-myths, local traditions, inherited values and religious ideologies to name but a few. Therefore, like everything else in an assemblage, capital too becomes implicated in various interrelationships, and is interdependent on local systems, and processes, resulting in heterogeneous forms of capital in different ecologies. We refer to this as capital-in-ecologies.

Assembly thinking, therefore, allows us to shift from thinking about triumphant, hegemonic, encompassing, expansive and penetrating global capitalism, to instead thinking about the local, organic, fluid and vulnerable local capital-in-ecologies. It situates capital in a wider world of ecologically rich social practices, values and phenomena (see Castree, 2010). Therefore, assembly thinking provides a means to explore and study 'more-than-capitalist' economies (Gibson-Graham 2006), those in which nature prevails, along with nature-beliefs, nature-values, and nature-traditions. In these 'more-than-capitalist' (Gibson-Graham, 2006) worlds, populated by a plethora of non-capitalist economic practices (Gibson-Graham, 2013), I discovered that powerful, intergenerational and engrained aspects of ecologies dictate the flows of capital (illustrated in Chapters 4 & 5). Ecological assemblies, therefore, enable us to re-think economic dynamics and understand the diverse economies of rural landscapes. This almost 'anti-capitalocentric narrative' (Gibson-Graham, 1995; Gibson and Pretes, 2008) that assembly thinking creates is essential to understanding the 'economic diversity' (Gibson-Graham and Dombroski, 2020) of our world, and in particular the diversity that abounds in ecologies, from international non-governmental organisations and microfinance institutions to grassroots forms of borrowing and resilient, entrepreneurial women, as well as the role of Earth others (species, microbes, totemic beings and so on). Assembly thinking captures the diversity of nature, actors, institutions, processes, relationships and traditions which are central to the working of capitalism within the peripheral ecologies of our world. Looking beyond the heroic reifications of capitalism to address how it works in ecological territories represents a shift in thinking about the violent, powerful, and politically dominant image of capital to a much more organic, fluid, innate and naturally produced capital. Therefore, within ecological assemblies, we can look at capitalism not just as an economic system, but as an ecology-specific, and multispecies assemblage of capital, embedded and implicated within the deep ecologies of its place.

In order to theorise a diverse economy reframing and explore a landscape of economic difference, Gibson-Graham's (1995; 1996 (a); 2002; 2006; 2007) 'diverse economy', 'community-economy', 'more-than-capitalist' and 'post-capitalist economy' ideas help present the economy as an assemblage of multiple undertakings, only some of which (wage labour, producing goods for a market, in a capitalistic enterprise) are based on market transactions. They argue that such capitalistic practices only include a 'small subset of the activities by which we produce, exchange and distribute values' (Gibson-Graham 2006, p.69). Instead, their diverse economy, as illustrated in the "ice-berg" image below (Figure 3-2), argues that there are multiple and beyond-capitalistic processes, systems and relationships upon which capitalism rests. This reveals a prolific landscape of economic diversity, rendering visible activities and economies that are often in the shadows.

Figure 4-2: The Community Economy "ice-berg"



Source: Gibson-Graham (2006)

Gibson-Graham's "ice-berg" therefore proposes a very different way of viewing the "relations of production, distribution, exchange and consumption of goods and services" (Mitchell, 1998, p.91) within the ecologies of Gilgit-Baltistan. Built on relationships of trust, cooperation, topophilia (Tuan, 1974), bondage, guilt, love, intergenerational values, spiritual beliefs, to name just a few, Gilgit-Baltistan's economies prove to be complex and peculiar arrangements. However, Gibson-Graham's work enables us to capture and frame Gilgit-Baltistan's ecological practices, relationships and systems as significant and underpinning aspects of capitalism's 'empire' (Hardt and Negri, 2020). The fact that such varied forms of capital are produced and reproduced within the ecologies of Gilgit-Baltistan is a step towards understanding capitalism as just 'one particular set of economic relations situated in a vast sea of economic activity' (Gibson-Graham 2006, p. 70).

Gilgit-Baltistan's economies are certainly not entirely or predominantly driven by capitalistic relations and systems as its inhabitants possess a non-capitalistic mindset:

whatever we have is enough, we don't desire more in life...our lands, our animals, nature's -support is enough for us...this money can't give us peace and happiness...yes, it can give us ease but we don't value this more than living a life of contentment
(female interviewee).

However, grassroots forms of borrowing and microfinancing play an important part in providing financial stability to Gilgit-Baltistan's economy. Therefore, like everything else in assemblage, capital too is multifaceted, produced in a binary relationship between non-capitalistic and capitalistic practices. Ecologies thus become sites in which both capitalist and non-capitalist forms interact. Tsing (2015) identifies such sites as 'pericapitalist spaces', as they are both simultaneously inside and outside the logics of capitalism.

These alternatives for capital, advocated by Hardt and Negri, Gibson-Graham and Anna Tsing provide an insight into how capital enters and circulates nature-rich ecologies. They also contribute to our understanding of how more-than-capitalist, beyond-human actors, relationships and systems play an integral role in mediating the flow of capital-in-ecologies. Such writings emphasise that an economy does not necessarily have to be entirely or predominantly capitalist, challenging us to re-think capital's assemblage. Assembly thinking

helps us to capture and synthesise the ecological ‘mesh’ (see Morton, 2010; Plumwood, 2002; Rose, 2004) in which capital becomes implicated within the varying ecologies of our world. This encourages new modes of untangling and exploration, whilst almost resisting and refuting the dominant capitaloscene, capitalocentric representation of capital-in-ecologies. Therefore, assembly thinking may be a step towards opening up dialogue for a different ecological imagining of capitalism.

3.4.2 An Ecological focus on Accountability

There has long been a call to explore accountability beyond social enclosures (e.g., Messner, 2009) and think about more ecologically diverse (Russell et al 2017) and ‘inclusive concepts’ of accountability (e.g., Munro and Mouritsen, 1996). In order to understand accountabilities in the everyday life and culture of people (Hopwood, 1994; 2009) and ecologies (Russell et al., 2017), we must explore ‘non-standard organizational forms’ (Laine et al., 2020) such as the complex and remote ecologies of our world, in order to understand the dichotomy between the social and the complex ecological. Assembly thinking urges us to consider the myriad interconnections, interrelationships and interdependencies between not just human, but also the ‘more-than-human, other-than-human, inhuman and human-as-humus’³¹ (Haraway, 2015, p.160) that make up an (ecological) assemblage. In other words, it reinforces the idea that assemblages are relational, composed of direct and indirect relationships between human and non-human actors (such as nature, species, spirits). Such loose and broad framings are important as they enable us to explore the diversity, multiplicity and peculiarity of accountabilities that are being acted upon and re-enacted in the pericapitalist ecologies of our world.

We currently know little about the interrelationship between accountability and deep aspects of ecology (Russell et al, 2017), and how they come together to create ecological accountabilities, draw out new visibilities between nature and humans, and most importantly, how are they enacted within their settings. As this thesis aims to study and develop the idea of ‘ecological accountabilities’ — the obligation of people(s) to provide an ‘account’ to nature(s) and, in turn, nature(s)’ ability to make people(s) accountable to itself — assembly thinking is a useful lens for studying and understanding the relationships that encompass ‘ecological accountability’ relationships (Russell et al., 2017) as well as the peculiar and complex ‘governance structures [that] emerge’ (Laine et al., 2020), and are

intertwined with diverse aspects of ecologies. Assembly thinking promotes the idea of multi-species and complex governing systems which underpin the stability of assemblages. Therefore, questions of “[h]ow to govern oneself, how to be governed, how to govern others, by whom the people will accept being governed...” (Foucault, 1991 p.87) can be situated in an ecological context, encouraging us to consider ecological modes of governance and accountability. Assembly thinking helps probe deeply into ecologies, in order to synthesise the deeply embedded ecological governance mechanisms and the deep, spiritual ‘geographical lore’ (Harvey, 2001) of ecologies. This geographical lore is embodied and socially acquired (Harvey, 2001) through intergenerational values, traditions and relationships, making ecologies and their actors resilient to nature-inflicted hardships. Assembly thinking therefore enables us to understand how the social and nature interconnect in tight-knitted communities and nature-rich ecologies. Numerous attempts have been made to understand the social aspects of space, such as the works of Lefebvre (1974; 1991) on ‘*la production de l’espace*’, Condominas (1980) on l’espace social, along with other significant contributions made by Foucault (1980; 1986), David Harvey (1982;1985 and 1990) and Ed Soja (1980; 1989). Thus space as a social construction has enjoyed much attention (Soja, 1980; Isnard, 1978; Sayer, 1982; Harvey, 1982), but space as an ecological construction is less well understood. An ecological perspective of social space is rooted in Durkheim’s social theory in which he consistently refers to social spaces as the geographical areas inhabited by social groups. Assembly thinking helps represent the ecological as well as the social, namely how they interact and are co-dependent. It is important to rekindle, strengthen and understand the interrelationship and interdependencies between the social and the ecological (which we frame through ecological accountability relationships) as they play an integral role in ensuring the smooth functioning of ecologies. Understanding how the ecological and social interconnect through nature embodiment and human-nature relationships (e.g., Kunchambo et al., 2017) is a prerequisite for understanding ecological accountabilities and modes of ecological governance, as the human body is ‘geographically malleable’, meaning it evolves, adapts, embodies and changes in ways that reflect its surrounding geographical environment as it is a ‘relational thing’, ‘created, bounded, sustained’ and intertwined with its ecological surroundings (Harvey, 2000, p.98). “The particularity of the body cannot be understood interdependently of its embeddedness in socio-ecological processes... to assert that the body is merely a social construct, then we can’t understand the ‘outside’ the forces that ‘swirl around it and construct it’” (Harvey,

2000, p.16). Assembly thinking provides a broader framing to understand the ecological as the powerful ‘outside’ force that swirls around and constructs the human actors in ecologies, including their identities, values, decision, actions and relationships. This art of ecological governing can be explored through assembly thinking.

Cuckston (2017) also highlights that the “extant accounting literature has not theorised how accounting [and accountability] can organise non-human life within socio-ecological systems” (p.1534). Assembly thinking helps us understand how accountability organises, influences and creates boundaries in ecologies, for both human and non-human life. An assembly is a construction with an inside and outside, and therefore assembly constructed around a network metaphor denotes an ‘inside’ and an ‘outside’. Actors (such as people, aspects of nature such as weather, species and institutions such as microfinance banks, credit unions and non-governmental organisations) on the ‘inside’ are closely connected to each other by a multiplicity and diversity of unbreakable bonds. (i.e., ecological accountability relationships). By contrast, those on the ‘outside’ are relegated to the fringes of the network and depend on the core of the ‘inside’ network in order to work and operate. The structure and mechanism created by an assemblage are precarious yet ferocious, “if you blow apart the strata [the sediment of the assemblages] ...you will be killed, plunged into a black hole, or even dragged towards catastrophe” (Deleuze and Guattari, 1987, p.160-161). In other words, the ‘inside’ elements form the functioning core of their assemblage. If any part of it is removed, there is a risk of tipping the entire assemblage. Accordingly, from an assembly-thinking perspective, accountability bonds together and holds the internal structure of ecological assemblages and provides the relational means through which the outside can interact with the inside and thus mitigate the risks of tipping over the entire ecological assemblage.

Assembly thinking, therefore, offers new ways to explore and understand how accountability is acted and re-enacted in ecologies. Within Gilgit-Baltistan’s ecologies, a strong, embodied relationship of (ecological) accountability between people and their surrounding nature(s) is being acted and re-enacted. These human-nature relationship (see Kunchambo et al., 2017), identified as ecological accountability relationships, emanate from spatially-bounded micro-networks (Boltanski and Chiapello, 2005) in ecologies. We can capture and frame such ecological accountabilities by using assembly thinking, which

enables us to make connections between the multiple, diverse non-human and human actors. This enables us to understand how ‘complex non-human’ (Russell et al., 2017) and ‘keystone actors’ (Bebbington et al., 2019), such as rivers, forests, totemic beings, spirits and animals are placed at the centre in different forms of ecological accountability relationships. By situating more-than-human and the ecological centre-stage in terms of relationship-making and relationship-influencing, we can generate ‘wider, wilder, and more vivid’ (Loftus, 2016, p.499) accounts of ecological accountability. Such myriad, tentacular interconnections between humans and non-humans also enable us to better study the chthulucene (Harraway, 2016), as we can collectively situate more-than-human, other-than-human ecological as well as the human actors at the centre of our story. How they influence each other, how they make each other, and how they work together to create strong, binding relationships of ecological accountability are some of the questions assembly thinking can help us answer. Assembly thinking provides a broad framework which enables us to make novel excursions into the complex, fragile and peripheral corners of our world, where nature plays an integral, influential and critical role in the constitution of the self, the social, the economic and the political landscape of nature-rich spaces.

3.5 The suitability of Assembly as a theoretical lens

Assembly thinking, as previously mentioned, is not a new proposition. It has been mobilised in several ways (e.g., by Hardt and Negri, Anna Tsing and Deleuze and Guattari), all of which reinforce the idea of cooperative networks, multiplicity, heterogeneity and interconnectedness. In a similar framing, I use the critical lens of assembly to study the complex ecologies of Gilgit Baltistan and in particular capital and accountability-in-ecologies. Assembly thinking indicates that there are multiple, diverse economic arrangements, all of which create a plethora of possible ways in which capitalistic and non-capitalistic forms interact. It also helps capture and frame the multiple and varied relationships of ecological accountability which bring together ecological assemblages. Assembly in this way provides a framework to explore and untangle the inherent complexity of ecologies including the multiple ecological processes, relationships and systems. In this way, it promotes the idea of multiplicity and heterogeneity of ecologies, suggesting that each and every ecology is unique and exclusive. Assembly thinking challenges us to dig deep to explore tentacular interconnections, systems and processes, all of which make and reaffirm

the stability of ecologies. In doing so, we are encouraged to understand the stories of ecologies: What is happening in this ecology? What is so unique about it? What interdependencies exist? What human-nature relationships exist? How are relationships formed between the various actors, including human and non-human? How does this ecology sustain itself? Which type of mechanisms and systems exist?

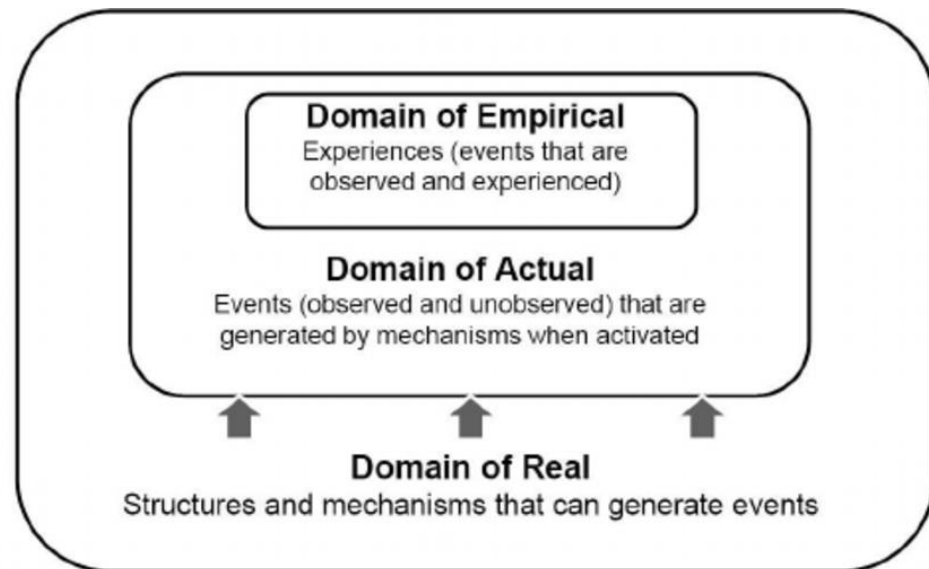
Assembly thinking therefore plays an integral role in this thesis as it enables me to re-think economies, namely how they are dependent on and sustained by their ecologies, principles of ecologies and most importantly, ecological accountability relationships. It also enables the opening up of the narrowly defined and bounded concepts of “capital” and “accountability” to render visible the complex ways in which human and more-than-human worlds are tightly interwoven and inseparable. We can re-imagine new modes of ecological organising and relationship-making in order to understand our beyond-human, ecological interdependencies. Assembly thinking therefore enables us to bring to life micro (capitalistic, social etc) networks, strong unitary forces, polyvocal voices, organic structures and the messy, tangled and complex assemblage of ecologies. The open-endedness and multiple possibilities of ecological assembly show that there is so much more out there to be explored and discovered.

3.6 Philosophical and Methodological Reflections

Assembly thinking, like all other theories and theoretical concepts, is premised “upon a philosophy of science and a theory of society” (Burrell and Morgan, 1979, p.xii). As such, the human-nature relationships discussed in the previous sections are predicated upon certain philosophical assumptions between human beings and their environment (see Burrell and Morgan, 1979). There are three dominant philosophies of science — positivism, social constructivism, and critical realism (Gergen, 2001) — that fundamentally attempt to influence, revise, modify, improve and revolutionise (Gomez and Jones, 2010) how we understand the world around us, including its structures and relationships, and this study situates itself in critical realism. This is because critical realism recognises the ‘multiple layers, complexity, interweaving and dynamic interactions’ (Olsen, 2009, p.85) between humans and nature and therefore allows us to account for what is happening in natural settings and eco-systems. This ontic depth (Olsen, 2009) asserts that the world is both

intransitive (exists independently of humans) and stratified (Archer et al., 1998, p.41) into three domains: the empirical, the actual and the real (Bhaskar, 1975; 1978).

Figure 4-3: Dimensions of Critical Realism: the real, the actual, the empirical



Source: Mingers (2004)

The domain of the **empirical** consists of human sensory experiences and perceptions, which includes things that were observed and heard whilst doing the fieldwork. Ultimately this encompasses all ‘empirical’ findings. Like many other ethnographers, I started from the world of the empirical (detailed in Section 3.8). To begin with, I assumed that my observations and personal experiences in Gilgit-Baltistan would enable me to understand the localised microfinancing arrangements of this Northern region. Through conversations I very quickly became familiar with the grassroots form of financing and localised capitalistic arrangement (see Figure 4-7 in Chapter 4) of some of the rural villages. However, many questions and curiosities remained unanswered e.g., Why were women (and not men) in the villages so successful in micro-saving and micro-borrowing? Why did women live life the way in which they did? How did the localised micro-saving arrangements become so successful? To answer these questions, I then entered the **domain of the actual**, which encourages one to look beyond the basic empirical findings and explore ‘why’ things are happening, structured, being acted and re-enacted in particular ways. This is achieved through deep conversations and immersing oneself in the everyday life of the local inhabitants of the ecological assemblage studied. Through deep conversations, focus groups

and in attempt to live life like the women in Gilgit-Baltistan, I began to better understand the complex ways in which Gilgit's ecologies (including the way in which women are arranged into networks of production) were held together. I learned about the engrained values, intergenerational beliefs, cultures, and mind-sets of the local women, some of which were observable and the others unobservable. My initial questions were answered but digging deeper into Gilgit's ecologies gave rise to only more and more questions which remained unanswerable e.g., How does nature assemble the social and economic? How do the local geographies manifest in relationships of accountability? After exploring the domains of the empirical and actual, one must then holistically consider the **domain of the real** in order to understand the causality⁵² and casual mechanisms⁵³ through which the world works. Ultimately, this encourages one to recognise that there are underlying or over-arching structures, and mechanisms, which in my case may emanate from aspects of ecology (both visible and non-visible) and that fundamentally contain the power to assemble things in particular ways. This is the essence of why things happen and how what we observe comes into being. Therefore entering the domain of the real enabled me to understand the causal processes, causal interactions, and causal laws by which Gilgit's ecologies worked. I began to reflect that nature (such as mountains, rivers, fields) prevailed the entire Gilgit-Baltistan region but why did each ecology operate so differently? After following through the domains of the empirical and actual, I came to realise that the actors, (including local women, NGO representatives, NGOs and microfinance banks) and nature itself was not what caused women and capital to be subservient to nature rather it was the 'in-between' set of accountability relationships (between nature and the local women) which were so central to Gilgit's *kudrathi nizaam*. The in-between set of accountability relationships were difficult to fully grasp because they were made up of rich traditions, intergenerational values, cultures and beliefs, all of which were rooted in sacred human-nature relationships (e.g., to be fearful of nature, to respect nature, to appreciate nature as a divine gift from God) passed down generations. Thus, each ecology (Danyore and Chipursan) had its own type of ecological accountability relationships (see Chapter 4 for landability and Chapter 5 for Naturability) premised on the unique human- nature relationships that were being produced and reproduced in their settings. This is what made ecology so widely heterogenous. This made holistically view the tight-knitted community economies of Danyore and Chipursan's

⁵² The relationship between cause and effect

⁵³ The process through which an outcome is brought about

ecologies as ‘ecological assemblies’ (as detailed in Section 3.4). Applying the theoretical framework of assembly to these ecologies enabled me to make connections and understand how accountability was premised on the local nature-influenced ways of living. The questions which could not be answered through the domains of the empirical and actual were answered through the domain of the real. I understood that what I experienced, observed and learned about the Danyore and Chipursan’s ecology was the unique social reality of these specific geographical spaces. Each and every ecology contains processes, relationships and systems which are ‘place-bound’ and ‘place-making’ (Herbert, 2000) making ecologies such complex, rich and heterogenous assemblies.

This ‘retroductive’ (see Bhaskar 1975;1978) perspective⁵⁴ is therefore theory-dependent, not theory-determined (see Danermark et al., 2019), as it contends that theories help frame the non-visible structures and mechanisms that underpin the world (e.g., Torraco, 1997; Friedman and Rogers, 2009; Danermark et al., 2019). Hence, after conducting and analysing the ecological fieldwork data following the domains of the empirical, the actual and the real, assembly was identified as a suitable theoretical framing (see Section 3.2).

In line with the idea that the world is intransitive and stratified (see above), I contend with an intersubjective view⁵⁵ on reality (see Cunliffe, 2011). Before attempting to reveal the underlying nature of the world (particularly of two different remote geographical spaces, see Section 3.4), it is first important to highlight the process through which I ‘concretise’ my relationship to my world (Morgan and Smirich, 1980, p.493) as this clarifies my ontological, epistemological and methodological positions. Intersubjectivity posits that there are many ‘interrelationships emerging and shifting in a dialectical interplay between ourselves, others and our surroundings’ (Cunliffe, 2011, p. 654). Therefore, there is no one single social reality. Instead, the complex and dynamic nature of human-human-nature relationships gives rise to a plethora of ‘imaginative’ meanings (Cunliffe, 2011, p. 654) of our world. My

⁵⁴ Retroduction refers to questioning why things are observed as they appear to be. Essentially, it is a method used to move backwards from observations and dig deep to explore why we see objects, relationships, systems, and realities constructed as they are.

⁵⁵ According to Cunliffe (2011), what differentiates intersubjectivism from the more commonly known subjectivism is ‘we-ness’, the idea of being complexly interwoven and being part of actively responsive relationships that are not under the control of the researcher. They form naturally and therefore over time, the researcher enters a fluid, embodied and embedded to its social and geographical surroundings and interpretations of things are thus multiple, and always embedded in time and place and in relation to others.

research accounts were thus intersubjectively situated in eco-systems where my personal experiences, along with that of the research participants, influenced the observations and interpretations of things. In this process, I became ‘embodied and embedded’ (the reflexive hermeneutic) (ibid p.654) into the ecologies I was trying to make sense of. Thus, my ontological position is that reality, to some extent, exists and operates independently of humans. However, it is intersubjectively experienced and interpreted by humans. Derived from this was my interpretive epistemology (see Burrell and Morgan, 1979), which broadly refers to ‘assumptions about the ground of knowledge’ (Chua, 1986, p.603). Employing an interpretive epistemology, ‘multiple realities are experienced, constructed, and interpreted in many ways’ (Cunliffe, 2011, p.10). This is a ‘pragmatic knowing’, one that is ‘in-situ’ and a ‘knowing-from-within’ (ibid, p. 654). As such, my knowledge of knowing and understanding the peripheral ecologies was informed by myself along with the localised geographical actors, both human and non-human, encouraging a ‘with-ness’ thinking (Shotter, 2008). This kind of knowledge is only obtained ‘from within one’s active, ongoing relations with the others and othernesses in one’s surroundings’ (Shotter, 2005, p.163). Therefore, an ethnographic method was employed (see Section 3.6).

3.6.1 Reflecting on the self within the research process

Without doubt, my ontological view coupled with my interpretive epistemology allowed me to understand the depths of ecologies, particularly ‘why’ and ‘how’ ecological accountabilities are formed, acted and re-enacted. However, my philosophical positioning also requires me to elaborate on my personal subjectivity and role within the research process.

Being a female British Pakistani, my everyday realities are shaped by particular cultures and values that I believe to be rooted in my upbringing, education, social spheres, geographical environments and most intriguingly, my experiences in exploring peripheral parts of the world. Collectively, these have infiltrated my thoughts and have challenged me to think and re-think ‘why’ and ‘how’ certain phenomena and relationships are as they are. Having said so, I have always been captivated by the geographical phenomena of the Earth, particularly its beautiful yet momentous and powerful features. How humans are assembled, immersed in and become integral parts of their surrounding geographical environments (i.e.,

their lands, their communities, their villages, their mountains, their forests, their deserts, their eco-systems) has always fascinated me. Therefore, I gravitate towards an inter-subjectivist position, seeking to explore and understand human-nature intimacies and perplexities.

According to Gergen (2001), there are deep structures (including accountability relationships, geo-political arrangements and so on) in the world that can be represented by scientific theories such as assembly and the reflexive hermeneutic of interpretive research. In this way, research on the studied phenomenon, in our case ecological accountabilities, develops as a ‘craft’ (as per Cunliffe, 2011) that allows us to see the world as fluidly and geographically ‘structured, differentiated and changing’ (Bhaskar, 1978, p.2). ‘Critical interpretation’ (see Alvesson and Sköldberg, 2009) is central to reflexive research as it brings into the open unconscious processes, ideologies and power relations (ibid.) that influence stories and outcomes. The critical lens of assembly allows intersubjectivity (as per Cunliffe, 2011) and requires research to be reflexive regarding critical interpretations. Subsequently, the research methodology adopted for this thesis was grounded in an interpretive epistemology which led to the research being designed as an ethnographic study.

3.7 Ethnography as the research design

This study adopts an ethnographic approach. The term ethnography comes from Greek: ‘ethnos’ are people, and ‘graphein’ is writing. This ‘people writing’ approach entails **stories** of human experiences. It allows one to explore how a particular community lives, studying events, language, rituals, institutions, behaviours, artefacts, and interactions (see Cunliffe, 2010, p.227). Ethnography requires the researcher to ‘...participat[e], overtly or covertly, in people’s daily lives for an extended period of time, watching what happens, listening to what is said, and/or asking questions through informal and formal interviews, collecting documents and artefacts—in fact, gathering whatever data are available to throw light on the issues that are the emerging focus of inquiry’ (Hammersley and Atkinson, 2007, p.3). Ethnography also unpacks the science of society and the ‘nitty gritty’ (Wills and Trondman, 2000, p.11) of everyday life to understand how societies are assembled and re-enacted on a daily basis.

Thus, ethnography is not merely a method of data collection; it is also a rich sociological practice (Rees and Gatenby, 2014) that allows ethnographic accounts to be understood in relation to the various geographical layers of an environment and its social structures, thereby ‘explaining’ phenomena as opposed to just ‘describing’ them (Watson, 2012). In this way, ethnography requires the researcher to get inside the heart, body and soul of individuals to make connections between their subjectivities and their socio-ecological structures and origins (see Rees and Gatenby, 2014). This provides a subtle yet complex view of society in which humans are neither passive products of socio-ecological structures nor entirely their creators. Instead, they are ‘placed in an iterative and naturally reflexive feedback relationship to them’ (Davies, 2008, p.26). This provides ‘unreplicable’ insights into the processes and relationships that sustain and motivate social groups (Herbert, 2000). However, it is important to note that such insights vary across geographical spaces, making them central to the assembling of landscapes; they are ‘place-bound’ and ‘place-making’ (Herbert, 2000). Therefore, when using an ethnographic lens, local geographies also make a major contribution to understanding how the social world works (Watson, 2011). Given the ‘natural’ (Brewer, 2000) and ‘earthly’ (Messeri, 2011; Genovese, 2017; Lempert, 2018) nature of this method of data collection, ethnography was deemed most appropriate for this study.

3.7.1 Ethnographic Data

Ethnographic fieldwork was conducted in Gilgit-Baltistan, a Northern Province of Pakistan, in two different geographical settings — the rural village of Danyore and the remote valley of Chipursan (Section 3.8 for the demography and geography of the fieldwork sites) — for an extensive six-month period. The process of how I conducted my ethnography are detailed in Section 3.8 below which highlight how I entered the field, identified the fieldwork sites, encountered my interviewee participants etc. This section details the ways in which I gathered ethnographic data, which was then converted into ethnographic geostories (see Section 3.7.2).

Like any ethnographer, I first required access to the field, a rural setting in Northern Pakistan. A formal ethical approval from the University of Glasgow’s ethics committee was necessary before I could access the field therefore my fieldwork started in August 2019 after

I had been granted my ethical approval. Following the ethnographic tradition of collecting data in natural settings, I collected my data in an open-ended, unstructured and natural manner (see Walsh, 1988). Therefore when deemed appropriate, I employed the techniques of informal/formal, open-ended interviews, focus groups and observations (see Appendix 1 and 2 for a summary of data collection and research participants). Observation data was conducted through observing people, processes, characteristics, interactions, behaviours, reactions and *tanzeem* activities. This natural process of collecting data also worked particularly well when it came to conducting interviews and focus groups because I had in mind the topics that I wished to explore and the questions that I wanted to ask, thus I was able to direct the conversations with the research in mind. This also enabled me to conduct informal, deep and meaningful conversations with my interviewees, which in turn allowed open-ended responses. For this reason, I prefer to refer to both the formal/informal interviews and focus groups as ‘conversations’, as most of them were conducted in this informal manner with local women in their natural and everyday settings (such as in their homes, fields, businesses).

Following this ‘conversation style’ interviews and focus groups was important as it enabled me to understand the social and cultural realities of the ecologies which I was trying to understand. As I was focusing on a village and remote valley setting, interviewee participants were selected in a natural manner. For example, whilst having a conversation with a *tanzeem* member in her home, a few of the interviewee’s friends decided to visit. We had tea together and one woman very kindly invited me to her house for dinner that evening. Like this, I crossed paths with many women that kindly agreed to be a part of my research. During the conversations, *tanzeem* members were often accompanied by their friends and relatives. When there were two or more women, I conducted focus groups as women shared close relationships and were comfortable to share personal matters and opinions with each other. Conversations were mainly centred around their way of life, everyday practices, values, perceptions, traits and their connection with their surrounding natural environments (see Appendix 1 for interview themes, questions and concerns).

Overall, interviews/conversations and focus groups were conducted with 128 individuals (see Appendix 2) with each interview lasting approximately 1-2.5 hours and each focus group lasting approximately 2-3 hours. However sometimes, women discussed other things

such as family matters and their financial situations and the conversations continued for much longer. As the study is based on interviews and observations, ethical issues were addressed with due diligence. Prior to conducting any interviews, free consent of the interviewees was taken in the prescribed form by Glasgow University's research and ethics committee. Confidentiality of data and anonymity of interviewees was ensured throughout the process. I only named participants, mainly local women, that requested for their names to appear in my research. Most interviews/focus groups were audio recorded with prior consent. As the interviews were mainly conducted in Urdu, I was concerned about the potential danger of other people transcribing and translating the interview notes into English (Hayes & Mattimoe, 2004; Marshall & Rossman, 2006) therefore I decided to transcribe and translate the interview records myself as Urdu is my mother tongue.

Throughout the fieldwork period, a personal diary was also maintained to note my personal reflections on data collection. The diary covers a wide range of issues, such as the thinking process before the interview or conversations, personal thoughts immediately after the meeting and a brief outline of emerging themes as well as mind maps and illustrations which helped me to make connections and understand what was happening in the field. My hand-written diary notes were written in English (translated in the process). Collectively, my hand-written notes and transcriptions amounted to a great amount of unsystematic, voluminous and unstructured ethnographic data. Due to the nature and complexity of ethnographic data, careful analysis, interpretation and presentation is required (Brewer, 2000). In any qualitative research, data analysis tends to be an on-going and iterative process. Therefore my data collection and data analysis processes were intertwined as a reciprocal action to understand the stories of my fieldwork sites. Throughout the data collection, personal reflections were made based on the theoretical framing and field experience. Theoretical choice (assembly) was also not a pre-determined one, rather settled with the iterative reflections on rich field materials. The transcription and the notes that were taken were used to identify common themes which brought to light the ecological nature of both accountability and capital, making three valuable ethnographic contributions to the thesis: **first**, I was able to identify, understand and see how ecological accountability relationships (tri-accountability relationships between the self, nature and other) were being acted and re-enacted in people's everyday lives; **second**, I was able to gain an insight into the micro, localised, grassroots forms of borrowing (*tanzeem*) and how it worked and circulated capital

both locally and globally; and **finally**, but perhaps most importantly, I was able to comprehend the vastness, superiority, significance and spirituality of the localised surrounding geographies (land, nature, mountains and rivers), and how these played an integral role in the formation of ecological accountability relations and the *tanzeem* arrangements. I then theorised these theorised these ethnographic findings derived from my data collection and analysis into geostories (see Section 3.7.2 below).

3.7.2 Ethnographic Geostories

As previously mentioned, (see Section 1.5), it was decided to present the ethnographic findings in the form of two distinct ‘geostories’.⁵⁶ Ethnographic geostories enable one to capture and animate the unique, deeply embedded geographies of the ‘-stan’ (land). However, “to appreciate the meaning these stories convey requires an intimate knowledge of the local natural environment, local animals and plants being the main characters and local places the stage on which they act out human drama...” (Hunn, 1993, p.14). Geostories situate not just the human, but also the more-than-human, inhuman and human-as-humus (Harraway, 2015) at the centre of the story. This art of ‘story-telling’ inspired by Latour’s (1998; 2004) encouragements to ‘feel’, ‘follow’ and ‘experiment’ when ‘ecologising’ experiences and moments, enables us to absorb and recognise the complex, entangled and embedded geographies of marginalised, rural and remote territories. By feeling, following and experimenting with the ecologies of Danyore and the Chipursan Valley, the ethnographic fieldwork yielded fascinating tales, myths, fantasies, realities and experiences that were rich, detailed and to some extent rather peculiar. Geostories proved to be a suitable way to present/narrate the findings. Relationships between the human and non-human world, i.e., the biotic and non-biotic, along with an array of other interesting things also came to light during our fieldwork and geostories allowed us to frame these findings in detailed narratives, conversations, pictures, observations and diagrams. In doing so, I was able not only theoretically but also empirically, to illustrate the inter-relationships between local geographies, relations of accountability and assemblages of capital.

⁵⁶ As previously mentioned, the prefix “Geo-” encompasses the vastness of the Earth’s surface, and all its varied topography (i.e., mountains, rivers, lakes, glaciers, valleys, roads, cities, villages and so on) and the suffix “-stories” addresses the lived realities, ways of life, embedded cultures, traditions, values and norms along with a host of other of socio-ecological matters.

Geostories were also deemed suitable as they provide us with new ways to engage, think and frame the (accountability) relationships between humans and their natural ecosystems. They give insights into the ‘wider, wilder, more vivid interdisciplinary mosaic’ (Russel et al., 2017, p.1444) of various actors, both visible and non-visible, human and non-human, including their physical and human environments (Kim and Jeong, 2017) that constitute relationships of ecological accountability. These ‘other-than-human persons’ (Hallowell, 1963, p. 23) with which humans can maintain ‘social relations’ — in this case, the land, mountains, rivers, species and the weather— are detailed, emphasised, and animated, at times also ‘exaggerated’ (Chamberlayne et al., 2002) in my geostories so that we can come to comprehend the centrality and significance of local geographies in crafting accountability relationships. Geostories, therefore, allow us to explore the ‘wider social and economic environment’ (Robson et al., 2017, p.36) and planetary boundaries⁵⁷ (Antonini and Larrinaga, 2017) that are entangled in the ‘tentacular’ connections (Harraway, 2012) that make up ecologies. They also help us to expose the fine details, intricacies, complexities, messiness and most importantly, the ‘multiperspectival’ and ‘unimagined possibilities’ of ecologies (Dey and Russell, 2014; Harraway, 2016; Loftus, 2016; Bauman, 2019) that would otherwise be considered overly abstract, complicated and unapproachable. Geostories therefore dig deep into the depths of ecologies and contain ‘only more and more openings and no bottom lines’ (Harraway, 2016, p.115), allowing space for questioning and creativity of the various types of ecological accountabilities arising between non-humans and humans in the chthulucene.

Stories have varying aesthetics; some are ‘empirical, others imaginative; haunting and poetic, others no-nonsense practical; some energetic, full of brilliant paradigm-shifting neologisms, others plain spoke and heartfelt’ (Kenney, 2016, p.75). However, each kind of story has a different way of engendering new thoughts, connections and understandings of our world. Geostories tell us about the processes, relationships and overall assembly of ecologies that in our case contribute to the understanding and framing of ecological accountability. Two geostories are narrated in the forthcoming chapters that contain fascinating ethnographic details of ecological accountabilities:

⁵⁷‘Planetary boundaries’ is a concept that involves the Earth system processes that contain environmental boundaries. It is commonly used to define the environmental limits within which humanity can safely operate.

1. Chapter 4: Savaging, Salvaging and Landability
2. Chapter 5: Adapting, Enduring and Naturability

It has long been argued that we need to revivify the approaches and ways of narrating accountability (e.g., Sinclair, 1995). If geostories render us capable of responding to the call for enhanced accounts of ecological accountabilities (as per Russell et al., 2017), we will need more stories.

3.8 Backstory: probing into the ecological assemblies of Gilgit-Baltistan

Before presenting the geostories in the forthcoming chapters, it is first helpful to understand the background to these stories — the myriad characters and their earthy settings and how they are implicated in my ethnography. This not only lends depth and perhaps believability to my geostories, but also makes one familiar with their respective ecological assemblies. After all, ecologies are complex meshworks (DeLanda, 2006) containing many overlapping interconnections, interdependencies, relationships and systems. Therefore a backstory is useful and sometimes essential. It introduces some insightful details, such as the overall geography and demography of the region of Gilgit Baltistan, and most importantly, it tells us how and why these ecologies were discovered, explored and [animated](#).

These stories (presented in Chapters 4 & 5) were born out of my curiosity about my country of origin, Pakistan. Its rich geography — including its varied topography, from plains to deserts, forests, plateaus, and snow-capped mountains in the Himalayan North — embedded within its current socio-economic environment had always fascinated me. Moreover, the organic nature of rural society, the cardinal role of NGOs and the overpowering role of rural woman and their tremendous contributions to Pakistan's financial landscape were just some of things that enthralled me. From my recent visits to rural villages in Pakistan, I was taken aback by the drive, passion, determination, and most importantly, the trust and loyalty with which rural females carried out their work. In these geographically harsh, complex and fragile spaces, I discovered life to be simple, the truth to be spoken and nature to be in its purest form. There was definitely something that made these women want to inhabit these remote rural territories. Something perhaps spiritual, something non-capitalistic, something beyond our apprehension. The forthcoming geostories (Chapters 4 &

5) stemmed from my passion for animating this very village perplexity. Although this environment is commonly perceived as impoverished and mundane, I aspired to explore how these rural females and their ecologies were interrelated. How did they cultivate capital in the multiple realms of the social, cultural, symbolic, and economic? Why did they do what they did? To whom were they accountable? And ultimately, what governed life on the periphery? Surely their glorious natural surroundings must have some role to play.

Ecologies are not ‘out there’ for inspection, collection and reporting; rather, they are supposed to be apprehended, felt and experienced (see Latour 1998; 2004). Only then can ecologies be somewhat and somehow studied, understood, theorised and put into stories. In an attempt to find an answer to my human-nature and ecological curiosities, it was important that I could ‘feel’ and ‘internalise’ the ecologies of Gilgit Baltistan, and therefore an ethnographic approach was deemed appropriate and ethical approval was obtained from the University of Glasgow to conduct fieldwork in Gilgit-Baltistan. This was the starting point of the research endeavour.

Aside from my prior familiarity and comfort with Pakistani culture, traditions, the Urdu language, and the ways of living, the process of internalising Gilgit’s ecologies started in Glasgow. New connections were sourced online. Dr. Muhammad Ilyas, an Accounting and Finance subject head at Karakoram International University in Gilgit-Baltistan, became my first point of professional contact. Many friends and family in Glasgow also introduced me to Gilgiti families and informed many people of my planned arrival. However, all my preparations — to visit and explore certain villages, people and NGOs — seemed ‘in the air’ because in a country like Pakistan, it is near impossible to plan, organise or formalise anything without ‘*aamna saamna*’ (being face-to-face). Also, the cultural proverb of ‘*fikr na karo, kaam ho jiy ga*’ (don’t worry, your work will get done) did not help. It was the most common response I received from friends, family and professional contacts and does not equate to any sort of certainty or reassurance that things will happen. Rather, it is merely an expression of ‘we will see and hope for the best!’ Therefore, the fieldwork started off with no concrete plan, many unanswered questions, anxieties and butterflies. Perhaps approaching the field in an organic, fluid-like manner, not knowing what to anticipate, was more fitting to the natural setting of Gilgit-Baltistan where Nature is capricious and uncertain, making life and the way of living precarious and unpredictable.

My husband kindly agreed to accompany me to the faraway, mountainous lands of Gilgit-Baltistan; for me, he was a pillar of moral support, but culturally he was a figure of protection and respect. A lone female traveller, especially within the rural and remote regions of Pakistan, would warrant a red flag. The presence of a male figure is a cultural must. Gilgit-Baltistan is a highly militarised region due to its fragile geo-political location, and therefore multiple army checkpoints are scattered across the entire region. A lone female traveller would attract unnecessary attention as she would pose a safety concern. Not to mention the fact that she would also face difficulty in approaching unknown males (be it professionals, shopkeepers, farmers, or taxi drivers) due to cultural barriers and any attempt to do so would be rather awkward.

Figure 4-4: Himalayan Mountain Range and Gilgit-Baltistan Airport



Source: Photographs taken by author

From Islamabad we took a two-hour domestic flight over the breathtakingly beautiful Himalayan Mountain range in order to make “entry” — the initial act of entering the field — (Johnson, 1975, p.52) into Gilgit-Baltistan. The region, formerly known as the ‘Northern Tribal Areas’ (only granted limited autonomy and renamed Gilgit-Baltistan in 2009), is a

Northern Province of Pakistan, sharing international borders with Afghanistan, China and India. Administratively, the region is divided into seven districts: Astore, Diamer, Ghanche, Ghizer, Gilgit, Hunza-Nagar and Skardu (see Figure 3-5). The entire province is a true manifestation of Nature's incomprehensible and enticing beauty. Locally promoted as 'the Switzerland of the East' and the 'land of glaciers', this region is home to some of the world's largest mountain ranges: the Himalayan, Karakoram and Hindukush ranges to name just a few. Its snow-capped mountains, glorious glaciers and tranquil valleys create a truly majestic landscape. From the moment of arrival, I knew I had entered a truly majestic, nature-rich ecology. The combination of the fresh aromatic air, the extremely low level of anthropic noise and my feeling of insignificance before the enormous mountains that stood firm and concrete in every direction, truly instilled an overwhelming sense of admiration and awe of Nature's beauty, vastness and supremacy. From the onset, I knew that this peripheral part of our world was unique, particular and different from most of the world's inhabited spaces.

Figure 4-5: Map of Gilgit-Baltistan, Pakistan



Source: Benz (2016)

To successfully conduct ethnography, it is important for any researcher to first gain the ‘cooperation’ and ‘trust’ of participants by establishing interpersonal relationships with them (Berg, 1998). The researcher-participant relationship forms the core of the knowledge-creation process (Hammersley and Atkinson, 1995) and therefore appropriate ‘camouflaging’ (Levin, 2014) techniques are necessary to ‘fit’ and ‘blend’ into the local ecology. Levin’s (2014) techniques of ‘masquerade’, to ‘dress-up’ (Levin, 2014, p.32) in a culturally appropriate way and ‘mimicry’, the method of adapting (Levin, 2014, p.11) into society worked particularly well. After a trip to the local markets to purchase fabric, some local women lovingly hand-stitched me ‘*shalwar kameez*’, cultural attire worn by women all over Pakistan (see Figure 3-7). Pakistani women also wrap a large ‘*chadar*’ (shawl) around them as modesty comprises a huge part of their belief and culture (see Figure 3-6), so I did too. This was my ‘masquerade’. ‘Mimicry’, on the other hand involved very little effort. I was invited to teach at a local primary school, a central hub of the local female community, where I taught several subjects, such as English, maths and religious studies to children of all ages. Through teaching, I made many new friendships, which later became valuable connections, and I very quickly learned the local way of life.

Figure 4-6: Masquerade and Mimicry



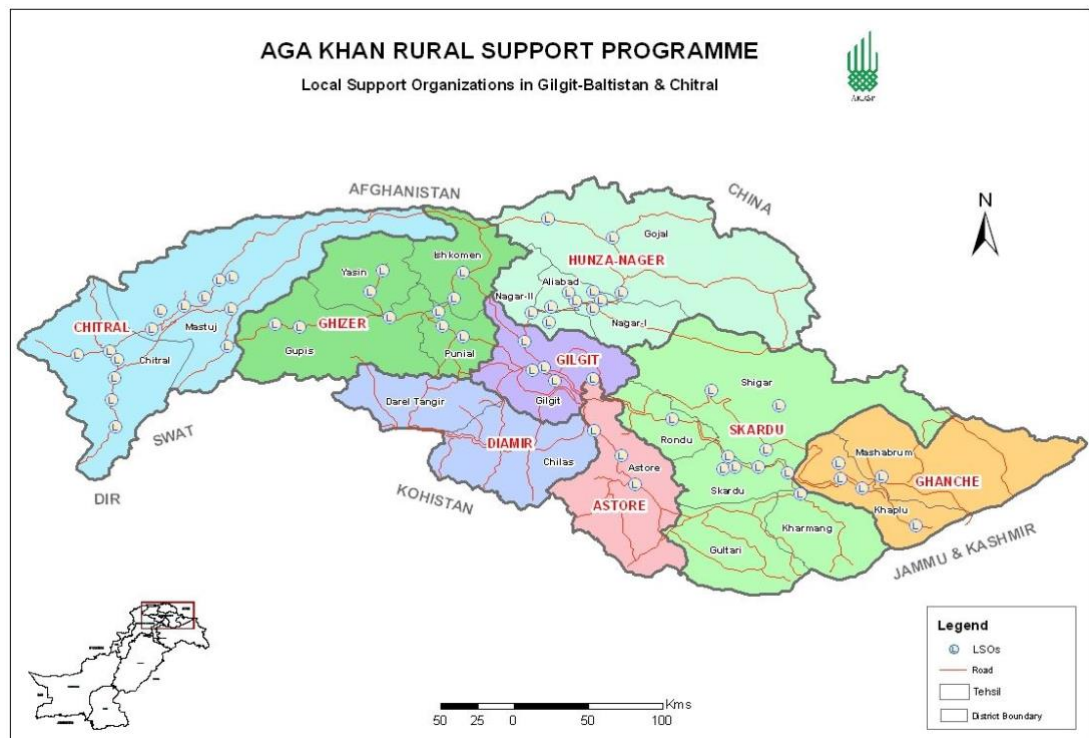
Source: Photograph taken by author's husband

I had an unexpected but valuable encounter with one of the largest, most prosperous and thriving NGOs in Pakistan, The Aga Khan Rural Support Programme (AKRSP). AKRSP introduced microfinancing to the Gilgit-Baltistan region in early 1982 with the help of international donors such as the European Union, Foreign Affairs, the Aga Khan Foundation (AKF), the Swiss Agency for Development & Cooperation (SDC), Trade and Development Canada (DFATD) and the Aga Khan Foundation Canada (AKFC), just to name a few. In conversation, Ruqiya, a family friend mentioned that she had ‘*waqfiyath*’ (a conversance) with AKRSP’s General Manager, locally known as GM ‘*saab*’ (sir) — a respectful title commonly used for powerful and wealthy elites in society. She kindly arranged a meeting with the GM *saab* in the belief that it would provide me with a better understanding of the extensive and rather diverse landscape of micro financing in Gilgit-Baltistan. It was in my kismet that AKRSP’s head office happened to be across the road from where I was staying. After a series of conversations with Muzaffar Ud Din (General Manager, AKRSP) and Aesar Ali (Lead Access to Finance, AKRSP) the loose and floating thoughts that I had aggregated in my mind about Nature and everyday life in this region started to somewhat come together.

Geography, Culture and Economy lie at the heart of AKRSP's projects, which are categorised into five major development agendas: infrastructure, natural resources, enterprise development, microfinance and women's development, with a focus on the latter two. Demographic and geographic targeting thus play a significant role in disseminating appropriate (ecology-specific) projects across their fifty-two branches in Gilgit-Baltistan (see Figure 3-7):

We are now shifting to a focus on geographic targeting...this involves the careful consideration of the local geography...such as the varying altitudes and close border territories that have unique cultures and ways of living... it is extremely important for us to understand the geography and culture of the regions that we operate in... these have an enormous influence on local financing practices; therefore, they play a huge role in determining the success of our microfinancing projects. (Muzaffar Ud Din, GM)

Figure 4-7: AKRSP's Geographic Presence in Gilgit-Baltistan



Source: AKRSP website

Indeed, Nature was dominant and all-powerful and nothing here escaped its realm. The natural setting of Gilgit-Baltistan, including its simple way of life and its close connection to nature, nurtures a variety of interesting human-nature relationships (see Kunchambo et al., 2017) and therefore naturalism⁵⁸ pervades the region. Chithral, a Pegan village, like

⁵⁸ The belief that natural laws and forces control the world and universe.

many other remote villages in Gilgit-Baltistan, practises extreme forms of Naturalism, where Nature is deemed to be sacred, worshipped and in control of the entire universe. Many other ecologies regard Nature as a ‘gift’ or ‘*baraqa*’, a divine blessing from God (see Chapter 4). Indigenous groups that have migrated into the region — such as the ‘Derthick’ people of Indo-origin and the ‘Iranians’ of Central Asia, Afghanistan, Turkmenistan and ‘Haka’ from the Xianjiang region in China — also bring their unique nature-beliefs and values with them. Nature forms a cardinal part of life here. With the ecological curiosity to better understand this Nature and its relevance and momentous role in all aspects of everyday life, I aspired to delve deep into the villages, communities and rural territories of Gilgit-Baltistan.

To make capital work in this complex, nature-rich and intricate region, AKRSP pioneered the ‘Seven Valley Project’, whose sole focus is enhancing and broadening the scope of financial inclusion in seven of the Northern valleys, highlighted as priority valleys because of their remoteness, sparse population, and extreme weather conditions. I became particularly fascinated by the Chipursan Valley, a faraway valley cut off from the rest of the world, which I identified as perfectly suited for the purpose of my ethnography (see Figure 3-9). At varying altitudes, AKRSP also strive to encourage (ecology-specific) ‘community-driven’ initiatives (see Chapter 4.3) to enhance financial stability in regions where agriculture fails to enable people to sustain a livelihood.

In ‘Double-cropping’ zones, at altitudes below 1000 metres, these places enjoy longer summer months and have two harvests a year. The soil is also more fertile therefore multiple crops can grow... ‘traditional cropping zones’ are places with altitudes between 2000 to 4000 metres high, and they have one and a half crop...and in ‘single cropping zones’, at much higher altitudes, usually anywhere 4000 metres above sea level, the weather conditions are not so great...because of the longer and colder winters, they only have one annual harvest with very few crops that can survive the cold conditions and poor soils...this is where life becomes more difficult... and where we face greater challenges in implementing our micro financing initiatives. (Muzaffar Ud Din, GM).

Various attempts are made to ‘make’ capital work in varying ecologies. At higher altitudes, AKRSP’s programmes “suffer”, and they are “adapted” to the local geographies of the place. This is where and how I began to reimagine capital, from a completely new perspective, one that I was quite honestly unfamiliar with. Like many others, I held a very superficial view of capitalism, one that cast capital as a hegemonic, triumphant and dominant power over all aspects of life, including the social, political and ecological. However, here in the midst of this mountainous region, me, my thoughts and my outlook on many things

felt humbled before nature. Through this organic lens, I began to see an alternative to the world as I knew it. As the locals said, nature was indeed the ‘all-mighty’. Here, all aspects of life were subordinated before Nature and so too was capital. I became fascinated by this organic, fluid dimension of capital that I had caught a glimpse of through AKRSP’s micro financing projects. However, I found it rather absurd that AKRSP’s mantra, ‘Capital is Power’ fuelled their ideology. I did not see it as befitting to Gilgit’s nature infused landscape. Therefore, I was curious to know more about capital-in-ecologies: how did capital penetrate and circulate the nature-rich ecologies of this region? Much of Gibson-Graham’s (1996; 2006a; 2014) ‘anti-capitalocentric’ narrative of alternative ‘diverse economies’ and ‘community economies’ appealed to me (as detailed in Chapters 4 & 5) as I found much of their work beautifully brought to life the capital that I began to see and experience in Gilgit-Baltistan.

Figure 4-8: Meeting Place at Karakoram International University



Source: Photograph taken by author

At Karakoram International University, my meeting with Dr Mohammad Ilyas, the subject head of Accounting and Finance was also very informative. Not only did I learn more about the nature of microfinancing and AKRSP's work in the region, but I was also fortunate enough to cross paths with two of Dr Ilyas's female students, Injleen and Razia, who had happened to come to discuss some of their coursework with him. We quickly became friends and some of our initial conversations sparked my curiosity to understand and explore deeper aspects of feminism:

Like other women we also do jobs and look after our children and families...but those women only look after around three to five family members, whereas 'yahan kee hathun' (us woman), we take care and look after around fifteen or more family members. We also join the office, do jobs, work in the farms, as well as give our parents support and help...we are different from those women. (Razia)

I want my success to be greater than these mountains [referring to the great mountains of Gilgit-Baltistan]. (Razia)

Every day, I get up at 5am and first I feed and graze the animals. I then tidy the house and prepare fresh breakfast and dinner for the day. After I'm free from the kitchen, I wake the children and get them ready for school...I only feed my children fresh, organic and home-made things...before the children come back home, I spend the day looking after my elderly in-laws and attend to them. During this time, I also run my own business...My evenings are occupied with teaching at my local Jamath Khana (Islamic centre) and doing homework with the children...we don't have one job; we have multiple jobs... we know how to fulfill and maintain all our responsibilities. (Injleen)

I want to achieve a lot in life and become very successful...I want my business to thrive so that tomorrow my daughters can take inspiration from me...no matter how many things come your way, you should never give up on your dreams. (Injleen)

Who were 'those' women and who were 'yahan kee hathun' (the women of here)? Why did Injleen and Razia have such a passion and drive to succeed in life? What fuelled their pride, confidence and dreams? Why did they refer to Nature in their expressions and aspirations in life? Did their nature-rich landscape have some role to play in cultivating their progressive and aspiring identities? These were just some of the things I grew eager to know and understand. Injleen invited me to Danyore, her village, where I made many useful contacts, such as Mr. Zaffar (head of Danyore's LSO) and Syeb Jahan (chairman of Danyore's LSO). Through these friendships and connections, Danyore became my first fieldwork site (ecology).

Figure 4-9: Fieldwork Sites



Source: adapted from Hussain et al., (2021)

Like the rest of Gilgit-Baltistan, the markets of Danyore with their hustle and bustle were a women-less landscape. At the onset, Danyore also seemed like a man-driven society/community/economy as men in black, white and sky-blue shalwar kameez⁵⁹ crowded the roads and markets. Here, I only found women hidden and busy at work in their fields, homes and in Baig Market (a women-only market). According to the local view on female spirituality:

Men are loafers, that's why you will see them aimlessly walking around the bazaars or sitting outside shops playing cards, drinking tea and talking for hours...the real work is done by us women here in the farms and in our homes...our society runs on our hard work. (female interviewee).

It was truly remarkable. I was charmed to learn that Gilgit-Baltistan, unlike large parts of mainland Pakistan, contained such liberal, progressive and non-patriarchal societies in which

⁵⁹ Shalwar kameez is traditional attire worn by both men and women in Pakistan. Shia (a sect of Islam) wear black, Sunni (a sect of Islam) wear white or pale blue and Ismaili (another minority sect of Islam) wear either.

women played a momentous role in shaping the social, financial and political landscape of their homes, communities, and economies. However, like the rest of Pakistan, its societies are unfortunately patrilineal, meaning that property and title can only be inherited by males. “A male guarantor is a must if a woman wants to obtain a loan or any form of credit...this was the biggest challenge facing women and access to finance” (AKRSP representative). Culture and traditional norms prevail and prevent capital from reaching women; another vulnerability of the so-called ‘empire’ (Hardt and Negri, 2000) of capitalism. To enable these women to flourish and reign in their lands, AKRSP has undoubtedly played a transformative role in their day-to-day lives, by providing workshops and resources to help these women enhance their entrepreneurial and agricultural skills, as well as facilitating their access to finance through the *tanzeem* system, a self-organised, grassroots, microfinancing arrangement run by women (see Chapter 4 for more details). Yet again, in this financial arrangement, I saw Nature prevail. Nature was the ultimate source of nourishing and sustaining:

This land has freed us...our lands have done many things for us in the past... now owning land makes us credible, people know that tomorrow we won't pack our bags and flee our village because our land holds value for us...our generations have lived off soil, that's why we have an attachment to our lands...because of this, we join our local tanzeem to save and borrow. (female interviewee)

I came to understand that the *tanzeem* itself was a system deeply implicated within the local geographies of its ecology, founded on incarnate human-nature relationships (see Kunchambo et al, 2017) and principles of ecology (see Chapter 5) emanating from the heterotopia of ecologies in this region. The *tanzeem* was more than a financial assemblage; it was a manifestation of Nature’s subtle yet overarching power over all aspects of life. Again, these were some of the initial enchantments which encouraged me to explore capital-in-ecologies.

Without doubt, the natural setting of Danyore, including its simple way of life and close connection to nature fuelled the geographical inspiration of this study. This place truly existed as part of its inhabitants’ identity. With this geographical curiosity, I began to delve deep into the intricate social structures of Gilgit-Baltistan so that I could better understand the relevance and significance of its natural environment and study some more of the endless intricacies of its nature-rich ecologies. There were so many entanglements and just too much to comprehend.

Through listening, observing and interacting with rural women, I began to rethink our economy. Nature and its actors — all things which harmonise and interact with Nature — formed the centre of this picture. Nature here not only worked on the surface, but also operated in a much more complex and profound manner, embodied in inhabitants, diffusing a powerful, self-inspired form of nature-governance and ecological accountability. Nature-sacredness was strong and permeated the region with the belief that Allah (God) is the all-provider, all-sustainer and all-merciful, and that Nature is a true manifestation of his divine blessing bestowed upon these people.

Danyore (as well as the Chipursan Valley) is an Ismaili ‘*alaka*’ (area), meaning that the people are followers of a moderate branch of Islam and densely populate the Gilgit-Baltistan region. Their Imam (religious leader), Aga Khan, resides in Switzerland and disseminates religious teachings across the world through weekly Friday ‘*bayaans*’ (religious talks) that are played in *Jamath Khanas* (religious centres used for worship, community initiatives and educational purposes) all over the world. Despite considering myself a practising Muslim, aware of the diverse branches of Islam across the world, I was unacquainted with Ismailis. I was mesmerised by their close-knitted and prosperous networks that are thriving in the region. I was even more startled to learn that Jamath Khanas are not just a symbolic place of worship, they also have a profound role to play in the financial stability of ecologies:

each area has its own Jamath Khana and each Jamath Khana has its own tanzeems...this keeps our tanzeem system organised and ensures we only include and trust people from our own alaka. (female interviewee).

Jamath Khanas geo-spatially organise people into ‘*alakas*’ through their shared beliefs as well as their ‘topophilia’ (Tuan, 1874) towards their lands and surrounding Natures, and these women are thus able to build binding relationships of trust and cooperation which in turn nurture strong, resilient, ‘community-economies’ (Gibson-Graham, 2014; 2016).

Nature here was intertwined with all aspects of life, from beliefs to cultures, traditions, mindsets, values and ways of living, sitting, acting and behaving, it moved everything. I was overwhelmed by Nature’s multiplicity, complexity and interconnectedness and the interdependency of the plethora of systems, relationships and actors, that were all encapsulated within Gilgit’s ecologies. Those ecologies were rich, messy and extraordinary. They were also similar yet so different. I sought to understand what kept them intact. How were nature, capital and the extraordinary lives of these women interconnected? Why did these women desire to live life in the way that they did? How did each ecology nurture its

own unique relationships with Nature? Through rigorous reflection, many deep conversations, and the slow process of absorbing nature, I unveiled ‘ecological accountabilities’; strong, resilient and binding relationships of accountability that were being acted and re-enacted in the landscapes of Gilgit-Baltistan. The forthcoming geostories (Chapters 4 & 5) are an animation of these ecological accountabilities, the ones that I observed, felt, internalised and experienced in the beautiful, intricate ecologies of Danyore and the Chipursan Valley.

This was the backstory of my geostories —how I stumbled across these ecologies, crossed paths with such inspiring, resilient and driven women, witnessed an organic capital, one subjugated to nature and perhaps most compelling of all, how I discovered ecological accountabilities. Geostories are not about illuminating the known, rather they are about bringing to the surface new visibilities and alternative ways of seeing small, significant and forgotten parts of our world, and this is what the forthcoming geostories attempt to do. Therefore, as well as the local histories (see Chapters 4 & 5 for details), methodologies (see Section 3.6.1), and theoretical arguments (see Section 3.2) articulated throughout the chapters, my experiences of feeling, following and experimenting with my thoughts in these ecologies are equally as important, as, by informing the narrative of the geostories, they form an integral part of the ‘story-line’.

Before narrating the geostories in the forthcoming chapter, it is first important to highlight some possible limitations of my ethnographic experience. This is essential as such limitations may have blurred my vision and hindered my experience of feeling and internalising the ecologies of Danyore and the Chipursan Valley. The first is my belonging and identity. Despite all the ‘masquerade’ and ‘mimicry’ (Levin, 2014), to fit in and to feel and experience life as an everyday woman in the rural landscapes of Gilgit, the truth was, I was far from that. My air-conditioned car, comfortable accommodation, freshly cooked meals, the emotional support of my husband, decaffeinated tea bags and chocolates that I had brought with me (a reminder of Glasgow), the love, care and affection I received from friends that became like family, and the idea lingering at the back of my mind that I would return home to Glasgow, my ‘normal’ life, were only some of the deeply problematic obstructions that constrained and hindered me from truly becoming a ‘*yahan kee hathun*’ (a woman of here). The women of Gilgit were extremely hospitable and caring. They would walk me through their fields after sunset and switch on the fan in their homes for me during

our conversations, so I hardly experienced the scorching midday heat. In Chipursan, AKRSP ensured I was accommodated in a comfortable guesthouse, arguably the best in the valley. The women of Chipursan would light a fire for warmth and serve naan, homemade flatbread, and chai, a sweet, local milk-based tea. These were all comforts and therefore my exposure to the harsh natures of these ecologies, my ability to feel their resilience and experience their true way of living was limited. My geostories are an attempt to animate these ecological assemblies. The voices of these women, their livelihood, their ways of living and most importantly their (accountability) relationships are an integral part of these ecological assemblies and they hold these ecologies together. With pride and happiness, the women of Gilgit expressed the desire for their names, their voices, their stories and their remarkable ways of living to be known to the world. I feel honoured to be able to share their identities and personal stories within my geostories, but I feel I have not really done justice to their desires. My geostories are merely an attempt to convey '*wahan kee hathun*' (the women of there), something I could never fully be. Individual consent was obtained before conversations that were for the purpose of my fieldwork. However, it was not practical to obtain consent each time, as some conversations happened spontaneously, for example whilst buying fruits, strolling through the farms or shopping. I was a new face in these close-knit communities, so women very kindly approached me for friendly conversations. However, I ensured that I did not record or use any information revealed to me in secret. Instead, such conversations and stories informed me in a broad way about the nature of Gilgit's women. Technology was another issue. Although I would like to believe I made true, genuine friendships, recording was very difficult. At points I felt hesitant to ask because it would create an awkward sense of tension and discomfort. This was rather strange as women felt comfortable enough sharing their personal identities, stories and more than that, they were eager to be named and known. Some family friends mentioned that many researchers and geologists have broken the trust of local people by marrying local women, buying homes and starting families, only to run away to their home countries with large amounts of uranium, minerals and semi-precious stones. Locals that had ties of friendships with such people had been harrassed by the military and police for a long time. I believe the discomfort around recording interviews stemmed from such fear. Taking notes also seemed odd as women would stop and wait for me to finish writing before continuing conversations. However, I did feel this was a gesture of kindness, to ensure I could finish my writing and not miss out on anything being said. Therefore, I would scribble down things I recalled later

in the evening when I returned to my accommodation. During casual meetings, eating food and having tea for example, it also seemed insensitive to start recording as women shared accounts of extremely emotional and personal experiences and reaching for my phone would be blatantly rude. For these reasons, I may have gaps in my data.

Another issue, which I believe was perhaps the most paramount, was language. I only came to feel this as I began to ‘story’ my fieldwork and translate conversations from Urdu to English. Urdu is my mother tongue and I have always taken pride in being a fluent speaker of Urdu. It forms a huge part of my everyday life; however, I very often take for granted the profound beauty, depth, and poetic nature of the Urdu language. I came to realise this as I translated conversations, stories and interviews, and struggled to articulate cultural proverbs and ideologies. I felt many beautiful and expressive things were lost in translation. And in some situations, I experienced difficulty in articulating precious aspects of culture and cultural mentality. Similarly, facial expressions and tones of sorrow, grief, empathy, humility, or pride, as well as humour and sarcasm were very often lost in the translation process. To me, this was all very meaningful and valuable ‘data’ as the process of deeply connecting and conversing with the female inhabitants of Gilgit’s ecologies formed an integral part of my fieldwork — everything that they shared and expressed both intentionally and unintentionally was precious and formed an important part of these ecologies, from how they work to how they withstand the harsh and enduring nature of their surroundings.

Chapter 4 | Savaging, Salvaging and Landability

Melted geographies of the past are being recast, resolidified and remade as new expressions of restructured constellations of social relations. (Smith, 2010)

4.1 Danyore: an untold story of a Peripheral Village

Something fascinating, but equally disturbing is happening in a peripheral corner of our world:

...we live here alone. Look there [pointing to snow-capped mountains in the distance]. Our men have gone over those mountains for mazdoree (labour work). Our life is here, in this land. It is just us, our children and these natural gifts [referring to mother-nature all around her]. We do karobaree (business) and khaithobaree (agricultural activities) and we get by in life with respect and pride...This is our way of life. (Gul Suriya, a female interviewee)

Figure 5-1: Village in Danyore



Source: Photograph taken by author

Before a sequence of events is studied, it is important to become familiar with the characters and their setting, because after all, they are at the centre of what is happening. *Savage* and *salvage* are also introduced, two stimulating and expressive concepts borrowed from Anna Tsing's (2015) acclaimed ethnography, '*The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*'. They not only help develop the fascinating and disturbing details of spatiality and capital, but also bring coherence to the story.

To begin with, this story was born out of an extensive, five-month period of ethnographic fieldwork conducted in Danyore. This faraway, rural village of Northern Pakistan, situated in the beautiful, mountainous district of Gilgit-Baltistan (GB), populated with greenery, lakes, glaciers, snow-capped mountains and flourishing valleys — you now have a much better visualisation — is home to respectfully owned acres of fertile lands, cultivating corn, wheat, fruits along with a diverse spectrum of many other things. Aside from its panoramic presence, this land is home to a close-knit community of resilient, independent, entrepreneurial women, doing something fascinating, non-patriarchal but neoliberal. This critical ethnography is animation of *their* doing. Often, the most peculiar problems and thoughts escape us because we lack sophisticated methods to frame them (Tuan, 1997) and critical ethnographies prove to be a solution to this problem. Generally, ethnography is a personal, emotional and highly reflexive method that aims to understand the self through rigorous self-questioning. Although this process formed an important part of the fieldwork, the findings and the everyday realities of mundane life in Danyore were studied as a *critical ethnography*, as the focus was on analysing and interpreting the ethnography. Specifically how it informs our understanding of inherent, unexplored micro and macro-phenomena of fragile, rural ecological territories. Pictures, conversations, experiences and observations are all data —they all form an integral part of the story and help present the spirit of our argument.

An interesting arrangement is being created by the land along with its female possessors; one may call it a 'socio-economic construction' (e.g., Hopper et al., 1987; Mangos and Lewis, 1995), 'human-nature relationship' (e.g., Salmón, 2000; Schroeder, 2007; Kunchambo et al., 2017), or even a 'neoliberal assemblage' (e.g., Weidner, 2010) but I decide to identify it, much more suitably, as *landability*. As the argument progresses, I confer meaning on and embellish this term both theoretically and empirically, and place it at the

centre of my analysis, but in the meantime, the *tanzeem* —a peculiar but unique system of organising local money — provides a crème de la crème introduction to it.

Functionally speaking, *tanzeems* are micro, local, grassroots financial systems, encouraging both micro-saving and borrowing. The picture below shows a group of women participating in a weekly *tanzeem* meeting, discussing household matters and financial affairs and sharing local gossip, whilst taking turns to deposit money in their *tanzeem* accounts or in some cases requesting to borrow money, all via their ledger system.² *Tanzeems* exist as an endemic feature of this rural landscape and play an imperative role in bringing it financial stability through a unique capital assemblage, one which we later orchestrate as salvage accumulation. The Aga Khan Rural Support Programme (AKRSP) plays a central role in organising this capital assembly. However, Taj Bibi, an elderly *tanzeem* member offers the opinion that the beauty and uniqueness of the *tanzeem* comes from

the meaning—tanzeem means to be constantly doing something little by little, little by little, little by little, the size as small as a seed...just like this we put our money aside into a pot, it's not supposed to be easy, it takes a lot of hard work, and patience, but in the end, you are rewarded with something great...you will have lots of seeds, which will grow, perhaps into something beautiful...it's something we've been doing for generations.

This peripheral part of the world has been thriving with woman at the helm for centuries.

Figure 5-2: Weekly Tanzeem Meeting



Source: Photograph taken by author

The *tanzeem* is also very different from the traditional micro-saving, micro-borrowing or self-help groups that populate rural regions across the Global South; its central operating, governing and enforcement mechanism is not human collateral, labour subordinates and NGOs, it is in actual fact, **land**, the physical, natural, pre-existing and organic land. Land in this region is part of a complex assembly. It is a traditional space, imbued with sacredness, symbolising pride and identity, rich in cultures and traditions, and has links to elements of both patriarchy and matriarchy. Paradoxically, it is something contemporary and progressive. Land here also exists as a ‘neoliberal platform’ for global capitalism (Harvey, 2005), possesses pre-eminent ‘productive power(s)’ (Hardt and Negri, 2017) and contains the power to put ‘life itself into circulation’ (Cooper, 2015). Land’s ability to: **(1)** embody the ‘heart, soul and mind’ of its rural female possessors, and make these women accountable to the land; and in turn, **(2)** harness capital, both at a micro level through the *tanzeem* and at macro level through circuits of capital is a two-part process producing and reproducing this

landscape. This specific socio-economic arrangement being created by the land is both gendered and exploitative. The ramifications of land-ability are studied as the story progresses through the fine details of how land, capital and accountability play out in Danyore's ecology.

Savage and **Salvage** are the two paradoxical and sequentially occurring stages of land-ability. First is **Savage**. Capital elsewhere in China, Afghanistan and the hustling, bustling trading region of the Punjab in Pakistan calls for male '*mazdoree*', wage-earned labourers, to carry out labour-intensive jobs. Simultaneously, topophilia, the 'affective bond between people and place or setting' (Tuan, 1974, p.4) keeps Gilgiti women along with their children, tied to the land, creating man-less landscapes, or what is locally known as '*hathun ka gao*', the village of the female. These women reign over their lands, with pride, strength and confidence doing '*karobaree*', business and '*khaitobaree*', land-related activities such as harvesting, cropping, irrigation and animal husbandry. In this way, land creates an unusual and non-traditional assembly; it retains its woman and emancipates its male. Savaging therefore destroys traditional social arrangements, breaks the family unit and challenges patriarchal gender roles. Then comes **Salvage**. Neoliberal Capitalism as practised by NGOs such as AKRSP formalises and organises the hard-earned profits of women's *karobaree* and *khaitobaree* into *tanzeems*, Local Support Organisations (LSO) and Micro finance Banks (MB). This organic financial assemblage (later illustrated) created by virtue of the land, which is thriving in this corner of the world, remarkably links circuits of local capital to spheres of global capital. This is a primitive illustration of Tsing's (2015) 'salvage accumulation' — capitalistic exploitation without capitalist control. Although Tsing's (2015) term is a development of Marx's notion of 'primitive accumulation', the historical process of "divorcing the producer from the means of production" (Marx and Engles, 1976, p.874-875), for Tsing (2015), 'salvage' is "not an ornament on ordinary capitalist processes; it is a feature of how capitalism works" (p.63) in ecologies. The act of 'salvaging' thus opens doors for new, unexplored dimensions for understanding capital-in-ecologies. It rescues disturbed and fragmented land assemblage and recasts it as something more complete and triumphant. In Marx's terms, it liberates the Gilgiti women from their pre-conceived identity of the proletariat to the bourgeoisie, or in neoliberal terms, entrepreneurial individuals. As the story progresses, Savage (destruction) and Salvage (reconstruction) are brought to bear as not only two disturbing yet fascinating manifestations of self-exploitation, but also as neo-

liberal, co-existing and inevitable processes that are a prerequisite for engendering capitalism in peripheral economies.

Finally, it is important to introduce Accountability to my story. Amongst the other happenings in this ecosystem, I also became exposed to the intricate, lucrative, socio-spatial and geo-political nature of accountability. In Danyore, accountability was found to extend beyond societal relations, encompassing its geographical parameters, that is, the land. This tri-horizontal accountability between human-nature-human builds upon prior studies of accountability (e.g., Messner, 2009; Parker, 2005; Bebbington et al., 2019). I attempt to show how nature, in the form of land, nurtures binding and powerful ‘microaccountability’ (Alawattage et al., 2019) relationships, ones enacted and re-enacted based on land values such as integrity, resilience and patience. This specific type of accountability forms the substratum of all social, cultural, political and financial facets of this ecology. Savage and Salvage are also premised on these ecological relationships of accountability. Accountability is a subtle, salient feature of both this rural village and my story.

Now that the **characters** (rural females, male labourers and NGOs), setting (land) and **themes** (geography, capital and accountability), have been introduced, the more fascinating details of the ethnography can be unravelled. We begin with an account of Savage (**Section 4.2**), followed by Salvage (**Section 4.3**), detailing how these two paradoxical processes make and remake the rural, socio-economic landscape. In this process, ‘salvage accumulation’ (Tsing, 2015) sees land as a neoliberal mode of ‘financial organization’ (Harvey) and an ‘emergent power’ (Leyshon and Thrift, 1994), socially arranging labour and capital. The concept of ‘landability’ takes centre stage in the story (**Section 4.4**) as it beautifully articulates the way in which capitalist and non-capitalist forms interact in this ‘pericapitalist’ (Tsing, 2015) setting. This is followed by a discussion of existing accountability studies, unveiling some interesting characteristics of accountability in ecologies, in the hope of contributing to our limited knowledge of capital and accountability in fragile ecologies. Finally (**Section 4.5**), the geostory concludes, highlighting areas for future research.

4.2 Savaged Territory

I find fascinating stories to first obfuscate the reader before providing any peeks of enlightenment. Setbacks, challenges and complications that lead to tensions are usually presented in the hope of encouraging commiseration with vulnerable and precarious situations, or to paint a superficial synopsis. Not to be pretentious, but we attempt do both.

~

Figure 5-3: Green Fields in Danyore



Source: Photograph taken by author

In order to destroy, sabotage, ravage, eradicate, disrupt, or in other words ‘**savage**’ something that is pre-existing, customary, intergenerational, ancestral, historical, cultural and personal requires supremacy and great power. In Danyore, it is the Zameen⁶⁰ (land). It is supremely powerful, uncontrollable, progressive and dynamic. It is the savaging force of its ecology, savaging both the human and non-human. ‘Savaging’ has long been a salient process endemic to ecologies — such as decomposition, flooding, soil erosion, abrasion, corrosion, tectonic shifts, ablation, chemical weathering, attrition and quarrying. Savaging is therefore a self-destructive and perpetual process in ecologies, which in Danyore is not

⁶⁰ This literally translates as land, but in this region, it denotes much more than that. It is used for many things such as country, fields, acres, district, village, farmlands, plot, ground, soil, earth and home.

limited to the physical, but extends to the social parameters of its ecology, savaging social relationships, arrangements and traditional ways of living.

Savaging works in a complex manner. Like the multitude of other ecological processes, savaging is complex and ecology-specific and therefore, only conversations with local woman brought ‘savaging’ to light and made apparent the multiple ways in which it works.

4.2.1 *Baraqa*: Land Sacrality

Gul Suriya, an elderly woman who sat amidst her acres of land, raking her crippled fingers through her drying chillies (*as seen in Figure 4-4*), shared many entrancing things about the deep and spiritual connection she shared with the land:

there is baraqa⁶¹ (blessings) in the land...we derive fresh, organic fruits from our soil...and fresh water which we are gifted in abundance from the mountains...because of this, we have a long healthy life.

Land in Danyore is more than a physical landscape, means of provision and source of sustenance; it is imbued with sacrality:

“this land is god-gifted”; “the land was bestowed upon us”; “God provides our sustenance through our land...it is our duty to look after it”; “our generations have lived in this land, there is something auspicious in this soil”.

Land sacrality has kept these women in a perpetual relationship with their land:

“we were born from the soil of this earth, we live life on it, we eat from it, and we return to it...we are returned to the land; we are buried in its soil”.

⁶¹ ‘*Baraqa*’ is an Arabic word, used by Muslims all over the world. It is literally translated as ‘blessings’, and universally imbued with sacrality amongst the Muslim population. The word ‘*baraqa*’ is commonly used for objects, relationships, actions and people. A common example is a child. A child is usually regarded as *baraqa*, a divine blessing from God. It is often believed that a child brings *baraqa* (blessings) into one’s life. Another example is marriage. Marriage is deemed a sacred relationship, loved by God, and hence it is believed that there is *baraqa* (blessings) in pursuing marriage. The act of sharing for example food or wealth is believed to have *baraqa* (blessings). This is because God loves these actions and has promised that doing so will not diminish what you have. *Baraqa*, one can argue, is a religious term, that is believed to bring blessings your way. Muslims believe themselves to be bestowed with many blessings from something as simple as a roof over their head to food, good health, their faith, and the presence of family in their life.

Figure 5-4: Drying Chillies



Source: Photograph taken by author

‘*Baraqa*’ cascades down through a belief system and religious ideology that elevate land’s status to something superior and all-powerful, making its inhabitants feel a sense of smallness, insignificance and powerlessness when faced with nature:

*“these mountains have a way of constantly reminding me that I’m so small, I’m nothing”;
“the land has its own strength, look at these huge mountains it bears. I want to be as strong as them and I want my success to be greater than their peaks”.*

The likening of their lands and its mountains to their success and humility through the use of ‘generative metaphors’ (see Gibbon, 2012; Schön, 1993), gives rise to what Kunchambo et al (2017) call the ‘encapsulated self’. This dimension of the human-nature relationship reaffirms the profundity of land in their everyday lives as a symbol of God’s greatness, mercy and artistic creation. Moreover, these theocentric beliefs instil love and a deep-seated attachment towards their lands, otherwise known as ‘topophilia’ (Taun, 1974).

In this way, *baraqa* (land as a divine blessing from God) is essentially what has allowed land in this region to transgress the boundaries of the physical and exist as an inexorable part of the social. Land exists as a noble representation of lineage and a precious pillar of the family

unit, as one woman said: *“just like I pray for my children, I pray for the well-being of my land”* and another shared that *“every mother has a child that is really annoying, it demands time, attention, love, and it always [emphasis] wants to stay attached to its mother, this child is our land [laughing]... we manage it like we manage our children”*.

Therefore, virtue and care towards the land is an essential part of their creed: *“we will die for our land”*; *“it is our responsibility and duty to protect this region...it is our pride and strength”*; *“we will do everything and anything to protect our izath (respect) [referring to the land]”*.

4.2.2 Land Governance

Land in this vernacular region⁶² therefore permeates the interstices of the heart, body and soul of its inhabitants. It is in their *“fithrath”* (the complex of deep, emotional and intellectual attributes that determine an individual’s nature, thinking and sense of action) to be dutiful and subservient to their lands — *“out of our own happiness we look after our land, we nourish it, irrigate it and it flourishes”*; *“nobody tells me how to and when to manage my land, I do it out of my own choice and love...after all, it has given me so much”*. It is also in their *fithrath* to live life with and within their lands — *“why would we leave, our land has given us everything, it’s our identity and pride”* — whilst remaining in constant devotion to it — *“not a night goes by where I don’t lie in my bed and thank God for his countless blessings, this land, our crops, our animals, my friends, they are my strength and hope...”*. Many women reiterated that land was *Baraqa*, reinforcing that land acts as a sacred form of governing in Danyore. Governance has long been understood in relation to religious beliefs such as the works of Foucault (1983)⁶³, who identified the roots of governance in religious beliefs, with its genealogical core being that of governing the conduct of people and populations with a ‘multitude’ of factors, such as a sense of fulfilment and happiness. Likewise, the *‘reward of looking after the Earth’* and the *‘peace in sitting on our lands and appreciating the fresh breeze from the mountains’* grants land natural governing powers. Aside from its spiritual significance, some women also expressed a sense of ‘moral accountability’ (see Jayasinghe et al, 2020) towards their lands:

⁶² This is a place that exists as part of its inhabitants’ identity.

⁶³ Foucault (1983) broadly refers to governance as the manner, or methods, of directing individual and. group conduct

like the old saying goes; umeed par dunya kayam hai (the world is built on hope) ... in times of hardship, only our land stands with us, so I feel forever indebted to my land, to care for it....

Land's ability to govern therefore gives way to a new, multifaceted 'art of governing' (Scott, 2009), one premised on an individually inspired 'self-governance' (see O'Malley, 1996; Bowie, 2013) 'self-determination' (Napoleon, 2005) and 'self-accountability' (see Carmona and Ezzamel, 2007) to care for and protect the land. The inhabitants' everyday lives are shaped by beliefs and moral codes that indicate the centrality of land. In Foucault's words, this mode of governance is 'conduct of conduct' as land naturally 'guides, it does not control' these women's actions and way of life. Instead, it intuitively embodies its inhabitants: "*when we get up, sit down, walk around, and get on with our lives, we are always worried about our land...*", indicating just how intertwined these women are with their land mentally, physically and spiritually. After all, "Nature is man's inorganic body... Man lives on nature — meaning that nature is his body, with which he must remain in continuous interchange if he is not to die. That man's physical and spiritual life is linked to nature means simply that nature is linked to itself, for man is a part of nature" (Marx and Engels, 1976, p.276). This embodying of land in Danyore, giving way to a naturally inspired and innate governance over the self puts Foucault's 'paradox of the free-yet-disciplined' (Pezet, 2007) into action. Regardless of what life throws at these women, they "*will always make decisions that are not only beneficial for their children and families but also for their lands*".

4.2.3 Man-less lands

Women are left to be independent, entrepreneurial caretakers of their lands, but due to land's inability to provide enough economic means:

to afford school fees for our children, and send them abroad to study, to pay for our children's weddings, to pay for the bill at the doctor's, or run our expenses, it becomes very hard to be able to buy fertilizers and nourishment for our land. Without this our crops don't grow, they catch diseases...life becomes hard.

Therefore women are left to make the difficult decision to stay on their land and work independently — "*it gets very difficult to manage everything alone, at times I get very tired...if my husband was here then maybe I would have fewer responsibilities and live an easier life*"— whilst their husbands migrate to the bordering countries of Afghanistan and

China, and the hustling trade regions of Punjab, in central Pakistan to earn money from ‘*mazdoree*’ (labour intensive jobs). Women are left to reign over their lands doing ‘*karobaree*’ (business) and ‘*khaitobaree*’ (land-related activities e.g., harvesting, cropping, irrigation and animal husbandry). Topophilia, along with their moral, physical and spiritual obligations to the land due to its over-arching supremacy in their everyday lives, keeps these women grounded on their land. Effectively, this creates a land arrangement locally referred to as ‘*hathun ka gaoo*’ (village of the women).

In this way, land creates an unusual and non-traditional assemblage; it retains its women and emancipates its men, creating man-less landscapes in the rural villages of Northern Pakistan. Land thereby destroys traditional social arrangements, breaks down the family unit and challenges patriarchal gender roles. This is land savaging. Women are retained to primarily provide physical care for the land, whilst men are lifted up to provide financial support for it:

with our hands, we look after the land...however you can say our husbands also look after the land. From their earning we grow our land, we buy new products to enhance its fertility....

This ‘synergetic’, ‘self-organising’ and ‘self-regulating’ power of the land to maintain its ecological landscapes resonates with Lovelock’s (1972) Gaia paradigm asserting that the Earth is a self-regulating community of organisms that interact with their natural surroundings, helping to maintain and perpetuate the conditions for life, both human and non-human, on the planet. In Lefebvre’s (1991) words, land signifies ‘dos and don’ts — and this brings us back to power....it implies a certain order and hence also a certain disorder. [Land] commands bodies. This is its *raison d’être*’ (p.121). Land contains the power to move bodies (male uplifting and female retaining), organise social and family arrangements, control modes of living and ways of earning (*mazdoree*, *karobaree* and *khaitobaree*).

4.2.4 Land Savaging

From its pre-historical origin, natural physical evolution to fabricating communities and relationships through culture, identity and spirituality, land in Danyore now also manifests itself as a savaging force of its ecology. Sacred ecology (Berkes, 2017), Gaia (Lovelock,

1979), a sense of place and identity, topophilia (Tuan, 1974) or land's ability to govern are only some of the ways in which land here is savaging its communities and the traditional ways of living. Only through land penetrating their hearts, souls and minds do these women allow land to savage their lives, families and traditional ways of living. Otherwise

why would we do all this, and make these sacrifices? The world runs after an easy, comfortable life. It's only us that make our life harder than it should be, because of this zameen (land). The love and relationship that we have with it, will never set us free.

Savaging in ecologies is an absurd process. After savaging of the physical, come new features, formations and landscapes. Glacial erosion destroys V-shaped valleys but gives way to U-shaped valleys containing corries, ox-box lakes and misfit streams along with many other glacial features. Likewise, coastal erosion causes land to collapse and retreat but results in beautiful coastal features such as sea caves, arches, stacks and stumps. Or as Tsing (2018) finds, deforestation carried out by humans in Kyoto destroys forests but allows wild matsutake to thrive. Likewise, after land savages the traditional, patriarchal way of living and the family arrangement, it gives way to new socio-economic landscapes (man-less lands), new identities (entrepreneurial women) and new relationships (accountability relationships with the land).

4.3 Salvaged Capital: the Aga Khan Rural Support Programme (AKRSP)

Now we take a peek at enlightenment. The heightening 'drama' of the story descends as tensions neutralise and seeds of restoration are planted.

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Ecologies constantly undergo natural restoration, reconfiguration and amendment. This happens in a myriad of ways such as naturally occurring chemical reactions like photosynthesis converting harmful carbon dioxide into oxygen. Or eroded soils that naturally replenish with sunlight and rainfall. Ecologies are perpetually in the process of naturally healing and re-thriving with the help of a heterotopia of actors, both visible and non-visible. This creates interdependencies and relationships in ecologies that are fundamental to the sustainability of ecologies. This is salvaging.

Like savage, salvage too is ecologically sensitive and endemic to its ecology. In Danyore, salvaging happens via the land. As well as being a savaging force of its ecology, land is simultaneously a salvaging mechanism, liberating and progressing its community and enabling it to flourish, both locally and globally. Like savaging, salvaging too is fascinating and perplexing, involving an array of actors, such as the AKRSP, First Microfinance Banks, societies, *tanzeems*, entrepreneurial women and most importantly, the Land.

4.3.1 Land empowerment

Land salvaging begins with empowering its women, through *karobaree* and *khaithobaree*:

Because we live on the land alone, whatever decisions need to be made, we make them ourselves and whatever needs to be done, we do it ourselves”.

For example, Gul Suriya runs a successful beauty parlour (*karobaree*) in Baig Market (a local, woman-only shopping market), whilst managing her family, crops, animals and lands (*khaithobaree*):

I manage all this myself...I haven't acquired an education, and neither can I read or write, I'm completely illiterate but I can earn for myself, for my children, for their better future, for my crops so they can flourish even more...this brings me a sense of pride that I can hold my head up high in society because I don't need to depend on anyone or be a burden on anyone..

Similarly, land has empowered and liberated the lives of many women in Danyore — “*this land has given us our freedom, we are free here, we can do anything we like*”— and granted them financial independence:

“We don't have to worry about asking our men for money”; “I can decide how to spend money myself...15 years ago we bought a plot of land and now we have fully built house on it. I was able to build my house myself. After I had my first child, I had saved enough money to make one room. We lived happily in one bedroom for 4 years until I had enough money to make a second room. I then decided to make a kitchen because I really enjoy cooking... then 3 years later we built another room because we had 4 children, slowly over the years I have built my house ... I didn't have to sit around in the hope that my husband would provide me with money. If I sat on that on hope, my house wouldn't be here today...my three-bedroom house and my garden are my pride...my hard work has gone into them”.

In this way, land is fabricating autonomous, self-reliant and ‘entrepreneurial’ women (see Alawattage et al., 2019) bringing financial stability to their homes, families and communities.

Figure 5-5: Land Empowerment: Lady Parlour, Handmade Purses and Community Sewing Factories



Source: Photographs taken by author

Land not only provides these women with monetary gains, but also elevates their social status within their household and society— *“earning gives one respect...the women that earn, people look at them in a different way, they have their own status in society”*. It recasts its women with a superior, respectful and admirable identity.

4.3.2 Earthly Capital

Interestingly, these women share a firm belief that their respect and capacity to earn comes from the land:

“we never forget, this respect and status that has been given to us, the land has given this to us”; “it is the land that allows us to earn”; “if our land was infertile, then we couldn't have done anything”; “if the land didn't support us, we would be nothing”; “these are miracles of the Earth [referring to her maize]”; “these are treasures of the land [referring to her crops]”.

Many women also expressed a sense of gratefulness that that they live in a place that has a ‘double-cropping season’ meaning that a variety of crops can be grown all year long. Noor Fatima, a knowledgeable local agricultural expert explains that ‘*kharif*’ is the first sowing season, lasting from April to June and its crops, such as sugar cane, maize, cotton and rice are harvested between October to December. ‘*Rabi*’ is the second sowing season from October to December and its crops, such as wheat and gram are harvested between April and May. Therefore, many women expressed that

staying here, we consider ourselves to be very grateful, all year long, the land provides us with an income...Allah chose for us to live in these lands from which many things can grow.

Land not only provides, but it also sustains — *“this land is not just a means of earning, it's our support”*. It does so by geographically assembling *tanzeems* (see Chapter 3, section 3.5): *“we put our land-earnings into tanzeems... every illaqa (area) has its own tanzeem, you can only join your local tanzeem where your land is”*. These local micro-saving and borrowing clusters are premised on land ownership:

if you have land, you can become a member of our tanzeem group, but you must have land... one lady has been living in our village for many years because her home flooded in the

incident at Atta Baad Lake, but we don't let her join the tanzeem because she is renting. She can get up and leave at any time so we can't trust her.

Therefore, land acts as a natural guarantor/ collateral, instilling trust in the local *tanzeem* arrangement. It does so because of the communal and self-accountability that these women hold towards the land: “*on the day of judgement [a day believed by Muslims to mark the end of time, when all of mankind will be held accountable for their deeds before being admitted to paradise or hellfire] we will have to answer to the land...the land will speak for any wrongdoing and injustice we do to it*”. Therefore, land is permeated with a mighty and sacred form of accountability which strengthens and underpins the success of *tanzeems*.

Figure 5-6: A Private Garden in Danyore



Source: Photograph taken by author

4.3.3 Salvage Accumulation

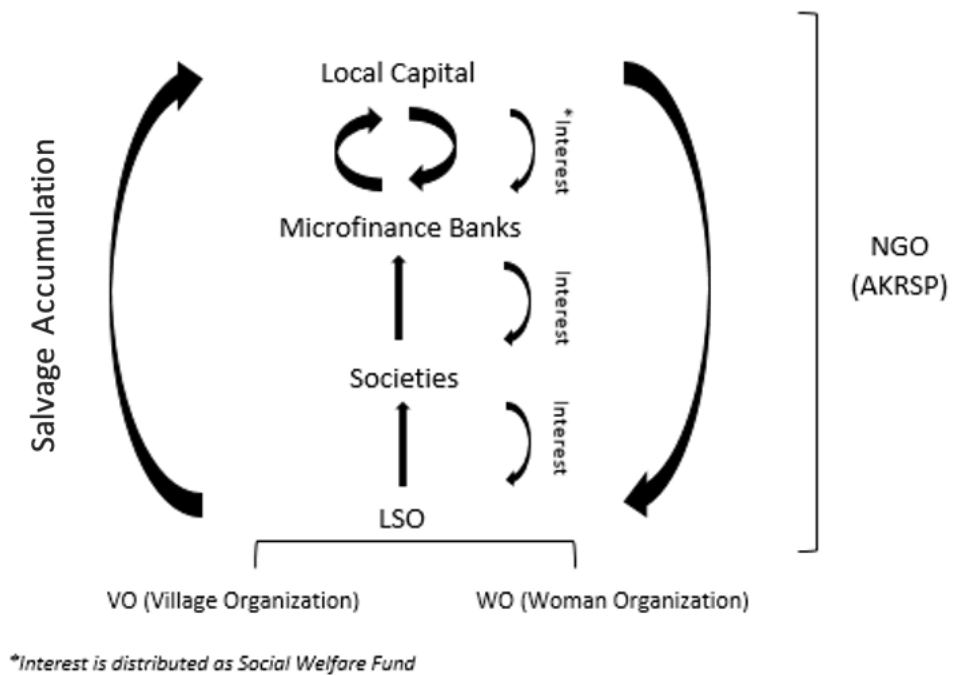
Now this pre-existing, supernal and sacred relationship between the land and its inhabitants, along with the rich, local land knowledge, cultural and traditional norms, *tanzeem* systems, compelling accountability relationships and the entrepreneurial spirit of its

resilient, determined and talented women — in essence the entire ecology — is being exploited by capital. However, this capitalistic exploitation is very different from Marx’s ‘primitive accumulation’, the historical process of “divorcing the producer from the means of production” (Marx and Engels, 1976, p.874-875). It is neither abusive, destructive nor manipulative, and instead it capitalises on what is already happening and what is already firmly established. It is what Tsing (2015) calls ‘salvage accumulation’, an exploitation that takes advantage of the value being produced without capitalist control.

In this salvage accumulation, the local NGO, AKRSP, organises the translation process in which the traditional, sacred land relationships and the pre-existing *tanzeem* systems are being made commensurate for capital (see diagram below). This process begins with re-branding the *tanzeem* as a ‘Women’s Organisation’ (WO) and then an AKRSP representative shares that:

we then guide women’s organisations (WOs) to deposit their savings into local societies. These are kind of informal banks that are easy to access and open an account with. We tell them [referring to the women] that this not only keeps their money safe, but they also benefit from the interest in keeping deposits in the society... Societies then deposit this money into micro finance banks like our First Microfinance Bank...they also receive an interest reward on their deposits...Our bank (First Micro finance Bank) then issues larger loans to richer and settled families...and the money that they return with interest is what we pay societies with.

Figure 5-7: Salvage Accumulation



In this way, AKRSP creates a financial assemblage for local capital to circulate in this peripheral economy by tapping into the original source and means of wealth — the land. Salvage accumulation is dependent on the land, as an AKRSP representative claimed that:

we tried many initiatives, for example, we set up a sewing factory in the village and trained the women to use the sewing machines, but they refused to go and work there...they are loyal to their lands and its duties...therefore we realised that geographic targeting was crucial for our projects. We couldn't disturb what they were doing with their lands, it was too important to these women. Instead, we thought of helping them to make what they do more efficient and profitable.

Noor Fatima confirms this when she says:

AKRSP taught us how to dry fruits, how to grow apricot trees, how to manage bee farms and sell honey and how to make dairy products from our cows.

Land is not only a prerequisite for the prosperity and success of the *tanzeem* but it also enables it to thrive. These women micro-manage their earnings based on land-values. Amina Begum shares that:

we are resilient like our crops... I get up at 5 am and first take care of my animals, I milk the cows, feeds the chickens, and take my lambs to graze. After that I manage my crops and

pick any fruits that can be taken and sold to the market...in this season I've sold lots of grapes...doing khaitobaree (land-related activities) teaches us patience, patience and patience and to keep striving...then I make fresh, organic breakfast for my children using dairy products from our own farm. Then I get them ready for school and after all my duties are done, I then give time to my business before the children finish school.

The land trains these women to be strong, determined, resilient, dedicated and compassionate. These land values are then translated into all their day-to-day activities. They enable women to work in their “*lands that are demanding and tiresome*” and strive to earn an income:

how we manage our land, with hard work and determination, this is exactly how we strive to earn money...we don't give up on our crops, just like this we don't give up on making an earning.

This is how land physically and non-physically enters the local circuits of capital and positioned centre stage for salvage accumulation.

4.3.4 Land Salvaging

This is how land salvages. Tsing (2015) broadly denotes the term ‘salvage’ as an act of saving or rescuing something to restore its value (e.g., marine salvage and the rescuing of ships and their cargo). Adopting this definition, land is salvaging the socially fragmented, vulnerable and isolated landscape of rural women and recasting as it as empowered, liberated and self-sustainable by connecting it to circuits of capital. The salvaged landscape now contains entrepreneurial women bringing a brighter future to their ecologies and generations to come — “*the tanzeem brings us hope and encouragement in times of despair that we are doing something that will bring development to our lands, our businesses and children*”. This new economic identity of entrepreneurial females reaffirms their belief that land is a great manifestation of God providing and sustaining their livelihoods — “*our ability to earn and to do anything comes from Allah, it is Allah that has made the land fertile so that we can reap its fruits and make a living*”.

Land is also salvaging through ‘salvage accumulation’ (see Tsing, 2015). Through this process, microfinance banks amass capital which circulates in the local (and global) economy, bringing financial stability to this peripheral village. However, this salvage accumulation is happening by virtue of the land. It is land, not the microfinance banks that

control the conditions under which *karobaree* and *khaitobaree* happen— essentially the two bottom-up injections of cash which fuel and sustain the local financial assemblage. It is land that governs and controls all aspects of this rural peripheral economy, including this process of salvage accumulation — “*the tanzeems and our local model of financing are founded on the land...and the strong relationships women share with it*” (AKRSP representative). Therefore, as Tsing (2015) rightly articulates, salvage accumulation is “not an ornament on ordinary capitalist processes; it is a feature of how capitalism works” (p.63) in ecologies.

Therefore, land salvages in a plethora of ways. It brings social, political and financial stability ways that make land the central salvaging mechanism of its economy.

4.4 The Assembly of Capital, Land & Accountability: Pericapitalist Spaces and Landability

The story now unfolds. The success/failure of the protagonist (which in our story is the land) is elaborated upon and new findings, new connections, and new relationships are detailed.

~

4.4.1 Pericapitalist Spaces

In Danyore, land is simultaneously savaging (destructing) and salvaging (reconstructing) its socio-ecological landscape. As previously illustrated, these are two paradoxical, yet interdependent processes, that are naturally enacted and re-enacted by virtue of the Land which are now creating ‘pericapitalist’ spaces (see Tsing, 2015). Tsing (2015) classifies ‘pericapitalist spaces’ as ‘sites’ that are both inside and outside the logics of capitalism (p.63), where both capitalist and non-capitalist forms interact (ibid p.66).

‘Capitalist’ forms are ones that are connected to the imperatives of global capitalism, be it through circuits of capital (Chiapello, 2018), supply chains (Tsing, 2015) or the accumulation of capital in ecologies (Moore, 2015). Either way, these are grassroots, bottom-up and localised mechanisms upon which capitalism’s empire rests. ‘Non-capitalist’ forms on the other hand are connected to the earth and part of nature. They are supreme and

powerful and abide by their own laws, systems and governance mechanisms. Embracing the ideas of Gibson-Graham, ‘non-capitalist’ forms can be found everywhere in the midst of capitalist worlds and not just in sensitive ecologies and indigenous, rural parts of the Global South. Non-capitalist forms are far more complex and less well understood in comparison to capitalist forms; they are an extraordinary, yet ‘alienated’ (Tsing, 2015) feature of capitalism that provide an impetus to it. They are fundamentally what allows capitalism to work in ecologies.

AKRSP’s local microfinancing assemblage (see Figure 4-7) and the land are an exemplification of capitalist and non-capitalist forms working together to create a pericapitalist landscape. Like any other assemblage, this financial assemblage in Danyore is made up of a myriad complex and interconnected heterotopia of things, all of which are connected to the land, the natural, organic, pre-existing land. Sacred land relationships, land as ‘*baraqa*’, and the ‘*fithrath*’ to care for and protect the land mesh together and collectively create an individually inspired selfhood to nurture and care for the land, to strive for its well-being, and to use it as a “*means for earning*” in any way whatsoever, as long as it does not “*cause harm to the land*”. After all, it is believed that “*benefitting from the land is our right...and this right was bestowed to us by Allah*”. With this in their heart, rural females, or perhaps more appropriately, female entrepreneurs, enact upon this belief and harness capital from the land, through *karobaree* and *khaitobaree*. AKRSP then translate all these land-related non-capitalist elements into usable deposits for WOs (*tanzeems*). These WOs collectively form the substratum of the financial assemblage.

4.4.2 Capital-in-ecologies

By this very process of salvage accumulation, the capitalist AKRSP microfinancing arrangement ‘interacts’ with the sacred non-capitalist ecology of Danyore. In this interaction, we see how capitalist forms depend upon non-capitalist forms. This informs our understanding of capital-in-ecology, namely how capital works in territories where non-capitalist forces dominate and where its inhabitants possess a non-capitalistic mindset:

I don’t want more from life, I just want to appreciate what I have and be grateful for all that Allah has given me. People of the world run after money, bungalows and big cars but what is the point? In the end we are going to leave it all here.

Therefore, for capital to work in Danyore, it must be subjugated to nature and the laws of the land already in place. Capital must mould, adapt, alter and make itself work in accordance with nature. If it does not do so, capitalism cannot circulate in this peripheral economy, as an LSO representative shares:

the things of the world are powerful, but nature is more powerful...it has its own system to run the world...to understand this is important. If you want to know how anything works in Gilgit, it is by nature. Understand nature and you will understand everything else.

Quite rightly, capital in Danyore works by abiding by the sacred human-land relationships: “*without this, all our projects would fail*” (AKRSP representative).

Thus, capital works in Danyore as a bottom-up, grassroots and earthly construction. It depends on land to fuel and sustain its circulation. This rejects the idea of capitalism as the single, over-arching power that conquers all economic systems. It also questions the so-called homogeneity of the global capitalist system which argues that there is no space outside of capitalism’s empire (see Hardt and Negri, 2000). Capitalistic logic and the fundamental doctrine of capitalism as defined by Marx — labour (the proletariat) receiving a wage from the owners of the means of production (the bourgeoisie) in a capitalist society — does not apply. Instead, the women of Danyore are simultaneously the labour and the owners of the means of production and they possess the power to control their *tanzeems* in a non-capitalist society. Land has recast their identities as landowners, entrepreneurs and businesswomen: “*I guarantee you that nobody can run their businesses, their lands, their families and their homes better than us*”. Capital-in-ecologies now has an expanded spectrum of actors, the land and its empowered, sassy, entrepreneurial women, upon which capital’s foundations rest.

However, I do not argue in any way that this is ‘anti-capitalism’ or an ‘alternative to capitalism’ or even the ‘end of capitalism’ (see Schweickart, 2011; Gibson-Graham, 1997; 2006). Instead, I believe that this capital assemblage in Danyore represents a shift from the dominant ‘capitalocentric’ discourse and allows us to recognise the diversity of economies (Gibson-Graham, 2007; 2016, Gibson-Graham and Dombroski, 2020, Roelvink et al., 2015), and ‘community economies’ (see Gibson-Graham, 2016, Gibson et al., 2013(a); 2020 and Gibson-Graham and Roelvink, 2016) where ecological actors are at the centre of their

economy. Land is central to the Pakistani economy given that agriculture constitutes the largest sector within it and accounts for 24% of the country's GDP.⁶⁴ Over 60.9% of Pakistan's population live in rural areas⁶⁵ and hence the majority of the country's population is either directly or indirectly dependent on this sector. Therefore, land is an imperative means of sustenance which requires its inhabitants to work in expansive, co-operative networks organised by ecological, community and kin relationships.

Gibson-Graham (2007) quite rightly argues that monolithic capitalism belies this non-capitalistic diversity of economic activities — in particular, the profundity of the ecological. Non-capitalist mechanisms, systems and relationships characterise large parts of rural landscapes (see Chapter 5 for another account) in Pakistan, yet we know little about the ecological nature of capital. Pericapitalist sites are at the beginning of exploring the intricacies of the ecological, namely how capitalism works through nature and how nature works through capitalism (see Moore, 2015). Many studies of capital-in-ecologies assert that capitalism “is not an economic system; it is not a social system; it is *a way of organizing nature*” (Moore, 2015, p.23, emphasis in the original). Such attempts perhaps unintentionally re-centralise capitalism and attribute it some element of superiority and control over ecologies. However, we find something quite different, the notion that nature (the land) is organising capital, by geographically arranging *tanzeems* — “*you can only join the tanzeem in the area where you have land*” — and controlling their flows — “*WOs are more successful where the land is fertile and has a double cropping zone. Women earn more in those villages and because of that, they can deposit more into their tanzeem*”. This generates more capital for their peripheral economies.

By understanding these fine details of how capital is ecologically arranged and assembled in this pericapitalist territory, we can begin to understand the ‘noncapitalistic elements on which capitalism depends’ (Tsing, 2015, p.66). In this pericapitalist, or ‘more-than-capitalist’ (Gibson-Graham, 2013) setting, the accumulation of capital, as Tsing (2015) argues, relies on salvage accumulation, the process whereby non-capitalistic ecologies (land, its value and associated relationships) are translated into useable inputs for accumulation. Both the savaging and salvaging of land enable this translation process. Therefore, land not

⁶⁴ Source: Pakistan Bureau of Statistics, Government of Pakistan.

⁶⁵ Source: 2019 statistic from The World Bank Data, Pakistan.

only becomes a prerequisite for capital in this pericapitalist territory, but it also allows the non-capitalist (land itself) and capitalist (microfinancing) forms to flourish simultaneously. Pericapitalist sites therefore resonate closely with what McGinnis (1991) calls ‘bioregions’, similar to ecoregions, which highlight that economic (as well as political and cultural) systems are more sustainable if they are organised around their ecological components (such as weather, soil fertility, species diversity and so on) as these directly influence the way in which human communities interact with each other and thrive in their ecologies.

4.4.3 Landability

Land is able to keep this precapitalist space (Tsing, 2015) — otherwise also known as ‘bioregion’ (McGinnis, 1991), ‘diverse economy’ (Gibson-Graham, 2016), ‘community economy’ or simply, ecology — bringing all its processes together, through an ecologically-inspired accountability emanating from the land. This unique ‘type’ (Ritchie and Richardson, 2000) of ecological accountability is rather complex and multi-faceted and is essentially what enables the land to savage and salvage the social, financial and ecological landscape in Danyore.

To begin with, accounts of this ecologically inspired accountability came up in expressions and deep conversations with rural women. Gul Surriya in particular provided a very strange and profound image of the relationship that land is creating with its rural female possessors:

I can't explain to you why we live like this [referring to life in the faraway rural village] and why we are like this [meaning hard-working and driven], maybe it's because we have some strange attachment to this land; it doesn't let us go anywhere and neither does it let us rest but alhumdulillah (all praise is to God) we are content with this life, we don't need anything else... We are grateful for the good and bad times that nature shows to us.

This is a peculiar type of ecological accountability that simultaneously “*traps us in the land yet lets us be free within it*”. Similarly, Amina Bibi also expressed that land in Danyore has a special relational quality:

Wherever you go, the system of the world is that we [humans] live on the soil [referring to the land], if you go to America, Canada, Australia or England, everyone lives on the land. We are all connected to the land, and we all share a relationship with it. But here in Danyore, our relationship with the land is something different.

She also refers to the unique, relational force of the land in Danyore. Despite land inflicting hardships on these women (land savaging which breaks families, by uplifting men and retaining the women), they remain in perpetual awe and appreciation and are duty-bound to their land. It is not just the topophilia (Tuan, 1974) or land sacrality, but the ‘-ability’ of the land to build strong, indestructible, personal ties with its female possessors that makes land so special and powerful in Danyore. This is ecological accountability towards the land and this is what makes land central to accountability relationships in Danyore. However, these ecological accountability relationships expressed by Gul Surriya and Amina Bibi are no ordinary relationships of accountability; rather they are complex, multi-faceted, intergenerational, ancestral and deeply embedded in their ecologies:

we have inherited this land from our previous generations, maybe that’s why we have an attachment to our lands ... we make sure we pass this relationship [with the land] to our next generation.

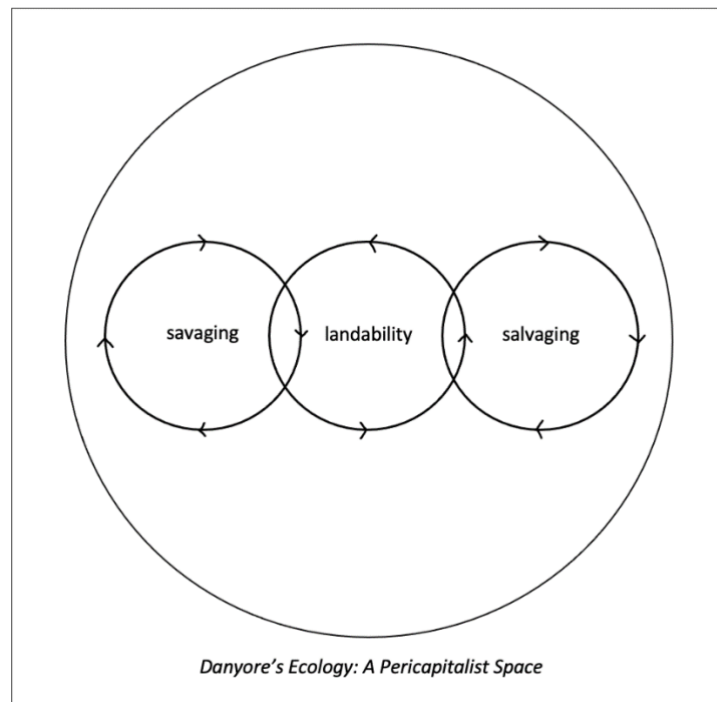
In this way ecological accountability becomes enmeshed with the social and ecological as it represents relationships of kin, the ancestral, and the community, all of which are connected to the land.

To further add to the image of this ‘messy ecology’, just like any other ecology, we have established that Danyore is also a ‘non-standard organizational form’ in which deep ecological and complex governance structures are emerging (see Laine et al, 2020). The plethora of polycentric governance systems flourishing there are all connected to the land (such as the spiritual, kin, traditional, societal, ecological and ancestral relationships). This further complicates the idea of ecological accountability as so far, it appears to be messy, fragmented and torn between the social and ecological. However, Miller and Gibson-Graham’s (2019) idea of ‘ecological livelihoods’ becomes particularly useful for understanding how such complex and messy ecologies in actual fact give way to something that is much more interesting and rich. They contend that ecologies contain a plethora and diversity of processes (e.g., savaging and salvaging), represent a variety of skills and knowledge (illustrated in accounts of *karobaree* and *khaithobaree*), and contain multiple

configurations of relationships (such as kin, ancestral, and spiritual relationships all connected to the land) which are all place-based and linked to their rich ecological contexts. This is what produces multiple and diverse ecologies, each containing ecology-specific local traditions, values, beliefs and norms.

Following the idea of multiplicity, heterogeneity and complexity in ecologies, I adopted the processes of ‘savaging’ and ‘salvaging’ to help bring clarity to the ecological accountability being acted and re-enacted in Danyore. ‘Savaging’ illustrated (1) land’s ‘ability’ to destroy its ecology by uplifting its men for *karobaree* and retaining its women, thereby destroying the traditional way of living. Whereas ‘salvaging’ revealed (2) land’s ability to restore its ecology by recasting its rural women as entrepreneurs, successfully running their *tanzeems* by doing *karobaree* and *khathobaree*. This two-fold process of land’s ‘-ability’ to simultaneously savage and salvage, is what we call *landability*. Their shared *landability* — an ecological accountability relationship between all things including one another, ancestors, future generations and all aspects of nature, which results in a self-inspired duty to care, protect and provide an account to the land in this life and the afterlife — permeates an ecological accountability relationship which makes its rural women accountable to their lands. This ecological accountability underpins the functioning of this ecology (see Figure 4-8).

Figure 5-8: Danyore's Ecology as a Pericapitalist Space



Landability enables both land savaging and salvaging. Revisiting the idea of land's ability to govern, land permeates the bodies of these rural women both mentally and spiritually. If we consider Foucault's (1979) idea that humans are 'fictitious atoms' (p.194) fabricated by their ecological environment (see Lewin, 1936 and Maslow, 1962) we can begin to view this ecological accountability in Danyore as an individually inspired self-governance that is reproduced by the 'inner nature of the self' — their *fithrath* — and the 'interiorisation of certain disciplines' (see Taylor, 1985, p.160) which in this case are produced and reproduced by the land. In this way landability promotes both self and communal care and respect towards the land: "*the significance and appreciation of land in our life is something that we all share*". Above all landability, this incarnate relationship with the land, naturally makes these women hold themselves accountable to it. This is land's power; it creates relationships of accountability that are self-mediated and enacted. Land also possesses the power to simultaneously break social relationships between husband and wife — "*our men are of no use to us*"; "*we don't need our husbands, we can manage everything ourselves*" — and make new social relationships through the *tanzeem* system:

“we are one big family, in both the good and hard times we support each other”; “the tanzeem is more than just a means of financial saving and borrowing, it is what gives us support and friendships. This is what makes a difficult life easy for us”.

As a result, AKRSP’s financial assemblage depends on these ‘microaccountability’ (Alawattage et al., 2019) relationships flourishing in these tight-knit, rural communities. A notable example of the power of grassroots actors and their decisions, relationships and way of life is illustrated in Scobie et al (2019) and their study of NGOs in New Zealand. They found that NGOs were dependent upon the ‘grounded accountability’ relationships within indigenous Māori communities (see Scobie et al., 2019). The self-determination of the Māori people which was grounded in their shared Whakapapa — “a structured genealogical relationship between all things including contemporary Māori, one another, ancestors, descendants, land and resources, and results in obligations to people and place across generations” (p.105) — gave rise to a self-inspired ‘grounded accountability’ that made employees from the Māori community work in an ethical manner that complied with the goals of the NGO. Their ‘inner’ sense of rightful obligation to others which was fuelled by their whakapapa allowed NGOs to thrive in New Zealand. Likewise, AKRSP orientate their projects through careful geographic targeting to fit the local land values, cultures and beliefs in Danyore. In doing so, they are compelled to respect and abide by the ecological accountability rules established by the land so that they can successfully operate in this rural village.

The power of land is also manifested in its ‘ability’ to sets rules, make selective relationships and organise its communities. As we have already seen, *tanzeem* membership is premised on land ownership within the *tanzeem*’s geographical boundaries. Therefore, land selectively includes and excludes people from accessing membership. In addition to this, land acts as collateral for micro borrowing arrangements. Smaller areas of land often pose an element of uncertainty, the sense that individuals may “*get up at any time and leave the village*”, hence generating less credibility, and correspondingly, possessing more land means that “*we can trust someone more, it is unlikely that they will ever try to run away because their land will always be worth more to them than the small amounts of loans that we issue to them anyway*”.

Another *tanzeem* member also shares that:

the more land, the more that we can trust someone. People with more lands take pride in it and have more respect in society, that's why they would never get up and leave..

Therefore, in this arrangement, land acts as a natural form of collateral and selectively allows people to join the *tanzeem* and share landability relationships:

selective people are allowed to join the tanzeem system, people that own land like us, because they stay on the land, look after it and help it flourish. If people can be loyal to their land,, they will be loyal to anyone.

This is similar to the notion of ‘stewardship accountability’ advocated in other accounting studies (e.g., Vollmer, 2020 and Bebbington et al., 2019), which articulates the collective responsibility and duty of humans to nurture and take care of their surrounding ecologies not for only for the current generation but also for future ones. Bebbington et al (2019) find that this ‘stewardship accountability’ makes the multiple ‘keystone’ actors in ecologies share and feel a sense of moral accountability to protect the ocean eco-systems. Similarly, landability relationships in Danyore make these women morally responsible for protecting and safeguarding the lands. It is in their *fithrath* to do so. Perhaps one could then argue that Danyore is a beautiful illustration of a moral economy at work. Their deep, sacred, indestructible ecological accountability relationships, which promote sacrificing and devoting their lives to their lands, are essentially what drives this peripheral economy. Land is a superior form of collateral which not only strengthens the local *tanzeem* system, but also allows AKRSP’s microfinancing programmes to thrive in this region.

4.3.4 Accountability-in-ecologies

However, accountability-in-ecologies involves more than the way in which nature (the land) and capital work together in ecologically fragile spaces. Accountability-in-ecologies helps us to explore the multiple ‘subsets’ of Earth’s ‘complex interacting set of systems which support life’ (Grey, 1992, p.406). By untangling these systems/ecosystems/ecologies, we can begin to unveil the interrelationship and interdependencies between humans and deep aspects of ecology (see Russell et al., 2017) and we can begin to understand ““for *what*”, “*who?*”, “*to whom?*” and “*how?*”” (Grey, 1992, p. 414) individuals are held to account in ecologies. This brings up new visibilities between nature and humans, specifically how they become connected through ecological accountability relationships. This extends the

boundaries of accountability from the social to the ecological, introducing an array of new ‘other-than-human’ actors and understanding how they are placed at the centre in accountability relations. Having said so, the ecological accountability in Danyore unveils the local ‘subsystem’ of land, namely its central role in sustaining life and relationships in the village, where women not only maintain social relationships with each other but also with their land. It is in their *fitrhath* to hold themselves accountable to the land. This innate ecological accountability arises out of their topophilia as well as their cultural, spiritual and ancestral connections with the land. Therefore, we have come to learn that accountability-in-ecologies represents the ‘tentacular interconnections; (Haraway, 2015) that make up ecologies, such as relations with kin, ancestors, other generations, the community and above all with nature.

Ecological accountability is not only what Shearer (2002) calls an “accounting for-the-self” and an “accounting for-the-other”, but also an accounting for-the-environment. Moreover, ethnographies and localised case studies of accountability-in-ecologies have the potential to recognise the power of the ecological Earth (in this case the land) in crafting accountability relationships that bring out accounts of ecological accountability to nature(s) instead of people(s).

4.5 Reimagining Accountability and Capital in Ecologies

The conclusion of the story has now been reached. The contributions are established, and complexities are unravelled.

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In ecologies where “*life is simple, but relationships, beliefs, and cultures are complex*” (female interviewee), relationships of accountability and systems of capital become blurred and fragmented and appear rather difficult to understand. This is largely because complex ecologies such as Danyore contain multiple ‘tentacular interconnections’ (Haraway, 2015) as established between humans and non-humans (e.g., the land) which render accountability (see Russell et al., 2017) and capital (Gibson-Graham, 2017) in ecologies difficult to interpret and understand. However, through the process of ethnography, I was able to dig deep into this intricate and complex ecology and to some extent, discover some ways in which accountability and capital are acting and re-enacting there.

Both accountability and capital in this ecology were illustrated through landability, land's ability to: (1) embody the heart, soul and mind of its rural female possessors to make them accountable to the land; and (2) in turn, use these ecological accountability relationships to harness capital, both at a micro level through the *tanzeem* and at a macro-level through connecting circuits of local to global capital. This is a two-part process (of savaging and salvaging) of producing and reproducing this ecological landscape. It was found that these interesting ecological accountability relationships being created by the land are engendering a bottom-up, localised and earthly mode of capital circulation. Therefore, landability reinforces that land is not merely an ephemeral part of the ecological, rather it plays a major role in strengthening and transforming its ecology.

It does so in a myriad of ways specifically through savaging and salvaging. Through unravelling these two interdependent and paradoxical processes, it was possible to engage in new ways of thinking about accounts in ecologies, particularly how they are vivid, complex and entangled within socio-ecological 'meshworks' (DeLanda, 2006) of tradition, culture and spirituality. Moreover, by digging deep into Danyore's ecology, I was better able to understand how this particular peripheral economy works. The fusion of the moral economy with the market economy and capitalist forms with non-capitalist forms gave rise to what Tsing (2015) calls a 'pericapitalist' space, simultaneously inside and outside the logics of capitalism.

Viewing this 'world from below, from where the people are' (Hardt and Negri, 2017, p.78) and in ecologies where nature dominates all realms of life, I found a unique form of ecological accountability, one that was a complete fabrication of its ecology — the land to be more specific — and an interesting system of capital that was fuelled and sustained by the land and its emanating values. Land's ability to produce and re-produce vast, micro, binding and cooperative networks of ecological accountability which are imperative to the circulation of capital in Danyore opens doors to explore new and alternative ways to reimagine accountability-in-ecologies and capital-in-ecologies.

Chapter 5 | Adapting, Enduring and Naturability

5.1 The Chipursan Valley: unfolding the nature of ecology

Figure 6-1: Chipursan Valley



Source: Photograph taken by author

After an extremely long four hours in a jeep, trekking through the rocky, knife-edge, off-road trail, intersecting the ancient Silk Road, we finally arrived at Chipursan, a breathtakingly beautiful and magical hamlet hidden between the glorious Karakoram (to the South) and Hindukush (to the North) Mountain ranges in one of the northernmost parts of Pakistan. This extremely remote and mythical valley is a tributary valley to the Upper Hunza Valley (Gojal Valley). It stretches 72 kilometres, starting from the Sost Port, ending at the Irshad Pass, connecting Pakistan to the Xinjiang Uyghur Autonomous Region of China and to Afghanistan via the famous Wakhan Corridor. Eleven villages are scattered throughout

the valley floor — Yerzirich, Raminj, Kirmin (a collective area comprising the three smaller villages of Aminabad, Rahimabad and Nurabad), Kill, Reshit, Sher-I-Subz, Ispanj, Shetmarg⁶⁶ and Zood Khon — inhabited by ethnic Wakhis⁶⁷ following Ismailism,⁶⁸ a Shia sect of Islam.

Local lore has it that the valley was historically a dungeon site where the ruling Kings of the Altit and Baltit fort would banish enemies and criminals to serve life sentences, which seemed very believable given the geographically harsh conditions and isolated location of the valley. After the collapse of the last ruling dynasty in the early nineteenth century, the valley was divided up into six sections and gifted to six noble soldiers who established residence in the Chipursan Valley (see images below). Over time, these six families grew and populated the valley along with some Wakhis from across the Pamir Mountain range of Afghanistan who also migrated into these mountains. The valley is now home to around 3000 people residing in over 500 little mud and stone houses and this is the last settlement along the Karakoram Highway⁶⁹ in Northern Pakistan.

⁶⁶ This was previously known as Kampeer Diyor. The story of Kampeer Diyor is narrated below

⁶⁷ An ethnic group with Persian origins.

⁶⁸ Ismaili people are followers of Imam Aga Khan who currently resides in Switzerland. He interprets and teaches aspects of the Holy Quran to his followers. There are approximately 15 million Ismailis around the world and around 20,000 reside in the Northern region of Gilgit-Baltistan.

⁶⁹ The highest paved international road in the world built jointly by the Pakistani and Chinese government. It stretches for 1300 km, connecting Pakistan to China. It is very scenic and follows the route of the ancient Silk Road.

Figure 6-2: One of the Six Original Homes Dating back to the Eighteenth Century



Source: Photographs taken by author

Aside from the valley's rich and fascinating history, the mesmerizing landscape seemed too unreal to be part of the chaotic world that I was familiar with. The glorious snow-capped mountains, fast-flowing rivers filled with glacier torments and boulders, with mud and stone houses scattered throughout the valley floor, potato plantations, scarce wheat fields, apricot trees and grazing animals were just some of the tranquil features of the valley. Unlike in most of the world's inhabited areas there was an extremely low level of anthropic noise⁷⁰ in the valley. Other than the overwhelming sense of calmness and serenity, earthy tones of brown, ash-greys, greens and blues filled the landscape of the dry valley. Kausar Bibi, a local female, said:

Close your eyes, do you hear the water flowing from the nearby river? Isn't it so peaceful? The peace and these kudrathee (natural/God-created) colours nourish our soul and provide us with an overwhelming sense of peace.

Nature here proved to be more than just a beautiful, tranquil backdrop. Through the process of ethnography and a series of focus groups (see Chapter 3, Section 3.6) with women

⁷⁰ Anthropic noise is known to be problematic at frequencies above 1 Hz. However, natural sources such as the wind, sea/ocean waves and rain are usually characterised by frequencies below 1 Hz.

in the valley (see Figure 5-3), I discovered Nature to be magnificently supreme, all-mighty, and in control — something perhaps beyond my apprehension. It was the powerfully reigning force of the everyday, assembling the social, financial and the ecological itself.

Figure 6-3: Focus groups with local women in Yerzich and Ispanj



Source: Photographs taken by author's husband

Like any other ecology, Chipursan too is an inherently complex and messy ecology, rich in nature-transpired processes, systems and (ecological accountability) relationships. Conversations quickly revealed that Nature was working here in a myriad of ways, one of which included the way in which mysterious tales, passed down over generations, penetrated and were embodied in the inhabitants (see Section 5-2 for the stories of Baba Ghundi, the Dragon of Yishkok and Kampeer Diyor). These tales, narrated in the valley, stand as “*valuable lessons*” (as an elderly male said) that form an integral part of the local belief system to “*protect Nature, if not we may be punished and destroyed like the previous generations*” shared Muqqadas, a mother of five young daughters. Zamurd, another local female also shared that:

Such stories [referring to the tales narrated in Section 5-2] are a reminder for us to live a moderate life, in peace and harmony and to look after one another, our animals and nature no matter how much difficulty we are in or no matter how much Nature tests us.

Intriguingly, such morals and injunctions to safeguard and almost fear Nature nurture amongst the female inhabitants the resilience traits of ‘adapting’ and ‘enduring’ to the

valley's extremely harsh and volatile weather conditions, such as the nine-month long snowfall, freezing temperatures as low as minus thirty-two degrees Celsius, and sudden landslides. I discovered '**adapting**' to be their capacity to respond to adversity, individually or through collective action after sudden nature-inflicted threat and to re-establish a stable condition, and '**enduring**' to be their capacity to carry forward, live life and reaffirm the social–ecological system in place, including the social, financial and ecological conditions that underpin the stability and foundations of life in the valley. Other resilience dynamics, such as habitat maintenance, diversity, self-refuelling, co-evolving, dependence and interdependence (Jacobs, 2000) deployed by these women arose as coping mechanisms that made life somehow liveable in this peripheral part of the world. As a result, these women share an adaptive synergy with Nature. Their oneness with and belonging to Nature — "*what's the difference between us and Nature, in essence we are one...we are made from this soil*"; "*these mountains are our home; we only know how to live here*" — prohibit them from challenging Nature — "*we know the consequences of challenging Nature, we will be punished and destroyed like the previous generations*" (Amina Yaqub, a female) — instead, they adapt and endure nature-inflicted hardships.

Nature nurtures resilience traits, which in turn nurture powerful ecological accountability relationships. As a result, ecological accountability in the valley is enacted as an adaptive and enduring relationship that "*must give way to Nature*" (Bibi Injeel, a local female). Bibi Injeel perhaps best articulated this peculiar relationship to accountability:

we live in peace and share very good relationships with each other, with our land and with our surrounding Nature. We respect each other and trust each other. But in many situations these relationships suffer...for example, when the weather gets really bad, and leaving our house can be dangerous to our lives, we have to think about ourselves... we also can't run our tanzeems. Because of this we can't make our weekly payments, there is no way to earn money...in these situations we must have a big heart and forgive each other [referring to forgiving the loans] ... or be patient and wait for the weather to settle and for Nature to give us a chance to earn money again.

Nature overrides and prevails over all aspects of life. Accountability and intriguingly, capital are both premised on Nature's precarity and volatility. They are both subjugated to Nature, and only work in accordance with it:

we have really struggled to implement any form of microfinancing here, projects are difficult to sustain because of the valley's extremely poor weather conditions, its geographical remoteness and infertile soil... (Sultan, manager of the local LSO).

Therefore, Nature makes it extremely difficult for capital to penetrate and circulate in the valley. Relationships of accountability become fragmented and suffer, but Nature keeps them functioning:

our relationships don't just suddenly break...our relationships are stronger than that...we don't blame each other; we are helpless in front of Nature (Miy Jahan, a local female).

The following sections illuminate this compelling relationship between Nature, Accountability and Capital, in other words what is collectively identified as *Naturability*. In order to understand how this form of ecological accountability is manifested in Chipursan, it is essential to explain: the everyday female-female relationships; how nature mediates these relationships; and finally, the interaction between females and their surrounding natural environment. After all, ecology accountability is concerned with framing the interaction between humans, both with and within their natural environment. The story (Section 5.2) begins with some mysterious local tales believed by the people of Chipursan which have infiltrated important morals, beliefs and resilience traits into the local people. This sets the historical context of the valley. The story then progresses (Section 5.3) to present an alternative economic representation of capitalism which echoes the recent inspirational works of J.K. Gibson-Graham (1996; 2006 and 2008 etc.) and their 'anti-capitalocentric' narrative. This Nature of Capital makes it difficult and almost impossible for capital to penetrate and circulate in the valley. As I contend that 'adapting' and 'enduring' are the two fundamental female resilience traits that nurture ecological accountability relationships in the valley, Section 5.4 progresses to give an account of the nature-inflicted issues that women face on a day-to-day basis, highlighting how these create resilience traits of 'adapting' and 'enduring'. Finally, Section 5.5 concludes by making connections between Nature, Accountability and Capital, namely how Nature crafts unique, powerful relationships of 'ecological accountability' (Russell et al., 2017) which make life liveable in some of the world's most ecologically harsh conditions and inhibit the growth and accumulation of capital.

5.2 Mysterious Tales: Stories with a lesson

The stories narrated here in the valley are no ordinary stories; they form an extremely important part of who we are, how we live life and how Nature wants us to be. (Roza Bibi, a local female).

~

Sarduas shares that their ancestors played a “*very special and extremely valuable role in teaching us how to live in these mountains and connect with nature*”. She shares that their ancestors have gifted them songs, dances, narratives, ceremonies, sacred objects and paintings, so that future generations may preserve the divine relationship between nature, people and totemic beings. Amongst these gifts, are mysterious tales⁷¹ (see Box 1.1, 1.2 and 1.3) which follow the oral tradition of story narration passed down the generations. They contain valuable lessons and “*offer guidance on how we should live our life*” says Tahira Rasool.

⁷¹ The stories narrated about the Punja Shah and Baba Ghundi Shrine, Yikshok Village and Kampir Diyor are based on the accounts of local people in the Chipursan Valley. There were several and slightly different variations to each story, however the common details have been described in the stories presented in Boxes 1.1, 1.2 and 1.3.

5.2.1 The Punja Shah and Baba Ghundi Shrine⁷²

Figure 6-4: Hand Imprints inside the Punja Shah Qadamgos (shrine), the Punja Shah Qadamgas (shrine) and the Baba Gundi Mizaar (tomb)



Source: Photograph taken by author

⁷² Shrines play an important part in the local, indigenous belief system. They were built by the local people to preserve the places where saints of the past were buried or had performed some kind of miracle. Local people visit the shrines to offer prayers and seek blessings if they have any problems or are sick. They believe the spiritual blessings, known as '*baraqa*' will provide them with a solution to their problems or a cure for their illness. Therefore, shrines are important, sacred sites. There are predominately *three* types of shrine: *Astan*, *Qadamgah* and *Mizaar*. *Astan* (threshold) are usually trees tied with colourful bits of cloth or a collection of stones which mark the place where a miracle occurred. *Qadamgah* (stepping place) is where an imprint of the hands, feet or knees has been made by saints. *Mazaar* (tombs) are the burial places of saints.

Box 1.1 The Punja Shah and Baba Ghundi Shrine

Once upon a time, an old man was migrating through the Chipursan Valley. He had been travelling for days and was cold, tired and hungry. On the way, the old man knocked on the door of several little mud houses, asking for some warmth, food and a place to rest but he was turned away by the local people. Eventually, the old man sat on a rock and out of anger and frustration, he thrust his hands through the hard rock, leaving deep imprints. He continued his journey through the valley and died just before reaching the mountains of Afghanistan. The old man was buried in the very place he passed away. After a few days, much to the surprise of the local people, a spring started to trickle from beneath the burial place of the old man. The people of Chipursan then came to realize the old man was indeed a saint, they called Baba Ghundi. 'Baba' meaning old man and 'Ghundi' because he came from a small village called Ghund, in Afghanistan. The people of Chipursan felt much shame and guilt and thereafter became much more hospitable and caring towards each other and visitors in the valley. The rock with the hand imprints of Baba Ghundi is now recognized as the Punja Shah Qadamgah and his burial place has become the famous, Baba Ghundi Mazaar. These are both sacred shrines for the local people where people to this day, make pilgrim to offer prayers and ask for forgiveness.

5.2.2 The Dragon of Yishkok

Box 1.2 The Dragon of Yishkok

Once upon a time, there was a village called Yishkok. The people that resided there in the ancient times were known to be immoral and uncivilised. They were greedy and conspired against one another. Therefore, a severe punishment was sent their way by God in the form of a nine-headed dragon. This fierce dragon had one large head and eight smaller heads, and it was known to circulate in the lake of Ruva. The people of Yishkok were commanded to feed the dragon with one human (often a little girl), one animal (usually a lamb, yak or sheep) and four sacks of wheat and corn on a daily basis. If they failed to do so, the dragon would eat everyone in the village. The duty of feeding the dragon was given to a different household each day. One day, it was the turn of a poor little family, consisting of a mother, father and their daughter, to feed the dragon. With much sorrow and difficulty, the parents were forced to give their daughter up for the dragon. Very sadly, the father walked his daughter down to the lake of Ruva and tied her to a rock, along with the other food and returned home. Several hours later, a young man walked by and asked the little girl what she was doing tied to a rock! After weeping and telling the young man about punishment of the dragon, she fell asleep on his lap. After some time, the dragon surfaced to the lake for his meal and to much surprise, the young man slaughtered the dragon's head with his sword. Later, the little girl woke, only to find lake Ruva filled with red blood. The little girl quickly freed herself and ran back to village to announce they were free from the punishment of the dragon. The people of Yishkok celebrated this freedom for several days with dances and feasting. Nobody knew or ever seen the man that slaughtered the dragon and freed the people of Yishkok. After this, the local people amended their ways and lived in peace and harmony.

Figure 6-5: Pasture area of Yishkok



Source: Photograph taken by author

5.2.3 Kampeer Diyor

Box 1.3 Kampeer Diyor

Once upon a time, there was a village called Kampeer Diyor. Kampeer means 'old woman' and Diyor means 'village'. The people of Kampeer Diyor lived a comfortable and affluent life but were known to be greedy. Amongst them, lived a poor, old vulnerable woman. She lived in a dark cave and only had a small black sheep which provided her with milk as her only source of food. One day, an old man with a stick was passing through Kampeer Diyor and noticed the old lady in her cave. He was upset to see how the local people had neglected her. As he approached her cave, the old woman was shocked to see a visitor after so many years. She was embarrassed and told the old man she had very little to offer him. She showed him her broken pot with a little bit of boiling milk. The old man gently tapped his stick on the lady's broken pot and to her surprise, the pot was repaired and was full of milk! The old man told the lady to take her sheep and any of her belongings and climb to the top of the valley in the early hours of the morning. The next day, the old lady followed the instructions and waited on a mountain top above the village. She then saw a storm approaching the village which flooded and destroyed the entire village. The old woman waited for the storm to pass and returned to reside in the village. Kampeer Diyor became a lesson for everyone else in the valley. Thereafter, the people of Chipursan became much more caring towards each other as they feared that greed could destroy their villages too.

Figure 6-6: Kampeer Diyor, now known as Shitmerg (village 10)



Source: Photograph taken by author

The mysterious stories narrated in Boxes 1.1, 1.2, and 1.3, reveal how the people of Chipursan were once greedy, immoral, selfish and evil. As a result, God inflicted on them a punishment brought about by Nature (see Boxes 1.2 and 1.3) so that they could come to realise their arrogance and poor character (see Box 1.1). Over time, these so-called ‘miracles’ of the past inspired change within the people of the valley. Derived from these mysterious tales are enriched local teachings, beliefs, values and knowledge that shape distinctive traits and characteristics within the people (see Kloppenburg, 1951). They have adapted to new ways of living, including: “*the way in which we keep and maintain relationships with each other, with God and with Nature*” shared Pari Jahan Gajali, a local female. These tales illustrate the idea that nature cannot be divorced from the social and spiritual. These ancestral stories and legends form an integral part of the local culture, beliefs and values because they signify meaning. Such meanings are rooted in their close connection to Nature, closely related to ‘topophilia’ (Tuan, 1974), their sense of attachment to place. This ecology, including the mountains, rivers, and lands, is more than a beautiful backdrop, rather it is a sanctuary where nature permeates the hearts, minds and bodies of the

people. In this way, Nature becomes closely connected and intertwined with their lives, with themselves as individuals, and with the construction and articulation of the self:

these incidents of the past teach us something very important...to fear Nature and God's wrath...they are a reminder to me and everyone else that we should become better people, and have more sympathy for those around us...and it is very important for us as mothers to instil these qualities in our future generations to come so that they can live a better life and so that they are not inflicted with any punishments. (Zaath Hoonza, a local female).

From accounts of these mysterious tales and reflection on them, it started to become apparent that these stories were creating an unusual, yet strong and indestructible relationship of ecological accountability. The inhabitants' personal beliefs and values, rooted in these ancient tales, are translated into their everyday actions and relationships. To “*love and care for Nature, our animals and each other...and to be grateful for everything that Nature has given us...and to live in a unified manner*” were only some of the things that these stories have taught them, as Kiy Bibi, a local female, expressed it. This *naturability*, accountability with and to nature extends from the ancestral to kin, intergenerational relations and nature, the raw physical nature of Chipursan's ecology:

we have a very strong relationship with these dry mountains, the cold weather, the snow...they [referring to the mountains and surrounding nature] have their own elevated status in our lives. (Yasmeen, a local female).

Just as Brosius (2001) quite rightly articulates when writing about the Penan of Sarawak, a tribal group in Eastern Malaysia, “The landscape is more than simply a reservoir of detailed ecological knowledge...It is also a repository for the memory of past events, and thus a vast mnemonic representation of social [accountability] relationships and of society” (p.148).

5.3 AKRSP's Seven Valley Project: the problem of Frozen Money

It's extremely difficult for us to live in these in mountains... many flowers and plants don't flourish here, and very few animals can survive these conditions...if Nature itself is challenged here, how can one expect anything else to survive here. (Zaynual Arab, a local female)

~

5.3.1 Seven Valley Project

As is beginning to become evident, Chipursan's ecological assemblage is like any other; it contains a plethora of things, actors, relationships, interconnections, interdependencies, processes and systems. One of these is The Seven Valley Project, a pioneering project currently being undertaken by the Aga Khan Rural Support Programme (AKRSP). Its "*sole focus is to enhance and broaden the scopes of financial inclusion in Seven Northern Valleys in Gilgit-Baltistan... highlighted as Priority Valleys*"⁷³ said an AKRSP representative. He added:

Chipursan so far has been quite terrible...this [referring to the Micro financing Projects] is a very difficult thing which we are really really struggling with...we just don't know what to do.

The *tanzeem* system works beautifully and very successfully in many rural ecologies of Gilgit-Baltistan (see Chapter 4 for an illustration), but it is a failed practice here⁷⁴ (see Figure 5-1), "*just like everything else*" (Zaynul Arab).

⁷³ The AKRSP representative elaborates that these have been identified as Priority Valleys due to their remoteness, sparse population and extremely harsh and volatile weather conditions. These Priority Valleys are situated in highly mountainous regions with poor road access, isolating them from the main cities and connections within Gilgit-Baltistan.

⁷⁴ On average (based on Table 1) each woman only has around 508 PKR (£3) saved in the *tanzeem*.

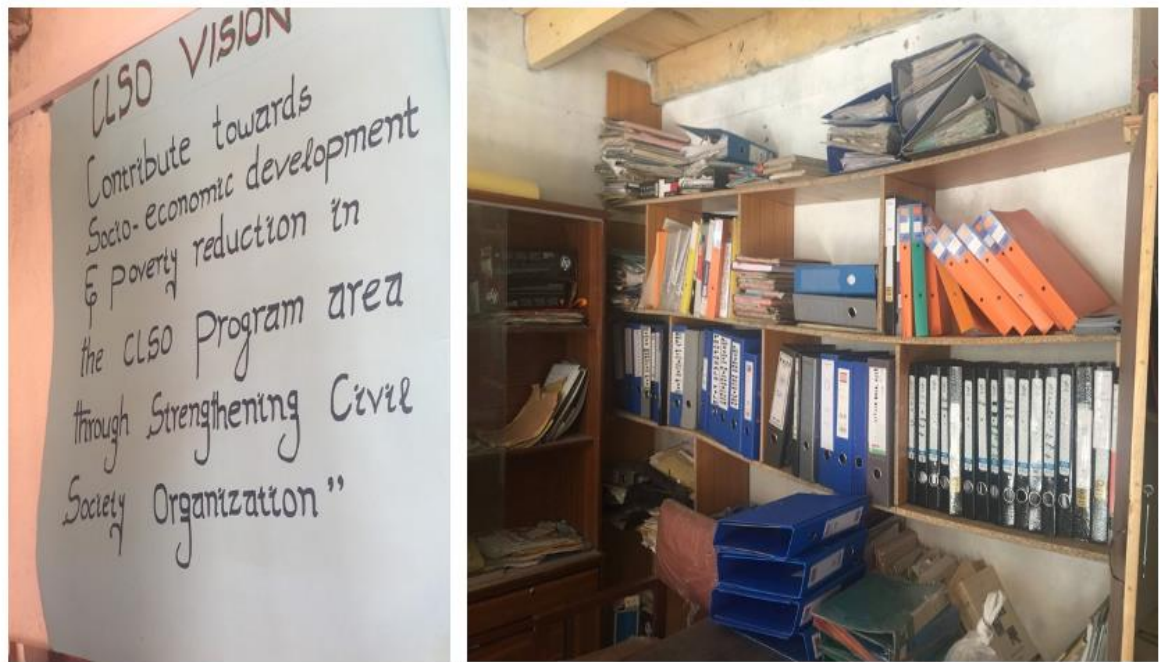
Table 6-1: Village Tanzeem data

Village	No. of Tanzeem members	Saving (approx. in lakhs)	Interest Rate on loan (%)	No. of Houses
Yarazich	63	3.5	14	78
Raminj	72	+15	12	32
Raheemabad	47	12	12	22
Noorabad	60	9	12	32
Ameenabad	65	+6	12	39
Khill	47	2	13	32
Rishth	123	+/- 8	14	61
Sheresabz	172	7	14	52
Inpingh	132	2	13	50
Shithmerg	110	11	15	61
Zudkhun	107	2.7	13	75

AKRSP's projects are carried out by the Community Local Support Organisation (CLSO) (see Figure 5-7), a voluntary oversight body whose members also expressed a distressing concern for the future sustainability of the *tanzeem* system:

...the tanzeem system is an escape from poverty, it's the only hope these women have for a better and more stable future, however the severe weather adversities have left us with little hope. (CLSO member).

Figure 6-7: Chipursan's Community Local Support Organization (CLSO)



Source: Photographs taken by author

The extremely harsh, cold, dry, volatile nature of this ecology has made it difficult or almost impossible for 'capital to establish residence' (see Marx, 1967), there. Haleema Ghiybe, (a *tanzeem* member from Noorabad) ruefully shared that:

We have nine months snowfall and during this time, the snow gets so bad, and it gets really cold [temperatures drop as low as minus thirty-two degrees Celsius] that we are housebound for at least three months. It becomes almost impossible for us to leave the house; it can be very dangerous to our lives if we attempt to meet for our tanzeems because all our houses are quite far apart...[laughing] but if you consider the situation, there is no point to meet anyway...you should meet when you have some money that you can deposit [into the tanzeem] or use to pay back a loan [from the tanzeem] ...if we can't earn and if we don't even have any money then it's pointless to meet.

Aside from the AKRSP, the extreme weather conditions have completely wiped out a Chinese NGO that had built vocational centres in each of the eleven villages throughout the valley so that local women could earn income using local material and skills — such as sewing, embroidery, making wool, hand-making rugs, blankets and clothes (see Figure 5-8). But Haleema Ghiybe informed me that since the NGO left the valley in 2016 only a few

villages use the vocational centres in the summer months. This is mainly because locals cannot afford to pay the electricity to run their centres. Besides that, they:

can't get their products to a market...and [the locals] can't afford to buy anything off each other. The only option that would encourage women to use the vocational centres would be if they could sell their products in a market but arranging to get products out of the valley is impossible...who would do it for us? Our products aren't worth the cost of paying a driver, his fuel and expenses just to sell our things. (Haleema Ghiybe)

The treacherous terrains block market access, a fundamental prerequisite for capital's growth and accumulation.

Figure 6-8: Women hand-making wool in their Vocational Centre



Source: Photographs taken by author

5.3.2 Freezing Capital

Figure 6-9: Domesticated Yak and Potato Fields



Source: Photographs taken by author

At these extremely high altitudes, the *hathun* (women) of Chipursan make a livelihood from potato farming and herding animals (mainly yak, long-haired domesticated cattle); these are the only things that are resistant enough to survive the valley's harsh conditions. Inhabitants weather the harsh conditions by preserving yak meat and potatoes. However, with extremely difficult access to markets, these women have very little form of income:

annually, we usually harvest enough potatoes to make eight to twelve sacks. One year I even had twenty-five sacks...we have lots of potatoes, this isn't the problem. The problem is that there's only one jeep in the valley that can take our potatoes to the markets in Punjab. You tell me, how many sacks can fit in one jeep? ... We are lucky if even one or two of our sacks make it to the market... (Sakina Parveen, a potato farmer in Rishth).

Potato farming is an exemplification of their precarious livelihood. The ecologically harsh nature of Chipursan makes it extremely difficult for capital to penetrate and circulate in the

local economy. As an alternative, many local women rely on the traditional, pre-capitalistic system of bartering:

After Zudkhun [the last village in the valley] and before the mountains of Afghanistan, there is open land, it doesn't belong to either Pakistan or Afghanistan. In English they say no-man's land...at that point, the Afghani people give us yak and in exchange we give them wheat flour and potatoes. (local AKRSP affiliate)

The barter system involves the exchange of goods without money as a medium of exchange. Chipursan's local economy therefore represents a 'more-than-capitalist-world' (see Gibson-Graham et al., 2016), one rich of a plethora of non-capitalist, as well as obscure capitalist practices. Aside from earthly modes of income (herding and farming), in recent years, women in the valley have established "women's shops", little communal stores in each village (see image below) where women collectively stock some 'luxuries' (such as shampoo and toiletries) and necessities to sell to each other for additional income. Yaqeen Rasul, a manager of a local women's shop shared that in this way, "*the little money that we have circulates in our villages; it goes from one pocket to another, and we survive off this system*". Apart from that, "*we don't hold onto a dream to be rich; more money means greed...and previous generations were destroyed [see Boxes 1.2 and 1.3] because of this...we can live off less*". This non-capitalistic mindset pervades in the valley: "*just like the ice here, our money also freezes here...this is its fate*" (Yaqeen Rasul).

Figure 6-10: Ladies-only Shop



Source: Photograph taken by author

It is part of the local belief that ‘human management’ of nature is impossible. Rather, there exists a shared belief that God is all-controlling, he is the all-seeing and all-hearing and is aware of everything, and it is he who grants Nature the power to work its way, “*in a system that is set in place for it...just like everything else has its system, Nature also has its own system, this is how the world works*” (Giy Amana, a local female). This is a religious worldview of all Muslims, but what differs here is the belief that nature also possesses ‘extranormal’ powers. It is believed that nature has spirits that are sentient; they are aware and watchful of all actions, intentions, and behaviours of the people in the valley. This is similar to the belief possessed by many indigenous groups, such as the Chisasibi Cree group in Northern Canada that believe their living environment (primarily animals) is a community of beings that possess supernatural as well as natural powers that surpass humans in all possible ways (e.g., Preston 1975, 2002, Brightman, 2007; Berkes, 2017). Similarly, Nature here in the valley is regarded as superior to mankind, it controls and regulates everyday life. “*Nothing from the outside world works here and can take control here*” — including capital. Instead, there is an incarnate belief that “*nature controls everything...[their] success and Rizq (provision)*”. (Parveen Rasul, an elderly female).

This ecology-centric view challenges the ontological status of capital. Capital does not ‘work’ well in the valley due to the over-arching supremacy of nature, inhibiting its growth and accumulation. Chipursan’s ecologically harsh conditions make it extremely difficult and almost impossible for capital to penetrate and circulate in the local economy. Instead, non-capitalistic modes of exchange (e.g., barter trade) are much more successful, sustaining the economy and livelihood of people. Chipursan’s economy is therefore a prime illustration of a ‘more-than-capitalist’ (Gibson-Graham, 2014) and ‘community-economy’ (Gibson-Graham, 2007; 2016; Gibson-Graham and Roelvink, 2016; Gibson-Graham and Cameron, 2002; Gibson-Graham et al., 2020). Not only does a non-capitalistic mindset pervade these women, but they also depend on each other for sustenance and support and engage in alternative practices for maintaining a livelihood (e.g., women-only shops and barter trade).

5.4 Nature-inflicted issues: accounts of Adapting & Enduring

This ‘community-economy’ (Gibson-Graham, 2007; 2016; Gibson-Graham and Roelvink, 2016; Gibson-Graham and Cameron, 2002; Gibson-Graham et al 2020) is a perplexing and unusual arrangement built on the local women’s ability to **adapt** to current situations, (*halath kay mutabaq chalna*), and their ability to **endure** (*bardashth*) nature-inflicted hardships:

Whatever difficulty comes our way from Nature, for example a landslide or a snow storm, we first accept this is ‘kudrath ka nizaam’ [part of nature’s system] ...When we accept that this is a reality and a part of our life, ‘hum halath kay mutabaq chalskthai hai’ [we can adapt to the current situation that is inflicted upon us] ...thereafter, it is our ability to bardashth [endure] the nature-inflicted difficulties that are a part of our life... this is how we live life here. (Arza Parveen, local female)

The female resilience traits of ‘adapting’ and ‘enduring’ are central to maintaining a liveable life in the valley. Every living thing has the will to flourish, its own ‘conatus’, which brings “every living thing into relationship with other living and non-living parts of the environment” (Gibson-Graham et al., 2016, p.707). The conatus to live, thrive and overcome challenges is an incarnate part of human nature. This is like the resilience of the Chipursan women — their capacity to adapt and endure, and “to sustain themselves in flourishing relationships with their environment, to cope with catastrophe, and to find ways to continue” (Rose, 2004, p.7). In Chipursan, this resilience connects local women with the more-than-human, other-than-human and diverse ecological aspects of their ecologies. The relationships (e.g., naturability) which arise through these interconnections, interdependencies and the *kudrathee nizaam* (nature’s system), make and strengthen these ecologies and nurture and sustain the resilience traits of adapting and enduring within the valley’s women. Such ‘human-nature’ (see Kunchambo et al., 2017) dynamics and resilience traits (see Table 4 below) in turn cultivate ‘self-organizing’ (Favis-Mortlock and De Boer, 2003) and ‘self-repairing’ (Gibson-Graham et al., 2016, p.77) community-economies which accentuate a peculiar arrangement of capital and binding relationships of ecological accountability throughout the valley. The resilience dynamics of these community-economies include:

Figure 6-11: Resilience Dynamics

- habitat maintenance – that is, the continual adjustment and correction of relationships between organisms to survive well together
- increasing diversity and redundancy – as the more diversity leads to more effective support for life
- circulation and capture of energy and matter that helps diverse activities and niches to self-refuel
- complex interdependence of developments and co-developments that co-evolve in an unpredictable but self-organizing manner

Source: Jacobs (2000), as cited in Gibson-Graham et al (2016a, p.707)

Together, these dynamics strengthen, make and transform the community-economy of Chipursan. ‘Community’ denotes all the multispecies, including the human and non-human community on whom human livelihoods are interdependent and with which they are interrelated and ‘economy’ is a representation of the oikos/habitat which creates a system to support life (see Gibson-Graham et al, 2016). Thus, a community economy is more than a localised financial economy centred around transactions, exchange and the growth and accumulation of capital. A community economy is one in which multispecies, humans and non-humans (including nature, spirits and totemic beings) work together to create and reaffirm a socio-ecological system to sustain life. In Chipursan, the community economy, like an ecological assemblage (see Chapter 3, Section 3.3), can be regarded as a space rich in resilience dynamics, interdependencies, interrelationships, accountabilities and co-evolving systems between the human and non-human. Such attributes of Chipursan’s community-economy can be read through Gibson-Graham et al’s (2016) summary of resilience dynamics at play in community economies:

Figure 6-12: Resilience Dynamics in Community Economies

In a community economy habitat maintenance is supported by:

- the work of humans and earth others to meet basic needs and survive together well and equitably
- transacting with/encountering human and earth others in ways that support mutual wellbeing
- consuming sustainably

Diversity in a community economy involves fostering:

- multiple, co-existing forms of labour, transactions, enterprise, property and investment
- economic sectoral diversity
- species and ecological diversity

Self-refuelling in a community economy takes place by:

- distributing natural and social surplus to enrich social and environmental health
- caring for – maintaining, replenishing, and growing – the natural and cultural commons
- investing wealth in future generations of human and earth others so that they can live well

Co-evolving developments and interdependence result from:

- human–human and human–non-human negotiations within community economies that cannot be specified in advance and where the bounds of negotiation are continually being fixed and extended

Source: Gibson-Graham et al. (2016a, p.707)

These are some of the ways in which resilience (adapting and enduring) is acted and re-enacted in the valley. Such resilience mechanisms of community economies reveal the diversity of the humans and non-humans that abounds ecologies, namely how these actors come together and work in cooperation to maintain their way of living, embrace diversity, replenish and care for nature and depend on the interactions between human and non-human. Such resilience dynamics situate Chipursan’s inhabitants and diverse aspects of nature, or in other words, Chipursan’s economy and ecology, as interdependent systems which collectively change, adapt and transform (Folke et al, 2010; Holling, 2001; Walker and Cooper, 2011) in the face of nature-inflicted hardships. These resilience dynamics are also central to maintaining a life, especially in places where Nature can be extremely volatile, harsh and unpredictable. The Chipursan community-economy is a prime example of nature’s volatility and instability (as illustrated in Table 5-2 below), making the livelihood of women in the valley precarious, vulnerable and unstable. Their resilience dynamics (see Figure 5-11 and 5-12) and traits of ‘adapting’ (*halath kay mutabaq chalna*) and ‘enduring’

(*bardashth*), bring to the valley an extremely strong form of *naturability* (ecological accountability), enabling Chipursan’s women to overcome the nature-inflicted hardships (as illustrated in Table 5-2 below). This strengthens and re-affirms the socio-ecological system in place.

Table 6-2: Nature-Inflicted Hardships in Chipursan

Nature-inflicted hardships

- Nine-month snowfall
 - Snowstorms and avalanches
 - Extremely low temperatures
 - Infertile soils
 - High Altitudes
 - Difficult terrains
 - Wild species
 - Landslides
-

In the valley, there is snowfall for nine months with year-long average temperatures of minus twenty-five degrees Celsius.

...because of the harsh winters, everything comes to a standstill, our nizaam (system) freezes like the ice... There is nine months of heavy snowfall here and usually in this period, we can't leave our houses for around three months because there is just too much snow...during this time, our crops don't grow, and our animals stay in shelter...we look after our children and our animals too... (Yaqeen Bibi, local female)

In order to endure the long winter periods, the Chipursan woman keep themselves busy with other activities: “*because there is so little to do, and to keep our minds off the cold, we keep ourselves busy with other things such as hand-embroidery and knitting.*” (Gulriya Amaan, female). Parveen Bibi, a local female from Zudkhun village also mentioned that:

all our local weddings take place during the winter periods; we dance and enjoy ourselves...we do everything before summer so that the three-month summer of harvesting is not disturbed.

Women adapt their ways of living (e.g., activities and celebrations) and co-evolve (see Table 5-2 above) with the seasons in the valley. In this co-evolving adaptation, Chipursan's women nurture appreciation and gratitude towards nature. Instead of regarding winter as an inconvenient period in which most aspects of life come to a halt, Chipursan's women regard the winter period as a beautifully intimate period:

Winter days are special here... we get to spend a lot of time with our children playing games and doing activities at home, of course, we can't leave home because of the snow... last year I taught both my daughters hand embroidery because they were off school... yes, the winters are definitely hard, especially for the children but we use this time to bond with each other... our relationships strengthen and as a family we become closer. (Azra Rasul, female)

Adapting happens daily, throughout the year in the valley. “*Halath kay muthabaq chalna* [adapting] is part of our lives” (Azra Rasul). Other activities, such as visiting vocational centres to do sewing and embroidery and running women-only shops⁷⁵ to generate additional income are left to the summer months. However, despite income generation during those months, capital circulation in the valley is still extremely difficult:

In the winters we don't operate the tanzeem because of the cold...however, when the weather gets better, we try to put some money aside but it's difficult because we need to buy coal and stock food to prepare for the winter again...because of kudrath ka nizaam [nature's systems], earning an income here is very difficult. (Arfa, female interviewee)

Another woman said that summer income merely covers expenses such as wedding costs, school fees and gifts for new-born children. For this reason, the *tanzeems* almost cease to exist, making it difficult for capital to penetrate and circulate in Chipursan's economy. During the harsh winters, rivers and streams also freeze over and many women talked about the difficulty they had obtaining water during the long winter:

every morning we walk down to the river, it's about a fifteen-minute walk and first, we break the river ice with our sticks...under all the ice there is water, we carry this in our large containers provided by AKRSP [the local NGO] on our backs...at one time we carry twenty litres of water on our back...we need water in our homes, but we mainly carry back a lot of water for our animals. (Abida, female interviewee)

⁷⁵ Small wooden shops (usually one small room) selling products for women, such as make-up, clothes, jewellery and food. Only woman can shop there. The idea of shops for women was encouraged by the AKRSP to help the local woman diversify their income.

Despite such nature-inflicted difficulty, Chipursan's women self-refuel and reaffirm the socio-ecological conditions of the valley by taking care of their animals. A woman shared: "*looking after these animals is our duty...on the day that we will have our hisaab [will be made accountable],⁷⁶ we will also be made accountable for our animals...for how we treated them and took care of them*". Religious beliefs in the valley are permeated by a spiritual naturability, an accountability to care, nourish and safeguard their animals as according to religious beliefs, local women fear that they will be questioned by God as part of their *hisaab* (accountability) in the afterlife. This *naturability*, (ecological accountability) instils a *bardashth* (the ability to endure) within the valley's women:

Our life will pass by; all the good times and all the bad times...but the afterlife is eternal... that's where we will live forever, so we try to live a good life, and do good actions, by looking after each other, respecting and taking care of nature because we will have hisaab [be made accountable] for all of these things". (Noor Aman, local female)

This *bardashth* (ability to endure), specifically derived from religious beliefs, instils a sense of peace and patience which makes *bardashth* a bearable part of their lives: "*the frozen water doesn't bother us, we are used to it because kudrath [nature] has made us patient*" (Yaqeen Gulali, female interviewee). However, the local NGO, the AKRSP attempted to resolve this problem by installing water pipes from Corrie lochs⁷⁷ in the mountain to the local streams:

for irrigation, AKRSP [NGO] installed water pipes that connect from the mountain tops to our streams, but these are useless... because of the cold, they freeze and crack. (Amina Bibi)

The livelihood of the people in the valley comes from their animals and potato harvesting, both of which depend on water for irrigation and animal welfare. In the village of Khill, there was a very common problem with insecticides in the water. One local woman said:

...we carry melted glacier water from the river for our homes, animals and crops...but recently we have found there are a lot of insects in the water...when we boil the water at home, they come to the surface...because of this our crops don't grow, and our animals get unwell...this problem comes and goes...

⁷⁶ Referring to the Day of Judgement, the day God will decide how people will spend their afterlife, either in heaven or hell. This is a day of reckoning, when all Muslims believe they will be held accountable for all of their actions and decisions.

⁷⁷ A corrie loch (tarn) is a glacial feature. It is a mountain lake, pool or pond formed high up in the mountains by the geographic process of weathering and corrosion. Once a deep hollow form, it stores melted ice water.

However, like the nature-inflicted issue of freezing water, there is an acceptance that this hardship is not within their control. As a result, women endure this as a test from God:

This problem comes from above [referring to the snow-capped mountains], we can't reach the mountain tops to stop the problem...so we accept that this is also kudrath ka nizaam [nature's system] ... we have to be patient, endure and make do. (Zahra Ullah, local female)

As Zahra spoke, she looked up at the mountains, in awe of them, almost as if she was testifying to their greatness and power and muttered, “*we are nothing in front of them*”. Despite the many hardships, local women do not display any resentment towards nature, instead they feel insignificant before Nature's greatness and accept such difficulties as part of their lives. This was evidenced through their light-hearted and humorous way of expressing their ‘problems’. Another nature-inflicted issue faced by many households in the valley are snow leopards which prey on sheep and yak. One female shared:

I lost two of my sheep last month and our neighbours lost three sheep just a few days ago...it was a shame because her husband recently passed away and she has five young children. Her sheep are her only form of sustenance...but there is nothing we can do; this is God's system in place for us...just like we depend on the sheep for sustenance, they [referring to the snow leopard] depend on our sheep...they [referring to the snow leopard] are also our animals and these mountains are also their home...the only difference is that we just don't look after them [referring to the snow leopard], they can look after themselves [laughing] ...we are used to this, don't worry, we get by. (Parveen Haq, female)

This is how species maintenance, diversity and self-refuelling (see Figure 13) between humans and species are supports, through enabling the mutual well-being of humans and non-humans, as well as the functioning of the community economy. Again, the reassuring and humorous tone used when talking about this issue shows acceptance and adaptation to the circle of life. Adapting therefore becomes more than a daily process for these women, it involves accepting and subjugating themselves to *kudrath ka nizaam* (nature's system). Another nature-inflicted issue is soil infertility. Because of the extreme cold, the valley's soil has only ‘one cropping season’ (see Chapter 3, section 3.8):

because of the cold weather we only have one cropping season, we mainly grow potatoes because they grow the best here in these cold regions...[laughing] like us potatoes can endure the cold of the valley. (Nazgul Rasul)

The comparison of human and non-human traits nurtures a ‘oneness with nature’ (e.g., Kunchambo et al, 2017). That feeling of oneness leads to the belief that:

When our crops suffer, we also suffer... we feel upset not only because they are a valuable food source for us, but also because we give time, love and care to our soil so when our crops don't flourish, we feel we didn't try hard enough. (Nazgul Rasul)

Potato harvesting is not only an example of their precarious livelihood, but also of eminent habitat maintenance (see Figure 5-12). Like Nazgul Rasul, many women expressed a sense of responsibility towards the natural environment and attributed poor harvests to their lack of attentiveness and care towards their crops. To ensure their crops weather the valley's harsh winters, locals asked the AKRSP for underground bunkers. Also, after the winter passes, there is limited food supply in the valley as the cropping season is usually quite some time away. In response to the diminishing food supply after the winter, the AKRSP have supported the Local Support Organisation (LSO) to build underground bunkers (see Figure 5-13) so that people in the valley have a source of both food and income after the brutal winters pass.

Figure 6-13: Potato Bunker



Source: Photograph taken by author

The underground bunkers act as a community resource as they ensure everyone has access to a food source after the winter: “*we share and collectively use the bunkers so that we can all make it through the difficult times together*” (Nazgul Rasul). *Bardashth* (their ability to endure) is therefore fuelled through collective action and support from community networks. However, the potato bunkers provide no financial incentive as Azra Rasul, a female interviewee says:

We only have two jeeps in the valley, who will send their potatoes? From here the way out is very long and difficult...last year I sent eight sacks of my best potatoes... but after paying the driver their commission, we have very little left...it is not worth the effort...but every year we still harvest the potatoes and try to sell them. (Azra Rasul, female)

The valley’s treacherous terrain makes it difficult to export potatoes. However, despite this difficulty, Chipursan’s women still have the strength and capacity to take themselves forward, with the hope that there may be a possibility to sell the following year — “*if this year isn’t in our kismet, we have hope that next year may be better for us*” (Azra Rasul, female). This determination is endurance, built on the hope and belief that nature will eventually cooperate: “*Just like a storm comes, after a while it dies down, like this our hardships become easy over time*”. However, nature presents many obstacles in the region that go beyond the terrains of the Chipursan valley. Another woman also added that:

... the landslide in Hunza and the Attabad lake has made it difficult for us...we used to use that route to transport our potatoes to Punjab...now the route has been blocked.

A landslide in Hunza, a region which used to connect them to the Punjab region of Pakistan, a key area for trade, is now flooded, blocking access to markets — a prerequisite for the growth and accumulation of capital. Landslides and avalanches also frequently occur throughout the valley:

thirty years ago, there was an avalanche that came down from the mountains...it destroyed the entire village, homes, animals, farming land... everything...everything is gone, now what you see is just rock...this incident reminds the people in the valley that in front of nature, we are nothing, we can’t do anything ...but in this fear we can't live life, we live happily, we celebrate the Baba Ghundi festival, weddings, children being born [etc]... we are happy people...

Another woman shared that:

bridges get built but they don't live very long [laughing]...landslides always, always [repetition] destroy them...then what do we do? We continue to cross the river by foot.

Feeling inferior before Nature once again is testimony to Nature's supremacy, but nature's course of action is not feared. Instead, women adapt to its volatility and precarity by engaging in celebrations and joyous occasions. This is what enables Chipursan's women to *bardashth* (endure) over the long term the nature-inflicted difficulties of the valley. Adapting and enduring therefore become their 'choice', as the local women decide to ignore the potentiality of a natural hazard, and instead nurture positive emotions and continue to live life to the fullest. This practice of adapting creates a perpetual and indestructible attachment between rural women and the valley, including all its natural shortcomings.

Figure 6-14: Village Destroyed by Landslide



Source: Photograph taken by author

From the accounts of nature-inflicted issues highlighted above, both the ability to adapt (*halath kay mutabaq chalna*) and endure (*bardashth*) have enabled these women to live in the harsh conditions of the valley for centuries and display no discontentment towards

nature. Nature nurtures within the valley's females these resilience traits of adapting and enduring. From the accounts mentioned above, I come to define **adapting** as the capacity to respond to adversity, individually or through collective action after sudden nature-inflicted threat and re-establish a stable condition, and **enduring** as the capacity to go forward, live life and affirm the social-ecological system in place. Adapting is therefore a short-term coping strategy, whereas enduring is a long-term coping strategy with regard to the nature-inflicted hardships of the valley. Through these accounts of adapting and enduring, I was able to begin to understand the complex, human, more-than-human and other-than-human (see Harraway, 2015) community economy of the Chipursan valley. Chipursan's community economy is built on resilience, the resilience (adapting and enduring) dynamics of habitat maintenance, increasing diversity, self-refuelling, and complex interdependencies.

5.5 Nature, Resilience, Accountability and Capital

From the accounts of nature-inflicted hardships in the Chipursan Valley, I could also begin to 'see' how nature permeates the social and is embodied in nurturing resilience traits (of adapting and enduring) within the valley's females. In turn, this resilience nurtures a peculiar and interesting form of ecological accountability (naturability), as well as a strong community economy. In other words, nature in the valley is triumphant, all-encompassing, penetrating and dominating, and by virtue of nature's supremacy and over-arching power, globalised, neo-liberalised, and dominant forms of economy and social ways of living are vanquished, violated and restricted. Instead, nature in the valley reproduces an alternative assemblage of a more-than-human and diverse form of economy in which it is difficult and almost impossible for capital to penetrate and be 'performed' (Aitken, 2007). This presents an enchanting economic representation of capitalism; one in which nature (through nature-inflicted hardships such as freezing temperatures, landslides and treacherous terrains) inhibits the growth and accumulation of capital. In this 'alternative' (Schweickart, 2011; Gibson-Graham, 1997; 2006), 'diverse' (Gibson-Graham 1996; 2005; 2006a; 2006b; 2007; 2008) and 'community-economy' (ibid) arrangement, rather peculiar relationships of (ecological) accountability flourish. These ecological accountability relationships, which are formed, acted and re-enacted between women and diverse aspects of nature are simultaneously strong and binding yet vulnerable and fragile with regard to nature, including the nature-inflicted hardships of the valley. Both capital and accountability are ecologically assembled and manifested and subjugated to Nature in the valley.

Resilience thinking offers compelling ways to understand how nature works in the valley to create resilient community economies and ecological accountability relationships. This embodied nature influences and moulds their ways of believing, perceiving and doing: “*nature has taught us a lot, it has taught us to be respectful towards each other, to be grateful for each other, to not challenge nature, to not think of difficulties as a test but a blessing or God’s mercy*” (female). This nature-governance of Chipursan’s women is a profound yet subtle attribute of nature’s natural and incarnate power in the valley. It creates visible and invisible geographical structures (such as *tanzeem* arrangements, organised by geographic territory) and (ecological accountability) relationships which shape the individual women of the valley as well as their collective identities and actions. As illustrated above, one way in which nature does so, is through nature-stories (see Box 1.1, 1.2 and 1.3). The Baba Ghundi, Dragon of Yishkok and Kampeer Diyor stories that are narrated in the valley illustrate that previous generations were once immoral, selfish and unappreciative towards the ‘*rehma*’ (God’s mercy) of nature and each other, and consequently, God inflicted a punishment on them through Nature (e.g., a storm, and a dragon). These stories now form an integral part of the valley’s value and belief system to care for and protect nature, to support and care for the well-being of each other so that the valley’s inhabitants, both human and other-than-human can survive together well and equitably. Therefore, like any other ecology, Chipursan’s ecology has undergone change, it has grown, adapted, transformed and collapsed (Lambin, 2005), and in this process, it has developed a ‘socio-ecological resilience’ (see Cote and Nightingale, 2012; Cretney, 2014) throughout the valley.

Socio-ecological resilience⁷⁸ captures the ways in which individuals interact with and respond to the ecologies around them, and in turn explores how these interactions influence social arrangements (such as relationships and communities). From the accounts of nature-inflicted issues (see Section 5.4), socio-ecological resilience can also be seen as the capacity of inhabitants, human and other-than-human, to adapt and transform to unexpected and enduring nature-inflicted difficulties. Such changes are driven by some spontaneous (e.g.

⁷⁸ Socio-ecological resilience is still in its ‘exploratory phases’ (Folke, 2006); however it has been used to capture and integrate society, the economy and biosphere (ecosystem of the earth composed of biotic and abiotic organisms) as a whole (e.g., Holling, 1973, 2001; Walker and Cooper, 2011) so that we can better understand the interactions and resilience that arise between these constituents. This has enabled resilience thinking to expand and begin to understand the ways in which we can understand human-ecological dynamics (Folke 2010; 2016) relationships and interdependencies.

avalanche) and gradual (e.g. long and enduring winters), and some large-scale (e.g. landslide) and micro-scale (e.g. water infestation) nature-inflicted events in the valley. Regardless of their nature (i.e., big or small, expected or unexpected), over time and through intergenerational teachings — “*with time and teachings from our elders, we have learned how to better live life here in the valley*” (Tahira Rasool, female) — women have nurtured a resilience to nature and the difficulties it inflicts on them, through their ability to adapt and endure. This resilience to nature, nurtured by nature itself, is essential to maintaining a liveable life within the harsh and precarious conditions of the valley. It is this resilience that is embodied and enacted through the local females’ ability to adapt and endure, which has enabled strong, resilient community-economies to form all along the valley floor. These community economies exemplify capital’s vulnerability and insignificance before nature as a non-capitalistic and ecocentric⁷⁹ mind set pervades the valley.

5.5.1 Resilience and the nature of Capital in Chipursan

If we view the economy from the lens of the anthropocene, or capitalocene, the hyper-separation of humans from nature has taken place in large parts of the world, especially in industrialised economies over the last two hundred years or so (see Gibson-Graham et al., 2016), and this has drastically reduced the ability of humans to feel, interact with and nurture a closeness with our other-than-human, ecological world. However, many marginalised and peripheral parts of our world, like the Chipursan Valley, challenge that and remind us to re-think the lived relationships, and functioning of economies in ecologies where nature is still loved, appreciated and dominant. How does capital penetrate and work in ecocentric and nature-rich ecologies? How do non-capitalistic and capitalistic practices coincide? Which of these practices dominate? Viewing the world from the lens of the chthulucene (Harraway, 2016) enables us to study such questions and challenges us to re-think and reconfigure the lived relationships between economies and ecologies (Gibson-Graham and Law, 2016), namely how they work together and co-evolve.

Within the tentacular arrangements and complex and myriad interdependencies between nature and the women of the Chipursan Valley, a strong, embodied resilience is being

⁷⁹ Ecocentric denotes a nature-centred system of values (Gerrard, 2004) as opposed to human-centred (i.e., anthropocentric) one. It situates all actors, biotic (living) and abiotic (non-living) as equally significant and contends that nature should be protected and valued at all times (Gerrard, 2004).

nurtured, acted and re-enacted. This resilience is what makes life in the harsh, precarious conditions of the valley.

Resilience thinking enables us to grasp the complexities and peculiarities that arise between people and nature, or economies and ecologies, as it depicts ecologies as socio-ecological mechanisms which interlink natural systems, human systems and human-nature systems which are interdependent but constantly change, adapt and transform together (Folke 2010; Walker and Cooper, 2001). This ecological assemblage simultaneously constructs and deconstructs, resulting in the emergence of alternative, varied forms of capitalistic arrangements and practices. This idea of transformation resonates with Marxist accounts of capital facing crisis, creative destruction, restructuring and the emergence of ‘new’ forms of capitalism (e.g., Marx, 1989, p.127). The very nature of capital to deconstruct and reconstruct in the face of crisis (in this case, the ecological crisis of nature-inflicted hardships in the Chipursan Valley), is what reveals its ability to mould and adapt so that it can work in varying geographical territories. This challenges us to reconsider the ontological status of capitalistic spaces as hegemonic and all-powerful, instead viewing it as much more organic, fluid and ecologically sensitive. This almost deconstructs capital’s dominance (e.g., Gibson-Graham et al., 2013) and reveals its weakness in the face of nature. Chipursan’s peripheral and remote economy demonstrates capital’s inferiority as it fails to work there and circulate in that ecologically fragile economy. Ecological phenomena such as natural events, nature values, traditions, cultures and resilience influence and dictate how well capitalism can function, so in order to work (subject to nature’s precarity) capital must be embedded and located within the greater ecological landscape. In this context, Gibson-Graham’s diverse framing of our economy is helpful as it reminds us that there are multiple ways in which capitalism can either work well or not so well. This is not a new economic representation of capitalism, but one that is less well understood and accounted for.

In Chipursan’s fragile yet resilient community-economy, a vast array of ‘more-than-capitalist’ (Gibson-Graham, 2006) economic practices, transactions (e.g., barter trade), forms of work (e.g., potato farming, breaking river ice to provide water for animals and families) and investment (e.g., investing in the soil so that future generations may live well and equitably) dominate the local economy. Such economic practices are often excluded from the economy and regarded only as prefigurative capitalist activities (see Gibson-

Graham et al., 2013). However, these ‘more-than-capitalist economic dynamics’ (Gibson-Graham et al., 2019) are central to Chipursan’s ‘moral’ economy (Scott, 1977) as the inhabitants of the valley are motivated by concerns about supporting habitat maintenance, diversity, self-refuelling and co-evolving relationships within community-economies (see Figure 5-13 above) so that humans as well as other-than-humans within the valley can survive together well and equitably, support mutual well-being, and maintain economic as well as species and ecological diversity.

The resilience of Chipursan’s inhabitants, both human and other-than-human (such as the yak, snow leopards, soil and so on) and their ability to weather the difficult geographical conditions of the valley is what leads to strong, resilient community economies throughout the valley, with each village being a representation of a community economy. Within these community economies, communal respect, as well as care, love and sympathy exist between the possessors of the valley (including all aspects of nature, the inhabitants and totemic beings). Therefore, a non-capitalistic, or perhaps it would be more accurate to say a ‘more-than-capitalistic’ (Gibson-Graham et al, 2019) mindset pervades and dominates the valley.

5.5.2 Resilience and Naturability

The more-than-capitalist economic system of the Chipursan Valley not only demonstrates the ways in which capital works in precarious and extremely peripheral parts of our world, but also furnishes new ways in which we can see, understand and capture the complex and embedded accountability relationships of such places. The marginalised economic actors, the women of the Chipursan Valley, actively contribute to enacting such diverse, community economies, by becoming part of networks and fostering ecological accountabilities with a range of diverse, human, natural and supernatural actors. Such ecological accountability relationships encompass ‘local and more widely stretched relationships’ (Latham, 2002, p.125) that are intergenerational and spiritual and extend to capture all biotic and abiotic organisms of the valley. Therefore, a rather complex and multifaceted ecological accountability pervades the valley:

How can I explain? Our relationship with each other and our surrounding nature is very different and complicated to understand...previous generations have taught us how to maintain these relationships. The mistakes and punishments of previous generations have

taught us to not just care and respect each other but to also love and protect nature. That includes all aspects of nature...the water freezing, the infertile soils, the difficult terrains, the freezing cold has not taught us to hate nature, it has taught us to love and appreciate nature...it has made us strong...Nature provides us with a living space, and sustenance, therefore we feel a sense of responsibility towards nature. (Zaida Bibi, female)

The historical incidents, tales, and nature-inflicted disasters create an interesting form of ecological accountability, which I identify as *naturability*, in the valley. The stories of Baba Ghundi, the Dragon of Yishkok and Kempeer Diyor illustrate how nature, including its sacrality and historical rootedness, preserved through oral history in the Chipursan Valley, becomes assimilated and embodied into the female ‘self via mythic, experiential and ritualistic ways’ (see Kunchambo et al., 2017). Therefore, the attachment to nature, ancestral experiences, and personal experiences of individuals, collectively enable nature to permeate the bodies, hearts and minds of Chipursan’s women. This embodied nature nurtures strong resilience traits of adapting and enduring, within the valley’s females, enabling them to ‘*forgive nature for the hardships*’ (Zaynul Imaan, female) that it inflicts upon them. This ability to let go, to forgive and to ‘*not hold anything in their hearts*’ (AKRSP representative) is translated into their everyday lives, including their *tanzeem* system. Women forgive each other in situations where nature inflicts difficulty on them (e.g., snowstorm, landslides, infertile soils, water parasites) making it difficult to return the money that they borrow from their *tanzeem* system:

in these situations we must have a big heart and forgive each other [referring to forgiving the loans] ... or be patient and wait for the weather to settle and for Nature to give us a chance to earn money again.. (Bibi Injeel, female)

Nature nurtures this resilience. Resilience thinking offers compelling ways to understand how nature becomes embodied by the self, and in turn, implicated in relations of ecological accountability. Nature embodies and nurtures resilience traits of adapting and enduring, enabling women to rebound in the face of nature-inflicted hardships: “*whatever nature tests us with, we can overcome it because we have the strength to manage the situation*”. Previous studies, such as Corbeill (2004) who explores how bodily movements stem from the relationships between Romans with their natural and spiritual environment, have captured the harmonious relationship between nature and the body. Likewise, Kunchambo et al (2017) explore how intangible aspects of nature permeate individuals, to become a part of the self. Similarly, in the Chipursan Valley, nature is embodied in and permeates the bodies

of the female in the valley, instilling a belief that they are “*a part of nature*” and hold a sense of “*responsibility towards nature*” (Zaida Bibi, female). This intensity to perceive nature as a part of themselves, as well as the strong mental, emotional and cognitive ties to their valley, otherwise known as ‘topophilia’ (Tuan, 1974), is what enables Chipursan’s women to nurture resilience towards all hardships in life, including nature-inflicted difficulties: “*it is our love for nature that gives us the patience and strength to fight on and continue to live life*” (Zaida Bibi, female). This resilience, enacted through their ability to adapt and to endure, is essentially what holds together Chipursan’s community-economies, oriented around key moral and spiritual concerns to hold themselves accountable to nature.

Using Boedker and Chua’s (2013) terminology, adapting and enduring become an ‘affective’ mechanism, as they consider people’s feelings and emotions (e.g., love, care, sympathy, respect), and these are what form an integral part of ecological accountability relationships in the valley. This ecological accountability extends to “*previous generations, and future generations and every small and big thing in the valley from the tiny insects to the big mountains*” (Zahra Imaan, female) that surround them. Therefore, ecological accountability in the valley encompasses relations with kin, with ancestors, other generations, and above all, with nature. As such, ecological accountability is not only what Shearer (2002) calls an “accounting for-the-self” and an “accounting for-the-other” (p.560), but also an accounting for-the-environment. However, within these arrays of tentacular relationships and accountabilities, ecological accountability becomes a somewhat ‘problematic practice’ (Messner, 2009, p.919). In many situations, nature puts women in an extremely vulnerable and difficult situation (e.g., a landslide, avalanche, freezing temperatures) which makes it almost impossible to earn an income from a precarious form of sustenance such as potato harvesting. As a result, women struggle to pay back their loans:

because of the difficult conditions, it becomes very difficult to pay back the money we borrow from the tanzeem. The little that we earn, we need to keep so that we can get by the winters” (female interviewee).

In these situations, women ‘*forgive each other*’ (Bibi Injeel, female) and therefore accountability becomes a fragmented relationship, vulnerable to the nature of the valley. Ecological accountability in the valley is therefore premised on Nature’s precarity and volatility.

5.6 Conclusion

From the accounts of nature-inflicted hardships in the valley, Nature manifests as a great, hegemonic, dominant, powerful and perpetually reigning force of the everyday. It achieves this overarching power not just by its physical ability to set the conditions of the valley, but by its ability to be embodied in the female inhabitants of the valley. Nature is embodied through historical tales (the stories of Baba Ghundi, the Dragon of Yishkok and Kampeer Diyor), which teach Chipursan's women to be subservient, grateful and respectful towards nature and to each other as failing to do so may result in God using nature to impose a punishment. Moreover, nature-inflicted disasters in the valley nurture strong resilience traits of 'adapting' and 'enduring', which act as the local females' short- and long-term coping mechanisms, enabling them to withstand the ecologically harsh conditions. Other resilience dynamics, such as habitat maintenance, diversity, self-refuelling, co-evolving, dependence and interdependence (Jacobs, 2000) deployed by these women also arose as coping mechanisms that made life somehow liveable in this peripheral part of the world. As a result, these women share an adaptive synergy with Nature. Their oneness with and belonging to Nature — *“what's the difference between us and Nature, in essence we are one...we are made from this soil”*; *“these mountains are our home; we only know how to live here”* — are what enable strong yet precarious community economies to thrive throughout the valley. Within these community economies, where mutual care for each other and all aspects of nature is prioritised, relationships of ecological accountability are acted and re-enacted. In these diverse, tentacular ecological accountability relationships, between kin, ancestors, generations and nature, female resilience traits (of adapting and enduring) act as 'inner motivational enablers' (Kunchambo et al., 2017) to ensure accountability relationships are maintained as well as they can be despite nature's volatility and harshness:

despite our difficulties [referring to the nature-inflicted hardships] we make a full effort and try to maintain our responsibilities, relationships, duties and roles within our homes, our communities and to our surrounding nature. (Yaqeen Rasul, local female).

Therefore, in the Chipursan Valley, we see a rather interesting ecological assemblage between nature, capital and accountability. Nature not only controls and influences the local economy by inhibiting the growth and accumulation of capital, but also nurtures rich and

resilient relationships of ecological accountability, which extend beyond place and time to encompass the historical, ancestral, intergenerational, kin and all aspects of nature. These diverse, tentacular relationships of accountability, flourishing in this peripheral part of the world, are a manifestation of nature's subtle yet powerful role in fabricating communities, ecologies and economies.

Chapter 6 | Ecological Accountabilities: towards a geo-political economy of accountability

6.1 Introduction

This chapter synthesises the empirical findings of the geostories narrated in Chapters 4 and 5. The fascinating yet peculiar ecological assemblies which are unveiled in the rural villages of Danyore (Chapter 4) and the remote Chipursan Valley (Chapter 5), enable us to understand how the social (relationships of ecological accountability) and economic (systems of local capital) are being acted and re-enacted in nature-rich spaces, where nature is the dominant, powerful and hegemonic force of the everyday. By closely studying these peripheral and marginalised parts of our world, we are challenged to re-think the profundity of local geographies, namely their powerful yet subtle role in governing, mediating, influencing and controlling the flows of capital and relationships of accountability. This chapter engages in a discussion on how local geographies, embodied and enacted via deep, engrained histories, ancestral values, local traditions and spiritual beliefs, permeates and nurtures relationships of ecological accountability and orchestrates systems of capital. The chapter then progresses to discuss how these ecological accountabilities and the diverse, more-than-capitalistic community economies in which they are being acted and re-enacted, lead us to consider and imagine the possible geopolitical economy of accountability. The idea of a geopolitical economy of accountability is elaborated upon. The chapter contends that local geographies can organise, structure and assemble the social and the economic in places where nature is loved, appreciated and respected. This paves the way to and opens up dialogue on discussions on ecological accountabilities.

6.2 Ecologies: complex ecological assemblies

The ecological assemblies of Danyore and Chipursan contain a plethora of rich, varied and complex systems, relationships and interdependencies. The '*kudrathi nizaam*' (nature's system) of these ecologies is sacred, intergenerational and rather complicated, as it extends

and encompasses all the diverse aspects of ecologies, including all things micro and macro, biotic (living) and abiotic (non-living), visible and invisible. Therefore, these ecologies contain a vast array of actors which are not only human but also more-than-human and other-than-human (see Harraway, 2015) working together to create resilient, self-organising, and self-destructive ecologies. The plethora of actors, processes and systems in ecologies makes each and every ecology unique and signifies the endless possibilities of ecological assemblies (the coming together of ecologies). However, in the attempt to unravel the ecological assemblies of Danyore and Chipursan, one similarity between them is striking: the over-arching, embedded profundity of nature. By ‘feeling’, ‘following’ and ‘experimenting’ (Latour, 1998; 2004) in these ecologies, I came to apprehend not only nature’s beauty, but also its powerful ability to embody, influence, control, govern and mediate all facets of life. The multiplicity of ways in which nature (e.g., land, weather, species, nature stories) permeates the hearts, bodies and souls of individuals so that it can work in the peripheral and marginalised economies of Gilgit-Baltistan again suggests the infinite possibilities and arrangements of ecologies.

These ecological assemblies open doors and encourage us to reconsider and explore how the multiple, unique ways of living in ecologically fragile and sensitive territories create interesting, ecology-specific relationships of ecological accountability and localised systems of capital, both of which are premised on the local geographies of their places.

6.3 Community-economies

In the ecologies of Danyore and Chipursan, a rather peculiar and diverse system of capital operates, which is embedded in and almost subservient to the local geographies of its place. Capital in these ecologies is not the dominant, hegemonic and reigning force that subsumes societies, economies and geographies. The capitalocentric, worldwide system of our economy does not exist in these peripheral and marginalised economies. Rather, in these ecologies, capital is humbled as it is subjugated before the geographies of its environment. It becomes enmeshed within the ‘tentacular’ (Harraway, 2015) connections and systems that arise between the ecological and the social. For capital, to ‘fit’, ‘penetrate’ and ‘work’ in these ecologies, it must mould and adapt to the ecologically infused local traditions, values and beliefs there. If it does not do so, capital becomes a *‘failed system in this region’*

(AKRSP representative). Therefore, it is the very geographies of these places which enable capital to work, accumulate and circulate (or not) in these rural and marginalised economies.

This alternative representation of capitalism challenges the widely held superficial view that capital is triumphant, hegemonic, encompassing, expansive and all-penetrating and fabricates all aspects of social and economic life. This ‘capitalocentric’ way of thinking limits the imagining of ‘other worlds’ (Gibson-Graham, 1996, p. 6), particularly the precarious, organic and ecologically embedded arrangements of capital in ecologies where nature is rich and actively involved in arranging and assembling networks of capital production — as evidenced through the *tanzeem* systems. Capital in these ecologies is “*just a means to get by in life*” (female interviewee), as the inhabitants of such nature-rich ecologies believe that “*there is more to life than money and worldly attachments*” (female interviewee). Therefore, in these ‘more-than-capitalistic’ places, there exists a ‘non-capitalistic’ mind set focused on the well-being of each other, including all aspects of nature (e.g., species) to live well and equitably, and safeguarding, protecting and nurturing is prioritised. There is an acceptance of the way of life and “*the little that they have*” (AKRSP representative):

We have little, but we are content... we believe that God has showered his mercy upon us...we can grow our own food, we have our own lands, and most importantly, we don't have to work for anyone. We can make an income from our own lands, our own animals and our own skills [referring to hand embroidery, stitching, knitting etc.] (local female)

In these ‘diverse’ (Gibson-Graham 1996; 2005; 2006a; 2006b; 2007; 2008) and ‘more-than-capitalistic’ economies (Gibson-Graham et al, 2019) where intergenerational relationships with nature, the ancestral and kin are prioritised, resilient ‘community-economies’ come into being, which contain a plethora of diverse, more-than-capitalistic economic dynamics (e.g., barter trade). ‘Community-economies’ situate capital in a wider world of social practices, values and phenomena (Castree, 2010), populated by a plethora of non-capitalist economic practices (Gibson-Graham, 2013). Local histories, local traditions, local beliefs, mysterious tales and social identity are some of the things which dictate the flow of capital in ecologies (see Appendix). Some of these community economies are extremely vibrant (as evidenced in Danyore), whereas others are precarious and vulnerable (as evidenced in Chipursan). This not only signifies that there are infinite variations and

assemblages of economies in some of the most remote and peripheral parts of our world, but it also evidences that economies are dependent upon the nature of their ecologies:

In regions where the soil is fertile, women make more income from their crops...regions with difficult terrains and harsh weather conditions struggle to operate their tanzeem. (AKRSP representative)

By studying more ecologies, it may become possible to theorise, represent and enact new visions of the economy. ‘Community-economies’ are one step ahead in representing and understanding economies as more than capitalist, and as sites for politics and transformations (see Section 6.5 below). Moreover, such framings enable us to view the economy and ecologies not as separate things, but as inexorably tied and intertwined. As sites and means of extraction and production, ecologies thus become central to the operation of economic systems in ecological spaces.

6.4 Ecological accountabilities

Like everything else in ecologies, accountability too is a complex relationship, composed of an array of actors implicated in a web of profound ecological complexities. As previously highlighted, understanding ecological accountabilities is a difficult task due to many reasons such as the complex and enclosed nature of many rural and remote ecologies. However, the primary reason may be attributed to the difficulty in obtaining ecological data. Through my ethnographic experience, I gathered ecological knowledge by living in and experiencing the ecologies of Danyore and Chipursan. This enabled me to internalise, absorb and carefully think about the rather peculiar arrangements of human and nature and the relationships of ecological accountability (e.g., landability and naturability) that flourish between them. By unveiling the profundity and over-arching power of nature in Gilgit’s ecologies, I was able to think about the concentrated, ecological nature of accountability in the nature-rich ecologies of the region. In these ecologies, accounts of ‘ecological accountability’ — the *obligation of people(s) to provide an ‘-account’ to nature(s) and in turn, nature’(s) ‘-ability’ to make people(s) accountable to itself* — came to the fore, enabling me to understand how nature permeates and is embodied, and how this influences and gives way to self-inspired and self-disciplined relationships of ecological accountability. Such ecological

accountabilities (i.e., landability and naturability) were made visible through geostories, containing local stories, photographs and mysterious tales.

These accounts of ecological accountability that manifested in these ecologies provided me with a much ‘wider, wilder and interdisciplinary mosaic’ (Russell et al 2017, p.1444) of accountability than I had anticipated.

In the enclosed, marginalised and peripheral ecologies of Gilgit-Baltistan, ecological accountability networks are mushrooming. In these ecologies, nature plays an integral, influential and critical role in all aspects of life, including the social, political and economic. Therefore, the ecological accountability relationships in these ecologies reflect the many intriguing connections between aspects of the social (e.g., kin, ancestral, intergenerational, values), political (e.g., ways to improve and stabilise the local economy, distribute wealth, re-invest back into the community and so on) and economic (e.g., microfinancing arrangements, grassroots *tanzeem* system) with the ecological (e.g., nature stories/myths, species, land, weather, soil). The ecological accountability relationships that are being formed, acted and re-enacted in these ecologies between women and diverse aspects of nature, thereby penetrate all facets of the social, political (see Section 6.5), and economic in a variety of ways, such as nature embodiment and self-inspired governance. This produces ecological accountabilities that are sacred and extend to encompass relationships of kin, ancestral and intergenerational relations and all diverse aspects of nature (e.g., weather, species, water, mountains). Therefore, ecological accountabilities enable us to understand accountability as a much ‘broader’ relationship (Munro and Mouritsen, 1996) which extends beyond the boundaries of organisational settings (Roberts and Scapens, 1985; Bebbington et al., 2010) to the complex, intricate and precarious ecologies of our world. In this framing, the everyday life and culture of people (Hopwood, 1983, 1994), their values, traditions and beliefs, which are associated with ecologies, as well as the polyvocal voices (Gray et al., 1997; 1987, 1988, 1991; 1990; 1992) of nature, species, and habitats are heard, translated and reflected in relationships of ecological accountability. In this way, ecological accountabilities enable us to broaden out the narrow classification of stakeholder groups (see Bebbington et al., 2006; 2010) to consider other ‘keystone’ actors (Bebbington et al., 2019) such as the ‘other-than-human’ and ‘beyond-human’ (Harraway, 2015). This ecologically diverse and inclusive framing of accountability broadens out the horizons of ‘account’ and

‘account-giving’ in accountability relations (Russell et al., 2017; Boltanski and Thevnot, 2006) from an “accounting for-the-self” and an “accounting for-the-other” (Shearer, 2002, p.560), to consider an accounting for-the-environment. Ecological accountabilities thereby make the ‘informal’ and ‘invisible’ accountable (e.g., Russell et al., 2017; Gray et al, 2006; Collier, 2005) by capturing and framing the deeply embedded and profound ecologies of places into accountability relationships.

Both Danyore and Chipursan possess unique histories, beliefs, cultures, values, traditions and social relationships, which in turn cultivate unique, ecology-specific ecological accountability relationships (see Appendix 3). Therefore, arguably one can assert that each and every ecology must produce its own unique and varied ecology-specific ecological accountability relationships. In this way, ecological accountabilities become a fabrication of their surrounding geographies, and work in a variety of ways (such as social, political and financial mechanisms) to instil socio-ecological and financial stability in remote rural territories.

6.5 Towards a geopolitical economy of accountability perspective

By exploring and untangling the complex ecologies of Danyore and Chipursan, I found both to contain a plethora of rich, varied and fascinating relationships, co-evolving systems and interdependencies, which not only produced and reproduced unique relationships of ecological accountability (i.e., landability and naturability), but also gave rise to unique, diverse, ‘more-than-capitalist’ ‘community-economies’. In this way, these ecologies became almost ‘ecologies of comparison’ (Choy, 2011) (see Appendix 3), as they enabled me to understand the infinite nature of ecologies and multiple ways in which they are assembled and work to hold together the social, political and economic facets of ecologies. By probing deep into these ecologies, I found that they work and manifest their innate ability to control, influence and assemble the social, political and financial through their ecologically embedded cultures, values, norms and belief systems. Collectively these things characterise powerful, binding relationships of ecological accountabilities, which enable the ecological to become mobilised as a socio-cultural, embodied, spiritual and geopolitical apparatus which assembles the social into networks of production and relations of accountability. This

leads us to consider the powerful geopolitical economy of accountability, namely how it works as a cohesive mechanism to assemble, influence and dictate the flows of capital in ecologically complex and fragile territories.

There are many important parts to consider of the geopolitical economies of accountability in Danyore and Chipursan. Ecologies flourish and work in infinite ways, some of which include nature embodiment and theocentric, transcentric and ecocentric beliefs. This results in an array of diverse and complex ecological accountability relationships which are acted and re-enacted in varying geographical spaces. Such ecological accountabilities are more than relationships of accountability between humans and diverse aspects of nature; rather they are multifaceted and complex, as they extend to encompass deep and profound aspects of ecologies such as nature beliefs, cultural traditions, values and norms, all of which are ecologically formed and influenced. Ecological accountabilities thus contain a plethora of ‘keystone’ actors (see Bebbington et al., 2019), resulting in complex, reciprocal and entangled relationships of accountability between people, modes of capitalistic accumulation and deep aspects of ecologies (e.g., nature beliefs, raw physical nature(s), spiritual beliefs, modes of ecological governance). Ecological accountabilities therefore play a cardinal role in bringing financial, ecological and political stability to ecologies in a variety of ways such as geographically organising *tanzeem* (micro borrowing) groups, nurturing resilience traits of adapting and enduring which drive nature-inflicted economies and nurturing response-ability (Harraway, 2015; 2018) to care for multispecies.

In this way, ecological accountabilities are more than a social and ecological relationship, they play an integral role in the organisation and assemblage of the multiple ways in which local ‘community-economies’ work. Ecologies exist as complex ecological assemblages, composed of an array of overlapping and interdependent systems, relationships and actors. Therefore, understanding how ecologies, in terms of ecological accountability relationships, become part of social, political and economic landscapes is complex. As shown in the case of Danyore and Chipursan (see Chapters 4 and 5) it is clear that ecologies shape the social meanings of people’s lives, influence identity construction of the self and characterise traditions, values and norms. This is what has largely enabled ecologies to maintain their social relevance and significance in today’s neo liberal world. From their pre-historical evolution and natural physical evolution to shaping the social, ecologies now also manifest

as being dominant, hegemonic and supreme forces of the everyday, dictating the flows of capital and capitalistic accumulation and arranging and assembling humans, more-than-humans and other-than-humans into networks of production and relationships of accountabilities.

The ability of ecological accountabilities to resonate and work beyond their micro setting can perhaps be better understood by scripting and imagining a geopolitical economy of accountability. Geography as an earth science informs us about the biological, cultural and physical features of the earth's surface. It not only informs us how the physical landscape has come to exist (i.e., mountains, hills, lakes, valleys, oceans, rivers and cities, collectively regarded as the topography of the Earth), but it also informs us how these physical parameters are connected and implicated in the social, political and economic facets of everyday spaces. As such, geography is certainly not exogenous to the social, rather it is deeply embedded in biophysical, social and cultural processes (Sheppard, 2011) that shape and assemble geographical spaces, communities, societies and nations at large. One way to account for the profundity and centrality of local geographies in bringing together the social, political and economic facets of ecologies is through ecological accountabilities. Although there has recently been a creeping intervention of ecological and nature-influenced research within accountability literature in the name of 'social environmental accountability' (Grey et al 1997; 1987, 1988, 1991; 1990; 1992 etc) and 'ecological accountability' (Russell et al, 2017), these studies only tap into some of the ecological dimensions of accountability relationships. Ecological accountabilities and reimagining a geopolitical economy of accountability is one way towards centralising and exploring the pivotal role of ecologies and the accountabilities that emanate from varying geographical places. They play a profound role in crafting and ensuring the ecological, political, social and economic stability of varying geographical landscapes.

The ramifications of ecologies as political sites, partly through their innate ability to embody, govern and control has been little understood. There is nothing novel in the suggestion that ecologies constitute a form of governance and influence in nature-rich spaces. The pre-eminence of geography (e.g., the theme of 'geography and empire') is rooted in early works of political geography, such as those of David Livingstone (1993), who provides a critical account of the trends and developments of geography as '... a cultural

product and a political resource’ (p.23) and Cormack and Godlewska who depict geography as an ensemble of techniques representing the world, which are crucial to state and empire formations. There is thus a widespread understanding that geography is political, but geography as a form of power is less well outlined (see Tuhail, 1995). The innate mechanisms and ability of geography (in the form of land, nature, weather, nature-stories and so on) to embody, govern and cultivate relationships of ecological accountabilities in ecologies, permeates multiple forms of polycentric governance systems (see Table 6.1). These connect and assemble diverse aspects of ecologies (e.g., micro borrowing *tanzeem* groups) and recast them as a political apparatus (e.g., Neu, 2000; Taylor, 1994). As one woman in Danyore remarked, “*land ownership gives one respect and authority to make decisions on our communities...*”. Therefore, understanding and explaining the geopolitical economy of accountability enables the exploration of questions such as ‘[h]ow to govern oneself, how to be governed, how to govern others, by whom the people will accept being governed...’ (Foucault, 1991 p.87) and how to be situated in an ecological context, encouraging us to consider ecological modes of governance and accountability. Understanding how ecologies control, assemble and influence people in tangible groups that can be governed and made accountable for their actions and decisions creates complex ‘abstract spaces’ (Lefebvre, 1991) and assemblages, as multiple ‘keystone’ (Bebbington et al, 2019) ‘tentacular interconnections’ (Haraway, 2015) and polycentric governance systems are involved in the creation, action and re-enactment of ecological governance mechanisms and ecological accountability relationships.

This notion of ecological governance is dependent upon the fact that human and nature share an inexorable relationship — ‘*Man, a part of nature, and product of nature, makes nature a part of himself; it is at once the subject matter of his activity and a prolongation of his body*’ (Kolakowski, 1978, p. 137). Thus, the art of ecological governing is deep-seated in the origins of the self, as evidenced in the geostories of Danyore and Chipursan. Such origins are earthly, mundane, incarnate within the women of these ecologies. Humans are vulnerable to being governed, either by being coerced or quite naturally by being seduced by interpersonal or intrapsychic forces. Ecologies play a profound role in this: ‘*What space signifies is dos and don’ts — and this brings us back to power. Space lays down the law because it implies a certain order — and hence also a certain disorder. Space commands bodies. This is its raison d’être*’ (Lefebvre, 1991, p.121). Lefebvre highlights the power of

geographical spaces in governing the body, creating ‘governable zones’ (Miller and O’Leary, 1994).

“if you have land, you can become a member of our tanzeem group, but you must have land...”; “selective people are allowed to join the tanzeem system, people that own land like us, because they stay in the land, look after it and help it flourish. If people can be loyal to their lands, they will be loyal to anyone”.

Hardt and Negri (2017) emphasise that to understand the nature of our political problem, we must better understand the forms of ‘social domination’ and the ways in which neoliberal governance and the power of finance in today’s neoliberal world, ‘extend and transform the modes of capitalistic exploitation’ (p.77). In other words, we should recognise the new role and productive power of actors and non-human actors in the changing landscape of capitalism. More particularly, we should recognise how these ‘contemporary forms of domination’ (p.77) (e.g., productive power(s) of the Earth) create powerful means of ‘resistance and transformation’ (p.41) to traditional capitalistic modes of production. Thus, in light of Hardt and Negri’s (2017) depiction of our current political problem, we must recognise the new actors, sites and relationships brought to light as neoliberalism has shifted modes of governance from hierarchy and capital domination to ones that are cooperative, naturally existing and deep-rooted in the capitalistic landscape. The land and the ecological have long been intertwined in capitalistic relations, but most commonly as a subject of exploitation. This has previously been described in Marx’s critique of a political economy, where he makes clear the role of nature, along with labour as a source of value. However, this notion of capitalistic exploitation of land as merely an economic factor of production belongs to the Western phase of capitalism during the industrial era. It does not consider how capital works in large parts of the Global South, in varying geographical landscapes. In these settings, we can see an alternative representation of capital, namely how it is subjugated to nature and becomes premised on nature’s precarity and volatility.

Geography is essential to the capitalism dynamic, especially in territories where laws of ecology are so pervasive and dominant. As illustrated and evidenced in the case of Danyore and Chipursan, capitalism, NGOs and microfinance banks adapt and are subjugated to the pre-existing, ecologically formed traditions, cultures, values, beliefs and relationships of ecologies. If they do not adhere to these ecological values and principles, capitalistic enterprises and capital itself struggle to penetrate, circulate and accumulate in the economies

of nature-rich ecologies. Ecological accountabilities play an integral role in enabling capital to enter these economies, but ultimately, nature dictates and controls the flows and accumulation of capital in the peripheral and marginalised community-economies of Gilgit-Baltistan. This leads us to consider and imagine a possible geopolitical economy of accountability.

A geopolitical economy of accountability can enable the exploration of the complex and reciprocal relationships between people, modes of capitalistic accumulation and deep aspects of ecologies (e.g., nature beliefs, raw physical nature(s), spiritual beliefs, modes of ecological governance) which enable capitalist and non-capitalist practices to prevail and interact dynamically. Therefore, a geopolitical economy of accountability signifies the possibility of unravelling and understanding local community-economies as not just nodes in a global capitalistic economy, but as powerful, rich, thriving, successful economies, containing a vast array of actors, relationships, systems and processes. These highly specific economic actors and identities collectively produce and reproduce resilient community-economies which are central to the workings of ecologies.

The geopolitical economy of accountability is cultivated in ecological assemblies which are enriched with nature-inspired and informed relationships. These relationships assemble people, places and actors into networks (for production, survival, kinship) and close-knitted community economies which define their boundaries, systems and operational codes (e.g., who can enter their *tanzeem* system) based on ecologically rooted values, traditions and principles (such as habitat maintenance, diversity, self-refuelling and co-evolving). This creates ecological assemblies which are held together and controlled by their own unique human-nature relationships. In this way, the social and ecological become inseparable as they are assemblage-bound and assemblage-making. A geopolitical economy of accountability is much like this stratified assemblage, as shown in the case of Danyore (Chapter 4) and Chipursan (Chapter 5). The local community-economy (including the *tanzeem* system) including the accumulation and circulation of capital in these ecologies is strictly regimented by ecological principle and values. Therefore in a geopolitical economy, one can argue that capital constitutes the ‘geography of the hemisphere’ (Walker, 1866, p.56) and exists as part of the deep natural landscape upon which all other political and economic processes play out.

Capitalism has always existed as a *revolutionary mode of production*, constantly seeking out new ways and new modalities of production. In the varying geographical landscapes of Gilgit-Baltistan, capital is now entangled with Earthly modalities of production, centred around organic processes, ecological principles and laws of ecology. These flexible, organic modes of production are subjugated to ecologies as ecological relationships and modes of governance dictate and assemble the flows of capital, linking the micro to the local and the local to the global. This organic financialisation is mediated and controlled by the ecological.

The geopolitical economy of accountability thus captures the earthy nature of capitalistic accumulation and circulation in ecologically rich but fragile places. This is essential as it enables us to look beyond the anthropocene and capitalocene, with humans and capital at the centre of power and our economy. Such frameworks promote the ideas of culture and politics (e.g., Gramsci, 1971; Lukacs, 1971) as being central in reproducing capitalist relations. However, using the chthulucene, we can now begin to bring out the significance of natural, pre-existing and incarnated ecological practices in dominating capitalist relations. As such, in a geopolitical economy, we can place geography at the centre-stage of power in rural financial landscapes. Within a geopolitical economy of accountability, we can thereby frame capital as a ‘natural/elemental force’, something ‘made and potentially remade, in the diverse and sometimes incoherent species of everyday life, the species we ourselves occupy and perform’ (Aitken, 2007, p.10). Ecological accountabilities enable capital to work in rural villages in a very organic manner, not by creating new governable subjects or new sites, but by capitalising the existing norms, relationships, practices and traditions already in place. Therefore, capitalism in ecologies is dependent on the geographic spatiality of its surroundings. A geopolitical economy of accountability encourages us to understand the bottom-up structure of capital which is consistent with Hardt and Negri’s (2017) views emphasising that we must view the ‘world from below, from where the people are’ as the social relations (of ecological accountability) create expansive, cooperative networks and assemble the multitude into social and financial groups.

Aside from the economic landscape, a geopolitical economy of accountability can help understand the complex configuration and modes of governance that organise and assemble

people and social relations. After all, ecological accountabilities work as a political, social and economic process in natural, peripheral settings, informing us of the relationships between people, modes of capitalistic accumulation and deep aspects of ecologies (e.g., nature-beliefs, raw physical nature(s), spiritual beliefs, modes of ecological governance) which are complex and reciprocal. In these ‘pericapitalist’ (Tsing, 2015) spaces, capitalist and non-capitalist practices prevail and interact dynamically, and therefore conventional accountability relationships are a failed and ‘problematic practice’ (see Messner, 2009, p.919) in such ecologies, due to nature’s precarity and volatility. Ecologies are “complex adaptive systems that possess intriguing structural qualities, such as resilience, hierarchy, scale, nesting, dissipative structures, and autocatalytic design, and descriptors of dynamics, such as nonlinearity, irreversibility, self-organization, emergence, development, directionality, history, coevolution, surprise, indeterminism, pulsing, and chaotic dynamics” (Abel and Stepp, 2003, p.19) and therefore accountability becomes a fragmented relationship, vulnerable to the ecological conditions of its environment. This ecological accountability holds the power to fragment, divide (e.g., destroying the traditional ways of living, see Chapter 4), transform (i.e., salvage, see Chapter 4) and to mobilise geopolitically. Therefore, rather complex and multifaceted ecological accountabilities pervade ecologies, which encompass ‘local and more widely stretched relationships’ (Latham, 2002, p.125) that are intergenerational and spiritual and extend to all biotic and abiotic organisms in their environment. The proposition of a geopolitical economy therefore may be useful, enabling us to understand how social, political and economic facets of ecologies work in complex and precarious micro geographical territories.

Chapter 7 | Conclusion

7.1 Introduction

This final chapter concludes the thesis by reflecting on the geostories of Danyore and Chipursan. This leads to the consideration of reimagining economies and relationships of ecological accountability within the peripheral and neglected corners of our world. The contributions are then highlighted followed by the possible limitations of this study. Finally, the thesis concludes with directions for future research and some concluding ethnographic reflections.

7.2 Reimagining economies and accountabilities

The geostories of Danyore and Chipursan presented in the thesis enabled the reimagining of economies and accountabilities in some of the most rural and remote parts of our world. In these rich, mosaic-like ecologies, composed of an array of interacting actors, including ‘more-than-human, other-than-human, inhuman and human-as-humus’ (Harraway, 2015, p.160), a plethora of interconnections, interdependencies, co-evolving systems and relationships are being formed, acted and re-enacted which are ‘sacred’ (Berkes, 2017) and intertwined with deep aspects of ancestral and intergenerational cultures, values and traditions (Sheppard, 2011). Therefore, these ecologies proved themselves to be extremely complex, abstract and usually unapproachable. Only through the process of internalising, experimenting, feeling and following (Latour, 1998; 2004) these ecologies was it possible to apprehend, theorise and recount these close-knit and enriched ecologies, containing unique and alternative community-economy arrangements and ecological accountability relationships. Moreover, the theoretical lens of Assembly (see Section 3.3), enabled me to understand Danyore and Chipursan’s complex *kudrathi nizaam* (nature’s system), which was spiritual, integrational and complicated, making both these ecologies so unique and exclusive. This enabled me to comprehend the sacred socio-cultural and geopolitical nature of the ecological, particularly its role in assembling the social into networks of production

and relations of accountability. Recasting and understanding the ecological as a sacred, socio-cultural and geopolitical phenomenon makes it possible to understand and envision the ecological as more than a physical feature of our world. Grasping the peculiar and complex ecological also enables a much more holistic view of how accountability relationships are formed, acted and re-enacted in ecologically complex, fragile places.

Ecological accountabilities rescript accountability as a more-than-human relationship, implicated in and with the ecological. This introduces an array of new ‘keystone actors’ (Bebbington et al., 2019) (such as weather, mountains, land, species) and sites (beyond the organisational setting) in which accountability relationships are formed, acted and re-enacted, enabling a much more diverse understanding of the ecological and the multiple ways in which it becomes enmeshed with relationships of ecological accountability. We can begin to comprehend how accountability, as a cultural, spiritual, and geopolitical construction and cohesive mechanism, instils social, political and economic stability in varying geographical landscapes.

By exploring and illustrating types of ecological accountabilities (i.e., landability and naturability) and the diverse, more-than-capitalist community economies in which they are formed, acted and re-enacted, we can begin to widen the horizons for accountabilities and begin to understand, both the alternative ways to be held accountable to nature and the alternative ways in which nature holds people accountable to it. Ecologically formed and rooted local identities, beliefs and values and the lived realities of rural communities are in fact linked to the ecological, and craft unique forms of accountability. Therefore, the ecological not only operates outside and inside our bodies, but ‘also through our bodies, including our embodied minds’ (Moore, 2017) through becoming implicated in relationships of ecological accountability. This ecological accountability, *the obligation of people(s) to provide an ‘account’ to nature(s) and in turn nature’(s) ‘-ability’ to make people(s) accountable to itself* enables an understanding not just of what Shearer (2002) calls an “accounting for-the-self” and an “accounting for-the-other” (p.560), but also an accounting for-the-ecological. By accounting for-the-ecological, we can begin to understand how the two paradoxes of pre-existing geographies and neoliberal capital work together to create ‘pericapitalist’ (Tsing, 2015) spaces, where the non-capitalistic and capitalistic work together to create alternative, profound and resilient economic arrangements in some of the

most peripheral parts of the world where nature is dominant, hegemonic and closely intertwined with all aspects of life, including the social, financial and political. This geopolitical economy of accountability makes it possible to re-think and reimagine the narrowly defined and bounded connotations of “capital” and “accountability” and render visible the complex ways in which human and more-than-human worlds are tightly interwoven and inseparable.

7.3 Contributions of the study

This thesis makes several contributions. It contributes to the accountability research by empirically illustrating the various ways in which local geographies permeate everyday, localised, micro relationships of ‘ecological accountability’. In an attempt to unfold how these ecological accountabilities are manifested in localised micro-saving and borrowing arrangements (i.e., the *tanzeem* system), it contributes to our understanding of how capital works and accumulates in complex ecological spaces. Finally, it contributes to understanding of a possible geopolitical economy of accountability.

First, in relation to accountability, this research has enriched our view of accountability in several ways. It responds to the call to extend accountability beyond social enclosures (Messner, 2009) by exploring how accountability is formed, acted and re-enacted in the varying ecological spaces of Danyore and Chipursan. In doing so, it empirically illustrates how aspects of the physical geographical (such as land, mountains, soil) become implicated in relations of ‘ecological accountability’. This contribution of an ecological accountability addresses the need to understand the ‘ecological’ in accounting research as highlighted by Russell et al., (2017) in their AAAJ Special Issue, ‘Ecological accounts: making non-human worlds (in)visible during moments of socio-ecological transformation’. This thesis thereby responds to the propositions (see Table 2-1) put forth by Russell et al (2017) in order to frame and illustrate the relationships of ecological accountability in Danyore and Chipursan. The need for “contemporary case studies of calculative practices that mediate human-nature relations... [and how] they become embedded in environmental governance, [and] critical examinations of how they work (or not)” (ibid, p.1443) is addressed by empirically illustrating the everyday calculative practices and localised *tanzeem* systems of two ecologies. In Danyore, land enables salvage accumulation and governs the social in the way

of *baraqa* and intergenerational values whereas in Chipursan, nature inhibits the growth and accumulation of capital and governs the social in the way of ancestral teachings, nature stories. The former is identified as landability, and the latter is identified as naturability, (land and nature's ability to make local women accountable to itself). Russell et al. (2017) also emphasise the need to address "socio-ecological controversies, [and] what classifies as accounts... [such as] complex non-human entities (e.g., animals, rivers, forests and lakes)" (ibid, p.1443). By unveiling the several biotic and abiotic 'keystone' actors (Bebbington et al., 2019) such as land, soil, animals, weather, nature, mountains, this study broadens the horizons of 'account' and 'account-giving' (Russell et al, 2017) and the narrow classification of stakeholder groups (Unerman et al, 2010) in accountability relationships. This study also responds to Russell et al.'s (2017) call to recognise the messy and complex socio-ecological through alternative narratives such as photographs and fictions (ibid) by framing the messy and complex processes, systems and relationships of the ecological in the form of 'geostories' using the theoretical lens of assembly. This alternative story method and theoretical framework captures the myriad ways, in which the complex ecological becomes implicated in relations of accountability (such as through resilience traits of adapting' (*halath kay mutabaq chalna*) and 'enduring' (*bardashth*)). In this way, this study "generate[s] a wider, wilder, more vivid interdisciplinary mosaic that is fully representative of the political and moral concerns at play in the "accounts" of "nature" (ibid, p.1444). In the attempt to respond to Russell et al.'s (2017) propositions to reimagine an ecological accountability, this study is able to illuminate the *obligation of people(s) to provide an 'account' to nature(s) and in turn, nature'(s) 'ability' to make people(s) accountable to itself.*

Second, in relation to capital, this research contributes to our understanding of how capital works in ecologies. By drawing on Gibson-Graham's (2008; 2014; 2016; 2020) acclaimed 'diverse economy', 'community-economy' and 'alternative economy' perspectives, this study shows how the peripheral economies of Danyore and Chipursan are dependent upon non-capitalistic processes, systems and relationships, such as resilience traits and relationships of intergenerational values to care for and protect nature. Collectively these ecologically rooted and formed values, beliefs and traditions produce relationships of ecological accountability which are essential to capitalism's dynamic in these ecologies. Hence this study contributes to studies that advance the idea that 'self-regulation' (Ebrahim, 2003) and 'self-determination' (O'Leary, 2017; Scobie et al., 2020) of microfinance and

micro-borrowing arrangements are dependent upon the ecological. Accountability and microfinance research has made several contributions to understanding how accountability is enacted in micro-borrowing arrangements (e.g., Alawattage et al., 2019; O'Dwyer and Unerman, 2006; 2008; Boomsma and O'Dwyer, 2014; 2015; O'Dwyer, 2010; Agyemang et al., 2017, Dixon et al., 2006; Rubenstein, 2017 and so on). Although these studies provide accounts of accountability in varying geographical territories, they only capture the everyday social relations of accountability and its role in organising and mediating micro-borrowing systems and relationships. In empirically illustrating and framing relationships of ecological accountability, this study extends our understanding of how the ecological, in the way of ecological accountabilities (landability and naturability) acts as a social apparatus of power, assembling networks of production and *tanzeem* systems of accumulation. This is a contribution to what I call the 'geopolitical economy of accountability'. This study introduces Harraway's (2015; 2016) 'chthulucene' as a geographical framework to capture and understand the complex ecological in ways in which ecological accountability enable capital to penetrate, accumulate and circulate the peripheral economies of Danyore and Chipursan. Thereby this study renders visible the everyday ecologically inspired activities and economies that are often in the shadows

7.4 Limitations

Despite having contextual, empirical and other contributions, the thesis is not free from limitations. However such limitations pave the way for future ethnographic research on ecological accountabilities.

First, it is necessary to exercise caution in generalising my empirical findings (as presented in Chapter 4 and 5) to other ecologies and the ways in which they exercise their local micro-borrowing and micro-saving arrangements. Each and every ecology contain varying human-nature relationships, spiritual beliefs and financial arrangements therefore the ecological accountabilities can greatly vary from ecology to ecology. Although I have suggested the possibility of multiple ecological accountabilities, it is difficult to conduct ethnography in such remote and culturally complex places. Language barriers and access to the field are only some of the possible barriers that make it difficult to conduct

ethnographic fieldwork therefore it will be difficult to understand and produce more accounts of ecological accountability.

Second, it is important to highlight the possible limitations of my ethnographic experience. Although I attempt to capture and frame the ecological accountabilities of these ecologies, many factors may have blurred my vision and hindered my experience of feeling and internalising the complex ecological aspects of Danyore and Chipursan. As previously mentioned, (see Chapter 3, Section 3.8) I had many comforts such as an air-conditioned car, comfortable accommodation and freshly cooked meals which limited my exposure to the harsh natures of these ecologies and therefore my ability to feel the resilience of the local women and experience their true way of living. Therefore, I perhaps failed to capture the profundities of the human-nature relationships and the deeply embedded ecologically rooted beliefs and values of these places.

Third, the ‘geostory’ method of presenting my ethnographic findings may raise questions regarding the claims and findings of this study. As I engaged in a critical realist process of connecting my empirical to the deeply-embedded socio-ecological realities, and in turn framing these realities using the theoretical lens of assembly, this may have resulted in researcher bias. Since the objective of this study was to explore the ecological relationships in everyday settings, I had to rely on primary data collected through ethnographic observations, interviews and conversations and make sense of this data. Therefore, like all other ethnographic qualitative fieldwork the subjective influence of my research was unavoidable. Also, the study did not use any software like NVivo, Aquad, QDA Miner etc. for coding and qualitative data analysis. Instead it relied on personal reflections and a geostory method to frame the findings. In ethnographic fieldwork, researchers continuously engage in brainwork and paperwork to develop an understanding of how things actually work in the field (see Watson, 2011) therefore following this process I identified the geostories of Danyore and Chipursan from iterative reading and contemplating over my field notes and interview scripts. As my interviews were conducted in Urdu, I decided to personally transcribe them to avoid any inaccuracies in translating them to English (Maanen, 2011; Watson, 2011). During this process I was able to enhance my engagement and personal reflections on the data. Therefore researcher subjectivity was inevitable.

7.5 Directions for future research

In light of the limitations discussed above, this section explores the avenues for future research. As illustrated in the geostories of Danyore and Chipursan, ecologies are open-ended gatherings, full of entanglements and complex, reciprocal relationships which give way to unique assemblages of capital and accountability relationships. Both capital and accountability are premised on deep aspects of the ecological, such as ecologically inspired and formed traditions, values and beliefs, giving way to a possibility of heterogenous and ecology-specific relationships of ecological accountability and systems and flows of local capital (as illustrated in Chapters 4 and 5). By exploring more ecologies, we can come to understand the synergistic, self-regulating and interdependent (Lovelock, 1978) ‘non-standard organizational forms’ (Laine et al, 2020), of ecologies and the overarching visible as well as the minute and invisible aspects of ecologies that perpetuate the conditions for ecological accountabilities and capital. Therefore, we can begin to understand the varying ways in which relationships of ecological accountability and capital are being acted and re-enacted in ecologies. This indicates that there is so much more out there to be , explored and synthesised.

By adopting Harraway’s (2016) term ‘chthulucene’, the long-term epoch in which there is a multiplicity of actors and forces, and where not only human but more-than-human intertwine and work together, we can untangle ecological profundities and diversities which are implicated in ‘tentacular’ interconnections. Harraway (2016) writes that in order to understand these interconnections which are flourishing on Earth, we must touch, feel and try things out. Such creativity can be acted and re-enacted in the ways in which I illustrate and narrate the peculiarities, complexities and profundities which emanate from ecologies, for example, generative metaphors, geostories, stories of response-ability, ethnographies and so on. Through these alternative ways of bringing to light the fine details and happenings of ecologies, we can begin to articulate the open-endedness of ecologies and shed light on their multiple possibilities and variety, some known and many yet to be known. Therefore, by placing such ecological perspectives at the centre, we can reconfigure the assemblage and workings of the social, ecological, cultural, economic and political and study how these things come together and work together to create diverse, more-than-capitalistic, community

economies and much wider, wilder and interdisciplinary mosaics (Russell et al 2017) of ecological accountability relationships.

Understanding and exploring ecological accountabilities, specifically how they extend beyond the social and become implicated with the physical, non-human world through self-nature (see Kunchambo et al, 2017) relationships and nature embodiment (sacred, ancestral and intergenerational traditions, teachings values and norms), we can begin to see how ecologies and nature operate not only outside and inside our bodies, but ‘also through our bodies, including our embodied minds’ (Moore, 2017). How we form relationships with other humans and more-than-humans is important as it “increases the number of things which are made visible and in doing so encourages an increasing openness” (Grey, 1992, p.415) ““for what”, “to whom?”, and “how?”” (Grey, 1992, p.414) we are made and held accountable. By untangling and animating more ecological accountabilities, we can encourage discussion of polyvocal and ‘minority’ (Allard-Poesi, 2005) voices — including a variety of stakeholders (Grey and Owen, 1996), communities (Grey, 1990), and species (Grey and Milne, 2018) — in social environmental accountability relations. By reconsidering and reconfiguring ecologies, we can begin to reimagine a ‘wider critical accountability’ that explores ‘environmental issues of real concern’ (Grey, 2007, p.181) to our world.

However, “... it is not enough to decide to include non-humans in collectives or to acknowledge that societies live in a physical and biological world...The crucial point is to learn how new types of encounter (and conviviality) with non-humans, which emerge in the practice of the sciences over the course of their history, can give rise to new modes of relation with humans, i.e. to new political practices” (Paulson, 2001, p.112). Therefore, as the thesis concludes, cultivating a geopolitical economy of accountability is much needed, as it enables us to understand how ecological accountabilities exist as powerful, influential relationships which dictate and influence the geopolitics of geographical landscapes, thereby enabling us to reconfigure the lived relationships between economies and ecologies (see Plumwood, 2002).

7.6 Concluding thoughts

In concluding this thesis, I share some personal reflections from my ethnography which I leave as my final thoughts.

Conducting ethnography in close-knit rural villages is daunting and difficult. In countries like Pakistan, you will come across many strange and baffling situations, at times making you feel overwhelmed or confused. Just by seeing, observing and internalising your surroundings, you will become curious and fascinated to understand why and how things happen in the way they do. Strong cultural practices, values, traditions, and beliefs prevail in all aspects of life and become enmeshed together, to collectively produce the social, financial, political and economic landscape of the country. Therefore, you cannot understand one thing without understanding the greater picture of how and why things are assembled the way they are. So the more you probe deep into untangling and understanding the ecologies of varying geographical landscapes, the more you find entanglements and situations that are hard to explain. In Gilgit-Baltistan, the local religion (the Ismaili sect), the entrepreneurial spirit of the local women, the localised financial system (including the grassroots *tanzeems*, the LSOs and microfinance banks), the tremendous work of the AKRSP, and the profundity of nature all create a complex web of entanglements. At the onset, accountability and capital seemed blurred in these ecologies, but through slowly internalising, feeling, following and experimenting, I began to pick up on an array of things which held meaning, value and significance, and gradually, I pieced them together, like an assemblage. Harraway's chthulucene, tentacular thinking and string figures helped me to understand how ecology, ethnography and theory shape and inform each other. This enabled me to untangle some of the peculiar and fascinating socio-ecological complexities, arrangements and happenings which I 'felt', 'experienced' and 'saw' in Danyore and Chipursan's ecologies and frame them in geostories (as presented in Chapters 4 and 5). Moreover, Tsing's and Gibson-Graham's alternative and diverse representations of capitalism and economies gave me the courage and confidence to also tell in my geostories the unusual and unique arrangements regarding the social, political, ecological and economic. The local community economy arrangements, which I discovered to be nature-rich, nature-informed and nature-controlled would have appeared as strange, minor or merely an insignificant node in the global capitalist system, but the 'diverse', 'peri-capitalist', 'more-than-capitalist' and 'community economy' framings of Gibson-Graham

and Tsing gave me the confidence to unveil the ecological as powerful, hegemonic and dominant, controlling, dictating and influencing the realms of capital and relationships of ecological accountability in this corner of the world.

Danyore and Chipursan, as ‘ecologies of comparison’ (Choy, 2011) brought me to the conclusion that each and every ecological assemblage tells a story, but these kinds of stories never end, they rather lead to more and more openings, and further stories. When one aspect of the story — the community-economy arrangements and ecological accountabilities — has been grasped, a generalised description is never enough; unravelling the first story (of capital, nature and accountability) in Danyore encouraged me to unravel the story (of capital, nature and accountability) of Chipursan, and now to go on to unravel more.

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Appendix 1: Data Collection framework in the field: themes, rationales, questions/concerns and data collection methods

Broader theme	Rationale	Questions/concerns	Data collection method								
			Photographs (P)	Observations (OB)	Interviews/Focus Groups						
					Aga Khan Rural Support Programme (AKRSP)	First Microfinance Bank (MF)	Local Support Organisations (LSOs)	Danyore <i>Tanzeem</i> (DT)	Chipursan <i>Tanzeem</i> (CT)	Others (e.g., local shopkeepers, driver, women from other villages) (OT)	
Geography	To understand the significance of local geographies	What were the physical geographies of the ecologies? Why were they so significant? What role did they play in everyday life? How did they transgress the boundaries of the physical?	√	√	√				√	√	√
	To understand how local geographies became implicated in the social, political and economic aspects of everyday life	How did the local geographical permeate the social? (e.g., through ancestral nature stories)? How did it become implicated in social relationships? What were human-nature relationships? Did the local geographies have some role to play in shaping the identities, traits and values of local inhabitants? (e.g., resilience traits) How did the local geographies organise and assemble the social?	√	√	√		√	√	√		√

Broader theme	Rationale	Questions/concerns	Data collection method							
			P	OB	Interviews/Focus Groups					
					AKRSP	MF	LSOs	DT	CT	OT
Accountability	To understand the relationships of accountability that were being acted and re-enacted in the local micro-saving and micro-borrowing groups	How did women hold each other to account? To whom were they accountable? How were their micro-saving and micro-borrowing groups built on trust?		√	√		√	√	√	√
	To understand the ecological nature of these accountability relationships and conceptualise ecological accountability(ies)	How did the ecological permeate relationships of accountability? How were micro-saving and micro-borrowing groups members made accountable to nature? How did nature make these women accountable to itself?		√			√	√	√	

Appendix 2: Summary of research participants

	Participants	No. of participants
Aga Khan Rural Support Programme (AKRSP)	General Manager (GM), Lead Access to Finance and Development, senior administrative manager, and other managerial staff	8
First Microfinance Bank	Banking trainee, bank manager, women's representative officer	3
Karakoram International University	Departmental Head of Accounting and Finance, accounting lecturers and university students	6
Local Support Organization (LSO)	Administrative staff, Chairman of Danyore's LSO, head of finance for Danyore's LSO, retired LSO chairman in Chipursan, current chairman of Chipursan's LSO	7
Other research participants	Relatives, hotel staff, hotel owners, guests at hotel, driver, teachers at local primary school where I taught, mothers of children that I taught, shopkeepers	13
Danyore's Tanzeem	Tanzeem members and a non-tanzeem member	27
Chipursan's Tanzeem	Tanzeem members and a non-tanzeem members	64
		128

Appendix 3: Detailed overview of the dimensions of Danyore and Chipursan’s Geopolitical economy of Accountability

	Danyore	Chipursan
<p>Nature in ecologies – description of local geographies, including the raw, physical natures which are both visible and invisible.</p>	<ul style="list-style-type: none"> • Faraway, rural village in Gilgit-Baltistan, Pakistan, lies across the river Gilgit. • Snow-capped mountains, greenery and extensive plain fields • Fertile lands cultivating wheat, corn, apricot trees, grapevines etc • Moderate temperatures with rainfall, warm summers and dry, cold winters • ‘Double-cropping season’ – a variety of crops can be grown all year long. ‘<i>kharif</i>’ is the first sowing season which lasts from April to June and its crops, such as sugar cane, maize, cotton and rice are harvested between October to December. ‘<i>Rabi</i>’ is the second sowing season from October to December and its crops, such as wheat and gram are harvested between April and May. 	<ul style="list-style-type: none"> • Remote northern valley of Gilgit-Baltistan, Pakistan surrounded by the Karakoram and Hindukush Mountain ranges. It stretches 72 kilometres, starting from Sost Port, ending at the Irshad Pass. 11 villages scattered throughout the valley floor. • earthy tones of brown, ash-greys, greens and blues fill the landscape of the dry valley • Glorious snow-capped mountains, fast-flowing rivers filled with glacier torments and boulders. • Potato plantations, wheat fields, apricot trees and grazing animals scattered throughout the valley floor. • Harsh, volatile geographical conditions. Such nature-inflicted hardships include temperatures as low as minus thirty-two degrees Celsius, landslides, avalanches and heavy snowfall. • One cropping-season – very few crops can be grown. During ‘<i>kharif</i>’, the only sowing season which lasts from

		April to June seeds are sown and crops, such as potatoes are harvested between October to December.
<p>Keystone actors – includes all biotic and abiotic factors that are implicated, and influence relationship- making with each other and help make the ‘informal’ and ‘invisible’ accountable (e.g., Russell et al, 2017; Grey et al, 2006; Collier, 2005), creating a much ‘wider, wilder, and more vivid’ (Loftus, 2016) account of accountability and enables the understanding of the ‘wider social and economic environment’ (Robson et al, 2017)</p>	<ul style="list-style-type: none"> • Organisations/entities: The NGO, Aga Khan Rural Support Programme (AKRSP), Local Support Organisations (LSOs), <i>tanzeems</i> • Nature: land, animals, soil, mountains, weather • Ismaili sect of women and their religious beliefs 	<ul style="list-style-type: none"> • Organisations/entities: The NGO, Aga Khan Rural Support Programme (AKRSP), Local Support Organisations (LSOs), <i>tanzeems</i> • Nature: species (e.g., snow leopards), weather, soil, mountains • Ismaili sect of women and their religious beliefs • Mythical actors: Totemic beings, saints, pious individuals, dragon etc
<p>Polycentric governance systems – The multiple ways in which nature embodies and works (e.g., as part of nature, historical and sacred beliefs, ancestral teachings etc) and thereby governs its inhabitants in ecologies.</p>	<ul style="list-style-type: none"> • Landability: this permeates a governance through land’s ability to embody the ‘heart, soul and mind’ of its rural female possessors, and make these women accountable to the land e.g., “<i>why would we do all this, and make these sacrifices? The world runs after an easy, comfortable life. It’s only us that make our life harder than it should be, because of this zameen (land). The love and relationship that we have with it, will never set us free</i>”. 	<ul style="list-style-type: none"> • Oneness and belonging to Nature enables nature embodiment e.g., “<i>what’s the difference between us and Nature, in essence we are one...we are made from this soil</i>”; “<i>these mountains are our home; we only know how to live here</i>” • Mysterious tales: instil a change within people of the valley as enriched local teachings, local beliefs, local values and local knowledge shape distinctive traits and

	<ul style="list-style-type: none"> • <i>Baraqa</i> (blessings): land is regarded as a divine blessing from God and form of sustenance. Land's sacrality and such theocentric beliefs instil a love and deep-seated attachment towards land. This spiritual attachment to land permeates a 'self-governance' (see O'Malley, 1996; Bowie, 2013) 'self-determination' (Napoleon, 2005) and 'self-accountability' (see Carmona and Ezzamel, 2007) to care for and protect the land. Their everyday lives are shaped by beliefs and moral codes that emanate from the centrality of land. Land naturally guides, it does not control these women's actions and way of life. Instead, it intuitively embodies its inhabitants, "<i>when we get up, sit down, walk around, and get on with our lives, we are always worried about our land...</i>", which makes these women intertwined with their lands mentally, physically and spiritually. • <i>Fithrath</i>: this complex of deep, emotional and intellectual attributes that determine an individual's nature, thinking and sense of action to care for and protect the land leads to an individually inspired selfhood to nurture and care for the land and to strive for its well-being: "<i>we make sure we do not cause harm to the land</i>" • The plethora of polycentric governance systems flourishing in Danyore are all connected to the land (such as the spiritual, kin, traditional, societal, ecological and ancestral relationships). 	<p>characteristics within the local people e.g., "<i>offer guidance on how we should live our life</i>"</p> <ul style="list-style-type: none"> • Nature becomes closely connected and intertwined with their lives, with themselves as individuals, and with the construction and articulation of the self: "<i>these incidents of the past teach us something very important...to fear Nature and God's wrath...they are a reminder to me and everyone else that we should become better people, and have more sympathy for those around us...and it is very important for us as mothers to instil these qualities in our future generations to come so that they can live a better life and so that they are not inflicted with any punishments</i>". In this way, nature governs not just current, but also future generations. In this way, nature embodies and permeates the bodies of the females in the valley, instilling a belief that they are "<i>a part of nature</i>" and hold a sense of "<i>responsibility towards nature</i>"
	The relational extended self	The encapsulated self

<p>Self – nature relationship – drawn from Kunchambo et al (2017) and their varying dimensions of humans to perceive nature as part of the self (the relational extended self, the encapsulated self and the assimilated self). Such relationships reveal how both tangible and intangible aspects of nature act as ‘inner motivational enablers’ to influence the self-nature relationship.</p>	<ul style="list-style-type: none"> • <u>Direct exposure to nature</u>: “We spend all our time in our fields, these fields are our second home” • <u>Affective attachment</u>: “just like I pray for my children, I pray for the well-being of my land”; “every mother has a child that is really annoying, it demands time, attention, love, and it always [emphasis] wants to stay attached to its mother, this child is our land [laughing]... we manage it like we manage our children; “out of our own happiness we look after our land, we nourish it, irrigate it and it flourishes”; “nobody tells me how to and when to manage my land, I do it out of my own choice and love...after all, it has given me so much”; “will always make decisions that are not only beneficial for their children and families but also for their lands”; “I can’t explain to you why we live like this [referring to life in the far-away rural village] and why we are like this [meaning hard-working and driven], maybe it’s because we have some strange attachment to this land; it does not let us go anywhere and neither does it let us rest...”; “...We are all connected to the land, and we all share a relationship with it. But here in Danyore, our relationship with the land is something different” • <u>Self-enhancement</u>: “the land has its own strength, look at these huge mountains it bears. I want to be as strong as them and I want my success to be as great as their peaks” • <u>Intrinsic values</u>: land has an intrinsic value as it enables women to afford school fees for their children so that they can send them 	<ul style="list-style-type: none"> • <u>Direct exposure to nature</u>: e.g., “the frozen water doesn’t bother us, we are used to it because kudrath [nature] has made us patient” • <u>Religious attachment</u>: Due to religious beliefs, women are appreciative towards nature and do not display any resentment towards it, instead they feel insignificant before Nature’s greatness and accept nature-inflicted hardships as a part of their life e.g., “we are nothing in front of them [referring to the mountains]”. • <u>Self-searching</u>: mysterious tales encourage self-reflection of individuals and who they wish to be e.g., “The stories narrated here in the valley are no ordinary stories; they form an extremely important part of who we are, how we live life and how Nature wants us to be” • <u>Valued as God’s creation e.g.</u>, “these dry mountains, the cold weather, the snow...they [referring to the mountains and surrounding nature] have their own elevated status in our lives”. • <u>Theocentric beliefs</u>: “we know the consequences of challenging Nature, we will be punished and destroyed like the previous generations”
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	<p>abroad to study, it also pays for their children's weddings, bills at the doctor's, and all other types of daily expenses. It's also a pillar of moral support e.g., "this land is not just a means of earning, it's our support"</p> <ul style="list-style-type: none"> • <u>Ecocentric beliefs</u>: <i>"we were born from soil of this earth, we live life on it, we eat from it, and we return to it...we are returned to the land; we are buried into its soil"; "why would we leave, our land has given us everything, it's our identity and pride"; "the things of the world are powerful, but nature is more powerful...it has its own system to run the world...to understand this is important. If you want to know how anything works in Gilgit, it is by nature. Understand nature and you will understand everything else"</i> <p>The encapsulated self</p> <ul style="list-style-type: none"> • <u>Direct exposure to nature</u>: direct exposure to nature through 'karobaree' (business) and 'khaithobaree' (land-related activities e.g., harvesting, cropping, irrigation and animal husbandry). Also, their moral, physical, and spiritual obligations to the land keep them in constant connection with the land e.g., <i>"with our hands, we look after the land"</i> • <u>Religious attachment</u>: 'baraqa' (blessings) cascades through a belief system and religious ideology that elevate land's status to something superior and all-powerful, making its inhabitants feel a sense of smallness, insignificance and powerlessness when in 	<p>The assimilated self</p> <ul style="list-style-type: none"> • <u>Direct and prolonged exposure to Nature</u>: e.g., <i>"Close your eyes, do you hear the water flowing from the nearby river? Isn't it so peaceful? The peace and these kudrathee (natural/God-created) colours nourish our soul and provide us with an overwhelming sense of peace"</i>. They also attribute human-like characteristics to nature and contend that the mountains, lands, and valleys also have agency e.g., "these mountains, these lands, it can all hear and see..." • <u>Spiritual attachment</u>: fear of nature and God's punishment e.g., <i>"these incidents of the past teach us something very important...to fear Nature and God's wrath...they are a reminder to me and everyone else that we should become better people, and have more sympathy for those around us...and it is very important for us as mothers to instil these qualities in our future generations to come so that they can live a better life and so that they are not inflicted with any punishments."</i> • <u>Self-authentication</u>: morals and values to safeguard nature e.g., <i>"protect Nature, if not we may be punished and destroyed like the previous nations"</i> • <u>Valued as self</u>: their oneness and belonging to Nature prohibits them from challenging Nature e.g., <i>"what's the difference between us and Nature, in</i>
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	<p>nature: “<i>these mountains have a way of constantly reminding me that I’m so small, I’m nothing</i>”</p> <ul style="list-style-type: none"> • <u>Self-searching</u>: “<i>these huge mountains have a way of reminding me that we are so small and insignificant...such thoughts make me think about what I really want to achieve in life...what’s worth doing</i>” • <u>Valued as God’s creation</u>: “<i>not a night goes by where I don’t lie in my bed and thank God for his countless blessings, this land, our crops, our animals, my friends, they are my strength and hope...</i>”; “<i>reward of looking after the Earth</i>”; “<i>peace in sitting on our lands and appreciating the fresh breeze from the mountains</i>”; “<i>our ability to earn and to do anything comes from Allah, it is Allah that has made the land fertile so that we can reap its fruits and make a living</i>” • <u>Theocentric beliefs</u>: “<i>there is Baraqa (blessings) in the land...we derive fresh, organic fruits from our soil...and fresh water which we are gifted in abundance from the mountains...because of this, we have a long healthy life</i>”; “<i>this land is god-gifted</i>”; “<i>the land was bestowed upon us</i>”; “<i>God provides our sustenance through our land...it is our duty to look after it</i>”; “<i>our generations have lived on this land, there is something auspicious in this soil</i>”; “<i>these are miracles of the Earth [referring to her maize]</i>”; “<i>staying here, we consider ourselves to be very grateful, all year long, the land provides us with an income...Allah chose for us to live in these lands from which many things can grow</i>” 	<p><i>essence we are one...we are made from this soil</i>”; “<i>these mountains are our home; we only know how to live here</i>”; “<i>we know the consequences of challenging Nature, we will be punished and destroyed like the previous generations</i>”</p> <ul style="list-style-type: none"> • <u>Trans-centric beliefs</u>: belief that Nature also possesses ‘extranormal’ powers. It is believed that Nature has spirits that are sentient; they are aware and watchful of all actions, intentions, and behaviours of the people in the valley e.g., “<i>the mountains, this land, it is aware of everything that we do</i>”; “<i>Nothing from the outside world works here and can take control here</i>”. • <u>Altruistic and biocentric concerns</u>: e.g., “<i>that we should become better people, and have more sympathy for those around us</i>”; “<i>we should become better people, and have more sympathy for those around us...and it is very important for us as mothers to instil these qualities in our future generations to come so that they can live a better life</i>”; “<i>we share and collectively use the bunkers so that we can all make it through the difficult times together</i>” • <u>Sacred relationship</u>: shared belief that God is all-controlling, he is the all-seeing and all-hearing and is aware of everything, and it is he who grants
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		<p>Nature the power to work, <i>“in a system that is set in place for it...just like everything else has its system, Nature also has its own system, this is how the world works”</i></p> <ul style="list-style-type: none"> • <i>Positive attitude e.g., “to be grateful for everything that Nature has given us...”; “Winter days are special here... we get to spend a lot of time with our children playing games and doing activities at home, of course, we can’t leave home because of the snow... last year I taught both my daughters hand embroidery because they were off school... yes, the winters are definitely hard, especially for the children but we use this time to bond with each other... our relationships strengthen and as a family we become closer”. Despite the nature-inflicted hardships, they keep a positive spirit e.g. “thirty years ago, there was an avalanche that came down from the mountains...it destroyed the entire village, homes, animals, farming land... everything...everything is gone, now what you see are just rocks...this incident reminds the people in the valley that in front of nature, we are nothing, we can’t do anything ...but in this fear we can't live life, we live happily, we celebrate the Baba Ghundi festival, weddings, children being born [etc]... we are happy people...”</i>
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<p>Generative metaphors – expressed by local women in their accounts of daily life, and relationships with each other and nature. These generative metaphors inform how and why (ecological) accountabilities are formed.</p>	<ul style="list-style-type: none"> • Life: <i>“in life there are many good times and many bad times, sometimes we are happy and sometimes we are also upset...there is no guarantee that we will live tomorrow so we keep good ties with each other”</i> <p style="text-align: center;"><i>“We live life in a happy manner, we don’t hold grudges against each other and always keep our hearts clean...therefore we forgive each other and support each other in all ways that we can”</i></p> • Land: <i>“the land has its own strength, look at these huge mountains it bears. I want to be as strong as them and I want my success to be as great as their peaks”</i>; <i>“we are resilient like our crops”</i> • Tanzeem: <i>“tanzeem means to be constantly doing something little by little, little by little, little by little, the size as small as a seed...just like this we put our money aside into a pot, it’s not supposed to be easy, it takes a lot of hard work, and patience, but in the end, you are rewarded with something great...you will have lots of seeds, which will grow, perhaps into something beautiful...it’s something we’ve been doing for generations”</i> 	<ul style="list-style-type: none"> • Nature: <i>“just like nature is unpredictable, that’s how our life and relationships are with each other...like the weather comes and goes, people also come and go”</i>; <i>“if Nature itself is challenged here, what can one expect of anything else to survive here.”</i>; <i>“because of the cold weather we only have one cropping season, we mainly grow potatoes because they grow the best here in these cold regions...[laughing] like us potatoes can endure the cold of the valley”</i> • Life: <i>“Our life will pass by; all the good times and all the bad times...but the afterlife is eternal... that’s where we will live forever, so we try to live a good life, and do good actions, by looking after each other, respecting and taking care of nature because we will have hisaab [be made accountable] for all of these things”</i>.

<p>‘Response-ability’ (Harraway, 2015, 2016, 2018) to nature(s) – beyond social obligations and accountabilities between people(s) to collective praxis of care and response to the multispecies of the Earth (see Harraway, 2016, p.105)</p>	<ul style="list-style-type: none"> • <i>“God provides our sustenance through our land...it is our duty to look after it”</i>; <i>“we will die for our land”</i>; <i>“it is our responsibility and duty to protect this region...it is our pride and strength”</i>; <i>“we will do everything and anything to protect our izath (respect) [referring to the land]”</i>; <i>“why would we leave, our land has given us everything, it's our identity and pride”</i>; <i>“like the old saying goes; umeed par dunya kayam hai (the world is built on hope) ... in times of hardship, only our land stands with us, so I feel forever indebted to my land, to care for it...”</i> 	<ul style="list-style-type: none"> • Responsibility to protect and care for nature e.g., <i>“protect Nature, if not we may be punished and destroyed like the previous nations”</i>; <i>“live a moderate life, in peace and harmony and to look after one another, our animals and nature no matter how much difficulty we are in or no matter how much Nature tests us”</i>; to <i>“love and care for Nature our animals and each other”</i>; <i>“...at one time we carry twenty liters of water on our back...we need water in our homes, but we mainly carry back a lot of water for our animals”</i>; <i>“looking after these animals is our duty...on the day that we will have our hisaab [will be made accountable]; “just like we depend on the sheep for sustenance, they [referring to the snow leopard] depend on our sheep...they [referring to the snow leopard] are also our animals and these mountains are also their homes.”</i>; <i>“When our crops suffer, we also suffer... we feel upset not only because they are a valuable food source for us, but also because we give time, love and care to our soil so when our crops don't flourish, we feel we didn't try hard enough”</i>; <i>“...Nature provides us with a living space, and sustenance, therefore we feel a sense of responsibility towards nature”</i>
<p>Ecological Assembly – the things, actors, relationships, ‘tentacular’</p>	<ul style="list-style-type: none"> • Land: is a traditional space, imbued with sacredness, symbolic of pride and identity, rich in cultures and traditions, and contains 	

<p>(Harraway, 2015) interconnections, interdependencies, processes and systems that make and hold together the ecological assemblies of ecologies.</p>	<p>elements of both patriarchy and matriarchy. Paradoxically, it is something both contemporary and progressive. It is a ‘neoliberal platform’ for global capitalism (Harvey, 2005), possesses pre-eminent ‘productivity powers’ (Hardt and Negri, 2017) and contains the power to put ‘life itself into circulation’ (Cooper, 2015)</p> <ul style="list-style-type: none"> • Savaging: process which destroys traditional social arrangements, breaks the family unit and challenges patriarchal gender roles as Capital elsewhere in China, Afghanistan and the hustling, trading region of Punjab in Pakistan calls for male ‘<i>mazdoree</i>’, wage-earned labourers, to carry out labour-intensive jobs. However topophilia, the ‘affective bond between people and place or setting’ (Tuan, 1974, p.4) keeps Gilgiti women along with their children tied to the land, creating man-less landscapes, or what is locally known as ‘<i>Hathun ka gao</i>’, the village of the female. The ecological assembly of Danyore becomes ‘man-less’ as males are uplifted and women are retained on the land. • Salvaging: process by which land salvages the socially fragmented, vulnerable and isolated landscape of rural women and recasts it as empowered, liberated and self-sustainable by connecting it to circuits of capital. The salvaged landscape now contains entrepreneurial women bringing a brighter future to their ecologies and generations to come — “<i>the tanzeem brings us hope and encouragement in times of despair that we are doing something that will bring development to our lands, our businesses and children</i>” 	<ul style="list-style-type: none"> • Nature: magnificently supreme, all-mighty, and in control. The powerfully reigning force of the everyday, assembling the social, financial and ecological • Resilience dynamics: resilience dynamics of adapting and enduring, hold together Chipursan’s ecology. ‘Adapting’ is the capacity to respond to adversity, individually or through collective action after sudden nature-inflicted threat and to re-establish a stable condition, whereas ‘enduring’ is the capacity to carry forward, live life and reaffirm the social–ecological system in place, including the social, financial and ecological conditions that underpin the stability and foundations of life in the valley. This resilience connects local women with the more-than-human, other-than-human and diverse ecological aspects of their ecologies. The relationships (e.g., accountabilities) which arise through these interconnections, interdependencies and the <i>kudrathee nizaam</i> (nature’s system), make and strengthen these ecologies and nurture and sustain within the valley’s women the resilience traits of adapting and enduring. • Nature-transpired processes: nature penetrating and embodying via mysterious tales (see Chapter 5, Part II for stories of Baba Ghundi, Dragon of Yishkok and Kampeer Diyor) • Ancestral teachings and mysterious tales: ancestors have played a “<i>very special and extremely valuable role in teaching us how to live in these mountains and connect with</i>
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	<ul style="list-style-type: none"> Land's power is also manifested in its '-ability' to set rules, make selective relationships, and organise its communities. 	<p><i>nature</i>"; mysterious tales "offer guidance on how we should live our life"</p>
<p>Ecological accountabilities – the obligation of people(s) to provide an '-account' to nature(s) and in turn, nature(s) '-ability' to make people(s) accountable to itself, and the nature of ecological accountability relationships.</p>	<ul style="list-style-type: none"> Ecological accountability is a complex, multi-faceted and intergenerational relationship, deeply embedded and intertwined with the land e.g., "<i>We are all connected to the land, and we all share a relationship with it. But here in Danyore, our relationship with the land is something different</i>"; "<i>we have inherited this land from our previous generations, maybe that's why we have an attachment to our lands ... we make sure we pass this relationship [with the land] to our next generation.</i>" In this way ecological accountability becomes enmeshed between the social and ecological as it represents relationships of kin, the ancestral, and the community, all of which are connected to the land. enacted and re-enacted based on land values e.g., integrity, resilience, patience. Accountability to the land is fuelled by religious beliefs: "<i>on the day of judgement</i> [a day believed by Muslims that mark the end of time, when all of mankind will be held accountable for their deeds before being admitted to paradise or the hellfire] <i>we will have to answer to the land...the land will speak for any wrong-</i> 	<ul style="list-style-type: none"> Ecological accountability is premised on Nature's precarity and volatility. Due to the nature-inflicted hardships in the valley, it becomes almost impossible to maintain and enact relationships of ecological accountability e.g., "<i>we live in peace and share very good relationships with each other, with our land and with our surrounding Nature. We respect each other and trust each other. But in many situations these relationships suffer...for example, when the weather gets really bad, and leaving our house can be dangerous to our lives, we have to think about ourselves... we also can't run our tanzeems. Because of this we can't make our weekly payments, there is no way to earn money...in these situations we must have a big heart and forgive each other [referring to forgiving the loans] ... or be patient and wait for the weather to settle and for Nature to give us a chance to earn money again</i>". Nature nurtures resilience traits, which in turn nurture ecological accountability relationships. These relationships of accountability become fragmented and suffer, but Nature keeps them functioning e.g., "<i>our relationships don't just suddenly break...our relationships are stronger than that...we don't blame each other; we are helpless in front of Nature</i>"

	<p><i>doing and injustice we do to it</i>". Therefore, land is permeated by a mighty and sacred form of accountability.</p> <ul style="list-style-type: none"> • Their shared <i>landability</i> — <i>an ecological accountability relationship between all things including one another, ancestors, future generations and all aspects of nature, which results in a self-inspired duty to care, protect and provide an account to the land in this life and the afterlife</i> — creates an ecological accountability relationship which makes its rural women accountable to their lands. • individually inspired self-governance that is reproduced by the <i>'inner nature of the self'</i> — their <i>fithrath</i> — and the <i>'interiorisation of certain disciplines'</i> (see Taylor, 1985, p.160) which are produced and re-produced by the land e.g., "...our land has taught us a lot...to look after each other, to be honest with each other..." 	<ul style="list-style-type: none"> • Personal beliefs and values, rooted in ancient tales, are translated into everyday actions and relationships. To <i>"love and care towards Nature our animals and each other...and to be grateful for everything that Nature has given us...and to live in a unified manner"</i>. In this way, ecological accountability with and to Nature extends from the ancestral, kin, and the intergenerational to Nature, the raw physical Nature of Chipursan's ecology: <i>"we have a very strong relationship with these dry mountains, the cold weather, the snow...they [referring to the mountains and surrounding nature] have their own elevated status in our lives"</i> • Resilience traits of 'adapting' (<i>halath kay mutabaq chalna</i>) and 'enduring' (<i>bardashth</i>) displayed by Chipursan's women, permeate an extremely strong form of ecological accountability throughout the valley which enables these women to overcome the nature-inflicted hardships of the valley, such as snowfall, avalanches, difficult terrains, extreme weather. • Religion: Religious beliefs in the valley permeate a sense of ecological accountability, to care, nourish and safeguard their animals as spiritually it is believed to be required by God as part of their <i>hisaab</i> (accountability) in the afterlife e.g., <i>"looking after these animals is our duty...on the day that we will have our hisaab [will be made accountable], we will also be made accountable for our animals...for how we treated them and took care of them"</i>.
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		<ul style="list-style-type: none"> Accountability becomes complex and multifaceted, extending to the intergenerational, the spiritual, and extends to capture all biotic and abiotic organisms of the valley: e.g., <i>“How can I explain? Our relationship with each other and our surrounding nature is very different and complicated to understand...previous generations have taught us how to maintain these relationships. The mistakes and punishments of previous generations have taught us to not just care and respect each other but to also love and protect nature. That includes all aspects of nature...the water freezing, the infertile soils, the difficult terrains, the freezing cold has not taught us to hate nature, it has taught us to love and appreciate nature...it has made us strong...Nature provides us with a living space, and sustenance, therefore we feel a sense of responsibility towards nature”</i>. Therefore, ecological accountability extends to <i>“previous generations, and future generations and every small and big thing in the valley from the tiny insects to the big mountains”</i>
<p>The nature of Capital – the ways in which capital is accumulated</p>	<ul style="list-style-type: none"> <i>Tanzeem</i>: the local, grassroots financial system encourages micro-saving and micro-borrowing. The tanzeem system works extremely well e.g., <i>“Danyore’s tanzeems run exceptionally well, perhaps they are the strongest set of tanzeems in the entire Gilgit-Baltistan region”</i>. On average, each woman has 120,000 PKR (£800) saved in the <i>tanzeem</i>. 	<ul style="list-style-type: none"> <i>Tanzeem</i>: the local, grassroots financial system encourages micro-saving and micro-borrowing. The <i>tanzeem</i> system is a failed practice in Chipursan e.g., <i>“Chipursan so far has been quite terrible...this [referring to the Microfinancing Projects] is a very difficult thing which we are really really struggling with...we just don’t know what to do”</i>; <i>“...the tanzeem</i>

	<ul style="list-style-type: none"> • Salvage accumulation: this is capitalistic exploitation without capitalist control (Tsing, 2015) as capital exploits the land when women are in control as they are both owners and control the means to income (the land). Land exploits the ecology, including the supernal, sacred relationships between the land and its inhabitants, along with the rich, local land knowledge, cultural and traditional norms, <i>tanzeem</i> systems and the accountability relationships. However, this exploitation is neither abusive or destructive, rather it exploits what is already happening and in place e.g., “<i>we tried many initiatives, for example, we set up a sewing factory in the village and trained the women to use the sewing machines, but they refused to go and work there...they are loyal to their lands and its duties...therefore we realised that geographic targeting was crucial for our projects. We couldn’t disturb what they were doing with their lands, it was too important to these women. Instead, we thought of helping them to make what they do more efficient and profitable</i>” • NGO, AKRSP, organise the translation process in which traditional, sacred land relationships and the pre-existing <i>tanzeem</i> systems are being made commensurate for capital e.g., “<i>guide women’s organisations (WOs) to deposit their savings into local societies. These are kind of informal banks that are easy to access and open an account with. We tell them [referring to the women] that this not only keeps their money safe, but they also benefit from the interest in keeping deposits in the society... Societies then deposit this money into microfinance banks like our First Microfinance Bank...they also receive an interest reward on their deposits...Our bank (First Microfinance Bank) then issues larger loans to richer and settled families...and the</i> 	<p><i>system is an escape from poverty, it’s the only hope these women have for a better and more stable future, however the severe weather adversities have left us with little hope.</i>” On average, each woman has 508 PKR (£3) saved in the <i>tanzeem</i>.</p> <ul style="list-style-type: none"> • Nature: nature inhibits the growth and accumulation of capital therefore capital’s ability to accumulate and circulate in the economy of Chipursan is dependent upon Nature’s precarity and volatility e.g., “<i>we have really struggled to implement any form of micro financing here, projects are difficult to sustain because of the valley’s extremely poor weather conditions, its geographical remoteness and infertile soil...</i>”; “<i>We have nine-months snowfall and during this time, the snow gets so bad, and it gets really cold [temperatures drop as low as minus thirty-two degrees Celsius] that we are housebound for at least three months. It becomes almost impossible for us to leave the house; it can be very dangerous to our lives if we attempt to meet for our tanzeems because all our houses are quite far apart...[laughing] but if you consider the situation, there is no point to meet anyway...you should meet when you have some money that you can deposit [into the tanzeem] or use to pay back a loan [from the tanzeem] ...if we can’t earn and if we don’t even have any money then it’s pointless to meet</i>”. As a result of the nature-inflicted hardships, women can’t earn an income and find it difficult to meet on a regular basis to deposit money into their accounts.
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money that they return with interest is what we pay societies with” (see diagram below for illustration)



- Land ownership plays a central role in saving and borrowing and becomes the central operating, governing and enforcement mechanism. e.g., “we put our land-earnings into tanzeems... every illaqa (area) has its own tanzeem, you can only join your local tanzeem where your land is”; “if you have land, you can become a member of our tanzeem group, but you must have land...”; “selective people are allowed to join the tanzeem system, people that own land like us, because they stay on the land, look after it and help it flourish. If people can be loyal to their lands, they will be loyal to anyone”. In this way, land acts as a natural guarantor/ collateral, instilling trust and in the local tanzeem arrangement. Land controls and dictates the flows of capital e.g., “WOs are more successful where the land is fertile and has a double cropping zone. Women earn more in those villages and because of that, they can deposit more into their tanzeem”.

- Blocked market access: due to the treacherous terrains of the mountains, market access is blocked e.g., “can’t get their product to the market”; “One year I even had twenty-five sacks...we have lots of potatoes, this isn’t the problem. The problem is that there’s only one jeep in the valley that can take our potatoes to the markets in Punjab. You tell me, how many sacks can fit in one jeep? ... We are lucky if even one or two of our sacks make it to the market...”
- Poverty: women can’t use vocational centres to earn a means of income by doing things such as sewing, embroidery, making wool from sheep, hand-making rugs, blankets, clothes etc. because they can’t afford to pay electricity to run their centres. e.g., “how will we afford to pay the electricity bills?” They also can’t afford to transport their goods out of the valley to markets e.g., “but arranging to get products out of the valley is impossible...who would do it for us? Our products aren’t worth the cost of paying a driver, his fuel and expenses just to sell our things”
- Traditional, pre-capitalistic barter trade system: due to the ecologically harsh conditions, many local women rely on the traditional, pre-capitalistic system of barter trade e.g., “After Zudkhun [the last village in the valley] and before the mountains of Afghanistan, there is open land, it doesn’t belong to either Pakistan or Afghanistan. In English they say no-man’s land...at that point, the Afghani people give us yak and in exchange we give them wheat flour and potatoes”

	<ul style="list-style-type: none"> • Landability: this is land's ability to embody the 'heart, soul and mind' of its rural female possessors, and make these women accountable to the land; and in turn, this enables them to harness capital. This is a two-part process producing and reproducing this landscape. e.g., "...doing <i>khaithobaree</i> [land-related activities] teaches us patience, patience and patience and to keep striving". Such land values are translated into their day-to-day activities including income generation e.g., "<i>how we manage our land, with hard work and determination, this is exactly how we strive to earn money...we don't give up on our crops, just like this we don't give up on making an earning</i>". This is how land physically and non-physically enters the local circuits of capital and becomes central for salvage accumulation. • Gendered: the 'affective bond between people and place or setting' (Tuan, 1974, p.4) keeps Gilgiti women along with their children tied to the land, creating man-less landscapes, or what is locally known as '<i>Hathun ka gao</i>', the village of the female. These women reign in their lands, with pride, strength and confidence doing '<i>karobaree</i>', business and '<i>khaithobaree</i>', land-related activities e.g., harvesting, cropping, irrigation, animal husbandry. Capital depends upon the hard work and entrepreneurial spirit of the local women. • Non-capitalistic mindsets: inhabitants possess a non-capitalistic mindset e.g., "<i>I don't want more from life, I just want to appreciate what I have and be grateful for all that Allah has given me. People of the world run after money, bungalows and</i> 	<ul style="list-style-type: none"> • Non-capitalistic mindset: "<i>the little money that we have circulates in our villages; it goes from one pocket to another, and we survive off this system</i>"; "<i>we don't hold onto a dream to be rich; more money means greed...and previous generations were destroyed because of this...we can live off less</i>". Belief in Nature's superiority and control e.g., "<i>just like the ice here, our money also freezes here...this is its fate</i>". • Ecology-centric view: Capital does not 'work' well in the valley due to the overarching supremacy of nature which permeates an incarnate belief that "<i>nature controls everything...(their) success and Rizq (provision)</i>"; "<i>Nothing from the outside world works here and can take control here</i>". • More-than-capitalistic economy: women depend on each other for sustenance and support and engage in alternative practices for maintaining a livelihood (e.g., women-only shops and barter trade). Aside from earthly modes of income (herding and farming) and barter trade, in recent years, women in the valley have established "women's shops", little communal stores in each village where women collectively stock some 'luxuries' (such as shampoo, toiletries) and necessities to sell to each other for additional income. • AKRSP, NGO support: AKRSP have supported the Local Support Organisation (LSO) to build underground bunkers so that people in the valley have both a source of food and income after the brutal winters pass.
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	<p><i>big cars but what is the point? In the end we are going to leave it all here”</i></p> <ul style="list-style-type: none"> • Exemplification of a moral economy at work. The deep, sacred and indestructible ecological accountability relationships, which promote sacrificing and devoting their lives to their lands drives Danyore’s economy. • ‘Pericapitalist’ (Tsing, 2015) space as capitalist and non-capitalist forms interact. Land governs and controls all aspects of the economy e.g., <i>“the tanzeems and our local model of financing are founded on the land...and the strong relationships women share with it”</i>. Therefore capital in Danyore works by abiding by the sacred, human-land relationships, <i>“without this, all our projects would fail”</i> • Land empowers women and grants them financial independence e.g., <i>“we don’t have to worry about asking our men for money”</i>; <i>“I can decide how to spend money myself...15 years ago we bought a plot of land and now we have fully built house on it. I was able to build my house myself. After I had my first child, I had saved enough money to make one room. We lived happily in one bedroom for 4 years until I had enough money to make a second room. I then decided to make a kitchen because I really enjoy cooking... then 3 years later we built another room because we had 4 children, slowly over the years I have built my house”</i>. In this way, women bring financial stability to their homes, families and communities. Land enables these women to become autonomous, self-reliant, and ‘entrepreneurial’ 	
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	<p>(Alawattage et al, 2019), women that dictate the flows of capital in the local economy e.g., NGO, AKRSP shared that “<i>our economy thrives and depends on the local women, their ability to work...</i>”</p>	
<p>Community-economy (Gibson-Graham, 2015) dynamics – the mechanism and ways in which more-than-capitalistic and other-than-capitalistic economies are formed</p>	<ul style="list-style-type: none"> • <i>Tanzeem</i>- informal way of borrowing. There are <i>tanzeem</i> meetings, discussing household matters, financial affairs and sharing local gossip, whilst women take turns to deposit money into their <i>tanzeem</i> accounts or in some cases request to borrow money from the <i>tanzeem</i> itself, all via their ledger system 	<ul style="list-style-type: none"> • Resilience dynamics: resilience dynamics of habitat maintenance, diversity, self-refuelling, co-evolving, dependence and interdependence nurture resilience traits of adapting and enduring which together produce strong, resilient women that drive their community-economy. • Resilience traits: the community-economy of Chipursan is built on the local women’s ability to adapt to current situations, (<i>halath kay mutabaq chalna</i>), and their ability to endure (<i>bardashth</i>) nature-inflicted hardships: “<i>Whatever difficulty comes our way from Nature, for example a landslide or a snow-storm, we first accept this is ‘kudrath ka nizaam’ [part of nature’s system] ...When we accept that this is a reality and a part of our life, ‘hum halath kay mutabaq chalskthai hai’ [we can adapt to the current situation that is inflicted upon us] ...thereafter it is our ability to bardashth [endure] the nature-inflicted difficulties that are a part of our life... this is how we live life here</i>”. Such ‘human-nature’ (see Kunchambo et al 2017) dynamics and resilience traits in turn cultivate ‘self-organizing’ (Favis-Mortlock and De Boer, 2003) and ‘self-repairing’ (Gibson-Graham et al, 2016, p.77) community-economies which accentuate a peculiar

		<p>arrangement of capital and binding relationships of ecological accountability throughout the valley.</p> <ul style="list-style-type: none">• ‘more-than-capitalist-world’ (see Gibson-Graham et al, 2016) one rich in a plethora of non-capitalist, as well as obscured capitalist practices. Aside from earthly modes of income (herding and farming), in recent years women in the valley have established “women’s shops”, little communal stores in each village where women collectively stock some ‘luxuries’ (such as shampoo, toiletries) and necessities to sell to each other for additional income.• Chipursan’s community economy is more than a localised financial economy centred around transactions, exchange and the growth and accumulation of capital. Instead it is a community economy in which multispecies, humans and non-humans (including nature, spirits, totemic beings) work together to create and reaffirm a socio-ecological system in place to sustain life.
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