

Freestyle Bearing:

Work, Play, And Synergy **In The Practice Of Everyday Life** **Among Mongolian Reindeer Pastoralists**

Written by Nicolas Rasiulis

University of Ottawa
Faculty Of Social Sciences
School Of Sociology And Anthropology

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Acronyms

*NSPA: National Special Protected Area

*TCVC: Tsaatan Community and Visitors Center

Abstract

Approximately 200 people, mostly Dukhas of Tuvan ancestry, live nomadically with reindeer, horses, and dogs as ‘Tsaatans’ in the taiga of northern Mongolia. How do they effectively realize their livelihoods? Does qualifying corporeal manners, or *bearings*, in which livelihood practices are performed *in the moments of actualization* offer insight into ways in which longer-term decision-making processes like nomadic settlement and livestock management are embodied? Informed by a phenomenological approach in anthropology during nearly four months of cooperative co-habitation with Tsaatan mentors, I argue that Tsaatans effectively realize livelihood practices as they cheerfully embody poised improvisation and acrobatics in both skillful discernment and movement. Simultaneously anticipating and performing diverse tasks in playful cooperation with friends, family and other animals along nomadic lifestyles in a wilderness habitat involves persistent, sensory-rich, versatile manipulation of environmental materials, as well as extensive geographic knowledge and frequent experiences of risk in remote, rugged terrain and powerful meteorological conditions impossible to completely avoid. These lifestyles catalyze the development of quick-witted and materially sensitive resilience with which people are capable of corresponding with beings, materials, and situations, and thereby of continuing to develop ancestral traditions of reindeer husbandry in a rapidly changing social, economic, technological and geo-political context.

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Preface

This thesis document is functionally multiple. It is first and foremost an honest attempt to genuinely communicate lived moments with Dukha reindeer herders and the diversely specified community they inhabit in ways which can evoke within you tangible experiences oozing with *meaning* perceivable to you. Second, and most *pressingly*, it is a valid document submission to the University of Ottawa which will enact the obtaining of my Master's degree and will unshackle me of very expensive due payments not sufficiently financially supported by my provincial and federal governments alike. Third, it is a weird, administratively sound poem in homage to the outstanding people with whom I engaged 3 and a half months of profoundly edifying cohabitation. Fourth, it is a semantic exploration engaging the notion of *livelihood* as the practices and processes whereby people both 'make a living and make it meaningful' (Bebbington, 2000: 501). I present a personal understanding-in-making of Dukha livelihoods as expressions of freestyle bearing and lifestyle, the latter a historically informed, practically improvisatory lifestyle which intimately engages a beloved habitat. Though this presentation is *personal*, my person – transformed through sympathetic relation with research participants – is strung and tuned to share communal experiences and polyphonic meaning. Alas, this document is a prayer that its intended functions effectively realize themselves.

Prologue

Kneeling in the snow, hands bathed in blood, I feel the cold gnaw at my extremities. As I lose sensation in my hands and feet, and feel like this is *normal*, I notice to which point I have transformed over the past four months. The coyote... In the shape of hood, bumper and headlights, and in the sound of roaring engine, he had seen his life end. Found by a traveller, who would not deny him a second life in the transformation of his body into experiences of friendship and craft, he somehow found his way to me, in this familiar Canadian forest. As I hollow out his stomach by removing his frozen guts with my knife, the familiar odour of flesh brings a smile to my face, bringing me back to the Mongolian taiga where I developed a passion for tactile interaction with animals, living, dying and dead.

Introduction

From late August to mid-December, 2015, I lived among Dukha and otherwise Tsaatan reindeer pastoralists along seasonal paths of migration through the taiga, and its rugged forests and alpine tundra, of the sparsely inhabited Mongolian area of the Eastern Sayan Mountains forming the country's northern borderland with the Russian Republic of Tuva. By allowing me to tangibly participate in the everyday lives of remarkably dextrous, creative people, this expedition helped me better grasp phenomena of inhabitation and enskillment in wilderness places. I came to apprehend these phenomena as elements of Tsaatan livelihoods, spoken of here as the practical means with which Tsaatans sustain their persons, families and communities. More than just ensuring subsistence and shelter, livelihood involves learning, the development of skills and relationships, and the affirmation of significance (Long, 2000: 195). In addition to the domain of labour, Tsaatan livelihoods emerge in the domain of leisure. Believing that wholehearted, free-flowing participation in the world is the most direct way of *experiencing* and thus of *knowing* it, I fully engaged my mindful and emotional body in the taiga habitat with Dukhas along the same daily flows as they did through a task- and leisure-filled environment. In doing so I perceived how Tsaatan livelihoods emerge along the relational domains of family, friendship, home-making and animal husbandry. Be it finding and retrieving reindeer roaming far into pasture while managing the use and keeping of other reindeer already recovered, spreading out and staying in touch as community within an expansive territory, diversifying a pastoral economy, or reappropriating modern electronics, Dukha people fashion ways of dealing with both familiar and new challenges which allow them to continue living in the taiga and herding reindeer.

This thesis seeks to answer three primary questions. How do Mongolian reindeer pastoralists effectively realize their livelihoods? Does qualifying bodily manners, or *bearings*, in which livelihood practices are performed *in the moments of actualization* offer insight on ways in which longer-term decision-making processes, such as nomadic settlement and livestock management, are embodied? Does a group-oriented nomadic lifestyle of cohabitation with other animals in wilderness places contribute to the emergence of manners in which tasks and decisions are realized (or not)? I argue that open-air pastoral nomadism in a wilderness habitat involves persistent, in-depth, sensory-rich manipulation of environmental materials, as well as extensive geographic knowledge and frequent experiences of risk, in remote, rugged terrain and powerful meteorological conditions impossible to completely avoid. I further argue that *freestyle bearings*, understood here as manners of moving which aesthetically and practically embody poised improvisatory acrobatics, emerge emphatically in the everyday lives of such open-air, nomadic, interspecific lifestyles. Freestyle bearing involves awareness, responsiveness, suppleness, balance, strength, dexterity and creativity with which people anticipate, respond to, solve, avoid and/or recover from diverse challenges. These resilience-enabling attributes are embodied in both reflexes and decisions, the latter including actions both focused in specific moments and dilated along various spans of time, which compose the realization of livelihood practices.

Dukha livelihood practices involve innumerable tasks, but these do not necessarily imply the unlikelihood of enjoyment because work and leisure are not mutually exclusive domains of practice and experience. Due in part to the jovial nature of open-air nomadic lifestyles embodied with family and friends, Tsaatans are often in good moods, engaging both effective work and creative play in performing livelihood tasks. Because moving in freestyle fashion is fun, freestyle bearing is expressed in particularly emphatic ways through play. For instance, improvisatory movement and strategy arise as players are driven by both the practical pertinence of the processual accomplishment of goals, and the enjoyment experienced throughout the course of that process. Both physical and mental acrobatics are often called upon with ease in order to accomplish these goals. As will be discussed in greater detail, such enjoyable, improvisatory acrobatics are clearly expressed in the practices of everyday lives in the taiga. Due to the group-orientation of Tsaatan lifestyles, many practices are often realized with the direct participation or influential presence of multiple people. Through playful, interpersonal performance of tasks, team dynamics are developed. As evidenced in canoe-tripping, freestyle snowboarding and football, group synergies emerge as people play and work together, rendering teams capable of effectively engaging just about any challenge they face. I argue that teams operating in cheerful moods are effective at surmounting challenges because teammates, whose minds -- by virtue of joviality -- are quick and un-impinged upon by doubt and fear insomuch as skills can be more effectively embodied, complement one another's skills and characters. As will be discussed in greater detail along with other examples such as migrating from one camp to another and building a log-house, such group synergy is compellingly experienced whilst herding reindeer into a pen.

With seasoned experience, teammates individually and collectively develop acute awareness of, significant intimacy with, and practical understanding of the playing field, understood here as an immersive meshwork of constitutive physical terrain, materials and participant actors. Such apprehension of the playing field enables practitioners' effective application of skills. In the case of Dukha people and other Tsaatans, the field in which livelihood tasks and leisure are engaged is constituted primarily of the Taiga, its specific places as well as their constituent materials and inhabitants. In similar, yet more thoroughly developed, fashion as canoe-tripping teams, Dukhas' nomadic inhabitation of an expansive wilderness habitat affords them with extensive, practical ecological awareness. This ecological awareness not only renders the performance of specific tasks more effective, but also affords Dukhas with the ability to intelligently manage human and livestock migration as well as the livestock themselves and related land-use.

Please note that, due to the tactile nature of this thesis topic, this is a multimedia document. In addition to photos being embedded within the text, frequent hyperlinks lead to online videos and sound clips. These multimedia materials serve to draw you into sensorial experience of Tsaatan lifestyles and practices in order to help you tangibly grasp the lived realities of both Dukha people's lifestyles and of doing fieldwork as an anthropologist, as well as the notions brought forth throughout my analysis and discussion regarding lifestyles and livelihoods in practice.

Overview of Chapters

In Chapter 1, I begin by supplementing existing literature concerning the Dukha Tsaatans with my own field-induced assertions in introducing these people and their contemporary livelihood situations. In the next chapter, I present the theoretical approach with which I conducted my research among Dukha Tsaatans and have written this thesis. In chapter 3 I then briefly explain which methods I applied during fieldwork and why before entertaining the reader with two brief interstitial vignettes in which I describe two events which occurred in West Taiga and which are evocative of living among Dukha people as a researcher. Following these vignettes, I present my main analysis in three ethnographically descriptive chapters.

First, I discuss Dukha freestyle bearing and the enskillment with which it is enmeshed. This chapter features sections on pedagogy, resourcefulness, acrobatic ease, comfort zones, risk, teamwork, and fun. In Chapters 5 and 6, I show how the notions discussed in the previous chapter are exemplified in specific livelihood practices. In the first of those chapters I explore how social life, teamwork, and fashioning homes along nomadic lifestyles contribute to the freestyle execution of livelihood practices. In chapter 6 I describe practices specifically related to animal husbandry and discuss how, through their execution, freestyle bearing is embodied in both intra- and inter- specifically cooperative relations.



1. Dukha Tsaatan People And Livelihoods

Dukha And Tsaatan: Much More Than Just Names

The people on which this work focuses are commonly identified and referred to with multiple names. Of the same ethnic group as kin now isolated in the Russian Republic of Tuva, they could be categorized as *Тува* ('Tow-wa'), known in English as *Tuvan*. Mongolian Tuvans often recognize themselves as Тува, but also and more specifically as *Духа* ('Doh-kha'), referred to in English as *Dukha*. Danish anthropologist Benedikte Kristensen (2004) pertinently employs 'Duha Tuvinian' (NP) as a name that both identifies the people's ethnic heritage and recognizes its contemporary geo-political situation. To the average public, the Духа are known as *Tsaatan*, an anglicized derivative of the Mongolian words *Тсаатан* (people possessing reindeer) and *Тсаачин*, which linguistically unites the word for reindeer ('*Тсаа*') and the suffix signaling that livelihood is derived from the conjoined word which precedes the suffix. Created and applied by the Mongolian steppe-landers who absorbed Dukhas into a national republic, 'Тсаачин' is an exogenous name. Despite its history as an exogenous ethnonym used by Darkhat and other Mongols to refer to Dukhas, in earlier times occasionally as an insult, its derivative 'Tsaatan' has become the title with which the latter are recognized internationally, and with which they refer to themselves in the navigation of NGO affairs. For example the Dukha NGO, the legislation of which declares it as a community-run organisation, is named the '*Tsaatan* Community and Visitors Center'. Most researchers as well as serious freelance writers and artists (i.e. photographers and cineastes) probably understand the pertinence of the term 'Tsaatan' and certainly employ 'Dukha' in addressing and referring to the Mongolian reindeer herding community. Although these people of this community are well-known and legally identify themselves as 'Тсаатан/Тсаачин', in the taiga I referred to my mentors as 'Духа' and so, to honour Духа identity whilst situating myself within existing academic literature, I will refer to my mentors and their community using this endogenous title's English derivative 'Dukha'.

As some Dukha people do not herd reindeer, and some of my mentors in the taiga were characterized by different ethnicities such as Darkhat or Khalka Mongol, I employ the term 'Tsaatan' in order to specifically highlight the notion of Mongolian people whose livelihoods derive primarily from reindeer husbandry. When asked if people who are not ethnic Tuvans and have married Dukhas effectively become Dukha, mentors said yes. Rather than just a filial descent group within a Tuvan ethnicity, Dukha is an identity. In some instances, this diversely developed and felt identity was synergized with others. For example, most if not all mentors at some point spoke of themselves as Mongolian. Tsaatans of hybrid Tuvan-Darkhat descent identified as both Dukha and Darkhat. Mentors with no Tuvan descent at all maintained their ethnically and experientially related identity, whilst joining Dukha families and adopting the latter's ways of life as a Тсаачин. I myself was qualified by the Mongolian root of this term when, after speaking with me of my experiences herding reindeer, Öwngdorjoo said to me playfully yet with an honest tone and demeanor: "Чи тсаачин болсон" ('You have become a Tsaatan').

Historical Context

For thousands of years the Dukha, the world's Southernmost reindeer-herders (Purev and Plumley, 2003: NP), moved throughout the Sayan mountain range within the borders of both contemporary Russia and Mongolia with reindeer and dogs. They subsisted by complementing hunting and gathering with the harvesting of reindeer milk and meat harvesting, and with trade (Ibid: NP). Whilst the Dukhas' nomadic movement was restricted in the 1920s when they fled Soviet sedentarization and herd collectivization, in 1947 its restriction was drastically limited when the Mongolian border with the USSR closed following five successive expulsions by the Mongolian government. The border closing isolated most Dukhas from their homeland, kin, and community in the taiga rising out of the Darkhat Depression in Northern Mongolia. (Ibid: NP). Dukhas were also now subject to communist livelihood reformations. Many Dukhas were forced out of the taiga and into sedentary life on the coast of Tsagaan Nuur village's eponymous lake where they worked at a state-run fishery. The fishery eventually closed after almost decimating the lake's fish populations (Ibid: NP). Reindeer husbandry became an activity limited to elder pensioners until the 1980s *Perestroika* era. The *Perestroika* benefitted the Dukhas, as the government offered human and animal health-services, and imported Siberian reindeer to reinvigorate the local population (Ibid: NP). Those who were allowed to continue migrating across the taiga with their reindeer were forced to cede the ownership of their animals to the state. At times, the state and its local administrative representatives supported reindeer husbandry, even offering veterinary services. However at other times, officials ordered the mass slaughter of reindeer, which made it difficult for the reindeer population to survive. (Ibid: NP) And yet, somehow, the Dukha kept on surviving and migrating through the taiga with their reindeer.

Contemporary Situation

Following the communist era's forced sedentarization and herd-collectivization¹, Mongolia's transition to market-economy has seen both the elimination of Dukhas' governmental services and salaries, and the intensification of their reliance on financial income (Keay, 2008: 10-11). Many Dukhas now inhabit Tsagaan Nuur village either in certain seasons or all year (Küçüküstel, 2013: 14). Children attend school in the sum center and parents often follow to avoid separating themselves from their children. Furthermore, some Dukhas seek livelihood opportunities either as 'малчин' ('malchin': Mongolian livestock herder), merchants or other independent ventures. Some Dukha leave the area to live in Khovsgol Province's capital city Moron, Ulaanbaatar, other Mongolian regions or even in Tuva for (mandatory) military service (only in Mongolia), other employment or studies. Albeit the socio-economic difficulties brought forward through the abrupt dismantlement of the Mongolian communist economy and social

¹ For a detailed account of Dukha history prior to and through the collapse of Mongolia's communist regime, see Wheeler, 2000.

services, many Dukhas have responded to this dismantlement by reverting to traditional reindeer herding in a new contemporary context (Nomadic Herders, 2010: 3-4).

Nowadays, approximately 200 Dukha people inhabit the Taiga and participate in reindeer-husbandry (Johnsen et al., 2012: 20) at least at some point in the year, usually during children's summer holidays if it is to be for only one season. Subsistence derived from the Taiga consists primarily of reindeer milk and meat, foraged berries and in some instances, according to hearsay, meat of wild mammals, birds, and fish. Subsistence acquired through financial economy consists primarily of flour, salt, sunflower oil, onions, potatoes, carrots, and sugar. Dukhas mesh together those purchased subsistence items, as well as the relatively new livelihood practices through which they are obtained, with more traditional food and practices in order to continue sustaining their lives and communities. Albeit the hybridity of Dukha subsistence and livelihoods, for most Dukhas who inhabit the Taiga reindeer husbandry is of utmost importance for both ensuring their subsistence and maintaining a way of life that practitioners identify with as *Dukha*.



According to the statistics provided by the Tsagaan Nuur Sum government on November 13th, 2014, in a general assembly with residents of the sum's Xarmai district which I attended, the total amount of domestic reindeer in both nearby West Taiga and in East Taiga was then 1511. It is generally agreed that a larger portion of this total reindeer population lives in West Taiga. There are many potential factors to this discrepancy between West and East Taiga reindeer populations. First, in communist times West Taiga inhabitants were encouraged by their regional government to base their livelihood on reindeer husbandry, whereas Dukhas of East Taiga were encouraged to focus their livelihood on hunting. The effects in practical livelihood priorities may continue reverberating today insomuch as West Taiga Dukhas both proliferate domestic reindeer and integrate *МОНГОЛ МАЛ* ('mongol mal': Mongolian livestock) into familial animal husbandry practices more than do families in East Taiga. Horses, cows, oxen, goats and sheep serve as financial capital with which owners can acquire bank loans and thus, in need, spend money on the wellbeing of their reindeer population.

If reindeer and other livestock are to come in close contact, caution may be needed as it could involve the spread of potentially mortal diseases (Purev and Plumley, 2003). In addition to the historical influences of different regional government administrations, other factors may be at work in the unequal distribution of reindeer across taiga regions. Different individual animals have suffered illnesses such as *Brucellosis*, and families may not have benefited as directly from governmental, NGO and philanthropic veterinary services, or not possess enough financial capital to purchase antibiotics. Circa 2008-2009, a truckload of reindeer were imported from Russian Tuva in exchange for goats and sheep by the Tsagaan Nuur Sum government. Of the animals sent from

Russia, only 7 survived the trip as they are reported to have been inappropriately fed along the way. All 7 of these reindeer were distributed among West Taiga families, as the latter's greater herd sizes afforded the creation of more significant genetic diversity within the area. In December, 2014, inhabitants of East Taiga received reindeer transported from a Tuvan nature conservation area by the Mongolian Ministry of Agriculture with money provided by the Turkish embassy in Mongolia. The animals in this shipment are reported to have been appropriately fed. It is reasonable to assume that East Taiga families received 2 bulls and 17 adult females, as only one female had died once the shipment arrived in nearby Moron on December 9th.

Since 2011, the national government has legislated the slice of Dukha ancestral homeland that is sequestered in Mongolia as the Хөвсгөлийн Улаан Тайгын улсын тусгай хамгаалалттай газрууд (Khovsgol Red Taiga National Special Protected Area), an IUCN category II protected area² national park (Johnsen et al., 2012: 23). In similar fashion to other national and governmental conservation areas worldwide, the Mongolian government's environmental protection strategy aims to 'seal' off specific segments of land from human contact. This strategy involves the creation of multiple zones, the boundaries of which extend in concentric circles radiating from Tsagaan Nuur out into both taiga regions. As its distance from Tsagaan Nuur increases, each zone becomes characterized by more and more stringent restrictions on human behaviour, and penalties for related infractions. According to these restrictions it is now illegal for Dukhas to hunt and fish throughout their entire homeland, and human inhabitation is now limited to approximately one third³ of Dukha territory.

This restriction of movement affords Dukhas with much less pasture land for their reindeer and horses, rendering it more difficult for herds not to overgraze pastures, and for humans – Dukhas and tourists alike – to avoid overharvesting the firewood and snuffing out the vegetation from the spots where they set their ortzes⁴. If this restriction is not rectified, the coming years may include the deterioration of both ecosystem health and autonomous taiga-based livelihoods in the areas of the legally inhabitable lands. Adding more insulting and impractical fuel to the flame, under the National Special Protected Area (NSPA) regulations Dukhas are obliged to inform the military about their migration plans before they enact them. Not only is it difficult to accurately predict where they will live and for how long, it is demeaning to monitor a population this way, in their home territory of all places. It is no surprise that many resist this subjugation by refusing to inform the military of their migration routes. Thankfully, the military has not yet applied any consequences to this subversion. Albeit the challenges imposed on these people in the creation and maintenance of the NSPA, Dukhas continue to resiliently herd reindeer together in the taiga.

² For more info on IUCN category II protected areas, visit:
http://www.iucn.org/about/work/programmes/gpap_home/gpap_quality/gpap_pacategories/gpap_pacategory2/

³ Personal correspondence with Sansar in East Taiga, and TCVC interim manager Burxuu in Tsagaan Nuur.

⁴ Уртц ('ortz'): Dukha conic, tipi-like tent walled with canvas and plastic tarpaulin sheets.

2. Theoretical Approach

Synergetic Enmeshment

Like other anthropologists learning with reindeer herders (i.e. Beach and Stammler, 2006; Habeck, 2006), my research draws on Ingold's phenomenological approach in anthropology and on his theoretical understanding of wayfaring. According to Ingold (2000), 'wayfinding' (235) – reworded a decade later as 'wayfaring' (2011A: 148) – is movement along improvised lines of habitation that, perceptually attuned with the movements of the world and its inhabitants, affords enskillment and the formation of knowledge (Ingold, 2011B: 242). In short, wayfaring is the meaningful process of inhabiting the world as a living organism. Due to their being characterized by extensive itinerancy and engagement with the materials constituting the places through people move, some human lifestyles, notably those led by nomadic people, may express the notion of wayfaring more obviously than others, but all humans participate in the world's physical and meaningful becoming by moving in the world and relating with its constituent organisms and materials in a process of *symbiogenesis*, or 'becoming-with' (Haraway, 2003). With this perspective on co-generative movement, rooted in an 'animic ontology' (Ingold, 2011A: 69), life is perceived and embodied as a *meshwork* which beings do not 'simply occupy', but rather animatedly '*inhabit*' (Ibid: 71) together in their mutual self-generation. Within the animic ontology, the world we inhabit issues forth as an ebb and flow of materials mixing. Living organisms mingle with these materials and other organisms as they participate in the world's continual self-generation, sustenance and transformation. This mingling is the process of life itself, a relational movement of mutually-constitutive relations in space and time (Ibid: 63, 70-71).

Organisms lay physical trails in the world as they navigate the movements of their lives. As organisms, Earth and Sky mingle their trails interweave, forming the storied fabric of the world. Ingold calls this fabric, undistinguishable from its processes of animation, the meshwork. In his conception of the meshwork, Ingold develops Merleau-Ponty's (1962) understanding that living bodies and their meaningful perception are inextricable from the world and its imminence. Like Henri Bergson (1911), Ingold perceives the organism as an "eddy in the current of life" (Ingold, 2000: 13) rather than a bounded isolate. The notion of meshwork sees our planet as a world in whose life and meaning we continually participate rather than a distinct surface against which we operate (Ibid: 63, 160). Ingold distinguishes the meshwork from Latour's (2005) actor-network theory. Rather than a network of connected entities animated by agency, Ingold's meshwork is a tangle of lines whose movement is itself 'animacy' (Ingold, 2011A: 85), here understood as "[...] the dynamic transformative potential of the entire field of relations within which beings of all kinds [...] continually and reciprocally bring one another into existence" (Ibid: 68).

Ingold presents an understanding of living organisms as bundles of lifelines entwined with one another and the world (Ibid: 70) in animate 'knots'. Animate knots are, according to Ingold (2015), 'whirls of catching up and being caught' (7) together with lifelines of other beings and

materials. Knots, the surfaces of which do not enclose but rather “[...] lie ‘between the lines’ of the materials that make them up” (Ibid: 15), are indistinguishable from the forces through which their constituent lines are joined. Knots join together, or entwine, as materials and beings establish relations of sympathy between their properties (23). This active entwinement embodies the world’s texture which, to those sensitive enough to feel into the texture, tells stories with the layout of trails of interactive activities of diverse beings’ past inhabitation of places (Ibid: 69-71,162-163). Co-constitutive participation in the world’s imminent becoming is a synergetic process of cooperative correspondence⁵ between different beings, materials, and media which may or may not actively intend to cooperate or *intend* anything at all. This *synergy* is in many ways sensible and meaningful to humans who, intending far less of our synergetic engagements than we even realize, can know and imagine things about and in relation to these synergetic knots and our participation in these. As with any expertise, skillful inhabitation of our synergetic meshwork requires sensitivity to ‘environmental cues’ and a great “[...] capacity to respond to these cues with judgement and precision” (Ibid: 161) in functional correspondence. Such responsive expertise is paramount in the making, or functional arrangement of material components into, things.

Making As Improvisatory Arrangement

The making of any one thing, especially when handcrafted with organic materials (i.e. wood, antler, stone, etc.) or synthetic materials fashioned along organic lines of coalescence (i.e. woven rope and cloth), is enacted as the mediational arrangement of materials in functional ‘correspondence’ (Ingold, 2013: 69) with one another. The actual *thing* being made is incarnated in a synergy of sympathetically fashioned and joined material components⁶, the exact form of which emerges in resonance with the maker’s anticipated intention yet in unpredictably instantiated, and thereby inexactly foreseeable, form (Ibid: 69). Such fashioning and joining is enacted as “[...] bodily kinaesthesia interweaves contrapuntally with the flux of materials within an encompassing, morphogenetic field of forces” (Ibid: 101). The maker interacts with these materials largely through the medium of a ‘transducer’, or a tool such as an axe or a hammer and nail, which converts the kinetic quality of a practitioner’s gesture into the position and/or form of a manipulated material (Ibid: 102) in relation to other strategically transduced materials.

Although individual materials are characterized by familiar forms and inclinations well known to the expert craftsman, each particular strand of any material uniquely embodies these familiar characteristics. Working with materials thus consistently requires of the maker to improvise his or her discernment in design and movement in order to responsively adapt known techniques to originally specific diversions from any particular material strand yet intimated with or tectonic arrangement attempted before. As the final form of any handcrafted thing is only

⁵ ‘Correspondence’ understood as a dynamic along which different components’ participation “[...] wrap around one another like melodies in counterpoint” (Ingold, 2013: 107) in functionally responsive ‘relay’ (Ibid: 105).

⁶ By ‘component’, I mean phenomena which either potentially or actually compose an assemblage or system.

knowable once its unique constitutive materials have been assembled in improvisatory fashion by the skilled maker(s) in direct and transduced gestures, design is thus a phenomenon which develops in the actual physical process of making, rather than a blueprint pre-existing construction which exactly predicts the final form of the thing being made. Knowing design to be enmeshed with performance, expert crafters work *with* these materials and their variously specific pliancy and recalcitrance (Ibid: 70), as well as *with* the ways in which these specific characteristics synergize when arranged in particular ways, *as they* ‘carry on’ (Ibid: 110) with the actual physical making of a thing.

Discussing 12th Century stonemasonry, Ingold (2013) posits that the lineaments of a handmade edifice are not imposed upon materials used, but rather “[...] emerge from the process of building itself” (55). Although, once joined together in functionally arranged sympathetic engagements, the finished product of a made thing may seem to be a final form, as its constituent materials continue moving along their personal inclinations and the lines along which they have been arranged in relation with one another, and as they continuously transform at the transductive hands of the weathering world and of its inhabitants, the assemblage’s structural arrangement or form actually continues changing over the storied course of time (Ibid: 69, 115, 117). As the asymptotically final form of a thing cannot be exactly predicted, it is in anticipatively foreseeing a possible form and the particular confectionary actions necessary to instantiate an assemblage functionally similar to this foreseen form that the maker realizes design as ‘opening up a path’ and ‘improvising a passage’ along this path (Ibid: 69). Although the exact measures which need to be taken in order to fashion a final form are unpredictable, once this form has been assembled the gestures with which it was fashioned are incarnated in the synergised materials as storied traits relatively retraceable by an attentive sensor (Ibid: 121).

As I retrace the process through which I actually wrote this document, I see how it is itself an example of making as improvisatory weaving of unpredictable and diversely characterized components. Although I had foreseen multiple forms which this thesis could finally take, first as communicated in my thesis proposal, then in a conceptual design inscribed in my field journal and in the many different chaptered layouts elaborated in a single Microsoft Word document, these fore-visions inexactly predicted the makeup of my thesis. The actual final form of this document was fashioned in the literary assemblage of my memories and understandings of lived experiences among mentors, of the opinions of mentors, of undiscussed ethical considerations, of analytic presentation of Dukha lives, and of limited time and pages within which I could write, along the unpredictable lines of correspondence between mediated intentions, materials and contexts. Over the course of the writing process, my imagined design of the document emerged in continual change as I arranged mediated phenomena into improvisatorially written sentences and paragraphs. This document would have been un-writable had I not learned many of the skills involved in the realization of Dukha livelihoods. As an apprentice among expert mentors, I learned these skills in attentive observation of mentors and their work, in subsequent mimetic performances, and in either mimetically inspired or independently intuited experimentations.

Cultivating Sensible Attention *In Practice With*

Livelihood practices are realized in much the same fashions as things are made. Practices are procedures carried out in the achievement (or not) of anticipated goals. Practices are processes, engaged by skilled practitioners over extended periods of time, which frequently involve the animating participation of multiple components such as organisms, other organic materials (i.e. rocks, antlers removed from reindeer, wood severed from tree, etc.) as well as both multi-material and multi-organismic assemblages (i.e. fashioned equipment, and families; wood stabilized with wood, and human-reindeer settlement group; weather, and group of friends, etc.). These diversely unique participant animate components' individual characteristics are attended to in relation with environmental conditions through strategic, anticipative orchestration which engenders a particular arrangement of components, gestures and occurrences which functionally synergize components as a practical assemblage along the lines of their correspondence. The orchestration of both making things and realizing practices involves improvisatory discernment in the arrangement of components and in the gestures required to engender such functionally arranged assemblages within a continually changing environment or "[...] encompassing, morphogenetic field of forces" (Ingold, 2013: 101). To be effective is to mediate the idiosyncrasies of participant components with sensibly informed improvised strategies and gestures. The effective practitioner's movements "[...] are continually and subtly responsive to the ever-changing conditions of the task as it proceeds" (Ingold 2011A: 59). Among Dukha people, such sensible improvisatory mediation of components is developed throughout lifetimes of engaging diverse practices with other people, attentively cultivating one's sensibility to and functional correspondence with other participant components through both personal performance and empathetic *feeling into* other variously experienced and skilled practitioners' performances.

In order to learn about the effective realization of Dukha livelihood practices, of which many include making things, I had to first understand how Dukhas perform orchestrations which transduce the animation of participant components into synergetically functional assemblages along lines of corresponding arrangement. In order to even begin understanding this I necessarily needed to learn how to perform these transductive orchestrations myself. Much in the same manner as in which Dukha people enskill themselves, and in which common craftwork skills are developed throughout the world, I developed ability to effectively realize many Dukha livelihood practices '*in practice with*' (Ingold, 2013: 2) my own body, expert practitioners and the material world we generatively inhabit. Many aspects of my fieldwork resonated with the principles along which, as discussed by Thorsten Gieser (2008), an apprentice engaged in an 'education of attention' (300) develops ability by both empathetically *feeling into* expert mentors' gestures *in the action* of performance, and subsequently mimetically enacting gestures anticipated as effective. The apprentice then responsively corrects these gestures (Ibid: 312-313), both autonomously through 'intuitive feel' (Laplante, 2015: 57) for the transduction of gestures into materials and by means of interpreting the mentors' reactions when feeling into the apprentice's performance in action, until functional performance is kinaesthetically engrained within the apprentice's mindful body

and grown along by the apprentice through carrying on the practice of these performances through time. Julie Laplante (2015) presents such growing of kinaesthetically engrained skills as a ‘bodily cultivation’ (61) engendered in sensibly attentive practice.

As Laplante (2015) has done with South African *isangoma* healers and Rastafarian *bossiedoktors*, as well as with the *A. afra* plants with which these practitioners work, with the mediums through which they work, and with the local places in which these plants are enmeshed in healing practices (65), I ‘grasped how practices work’ (Ibid: 57) by attending to the goings-on which constitute the realization of practices by “[...] developing abilities to feel ‘with’ people, places and things [...]” (Ibid: 61). Such ‘attending to’ is not only being aware of what is around you and of how you move through it in relation to other materials and people, but to focus that holistic attention into sensitive apprehension and sensible realization of practices, and of the local inhabitation with which the latter are enmeshed. As anthropological researchers, tasked with the goal of communicating what we have learned about and through skilled performance of mentors’ habitual practices to a public audience in the form of theses, academic articles, movies, conference talks and/or books, we must reconcile, or *mediate*, our newly cultivated self with the different but familiar abilities “[...] tailored and privileged within academia [...]” (Ibid: 61) following fieldwork into a legitimate written, or otherwise crafted account (Ibid: 61).

Laplante points out that self-transformations of enskillment with experts and practices with which we were not previously familiar occur serendipitously as anthropological apprentice and expert mentors find “common grounds based on each other’s [different yet relatable] past and current experiences [...] which happen to cohere” (Ibid : 60) as a meaningful synergy of cooperative practice and correspondent learning. In understanding and enacting my mimetic performances of Tsaatan mentors’ activities, techniques and bearings in their habitual fields of practice, as well as in crafting a written account of these, I drew on my own relatable experiences of canoe-tripping and freestyle snowboarding to find common experiential grounds both with mentors in practice, and with myself in the orchestration of different fieldwork experiences into a personal, truthfully accurate, meaningful and creatively expressive literary account of Dukha lives.

Motricity, Freestyle, Aesthetics, And Kinaesthetic Pleasure

Motricity, Freestyle Bearing, Aesthetic Pleasure And Fun:

My approach in writing an accurate, meaningful account of Dukha livelihoods and lifestyles draws on Manuel Sérgio’s (2008) conception of Human Motricity Science as an inquiry focused “[...] on all human activities in which we can identify any human and intentional movement for transcendence” (1), and by the of study into ‘ecomotricity’, presented by Cae Rodriguez (2015) as the inquiry into the ways in which humans meaningfully relate with their environment in gestures, driven by the primordial intention of interacting with the environment, that enact our diverse personal participations in “[...] constantly creating and recreating the unique

indissoluble unit that each of us calls ‘our’ world” (375). Rooted in Sérgio’s (2008) conception of ‘human motricity’ as the ‘body-subject’ (29), or “[...] the effective unity of a Being that moves intentionally [...]” (Ibid: 29), ‘ecomotricity’ arises as a notion which refers to the unified subjective process of a human’s intentional movement in relation with its environment (Rodriguez, 2015: 375-376). The ‘body-subject’ is here understood as a being permeably enmeshed with its active environment. My main interest in ‘human motricity’ and ‘eco-motricity’ is the *motricity* which these notions bring to the forefront of inquiry. An inquiry on motricity casts its expansive scope on functional movement and, by discarding the word ‘human’ or the prefix ‘eco’, affords legitimate attention to any form of movement, human, non-human, and more-than-only-human alike, and in so doing acknowledges the fundamental indissociability of organic life. Much as do the editors of the Oxford Dictionary, I understand ‘motricity’ as meaning: “[m]otor function; the faculty or power of movement by the body or a body part”⁷. I further conceive of ‘motor function’ as not only the ability and animation of corporeal movement, but also as the *function* of movement within an environment. In terms of human inhabitation and related practice, the function of movement is at once purpose, enactment, and realization of enacted purpose. Here ‘purpose’ serendipitously evokes both its meaning as ‘reason for doing something’ and as the ‘determined resolve’ with which that thing is often done.

In this thesis I deliver an ethnographic account of some of the manners in which motricity is embodied in the realization of particular Dukha people’s meaningful, practically effective livelihoods. These particular people expressed freestyle bearing in the everyday embodiment of their livelihoods and enmeshed lifestyles. I employ the term ‘freestyle bearing’ to refer to manners of moving which aesthetically and practically embody improvisatory acrobatics. Just as ‘motricity’ is more than just ‘movement’, ‘bearing’ is more than just ‘gesture’, here understood as specific corporeal movements done as means of engendering intentions. In contrast, ‘bearing’ is understood as both the personally expressive fashion in which a person moves and gestures, and the awareness of their existential position in relation to their environment, its components, and the lines of movement along which these components arrange, synergize, diffract, assemble, dis-assemble and transform themselves. Motricity, and the latter’s actual embodiment, emerge as corporeal bearing in correspondence with the intentions driving gestures, with personal characters, demeanors and moods, as well as with the intentions and/or characteristics of other components enmeshing together as particular fields of practice or ecological environments. Motricity is freestyle when the analytic discernment and performative bearing of the moving body is intensely qualified by improvisatory and acrobatic poise. As poise does not necessarily imply immediate success, mistakes can and do occur without a performance losing its qualification as ‘freestyle’. Skilled practitioners’ improvisatory and acrobatic poise enables them to successfully mediate mistakes with anticipated intentions as well as with oneself and other components of a field of practice, thereby arranging these mediated phenomena into functional assemblages with prowess.

⁷ Oxford Dictionary, online reference: <http://www.oxforddictionaries.com/definition/english/motricity>

Freestyle motricity is embodied in aesthetically pleasing bearings, gestures and forms, some so popularly appraised that huge corporations finance events which financially award snowboarders judged on their aesthetically pleasing, technically challenging, and creatively expressive performances. In the performance of everyday life among Dukhas, technically challenging practices are enacted in aesthetically pleasing gestures, bearings and technically realized forms. Some men, such as Erdene and Baatar, not only gracefully move and handle materials in the realization of tasks, but also in simple procedures such as wrapping and tying their several metre long belt to fasten their deel coat in place while looking me in the eye and bearing their body in confident performance, in part intended to playfully aesthetically impress me. And impressed I was, observing their grace, suppleness and dexterity in a belt-wrap dance to ambient music playing within the home. Although in some instances intentionally performed, most of Dukha freestyle bearing is simply the unique personal ways in which people tend to move in the open-air within the taiga. Freestyle motricity is not enacted with the sole purpose of looking good for others, but first and foremost in the tendency of skilled practitioners to move in sensually pleasing fashions. What pleases the aesthetic eye of the beholder also often pleases the kinaesthetic body of the performer. It is therefore understandable why in the world of snowboarding, amidst the hyper-industrial, superficial commercial performance for potential financial reward, many of the most skilled riders work entire careers to eventually live off of snowboarding while honouring the roots of the freestyle sport: freeriding for fun.

The aesthetic pleasure I derived from perceiving Dukha freestyle bearings was not only in the human gestures themselves, nor only in the functionally arranged practical assemblages these gestures engendered, but more so in the *manners* in which the gestures, however strongly or energetically animated they may be, *effortlessly corresponded* with participant components in their functional assemblage. Effective action feels good to the performer's body by virtue of the former's effortlessness, and good to the thoughtful self by virtue of its practical realization of anticipated intentions. Feeling good is fun, having fun makes one happy, and being happy affords oneself with the lucidity and energy and animation to act effectively. That is why freestyle snowboarders assemble as groups of friends, or 'crews', to ride, film, and fool around with. The more one practices with friends, the more effectively freestyle motricity is realized, and the more practitioners experience wellbeing through their practice(s) and related lifestyle(s). This interplay between fun and function calls to attention the intrinsic enmeshment of work and play. Rather than distinct, mutually-exclusive domains of activity and experience, work and play are often engaged by people along the very same processual lines of their motricity.

Exemplary of how work and play can be so enmeshed, the entirety of my three and a half months living among Dukhas was field-work, *work* in a partially definable *field* of activities and relations composed of many interrelated domains, including livelihood and leisure. Whether I was realizing livelihood practices, playing, resting, or any combination of these, I was necessarily *tasked* with the challenge of learning as much as I could with Dukha people. This pervading task was intended not only to share edifyingly meaningful experiences with mentors, but also to

successfully actualize the realization of my MA thesis, the latter being both an important constituent practice of my current livelihood and a potential precursor to my future livelihood. That I thoroughly enjoy what I do as an anthropologist further exemplifies the enmeshment of work and play, of function and fun. I would indeed qualify both my fieldwork and corresponding thesis writing as the embodiment of freestyle motricity by virtue of these labours' broadly improvisatory and acrobatic natures.

An anonymous reviewer for a rightly refused French-language article manuscript I had submitted critiqued my conception of 'freestyle' as a 'fourre-tout' (ragbag). I agree with this in the sense that you can stuff just about any phenomenon into its theoretical encompassment, but do not see its polyvalence as reason to dismiss it as forcibly and unjustly applied. Instead, I perceive freestyle as a versatile notion whose diverse and widespread applicability suggests it is a real phenomenon worthy of inquiry and of theoretical elaboration. As will be evidenced in the following section, 'freestyle' is applicable to understanding Dukha livelihoods and lifestyles.

Freestyle In Practices And Lifestyles: Snowboarding And Inhabiting The Taiga

Rather than imagining freestyle as either an all-pervasive essence intrinsic to life, or an innovative mode of existence unique to only a few select communities or practices, I recognize freestyle as a dynamic which, throughout life *as I know it*, is apprehensible wherever I inquire. However, I would not bother to theorize most potential expressions of freestyle to the lengths with which I do in this thesis' analysis of Tsaatan livelihood practices because the undiscussed potential expressions do not viscerally evoke within me as much aesthetic experience of freestyle as do Tsaatan practices and corresponding lifestyles. The salience of 'freestyle' as a quality characterizing something lies not in that thing's essence, but rather in the intensity with which one perceives the thing's qualities as particularly expressive of freestyle. There is nothing that is objectively freestyle, and nothing that is objectively non-freestyle, nor is there any threshold where one necessarily becomes exclusively the other. What differentiates phenomena as emphatically 'freestyle' (or not) isn't an oppositional relation of otherness vis-à-vis different qualities, but rather a difference in intensity with which qualities indicative of freestyle are perceived. The threshold at play here is one of differences in *degree* of qualitative experience, rather than of differences in *category* of qualitative classification. These are 'differences that matter' (Barad, 2007: 89) in people elaborating (or not) a characterization of something as freestyle. My inquiry does not consider at which point something *becomes* qualified by freestyle, but rather moves forward from personal experience through which phenomena were so intensely qualified by improvisational and acrobatic poise that I am hence viscerally driven to characterize the phenomena as freestyle. Apprehended in large part subjectively through aesthetic perception, freestyle is potentially an infinitely degreed spectrum of perceivable qualitative intensities rather than a defined state in and of itself. By virtue of its potential for characterizing many different phenomena, notably instantaneously performed physical forms (i.e. freestyle bearing) and longer-term decision-making

processes such as settlement positioning and resource management, I theoretically engage freestyle as a qualitative dynamic, the dimensions of which are perceivable in various domains of existence.

I derive my conception of freestyle from my own experiences practicing extreme sports, notably freestyle snowboarding. Such practices are emplaced, issuing forth through the encounter of practitioners with the places and the latter's constitutive materials which together form fields of practice. The movements of freestyle practice resonate with the character of these fields. In the practice of many extreme sports, such fields are composed in wilderness places. In sports such as freestyle snowboarding, rock climbing, surfing, white-water paddling and canoe-tripping, freestyle performance engages a 'dance with nature' (Brymer and Gray, 2009: 141). This dance is a metaphor many extreme sports practitioners employ to identify the relational emergence of freestyle activity. These practitioners speak of partnership between themselves and the materials with which they perform. Rather than controlling environments and their materials, athletes feel like their practice consists of moving one's body in enjoyably creative ways that work in tandem with nature and its materials (Ibid: 141-142). Through the mindful corporeal attunement to active environments necessary for skillful freestyle performance, some practitioners perceive certain parts of nature as "agents with which they negotiate" (Ibid: 142). This attitude towards wilderness places as animatedly composed of agentive beings and materials, as well as other features of freestyle experience, are commonly extended to practitioners' everyday lives beyond sport(s) (Ibid: 102). By virtue of this extension of values and attitudes from sports to athletes' lifestyles, these athletic practices garner the name of 'lifestyle sports' (Wheaton, 2010: 1059-1060).

As in the case of rock climbing, where playful practice is enmeshed with both wilderness places and considerable dangers to practitioners' safety (Abramson and Fletcher, 2007: 7), freestyle snowboarding treads a fine, dynamic line between risk and safety through skillful performance. Snowboarding's freestyle facets, notably improvisation, acrobatics, technical challenge, creative expression and, often, risk, are enmeshed in high-speed, irreversible gestures and corresponding transformations of material arrangements occurring in unpredictable, continually new ways⁸. For instance, the powdery, untouched snow covering a mountain spine, on the other side of which is a deadly drop onto jagged rocks, can only be slashed once by a rider's board as he or she carves down its safe face, heeding the snow's structure so as to avoid causing an avalanche. If an avalanche is to occur, as is often the case among professional snowboarders, in order to stay alive the rider must quickly improvise a way to safety. That the most skilled of snowboarders ride away not only with their lives intact, but also with aesthetically pleasing style, is testament to the improvisatory and acrobatic poise and composure which, largely developed through risky activity, characterise comfort zones developed in freestyle performance in wilderness places. How could such poise *not* be developed when, as does Travis Rice in the movie 'Art Of Flight' (Morgan, 2011), one jumps off a helicopter with no helmet onto a remote mountaintop, thereby creating an avalanche, before outracing the avalanche and then, as it is close

⁸ Follow link to sound slip 1 (S1): <https://www.youtube.com/watch?v=G1Ot1hL5K9w>

behind, spinning a 540° rotation through the air over a huge, extremely dangerous gap to safety, all the while looking ‘cool’ in sponsor companies’ brand new outdoor gear?

A significant component of freestyle snowboarding aesthetic style is dress fashion. Rooted in historical motivations of riders to differentiate themselves from skiers perceived as ‘uncool’ both on and off the hill (Edensor and Richards, 2007: 106), freestyle snowboarding’s diverse dress fashion continues to embody practitioners’ self-expressive assertion of their wild, creative personalities and lifestyles (Ibid: 107), thereby differentiating themselves from uncool ‘non-freestyle’ skiers and snowboarders. This fashion and the correspondingly developed demeanors, attitudes, comfort zones, and nomadism (engaged to follow snow along its continual rhythmic movement around our planet⁹), carry on beyond the mountains in the styles with which practitioners live every day. Among many the extreme sensual pleasure of freestyle snowboarding is even translated into ingestion of psychedelic substances in everyday life (Thorpe, 2012: 42). In resonance with freestyle aversion of danger, psychedelic practices imply potential risks of diverse natures, some of which are avoided or resolved with acrobatic improvisations of equally diverse natures. Although Dukha are among the rarer communities of indigenous reindeer pastoralists who *do not*, along with their livestock, ingest psychotropic *Amanita muscaria* mushrooms, sensory pleasures and enmeshed risks abound in their everyday freestyle motricity.

In similar fashion to freestyle snowboarding, the practice of Dukha livelihoods is improvised, acrobatic, technically challenging, creatively expressive, and often risky. As this claim will be extensively elucidated throughout this document, I here focus only on the conception of Dukha lifestyles being characterized in part by the freestyle demeanors of its corresponding livelihood practices. For Dukhas, the performances through which freestyle emerges are not necessarily perceived as sport. Rather than a *lifestyle sport* characterized by freestyle, Dukha freestyle characterizes a *lifestyle* in and of itself. The demeanors and aptitudes developed in skillful, freestyle performance of livelihood practices, through which the environment and its materials are intimately encountered, resonate with the ways in which Dukhas live their lives. Dukha freestyle is functional, self-expressively creative inhabitation of the Taiga with dogs, reindeer, horses, other domestic animals, wild animals, rivers, rocks, trees, mountains and spirits. In resonance with extreme sports practiced for lifetimes in wilderness environments, Dukha freestyle both develops and necessitates acrobatic improvisatory ease, and knowledge of the environment and its materials. Practitioners apply this acrobatic improvisatory ease and environmental knowledge in successfully harmonizing their bodies with the animating force of nature, which extreme sports athletes ‘feel’ (Brymer and Gray, 2009: 202), ‘work with’ (Ibid: 142) and get ‘stoked’ (Wheaton 2010: 1060) on, in the materials they feel and wield. This acrobatic ease corresponds to a certain degree with Dukha dress fashion and, consequentially, with their daily demeanor and bearing.

⁹ Follow link to: <https://www.youtube.com/watch?v=9sMmLybdkzc>

Freestyle is incarnated in the ways in which many Dukha people arrange their dress fashion, wear their clothes, as well as walk and ride. Along continually improvised moments of motricity, the embodiment of these ways acrobatically mediates tradition, modernity, and function in stylish flares that appeal to my aesthetic sensibility to traits of freestyle developed snowboarding. In dressing themselves, Dukha people draw from diverse vestimentary sources. Modern pants, shirts, toques and rubber boots are worn with traditional дээл ('deel') coats (themselves past appropriations of Mongolian dress). Deels are for many rhythmically interchanged with modern zippered counterparts, as are modern pants and shirts with 1950s style casual dress equivalents. This 1950s style is consistently expressed in most adult women's daily use of colourful, intricately ornate headscarves. Dukha people arrange these diverse clothing items into functional, comfortable, self-expressive vestimentary assemblages. The deel is a key example of how Dukha fashion can be functionally acrobatic and acrobatically worn.



Deels are functionally acrobatic in the sense that their diversely versatile uses (i.e. coat, transport device, bedding material, etc.¹⁰) are agilely coordinated in practice. Used in one way or another for many activities in various useful manners, deels participate in the composition of Dukha people's aesthetic form. Drawing on how styles of movement are "[...] embodied in the practicalities of carrying equipment that coerce the body to perform in particular ways" (Edensor and Richards, 2007: 107), I hypothesize that corporeal bearings emerge in correspondence with the vestimentary equipment that we 'carry' with our bodies through dress. For example, Dukha men often wear a big, one might almost say *oversized*, deel with their belt wrapped around the coat at bum level. This particular arrangement affords the dresser with comfort, stylish flare, and ample carrying capacity, as well as, by virtue of the deel's specific 'coercive', or perhaps rather *inhibitive* structure, makes the dresser's movements wide and poised with a low center of gravity. This wide, low and balanced poise is aesthetically similar to the phenomenon of 'steetz' characteristic of freestyle snowboarding. Snowboard steetz is itself fashionably inhibited by the wearing of oversized clothes which, by virtue of their bagginess, afford the manoeuvrability necessary for skillfully realized acrobatic performance. This steetz, characteristic of freestyle bearing beyond only snowboarding, is an essential demeanor in which I tended to effectively play football, notably when blocking defenders and running with the football. This wide, low center of gravity allowed me as a runningback to quickly perform the irreversible acrobatic gestures (i.e. quick cuts, spins, hurdles, trucking through tackles head on, etc.) necessary to effectively drive the offense forward and score touchdowns. Although clothing does not directly accomplish livelihoods, its influence on corporeal movements engenders the ways in which activities are performed.

Dressers intuitively feel how clothing influences movement, discerning the arrangement of their dress in correspondence with its intended and anticipated uses. For instance, women usually

¹⁰ Follow link for video 1 (V1): <https://www.youtube.com/watch?v=gbgRkt85CS4>

wear their deer belt higher than do men, especially young men, affording more lumbar support. Such support is very useful when performing hours on end of domestic tasks which require lots of work on or close to ground level. In contrast, when Tuya would ride out on a steed to bring reindeer to pasture or to hence retrieve them she would typically wear an oversized modern style jacket, giving her the wide demeanor men typically embody, rather than the more constricting bearing fashioned through belt-wrapping supportive to lumbar muscles. It is for this constrictive lumbar support that men often wear their belt slightly higher and tighter than usually when they travel extended periods of time on the back of horses or reindeer. Accounting for the belt's catalytic effect on movement thus functionally corresponds with the unique fashions in which dressers carefully and attentively wrap their belt.

Dukha aesthetic fashion is also acrobatically embodied in resourceful hair stylization performed in correspondence with open-air, wilderness lifestyles. Women use saliva to wet their hair or their children's and, utilizing their prowess in weaving and tying, skillfully stylize the hair in ornate arrangements. On the other hand, men usually keep their hair neatly trimmed once they have been initiated as young men according to the Darkhat custom of the first cutting of a boy's hair. Young men also take the time to shave their barely pronounced facial hair, as the growing of such hair is for them only aesthetically appreciated and socially acceptable once a man has attained older age. Too old to be long-haired, and too young to be bearded, yet long-haired and bearded I was, Dukhas perceived me as a funny anomaly and eventually referred to me by the name of 'Сахал' ('Sakhal': 'beard'), one I accepted and that has become a part of who I continue being today. My grizzly hairstyle is in itself correspondent with my freestyle snowboarding and canoe-tripping lifestyle, as well as with related self-proclaimed-hippy values, and ecologically friendly demeanors. Whereas freestyle snowboarding and canoe-tripping are to some degree dissociable from my lifestyle with which its practice corresponds, Dukha lifestyles are *indissociable* from their corresponding practices because the latter are so intimately enmeshed with practitioners' inhabitation of the places in which they practice that, effectively, to *practice* is to *live*, and to *live effectively* is to *skillfully practice*. Dukha lifestyles of skillful practice emerge along with open-air nomadism in wilderness places that are meaningful to inhabitants as their storied homeland.

Open-Air Life: Nomadism In *Wilderness*

The 'nature-culture' relation has been discussed, re-imagined and re-discussed so much as to almost become *over-discussed* in the social sciences, and with particularly eccentric gusto within the discipline of anthropology, enough for me to acknowledge the *de facto* enmeshment of humanity with nature, the latter conceived of here as the entire vital process in which all forms of life participate, albeit persistent and often unconscious dichotomisation of humanity and nature. In the dated, yet not *outdated*, words of the wilderness-life author Calvin Rutstrum (1975):

“We are not aliens contemplating nature; we are nature. We might assume the urban role and remain there, with an abiding faith and feeling that in its confines

we can hide from natural realities; but nature will walk through walls of concrete, glass and steel without opening a single door [...] In all of us, in every plant and raindrop is that integrating or disintegrating, illimitable force" (26).

In William Cronon's seminal work entitled *The Trouble With Wilderness* (1995), the author rightly proclaims that "[t]he time has come to rethink wilderness" (7). At the heart of Cronon's rethinking lies an attempt to dispel the historically and religiously loaded humanity/nature dichotomy which is embedded in popular use of the term. Even among nature lovers who want to 'protect' wilderness areas and their non-human inhabitants from humanity, perceived as disturbingly 'infectious' in relation to ecosystems, commit this fallacy by perceiving 'wilderness' as essentially places uninhabited by humans (Ibid). As Cronon states, "*wildness* (as opposed to wilderness) can be found anywhere" (Ibid: 7), for it is the very erratic characteristic which animates all forms of life. Unfortunately, by continuing to use the word 'wilderness' without defining it as anything more than a cultural construct with a storied past, Cronon inadvertently commits the very same dichotomization he so pertinently deconstructs. In claiming that wilderness is a "[...] state of mind [...]", and a human one at that, rather than a "[...] fact of nature [...]" (Ibid: 23), Cronon fails to recognize the possibility of the linguistic scope of wilderness including something beyond human invention without being beyond human experience. Wilderness is not *just* a human state of mind. As the suffix 'ness' serendipitously informs us, 'wilder-ness' can be a state, quality or measure of being *wilder*. The intensity of wildness which renders something 'wilder' depends on what the subject is related to. I understand life in all its forms to be *wild*, 'wild' conceived of here as un-manicured or un-tamed rather than the *inhuman* or the unrelated to humanity. Although nature thrives wildly through every puddle of water and every crack in concrete with which cities are riddled, I would not qualify nor measure domestic urban settlements, especially those most metropolitanized and thereby perceived by inhabitants as relatively permanent human assemblages, as more wild than the expansive alpine tundra which I inhabited in West Taiga, or even than the familiar lakes and forests – not many hours away from my home in Ottawa – through which I have often canoe-tripped.

Although I would indeed qualify the Eastern Sayan mountain range's taiga as wilder than my familiar canoeing territory, it is not by virtue of the former's being located farther from an urban center, nor of its including the presence of less humans, nor of its embodying less traces of human habitation or passage. As Cronon (1995) highlights, inhabiting the wilderness "[...] inevitably means that we will use the nature we find in it, for there can be no escape from manipulating and working and even killing some parts of nature to make our home" (24). The different places' disparity in wildness intensity stems rather from the diverging fashions in which human traces are inscribed in these places, and from the different extents to which places and its non-human inhabitants are tamed by humanity, or subjugated to forms and uses which do not harmoniously correspond with the places' constitutive inhabitants' and materials' self-determined existence according to their own innate characteristics and inclinations. It just so happens that

many places which can be justly qualified as wilder than most others are indeed more remote from urban centers and harbour far less humans than the latter locations. It would seem that wildness thrives relatively more freely in places, including those inhabited by humans, free from the stranglehold of perverse subjugations to form and use such as those committed in clear-cut logging or open-pit mining. I believe that the quality, or *-ness*, which distinguishes anthropogenically influenced wilderness places as that much *wilder* is the state of being, ways of life, or *lifestyles* of its human inhabitants. Dukha people constantly transform the places they inhabit. The wilderness of their habitat lies in the ways in which their gestures and functional arrangements of materials and beings correspond with the erratic, unpredictable, organic lines along which these materials and beings naturally flow, ebb and relate with one another.

I theorize that Dukha people's functionally orchestral gestures, and the knowledge informing these, emerge in the mundane and extraordinary occurrences of everyday open-air life along nomadic itinerancies in wilderness places. Central to this theory is the notion of 'open-air'. Inspired by diverse outdoor sport/leisure lifestyles and philosophies such as those referable to as French-Canadian 'plein-air' (literal: 'full-air'; colloquial: 'outdoor life') and Scandinavian 'friluftsliv' ('free-air-life'), I present 'open-air' as a term which characterizes lifestyles the carryings out of which include constant sensible exposure to the wide, wild world weathering on the other side of the walls, ceilings and doors with which homes are assembled. In Ingold's words, to 'inhabit the open' (Ingold, 2011A: 96) is "[...] to be caught up in [...] the weather world" (Ibid: 96). Effectively inhabiting the open-air, especially when moving one's home and community along rhythmic migrations in wilderness places, involves personal and collective enskillment, cooperative teamwork, and informative intimation with one's habitat. Such intimate, tacit and communal open-air learning happens along canoe-tripping expeditions.

Exemplary of such learning is Hvenegaard and Asfeldt's (2007) project facilitating student planning and execution of a yearly educational canoe expedition into the Canadian North. (169-171). The authors explain how, by feeling the rhythm of the places through which they travel, participants come to know their environments and thereby become comfortable and happy in nature. This knowledge, comfort and happiness facilitates the acquisition and development of skills and "[...] an appreciation for the significance of the [wilderness] place" (Ibid:176). This enskillment, and much of its informing character, is engaged through what in friluftsliv philosophy is conceived of as 'tumbling and fumbling'. To tumble and fumble is to test thresholds of corporeal safety through skilled movement whilst attentively immersed in an environment, and to subsequently calibrate one's body to remain on the safe crest of said thresholds (Jensen, 2007: 101). Jensen claims that an outcome of tumbling and fumbling is to become "[...] able to solve questions, particularly those without obvious answers" (Ibid: 101). Tumbling and fumbling is moving through the open-air world in playfully acrobatic action which both expands comfort zones and stimulates the sharpening of senses and of problem-solving aptitudes, the latter empowered by sensibility to the correspondences between phenomena composing wilderness places. When, as in the case of canoe-trips and Dukha nomadism, inhabitation is the very core of a practical pedagogy,

tumbling and fumbling develops practitioners' abilities to know places as they functionally wield and arrange the materials composing these places, and thereby to effectively and cheerfully inhabit wilderness places in close-knit groups of people.

Such a team of people emerged along the approximately 500km course of a 26 day canoe-trip expedition in Québec that I and my trip co-organiser and co-guide realised with ten teenagers in 2012. Teammates and I enmeshed ourselves as an autonomous community along lines of both fun and challenging practices and occurrences in sublime wilderness places. Together, as we spent more and more time nomadically inhabiting sublime wilderness, we became not only progressively "[...] more aware of [our animate] dependence on [and vulnerability in relation with] our environment [...]" (Rasiulis, 2015: np), but also more understanding of our environment's harmonious systemic functioning. Trekking and camping in the wilderness were full of challenges which required us to enskill ourselves in ways by means of which we could effectively trek and camp in cheerful, communal existence. Informed by our growing intimation with local ecosystems through inhabitation, we became more and more comfortable living in the open-air and thereby were lucid enough to develop poise in kinaesthesia, "[...] communication, extra-corporeal spatial awareness, corporeal balance, muscular responsiveness, strength and endurance" (Ibid: np). Dukha lifestyles are extremely open to the wild, breathing air of our planet, and thereby stand out as fields of human activity particularly salient for inquiry into nomadic enskillment and informative intimation with nature. This salience derives not only in the extremity of these lifestyles' openness to the air breathing through such a remote wilderness territory, but also and especially in the lifestyles' lifelong character and interspecific composition.

Reindeer Games: Relations Of Symbiogenesis

Symbiogenesis is a term brought forth by Lynn Margulis and Dorion Sagan (2002) to refer to the process through which organisms are composed of transformative fissions among different bacteria. Haraway (2006) draws on this biological notion in reference to the 'dance of relating' (110) in which actors of 'naturecultures' (Ibid: 110), or components of interspecific assemblages, regenerate themselves together in "[...] the patterns of their sometimes-joined, sometimes-separate heritages both before and lateral to encounter" (Ibid: 110). From the esteemed shoulders of Margulis, Sagan and Haraway, I cast a glance which sees self-generation of body, character and demeanor as animated in part through intimate relations with lifeforms of other species. This self-generation as a correspondence between intentional bodies, characters and demeanors of members of companion species. This correspondence is a functional synergy of the different intimately involved motricities specific to the particular species at play in any given sustained dance of relation, however diversified these motor functions may be within a single species. Co-inhabitation is one of the most evident ways in which companion species generate themselves together. Inquiry into nomadic reindeer pastoralists' co-inhabitation with livestock offers insight into the actual, qualifiable relations through which individuals of inter/intra-specific domestic knots dance themselves into form, character and demeanor.

Although not necessarily worded as such, symbiogenesis is commonly recognized among reindeer herders and their livestock. For instance Istomin and Dwyer (2010) theorize that, among Komi and the reindeer they herd, humans and reindeer participate in ‘dynamic mutual adaptation’, a mutually-constitutive dialectic responsiveness to one another’s movements (620). Beach and Stammler (2006) theorize ‘symbiotic domestication’ as a feature of traditional circumpolar reindeer-herding. Symbiotic domestication is understood as a herding strategy, attentive to multispecies needs, that reflects a socially reciprocal, consensual ‘circularity of wills’ among human and reindeer which sustains their mutual livelihood (7, 8, 12). Drawing on his fieldwork among Sami reindeer herders, Ingold (1974) theorizes that reindeer and humans communicate together as they co-inhabit. He claims that reindeer are particularly attached to humans that caress them and speak kindly to them, and that the integration of reindeer into humans’ social world is done through the establishment of a contract of ‘mutual advantage’ (524-525). Herders encounter reindeer as social, decision-making animals (Ibid: 537) and so their domestication is achieved by “control through symbiosis”, by which herders “accommodate themselves to the needs of the deer” (Ibid: 525). Such accommodation limits the independent freedom of both humans and reindeer, but provides all those involved with advantages unachievable by themselves alone (Ibid: 525). Complementing Ingold’s perspective on herder-herded relations, Charles Stépanoff (2012) elucidates a theory according to which Tuvan Tozhu herders orchestrate reindeer’s autonomous participation in ‘joint-commitment’ with herders towards mutual realization of livelihoods by means of continuously corresponding authoritative behaviour in relation to livestock with behaviours and lifestyle accommodations which are attractive enough for reindeer to willfully and regularly submit to variable degrees of human authority. Such correspondence between animals of different species depends on animals’ functional awareness and understanding of oneself in relation to the other (290).

Joachim Habeck’s (2006) work among the Komi of European Russia suggests that nomadic reindeer-herding affords mutual learning with reindeer and dogs, as well as physical, technical and geographic enskillment crucial to resiliently dealing with continual environmental change (130-132). Habeck claims that “[t]he practical and experiential aspects of herders’ movements through the landscape, in correspondence with the movements of their animals, deserve to be studied and described more thoroughly through participant observation” (Ibid: 138). Istomin and Dwyer (2010) answer Habeck’s call for participant observation among herders *and* their reindeer. Drawing on their ethnographic work among Siberian Komi and Nenets, the authors suggest that reindeer and their herders mutually adapt to one another’s actions, thereby developing mutually interactive understandings of the world (613, 616, 620). Drawing on his ethnographic account of training two reindeer to pull sledges with Finnish Saami herders, Vuojala-Magga (2010) claims that in order to effectively learn and practice, beings of both different and the same species develop calmness and mutually trustful relationships through which the herder can handle the reindeer with appropriate firmness (57).

According to Jürg Endres, a German anthropologist who has done extensive fieldwork among Dukha people, and work with the Dukha-run Tsaatan Community Visitors Center organisation, Dukha herders semi-domesticate reindeer with a mutual trust developed and maintained through relations of companionship¹¹. Whereas the reindeer's 'semi-domesticated'-ness is understood as a wildness which is never fully subjugated to the tameness these animals embody, the relation of companionship in which they participate with humans is enacted in extensive co-inhabitation and cooperative realization of one another's livelihoods. This companionship affords the trust, developed by reindeer and herders through co-inhabitation and cooperative practice, with which humans can release their livestock into expansive pastures relatively un-inhibited and unsupervised, and with which reindeer allow themselves to be steered and handled by humans, or even come back to herders' settlements unsolicited. Endres shared with me Selcen Küçüküstel's (2013) conception of the relational power-dynamics of trust and deviance between herders and reindeer as metaphorically similar to the trustful relations between parents and children (63). Like parents, herders enforce certain authority over their children whilst allowing the latter, more and more as they grow more intimate with and knowledgeable about one another, the freedom to move around and away from the home as unique, autonomous individuals. Reindeer, like children, playfully subvert their parents' authority, trusting that when they *do* eventually resubmit to parents' authority and domesticity they will be treated with care (Ibid: 63). It is thus in freestyle mediation between authority and permissiveness for herders, and between submission and subversion for livestock, that humans and reindeer relate in ways which effectively engender functional symbiogenesis.



In contrast to my perspective on the caring demeanours of Dukhas in relation to reindeer, Ingold's (2000) presentation of pastoralist interspecies relations has posited that, unlike herders, livestock animals lack the ability to care for their interspecific domestic counterparts. Unlike the wild animal sacrificing its life autonomously to the hunter, as is a widespread notion among many hunter-gatherer communities, the herdsman is presented by Ingold as taking the lives of its non-consenting animals during ritual sacrifices (72). In the case of the Dukhas, ritual sacrifices of reindeer imply a different way of pastoralists to relate with their animals. Dukha sacrificial offerings involving reindeer do not usually include the killing of reindeer. For instance, upon suggestion from a shaman, often in response to family misfortune of some sort, Dukhas may adorn specific reindeer with coloured ribbons, thereby offering it to a specific spirit. In exchange for the spirit's care in resolving their targeted misfortune, Dukhas will raise and care for the animal without putting it to direct labour use (i.e. milking, packing, riding). The 'sacrifice' in offering this animal is the economically 'useless' upbringing of an animal in honour of a spirit. Whether the reindeer knows it or not, its life is nonetheless a sustained act of caring for its owner family, and thereby functionally contributes to realizing the latter's livelihood. This sacrificial practice is but one among many ways in which Dukha people improvise ancestral traditions.

¹¹ Personal correspondence in September, 2014. East Taiga, Tsagaan Nuur Sum, Khovsgol.

Creativity, Improvisation, And Tradition

Much in the same manner as things are *not* made by exactly instantiating predicted designs, cultural traditions do *not* function as behavioural or semantic blueprints independently pre-existing practice. Instead cultural traditions, along with newly emerging techniques, ideas and materials, inform and characterize practitioners' personal, uniquely self-expressive and improvisatory motricity. In his introduction to *Part 1* of the anthology Creativity and Cultural Improvisation, Ingold (2007) elucidates this perspective on creativity and improvisation in contrast to molecular biologist Jacques Monod's scientific credo according to which the growth and development of organisms, including individual organisms' behaviours, are not 'creation' but rather 'revelation' of hereditary DNA assemblages realized by mechanical bodies in absolute correlative dependency on structural designs which precede moments of practice. The ontological premise upon which this credo stands effectively annuls the possibility of personal creativity in self-generation (45). In contrast to Lévi-Strauss' theorized 'bricoleur' (1962), in whom creativity is expressed as functionally assembling nothing but previously apprehended structures of thought (Ingold, 2007: 46), Ingold's imaginary 'painter' creatively brings forth his or her work *as* it unfolds *in the moments* along which it is engaged with paint (Ibid: 47), and thereby "does not merely give outward expression to a conception that has sprung ready-formed to his mind (Ibid: 47). Within such a perspective on creativity "[t]here is no script for social and cultural life. People have to work it out as they go along [...] they have to *improvise*" (Ingold and Hallam, 2009: 1). Ingold and Hallam qualify improvisation as generative of the "phenomenal forms of culture as experienced by those who live [...] in accordance with them" (Ibid: 1), as relationally emergent in practitioners' continual attunement and responsiveness to one another's performances, as continually emerging rather than sequestered in distinct occurrences, and as the 'way we work' both in the conduct of our everyday lives and in studied inquiries into human lives (Ibid: 1).

As humans we live our lives in improvisation, continually heading into an unpredictable future "[...] guided by the past but not determined by it" (Ibid: 11). Within this perspective on improvisational creativity and its generative role in life, 'tradition' is not a formula which pre-exists practice. Tradition is rather a communal pool of recapitulatory experience-based knowledge and memory shared by people who, in attuned and responsive correspondence with one another, with environing materials and mediums as they unfold in the moment, as well as with imminent anticipations of a continually changing foreseeable future, creatively improvise functional expressions of tradition in synergy with newly encountered materials, knowledges and people. Each person embodies uniquely characterising expressions of synergetic, synchronistic, attuned, and responsive, or in one word *resilient*, tradition. Each unique embodiment of resilient tradition within a community enmeshes itself with its counterparts in continually remembering, becoming, and foreseeing who they are as individuals and as groups in a given field of inhabitation or practice.

Among freestyle snowboarding communities at large, traditions are phenomena such as established tricks, performance formats, colloquial language, as well as monumentally storied places, events and heroes of the sport. Both historically and in contemporary times, one of freestyle

snowboarding's main *modus operandi* is creative innovation. Although professional riders are now sticking the landings of aials more complex than ever imagined before off of bigger jumps than ever fashioned until very recently, both beginners and professionals find pleasure and significance in perfectly executing the most basic, 'old-school' tricks upon which the sport was founded when equipment was more rudimentary and technical skills less developed. In so doing, snowboarders persistently realize the embodiment of the motor function at the root of the lifestyle sport's traditions: having fun on a snowboard with snow, mountains and, often, friends. Beyond the mountains, I engage the versatility of my own body, moving on foot through places inhabited along my everyday life itinerancy, realizing tricks on and around features of the landscapes with my body *as is*, without any technical ornamentation such as board and bindings. What I call 'freestyle walking' is in and of itself a creative embodiment of the motor function at the root of freestyle as I relate with it. This radical motor function is having fun as a person currently generating one's mindful body and self-awareness in and with the astonishing living world we inhabit. I do not foresee myself claiming any sort of radical definition of Dukha people's intentions and purposes in life, but in my co-inhabitation with mentors I was swept away in the rhythms of fun practice and play which resonate along their nomadic, interspecific lifestyles. Among Dukhas, as with any people, traditions abound. These traditions are enmeshingly synergized in uniquely personal ways with newly encountered technologies, economies, livelihood practices, information, and people. Tenacious, creative, and resilient, my mentors effectively improvise synchronically appropriate, traditionally informed lives in a dearly loved fraction of their ancestral Tuvan homeland with their ancestrally cultivated interspecific companions: reindeer, dogs and horses.

3. Methods

In order to begin learning how Tsaatan people effectively realize their livelihood practices, I engaged anthropological fieldwork as an itinerant apprenticeship in the practice of Dukha livelihoods along which I cultivated my attention to various ways of being alive with others in the world. In practice, my primary research method was attentive, curious, productive co-inhabitation with Dukha and otherwise Tsaatan mentors. To a limited yet functional degree, I developed many aptitudes by ways of which I grew as an able person with whom the cooperative realization of livelihoods was pertinent by virtue of function and agreeability. It is by developing these aptitudes in practice with mentors, and by complementing this tactile learning with observations of and conversations with mentors, that I came to begin grasping some of the techniques and qualities which are embodied in the effective realization of livelihoods in the taiga, and which are ungraspable in their totality by virtue of their continual open-endedness. Performing livelihood tasks, relaxing and playing, and the informal conversations that arose by doing those things with mentors afforded me with experiences and information which I have elaborated on in this thesis. My leather-bound journal served as primary tool for assembling traces of moments, thoughts and information, as well as for drawing. My camera served as an instrument with which I creatively recorded moments and movements for further study and artistic evocation. Both journal and

camera became good friends of mine as I handled them excessively and carefully, often developing thoughts by making diary-like notes, as well as by speaking to myself or an anticipated audience through audio-visual recordings. Occasionally drawings, photos and videos that I collected were authored by mentors.

I carried photos of my homeland and family in my luggage, and by showing mentors these photos they gained insight on who I am, and I on their perception of people and landscape. By showing mentors photos of people and places from their contrapuntal Taiga region (East or West) taken recently with my camera I gained insight into mentors' aesthetic appreciation and geographical knowledge of their homeland, as well as into the importance for them to learn recent news concerning friends or kin living in regions distant from them at the time.

As Dukha domestic knots include or at least involve other animals with whom they cohabit, grasping the lived realities of Dukha people necessitated that I intimate myself with their animals. I became acquainted with dogs, reindeer and horses by living among them daily. I shared homes with a few dogs¹² and kept other dogs out. I intimated myself with reindeer and horses by herding and riding them, as well as by using them as pack animals. I also learned a lot about them by watching them as they grazed, rested or agitated themselves, and by performing sensori-emotive interviews. These interviews consisted of spending time with animals, sharing space, physical touch and mutual gazes with them. During these moments individual animals and I learned how to be comfortable with one another, thereby bringing to my attention many nuances in animals' personalities and behaviours otherwise unavailable to me as an unengaged observer. The abovementioned methods, and especially the knowledge they afforded me with, are apprehensible in the ethnographically supported analysis of Dukha livelihoods presented in the following chapters.

My methods align with Sarah Pink's (2009) take on 'sensory ethnography'. Such an ethnography acknowledges sensoriality as fundamental to human experience, understanding and representation of life, as well as, by extension, to anthropological experience, understanding and evocation of research-participants' lives (1,7). Such an acknowledgment affords deliberately embodied knowledge of the subject of inquiry. Like Merleau-Ponty's (1964) mythical painter, the phenomenological inclined sensory ethnographer 'lends his or her body to the world', senses with the world, is transformed by it and in return transforms it with his or her artistic media (12). The meaningful qualities expressed in Dukha livelihood practices needed to be sensed by engaging my body in life with Dukhas in the Taiga. Throughout our co-inhabitation I paid attention to mentors' movements in the moments of instantiation, and to my own such 'micro-movements', in order to understand the practical dimensions of livelihood realization. This written account attempts to describe significant qualities of these movements, as well as to meditate on ways in which the dynamics present in the generative contextualization and actual performance of these micro-movements are expressed in more 'macro-mobile' phenomena such as decision-making processes

¹² I acted as primary caretaker for a bitch and her four puppies for ten days in East Taiga. (See figure 1 in annexe 7)

related to settlement patterns and resource management. Recognizing that there are diverse variations within a community as well as within a single person, I do not pretend that all Dukha people's movements and activities are always performed in the manners I discuss. I instead account for and analyze their common instantiation in such fashions. Furthermore, I do not claim that my analysis is the only interpretation that could be inferred from the movements I discuss, but rather share personal experiences and understandings. These experiences and understandings are enmeshed with the improvised itinerary along which I engaged this research.

Research Itinerary

My research emerged through unforeseen, serendipitous turns of events. I originally envisioned and worked towards my thesis research building upon ethnographic work, which I had started as an undergraduate student, conducted while guiding canoe-trips in Québec (Rasiulis, 2015). One day, within the intricately enmeshed pathways of Youtube, I listened to Mongolian folk music whilst in my mind I experienced a vivid sensation of walking through a forest where I had never been before, moving branches aside with my hands in order to get a good look at an unknown river's rapids so as to effectively run them in my canoe afterwards. I then instantly remembered a brief, mundane moment in conversation with my canoe partner Zac on the Gatineau River entering the Northern neck of the Baskatong Reservoir where he mentioned that canoeing in Mongolia was apparently 'epic', or 'amazing', or some other fun quality of the sort. That's when the stem poked its head through the seed and I saw my general research destination: Mongolia.

I envisioned a canoe-trip exploring relational processes of home-making in Mongolia. I thought that, by removing myself and my canoe-tripping practice from our home and its familiar landscapes and by placing us in foreign waters and lands, I could sort of 'test out' canoe-tripping's potential as a transposable tool for catalyzing senses of belonging *in*, *with* and *as* nature. I soon dismissed this project in favour of one which would allow me to explore home-making and expedition-guiding in a more specifically *Mongolian* way. I began planning horseback expeditions along which I would inquire upon my relationships with the environments, guides' skills of sharing their own place-based relationships with clients, and these tourists' experiences of intimately engaging (or not) foreign ecosystems through open-air nomadism. Another day, when my productive procrastination involved watching documentaries about Mongolia on Youtube, I watched in amazement a brief segment on the Tsaatan reindeer herders. Although, unbeknownst to me at the time, the snippets were not even filmed in Dukha territory and its peculiar ecosystem¹³, the people, reindeer and larches seemed so aesthetically seductive, so *magical* to me. I felt as though my spirited body could find sensory and semantic wellbeing and adventure there. After all, what better way to explore ecological relations through open-air nomadism than by living with people *and* other animals for whom expedition is lived daily and all year long?

¹³ The Dukha family featured in this documentary is one that spends its summers on the shores of Khovsgol Lake, a tourist hot-spot in the province.

I contacted Morgan Keay, founder of Itgel and its now fully autonomous offshoot NGO the Tsaatan Community and Visitors Centre (TCVC)¹⁴, and established a loose plan according to which I would volunteer independently with the TCVC as its members and I deemed appropriate. I was unable to contact the TCVC albeit attempts to phone and email its representatives, and contact with Morgan was eventually interrupted for reasons unknown to me, so before leaving Canada to do fieldwork I contacted Lkhamdulam, founder of the Mongolian community-based development NGO People Centered Conservation. Lkhamdulam shared with me insights from her experience facilitating an Itgel-financed participatory rural appraisal with Dukhas in 2008¹⁵. In order to help me improvisatorially organize a community meeting focused on any issue(s) deemed fit by the community, Lkhamdulam helped me acquire a visa with which I could inhabit Mongolia for four months. When I temporarily fell out of communication with my contact at the National University of Mongolia (NUM) who was going to help me find an ethnographically inclined translator, Lkhamdulam introduced me to her brother Ganzorig, the man whom I would get to know as Gana, my translator and friend. During and after my three week Mongolian language and cultural immersion program with the NUM, Gana was very helpful during the acquisition of my visa and Tsagaan Nuur Border Area special permit. I am very grateful to Lkhamdulam and Gana for their help.

Living at the NUM Foreign Student Dormitory in Ulaanbaatar while awaiting my permits, I met Bjoern and Sascha, two German human geographers participating in a Mongolian language program. Sascha had both time to travel around Mongolia and a lust for wilderness adventure, and at my invitation he joined my expedition into the Taiga for its first three weeks. My research during this time was nourished by conversations with him and by his asking mentors questions I would not have asked myself. This initial phase of fieldwork was spent inhabiting an 'ortz hotel' in West Taiga in an autumn camp, the members of which were temporarily settled in a domestic knot with a woman named Jargal as focal person joining other inhabitants together. Here I became friends with mentors by making myself useful to them, notably by fetching water and preparing firewood. After this trek I embarked on another horseback expedition with guides hired in Tsagaan Nuur, this time to East Taiga where Gana and I inhabited the ortz of Dawta and Gantuya. Here I made myself useful, notably by preparing firewood as Dawta's mobility was reduced due to a leg fracture. After 2 and a half weeks with Dawta and Gantuya, Gana and I returned to Tsagaan Nuur to join TCVC groundskeeper and interim-manager Burxuu in facilitating a community meeting on October 6th which over 30 Tsaatans attended in order to assess the TCVC's current state of affairs and operations, as well as the current challenges facing the Tsaatan community at large¹⁶. The evening of this meeting, Gana left my company for successful employment.

¹⁴ For more information on the TCVC, see Annexe 3 and follow link: <http://visittaiga.org/>

¹⁵ For More information regarding the participatory-rural-appraisal see Keay, 2008.

¹⁶ At the meeting I had organised, and advertised, by word of mouth in the taiga with tele-communication support from Burxuu, it was agreed upon that the most significant problem related with NSPA regulations is the limitation of territorial expanse within which herders and their reindeer can inhabit. This limitation forces herders to cycle between less pastures, thereby risking deterioration of pastures due to overgrazing and trampling. Participants also agreed that,

During the time spent with Gana, much of my ethnographic experience was spiced by his own hermeneutic flavour in translating both my own words and those of my interlocutors. Afterwards, as a single outsider among the Dukhas, I was obliged to drastically and quickly improve my Mongolian communication skills. I learned much by studying my dictionaries, by slowly reading a Mongolian children's comic book with the frequent use of the dictionaries, by speaking with and listening to Dukhas, and by testing out unknown words I picked up in their speech in similar fashion to how I tested out reindeer herding calls, whistles and movements. During this phase of research I travelled to and from the Taiga with mentors, in tandem with their own autonomous travels, by horseback or motorcycle. After spending over 40 days with Jargal's family in West Taiga autumn and winter camps as well as briefly in Xarmai, a time during which I joined the family's winter migration, I returned to East Taiga. There I house-sat Uultsang and Zaya's cabin in their winter camp for a week and a half and cohabited with them the few other weeks I spent there before leaving the area for Canada.

Albeit my swift and effective improvement, my lack of complete fluency in Mongolian language limits the degree to which I can communicate the ways in which mentors perceive and interpret the world and their living in it. Furthermore, my linguistic limitations are potentially factors of inaccuracy in my research findings. Although I took the time to ensure that important conversations were mutually understood, and I have tried to sift through notes and memories of conversations with as much linguistic exactitude as I can, some shortcomings may have evaded my knowledge. Even though I could sing Mongolian and Tuvan songs, compose my own Mongolian language song about the Dukha and the Taiga, as well as discuss political or spiritual issues and make Owgen drop to the ground laughing – having become unable to continue strapping logs to a reindeer after hearing me recount a joke ludicrously inspired by real life – there remained domains of speech through which interlocutors and I could simply not successfully communicate. Body language thus became of utmost importance both in ensuring our words were mutually understood and in substituting for words when our use of the latter failed. As the mentors with whom I lived and learned each embody their own unique relations and personalities, it is important that you become acquainted with them before reading the following major analytic chapters.

in order to reinvigorate the TCVC's tourism service and community financial safeguard operations, both a manager and an accountant are needed to effectively run the TCVC. Nominations for full-time manager were cast and voted upon, although in December no manager was yet confirmed. I have no evidence of confirmation since then.

List Of Mentors

West Taiga:

Jargal: 55 year old widow. Daughter of a deceased удган ('udgan ')¹⁷. Elder around which a settlement group (айл) forms. Charismatic, funny, influential, sharp tongued, has relations with many and diverse people.

Naranxöö: Jargal's eldest son. 35 years old. Funny, strong, hard-working, natural teacher.

Baatar: Jargal's 2nd son. 27 years old. Funny, approachable, patient, clever, playfully proud, commends good work.

Owgen: Jargal's 3rd son. 25 years old. Funny, occasional mood swings quickly mended with spontaneous cheer or effective work. Helpful to Jargal and good with electrics.

Erdene: Jargal's 4th and youngest son. 23 years old. Charming, charismatic, great singer, festive, proud, funny. Great riding trail navigator.

Mama: Jargal's 2nd and youngest daughter. 30 years old. Kind, laughs a lot. Opinionated. Good listener, approachable, really good cook. Helpful. Does some typically male tasks.

Tuya: Jargal's eldest daughter. 33 years old. Kind, clever, approachable, does many typically male tasks. Knowledgeable regarding traditional lore and practical uses of forest resources.

Bijei: Daughter of a deceased зайран ('zairang')¹⁸, wife of Baatar. 27 years old. Calm, reserved, patient, endearingly kind, tough, hardworking even when pregnant.

Marchi: 35 year old Darkhat man from Rechindlumbe Sum, moved to Xarmai as a young adult, married Mama and became a reindeer herder. Strong, skilled, hardy, excellent geographical knowledge, great at herding animals, very kind under tough exterior, not easily approachable at first, hard worker.

Tartak: 40 year old son of a deceased zairing, husband of Tuya. Skilled, piercing eyes, wise, knowledgeable regarding livelihood practices, spiritual phenomena and lore.

Boomboole: 1 year old daughter of Baatar and Bijei. Patient, prematurely wise, shy, kind.

Ondra: 3 year old daughter of Mama and Marchi. Kind, smiley, charismatic, energetic, sneaky, dramatic.

Gakhai: 4 year old daughter of Tuya and Tartak. Fiery personality, funny, expressive, clever, keen, stubborn.

¹⁷ Female shaman

¹⁸ Male shaman.

Gambat: Man, aged early 20s. Friend of Erdene and Owgen, deceased father was friends with Jargal's late husband. Funny, charismatic, entertainer, highly expressive of uniqueness. Tall, lanky, incarnation of freestyle 'steetz' in both movements and creative speech (i.e. invents expressions¹⁹, speaks with unique slurry accent).

East Taiga:

Dawta: Man, aged mid-40s. Cousin of Jargal. Funny, approachable, trickster. Former TCVC East Taiga manager. Had a broken leg at the time research was conducted.

Gantuya: Woman, aged mid-40s. Wife of Dawta, born and raised in West Taiga. Kind, funny, approachable, caring, hardworking, trusting.

Xadaa: Man, aged late 30s. Kind, approachable, generous, strong. TCVC East Taiga manager.

Sainaa: Woman, wife of Xadaa, aged mid-thirties. Kind, approachable, generous, good cook.

Uultsang: Man, grandson of Dawta's uncle, aged early thirties. Clever, funny, patient, artistically inclined, hardworking.

Zaya: Woman, wife of Uultsang, aged late twenties. Originates from Ulaanbaatar, married into the community after working with the TCVC as operations coordinator. Funny, kind, approachable, knowledgeable in worldly affairs and modern technology.

Xöö: Man. Uultsang's older brother, aged mid-thirties. Patient, often lives farther from Tsagaan Nuur, hardworking.

Sansar: Man. Son of a living zairing, aged early thirties. Participated in a World Reindeer Herders Congress in China (2013). Wise, calm, patient, hardworking.

Öwngdorjoo: Man. Father of Sainaa, aged early 60s. Kind, approachable, clever, funny, strong, hardworking, knowledgeable regarding Dukha history and lore.

Dari: Woman. Mother of Sainaa, wife of Öwngdorjoo, aged early 60s. Kind, approachable, wise, funny, hardworking, knowledgeable regarding Dukha history and lore.

Suren: Woman, widow, elder cousin of Dawta, aged early 60s. Quiet, attentive, calm, became socially warm (with me) only in time. Tough, lives all year in orts, most often alone.

Xüiche: Man, aged 25. Charismatic, self-expressively cool and unique.

¹⁹ His expression 'Сайхан тсар байна, чи!' (roughly translated as 'dandy time for you!') has been incorporated in both Erdene and my common speech in both genuine and sarcastic uses.

Please note that not everyone who participated in this research is featured in the text it has spawned. I relate to the participants of this research as *mentors* who, through co-inhabitation, told me of their lives with words and with the very actions and storied traces through which their lives were made apparent to me. For purposes of literary concision I focus the identification of mentors on the people with whom I co-inhabited settlements and formed particularly close relationships directly referred to in my thesis. Please note that ages, as listed above, were those at the time of research.

Interstitial Vignette I



Atop of the snowy Xuulag Dawa mountain pass, where we circle three times around a cairn adding rocks, we look west without seeing Jargal and her sons. They will be another few hours... I think of how my luggage – gear, food, legal documents and all – is with Jargal and the others rather than at my disposition, but do not worry about that. Worst case, I tell myself, I'll spend a night without my stuff, sleeping in my deel with the blanket resting at that moment between the saddle and my reindeer's back as padding to soften the burden of carrying me. I have a lighter in my pocket and, thanks to Sascha's earlier suggestion, a knife slung on my belt, and I'm with people significantly skilled in taiga life. I'll be fine. As we descend eastwards, beyond view of the setting sun, the snow around us and the surrounding snow-capped peaks show a blue hue. Before hiking down the steep trail from the pass, the caravan stops atop a plateau. Baatar, Biijei, Marchi and Mama give me two options: wait here for Jargal and company, or continue travelling with our current caravan. After an instant thinking of staying alone in this cold, bleak, alpine ledge highly exposed to wind, I unequivocally decide to continue our journey together. Happy with my decision, but far from over-excited about it, they hop back on their steeds and lead the way.

Interstitial Vignette II

As I hang out with Marchi, Mama and Ondra in their orts, they show me a large hardcover book entitled: *‘Under A Sheltering Sky: Journeys To Mountain Heartlands’*. Marchi explains that the book’s author, whom as expressed in the book is British alpine explorer Colin Montearth, had spent twelve days in West Taiga during the previous winter in order to practice some alpinism with the guidance of Delgir, a well-respected elder. After his expedition in the Taiga, Montearth had given a copy of his book to Burxuu at the TCVC, who eventually passed it along to Marchi and Mama. I thoroughly enjoy reading the book’s adventurous tales in familiar English language, and looking at its beautiful alpine photos. I translate some photo captions for my hosts, explaining where some of the photos were taken. They enjoy learning about other alpine dwellers, especially high-elevation pastoralists like yak herders in Nepal. Ondra entertains herself both by looking at photos and by energetically and abruptly turning pages, sometimes slightly tearing them. Some roughed up pages already feature some doodles or scribbles added haphazardly with pen or pencil. As I would learn later back in Canada, the book is worth \$94.24 USD on amazon.com. My



hosts visibly enjoy and care about this rare book, but do not try to conserve its original state of structural integrity, as it will necessarily get banged up at some point of nomadic life, notably in the processes of being packed in tight spaces and strapped to animals travelling along often densely forested trails. I breathe and feel the wind blow in through the door flap and the ring around the stovetop. I feel comfort in living multiple months without ever being fully sealed off from the breathing atmosphere and its weathering expressions. Through open-air nomadism, the sensation of shelter may be stripped down to its most basic: the comfort of living free underneath an expansive sky.

4. Taiga Freestyle: Bearing of Enskillment

The freestyle bearing with which many Dukhas perform livelihood practices emerges through an imminent pedagogy of practice. From infants to elders, people extensively sense and manipulate the materials which constitute their habitat, learning and continually developing both familiar and new aptitudes. The improvisatory freedom and acrobatic²⁰ ease which characterise their bearing emerge naturally in the generative context of nomadic life with other animals in wilderness places. These characteristics of movement both result in part from, and strongly contribute to effective execution of, livelihood practices involving considerable and frequent risks to practitioners and/or their animals. Improvisatory skills and rugged comfort zones both afford Dukhas with the versatility to effectively realize a wide variety of tasks with a limited arsenal of human-made tools, and are developed by the necessity of accomplishing such feats in order to sustain livelihoods in and around the Taiga. I suggest that an important factor in both the execution of tasks and the enskillment which emerges inherently through those practices is the playfulness with which many tasks are performed. This playfulness is enhanced by the cheerfulness facilitated by working and living with family members and friends. Through sustained and reciprocal collaboration with friends and family, mentors seem to sustain and develop team dynamics which enhance individual persons' effectiveness, and which join the latter together as a whole of complementary aptitudes and characters capable of surmounting just about any challenges which arise along the way of their lives.

Pedagogy of Practice In Immersion

Inhabiting The Open-Air:

The Dukhas with whom I cohabited sense a plethora of environmental phenomena from within the indoor domain of the 'rəp' ('ger'), the home. Whichever the season, whether living in an ortz or a cabin, people are never 'sealed off' from outdoor phenomena, from the *open air*, whilst living in the Taiga. Wind blows through the ortz, seeping its way in the тоноо ('tonoo')²¹ and under the door flap or skimming the ground at the base of the ortz poles. Surfaces such as carpets, canvas sheets and wooden flooring isolate inhabitants from the ground but, albeit frequent and effective tidying both floors and boots upon entry with brooms (made of shrub branches tied together at the handle with deel scraps or other strings), soil, sticks, stones, foliage and water or snow nonetheless rhythmically enter the ortz and decorate its floor. Furthermore, especially in



²⁰ In this thesis I speak of acrobatics as dynamics of significant agility, suppleness, coordination and balance, whether physical, mental and/or social.

²¹ In an ortz, the tonoo, or roof ring, consists of the opening in the overlay of canvas and tarpaulin sheets through which the stovepipe rises out alongside the ortz poles.

summer and early autumn, the indoor space nearest the door is commonly devoid of isolating surface. Regardless of the flooring and season, the ground upon which the stove rests and which immediately surrounds the latter necessarily remains open to the earth, unclothed in order to avoid isolating surfaces melting or catching fire. Rainwater and snow infiltrate home-edifices along passages which are rhythmically altered or comfortably acclimated to. In the two taiga winter cabins I inhabited, though significantly more isolated than ortzes, environmental materials still rhythmically seeped in through the door with the boots and clothing of people as well as in the wind that may have just kissed their faces or swept at their back. Ortzes and cabins, albeit their extensive immersion in environmental movements and materials, nonetheless effectively provide shelter and comfort²². The immersive character of open-air life is sensed rather than subjugated to. Engaging extensive outdoor work, and periodically retiring to an indoor residential domain continually open to the outdoor world and its respiratory ebbs and flows of material movement, Dukhas live immersed in the imminently emerging meshwork of their habitat. It is in the generative context of such environmental immersion that Dukhas learn and develop skills.

Practice Makes Better: Learning And Developing Skills By Doing

As environmental immersion goes hand in hand with life in the Taiga, learning how to handle materials, how different materials interact together and with diverse human movements, as well as how materials can be most effectively wielded in ways which engender intentions, begins in infancy and refines and diversifies itself throughout entire lifetimes. Experiences observing and participating with children as they handle materials and engage their environments through play or boredom offer insight into ways in which environmental knowledge and corporeal skills necessary to live in the Taiga are learned. Perhaps bored, having fun, or curious, Ondra would often stick materials such as sticks or foliage in her mouth and taste them before spitting them out or fishing them out with her fingers. As Ondra's hands, lips, cheeks and hair would frequently show traces of intimate interaction with soil and sap, Mama would rhythmically clean her daughter's face with warm water, and tidy her hair with a comb and saliva. Once, after slaughtering a reindeer who had broken its leg, as Baatar and Bijei were cutting reindeer meat into slices and hanging them on rope tied around ortz poles near the stovepipe in order to cook jerky utilizing the heat emanating from the stove, Bijei patiently said words corresponding with the current situation (i.e. max: meat; xytrara: knife, etc.) which Boomboole then softly repeated on her way to learning them. At one point Boomboole played with a knife whilst kneeling on the ground. Holding it by the handle, she slowly slid the blade along flesh and bone without the necessary strength to make incisions, but in logical lines and angles. Frequently watching her parents wield knives, and benefitting from her parents' relaxed permission for her to handle these sharp tools, Boomboole seemed to understand both the purpose and technical logic of putting blade to flesh, as well as demonstrated poise in the act with comfort impressive for a child not yet aged two years.

²² Follow link to see video 2 (V2): <https://www.youtube.com/watch?v=QR6Y4yGGV2c>

Later on, as I watched Boomboole play with detritus on the orts floor, I noticed how much attention she paid to the materials surrounding her, and how inquisitively and versatily she handled many of them. She picked up sticks and stones from the ground, handling them with a dexterity still a bit awkward, learning how to handle the materials constituting her environment by getting to know how they feel. Noticing her interest in materials, I showed her how to hammer a tiny branch into the ground like a peg using a wood chip as hammer. As I watched her improvise her own rendering of my movements, I was impressed with her aim in striking down the woodchip onto our makeshift peg. After unsuccessfully teaching her to tie a knot, Boomboole and I went outside and piled objects that we found in the windswept alpine tundra onto one another in balance, edifying a sort of ephemeral artistic installation, and demonstrating both Boomboole's understanding of equilibrium and her ability to render her body responsive, supple and dextrous enough to manipulate materials so as to make them interact with one another in equilibrium^{P3}.



Watching elders such as Jargal, Suren, Öwngdorjoo and Dari perform tasks, I frequently observed the extreme refinement with which they interact with their environment and its materials albeit the minimal yet noticeable reduction in strength and suppleness which accompanies their older ages. Be it mixing and oxygenating milk tea through scoop and release, sewing fabrics, chopping wood, or milking reindeer, elders demonstrate largely unequivocal skill in precise handling of tools and environmental materials. Not only do elders continue developing the ease and effectiveness with which they execute tasks, they also learn new skills inherent to unfamiliar practices. For example, at times with the help of younger people, elders learn how to use mobile phones to send and receive text messages, and to make or receive calls, by watching others wield the devices and by inquisitively pressing buttons until intended means are achieved. Most tasks inherent to life in the taiga, regardless of external explanation or observation of others and subsequent mimesis, or none of the aforementioned methods, are embedded in a pedagogical process by which both material knowledge and skills are learned and developed through extensive practice in continual environmental immersion.

The lack of rigidly formalised guidelines of practice is a facet of Tsaatan lifestyles that seems conducive to the emergence of enskillment processes which correspond with the developing embodiment of freestyle bearing. In my experience living in Canada, practices – especially those institutionally deemed to be risky – are commonly engaged along formalized guidelines such as laws, regulations, instructions, and standardized techniques. In contrast, Tsaatans largely realize practices along gestures which, although in many instances correspond with traditional techniques and knowledge, are free to be both decided in the moments of actualization and developed in time as practitioners are inclined to, and as the latter deem fit to effectively realize intentions. Whereas in Canada I subscribe to the use of standardized equipment and techniques formally recognized to help minimize risks and to thereby favour the persistence of my safety when I use a chainsaw,

Tsaatan mentors of mine who operate chainsaws in the taiga do so whichever ways feel good and function in unique situations of performance. Rather than subscribe to exogenous instructions aimed at reducing risks, Tsaatans afford their own safety by quickly and continually developing attentiveness, understanding, dexterity, and agility with which risks generally do not result in actual danger or disaster. An important facet of my fieldwork in the taiga was the lack of formalized guidelines with which I was supposed to conduct myself. I decided that one of the most pertinent things I could do was making myself useful to mentors through effective contributions to their livelihood realization. What resulted from my personal initiative to embody this decision was my limited yet significant participation in the mutual realization of livelihoods along the manners of my mentors and of their homeland. My participation emerged as a non-formalized apprenticeship in living as a Canadian Tsaatan.

Anthropological Apprenticeship:

One of the experiences most recurrent during my fieldwork, especially in its beginning, was answering the question ‘Чатахы?’ (‘Able?’) with ‘Чатана’ (‘Able’). As Dukha livelihoods are indissociable from the totality of people’s lives, most moments among my hosts were like trials in the endowment (or not) of the abilities necessary to living in the taiga as a reindeer herder. I developed many of those abilities by immersing myself in the Taiga and in the practice of Tsaatan livelihoods, activities which afforded me with firsthand experience of learning through practice. This experience sheds visceral insight into the musculoskeletal and cognitive processes of both learning and developing skills involved in the execution of Dukha livelihood practices. Great encouragement was hearing mentors exclaim ‘яг!’ (‘exactly, just right!’) when I understood something or ‘яһзаа!’ (‘form’, ‘manner’, ‘character’, ‘style’, said with emphasis) when I performed tasks with relatively impressive effectiveness and skill. Of utmost importance to my effectiveness as a participant in livelihoods was the ability to tie diverse knots. Two knots in particular, and the relational fields their practical applications afforded me to participate in, catalyzed practical pertinence of my presence among hosts. One of these knots serves to securely and conveniently tie an animal to a tree, peg or post, whilst the other is practiced in hobbling reindeer. Both knots are effected using a rope usually fastened to an animal’s halter. In the rarer case of tying oxen in place in the Taiga, this rope is fastened to the beast’s nose ring.

The first knot consists of forming a loop by wrapping the standing end of the rope, pulling it from the direction of the animal around the working end (which is wrapped around a peg or pole) and wrapping the working end around the standing end, before bending the former into a bight which, after being slipped through the original loop, is fastened by either human or animal pulling on the standing end of the rope. When tying reindeer in place, they often repeatedly pull on the rope in trying to avoid being fastened in place, both rendering the initial phases of the knot more challenging, and effecting the last movement of the knot for the herder. Once fastened the knot further tightens if the animal pulls away from it, yet remains effortless to untie by pulling the working end of the rope – a feat reindeer would lack the dexterity to accomplish if they were to think of trying. This knot, although tightened as flush as possible around a root, horizontally laid

wooden beam, or peg, must be fastened loosely when done around a tree in order to avoid the rope coiling over the knot as the attached reindeer circles the tree until it potentially strangles themselves.

The second knot consists of passing the rope between the reindeer's forelegs before wrapping it around a hind leg²³, passing the working end around the thigh from outside to in, and restraining it in a loop fastened by weaving the working end over and under itself in a variety of possible ways just above the knee joint. Once again, the initial phases of the knot are rendered more difficult, and the conclusive phase is assisted, by the reindeer's often dynamic efforts to avoid constraint. Here the reindeer pulling its head away fastens the wrap around its leg while the herder's fingers are binding the loop. Whereas the first knot is meant to be convenient to untie, the hobbling knot minimally sacrifices convenience for the extra security of its tightness. Un-hobbling reindeer as they try to shake, hop and kick themselves free from one's grasp engenders more affinity with and understanding of the knot as its history of creation is retraced in its undoing.

I learned the knots by observing others tie them, and by practicing on my own and around mentors to mimetically reproduce the latter's movements until I understood how the rope's movements make the precise combination of folds and wraps which interact together to create these particular knots. I only *really* learned and developed ease with the knots once I successfully performed them in real livelihood practices. I appropriated the knot and formed my own unique fashions of moving my hands and the rope in effective execution of these knots. I often engaged a playful competitiveness among my hosts in the practice of these knots, catching as many reindeer as possible and tying them down appropriately before others took the animals from and tied them themselves. This refined my skills whilst simultaneously demonstrating to my hosts my pertinence as a livelihood co-practitioner by virtue of my ability to catch reindeer (sometimes broken free from hobble), as well as un-hobble reindeer and tie them in place, all in quick succession.

Whether involving other animals or not, tying and untying knots requires finger dexterity and suppleness in order to allow the rope itself to be supple in handling, a characteristic helpful to its binding on itself and around other materials. During my fieldwork I employed knots previously learned through canoe-tripping, notably bowlines and hitches, as well as improvised knots functionally pertinent to unique situations which arose. One important way in which I employed knots was in occasional structural adjustments to my own ortz in West Taiga, both in September and October. Much of domestic life in an ortz involves knots. For example, in order to keep snow from entering the October ortz with my boots, I tied bush branches harvested nearby together into the form of a broom with a strand of tarpaulin that had severed from my roof, and used this broom to brush and tap the snow off my boots and then sweep the snow out of the ortz through the door²⁴. In making the broom I reproduced the techniques that I had inferred from observing already-made

²³ In my experiences handling hobbled deer in both East and West Taiga, the left hind leg is usually the one restrained.

²⁴ Follow link to see video 3 (V3): <https://www.youtube.com/watch?v=QDb411zXbOU>

brooms. Even when watching others employ skills, much of the skills' specificities were inferred through logical deduction and creative imagination. Exemplary of such a learning process are my experiences crafting picks for cleaning tobacco pipe shanks.

After watching Xadaa make a pipe pick, and noticing the visual traits of the specific species of bush used, I set off to make my own pick. I began by walking to open areas nearer water where I most often found the specific bushes, discerning a few of the most appropriately sized and shaped branches, and severing them from the stem with my hands. Back outside Dawta's orts I reproduced the knife movements I had sensed Xadaa do with my body's imaginative empathy, scraping the blade of my knife back and forth along the branch and thereby shedding it of its inner and outer layers of bark. The appropriate pressures and angles to engage, as inferred by watching Xadaa, were verified and modified in practice. Discerning the exact spot at which I should cleanly sever the stem with my knife to finalize a shape required speculative imagination and intuitive action. Whereas Xadaa used his thigh as the surface atop of which he rested the branch to work it, the first time I made picks I used a split log as working surface, as I was not yet comfortable enough with the practice to exert pressure on a thin piece of wood using my leg and the blade's edge facing it. As time went on, not only did I develop the ability to effectively harvest and transform stems into picks, but I also became comfortable using my body, boots and deel as working surfaces, just as I noticed mentors do.

Another, more extreme example of such a learning process, and of how it can be engaged in the wielding of wood with steel blade, are my experiences making a floor plank out of a log. At their winter camp in Shangmak, I assisted Baatar and Owgen in constructing the final half of the former's unfinished cabin's floor. Before placing the planks into flooring positions we had to first manufacture those planks. I watched the brothers select standing larch trees, in a radius of 150 metres from the cabin, that were long, straight, minimally gnarled with knots, and of desired widths before cutting them down with Baatar's chainsaw. In between trips carrying finished planks to the cabin, I watched the men transform the fallen trees into usable planks and assisted them as I could. Using a wooden pole cut to size as a unit of measurement, one man or the other would cut the tree into logs of desired lengths with the saw. After helping them clear branches from the logs with a small, relatively dull axe that Baatar offered for the task, I would collect the debris and stack it in piles which would eventually serve as timber for controlled trash fires. In tandem, the brothers would take turns effecting the following tasks.

First, two opposing quarters of the log's bark are shaved off with an axe, often using feet and legs to help immobilize the log upon the blade's impact. Once the length of the log is shaved off on both sides, splitting the log into two relatively equally sized planks begins with the decisive first axe hit on either base of the log. With power and precision, the former rendering the latter more challenging, an axe blade is buried in the middle of the base, perpendicular to the shaved lengths. Another such incision is struck in the middle of the opposing base. It is the decisive cracks in the log which these initial incisions create that are subsequently followed in both directions until they meet and, in so doing, sever the log into two separate pieces. This severance is executed by

powerfully and precisely burying axe blade(s) into the middle of the shaved quadrants along the full length of the log as well as, especially in the splitting of logs wider in diameter, with wooden wedges crafted on the spot. Once shaped out of shorter logs with an axe blade, the wedges are placed in the cracks and hammered with the blunt sides of an axe head. This hammering allows the wedges to further open the cracks in which they are inserted, allowing cracks to widen, and to release previously stuck wedges that can subsequently be used further along the cracks. The opening of these cracks is facilitated by more burying of the axe into the non-severed sections of the log rendered more taut, and thereby more prone to rupture upon receiving shocking incisions, by the wedges squeezing as far as possible into the cracks. Once the log is severed into two planks, the inner faces of the former log are shaved down to smooth, flat surfaces with an axe.

After watching the brothers manufacture several planks, with Baatar's permission I tried myself at splitting a relatively thin log with the small, dull axe. Albeit great effort and care, I only managed to make one functional plank out of the log. Although it took longer to be crafted than the brothers' planks did, and was not nearly as straight, flat or smooth as theirs, it was joyfully employed in the assemblage of the cabin floor, placed in the northeastern-most corner. The power with which the axe must be frequently struck in splitting the log is challenging to complement with accuracy and, by virtue of the irreversible structural effects of sharp steel encountering wood with great momentum, is thereby risky. The primary risk it entails is that of wasting a log, and the time dedicated to preparing it, if off-target blows compromise the practical structure of the wood, rendering it ineffective for use in achieving its intended goal. Another evident risk is that of wounding oneself with misguided axe swings or by not controlling the axe's occasional unpredictably erratic bounces off of wood. The element of risk is both an important reality faced whilst practicing livelihoods in the Taiga, and a significant element of the generative context in which emerge freestyle bearings and the skillful performances these afford.

Risky Business

Many of the risks which can characterize Dukha livelihood practices emerge largely as a result of the tools employed, as well as of the physical characteristics and remoteness of the places in which work is done. By virtue of the great distances separating these places from emergency medical assistance or intensive care services, their remoteness increases the risks associated with dangerous practices. Be it in the form of knives, axes or saws, blades are frequently wielded in the execution of myriad common tasks. An important example of this is in the crafting of firewood. This process usually begins by obtaining large fallen logs from the forest floor, or by cutting down a dead, standing tree with a beat-up chainsaw and no safety equipment. The latter case involves not only the risk of cutting oneself with the saw, but also of being crushed by the tree or hit by its loose segments falling from a significant height – dangers suffered even by professional lumberjacks. Trees are then sectioned into 3 feet long logs which, after being carried to camp, are further sectioned into foot and a half long pieces with a chainsaw, employing effective techniques

which would nonetheless make experienced, safety-oriented woodsmen cringe. In sectioning these logs practitioners commonly use their feet, boots unclad with steel-plated protective material, to stabilize the pieces of wood no more than a foot away from the rapidly spinning metal blade devouring logs and spitting out sawdust in its wake. Occasionally an old, rusty tandem handsaw is used instead. Regardless of the sectioning tool used, the logs are split with an axe before being burned. Logs are often placed on a larger log or on a stump before being struck with the axe. A noteworthy particularity of Dukha firewood splitting technique, previously unbeknownst to me, is how practitioners commonly hold the logs or pieces of logs with one hand as the other strikes down the blade²⁵. Although involving the risk of cutting one's own fingers or hand, this technique affords significant control over the wood, thereby increasing the speed and effectiveness of chopping. The dexterity and precision necessary to employ this technique without engendering bodily harm are also put to use in slicing split logs into thin strips of kindling with a cleaver, a fire-starting alternative to dry larch branches when the latter are not readily available.

The dexterity and precision in question are catalyzed by a thorough understanding of how diverse blades transformatively interact with various materials. In the cases of peeling potatoes or crafting axe handles such dexterity, precision, and understanding are complemented with a responsiveness that affords the safe employment of a technique which once more increases both the danger and effectiveness of work. The technique at play consists of skimming the surface of a material towards one's own thumb, the latter stabilizing the material in question, with just enough force to sever the material whilst avoiding incisions in the thumb²⁶. These aptitudes are complemented by the toughness of practitioners' skin, rendered significantly strong through lifetimes of handling rough materials and of healing lesions suffered.

During my first twenty four hours in the Taiga, I mended a burn on Biijei's one year old niece and a cut on a slightly older toddler, the wounds caused by woodstove and knife respectively. I share this information to demonstrate how common wounds can be in the Taiga. It is no wonder that Dukhas such as Tuya retain traditional knowledge and practice regarding natural bandages, as will be further discussed near the end of this chapter. After only a few months of "constantly rub[bing] against tools or materials" (Ingold, 2013: 117) in order to effectively inhabit and work in the taiga, my hands displayed the marks of handling abrasive wood, rock, blade and animal²⁷. Given another twenty-four years inhabiting the Taiga, the cuts and burns covering my hands would perhaps harden into tougher, more calloused skin similar to that which constitutes the epidermis of Owgen's hands which, "[g]narled and weathered by the exactions of their respective tasks" (Ibid: 117), are some of the most rugged looking hands I have ever seen or, better yet, observed at work, and those hands 'tell histories' (Ibid: 117) of that work.



²⁵ Follow links to see video 4 (V4): <https://www.youtube.com/watch?v=O29Nij1JzJI> ; https://www.youtube.com/watch?v=VOZ_qtqnQOs ; https://www.youtube.com/watch?v=Orwo_IDrUjo

²⁶ Follow link to see video 5 (V5): <https://www.youtube.com/watch?v=PICTdYgPO5M>

²⁷ Follow link to see video 6 (V6): <https://www.youtube.com/watch?v=nXs8koNPga4>

In addition to being remote, the places in which Owgen and other Dukhas work are characterized by natural features that can involve significant risks. Noteworthy features include severe cold, significant cliffs, and uneven grounds littered with wood and rocks, many of them sharp. The cold can induce frost-bite, as well as cover waterways with ice that, if broken through, can render escape from drowning difficult. Be it migrating, fetching wood, or retrieving reindeer



from pasture, people commonly move alongside cliffs or severe inclines, often featuring sharp rocks. Without refined balance and sure footing, falls could result in serious injuries or death. Whether moving alongside cliffs or not, Dukhas must also navigate risky situations in ways which avoid harm coming not only to them, but also to their livestock. Examples of this are keeping wolves away with the presence of guard dogs and, in more severe situations, by firing rifle shots into the air to frighten the predators. The daily exposure to various forms of risk directly incites Dukhas to develop their skills because failure to skillfully perform would result in consequences that could be fatal. As failure is not an option, the only alternative is to succeed with skill and with the ability to capitalize on luck. In similar fashion to extreme lifestyle sports such as snowboarding, the surmounting of risk through daily tumbling and fumbling involves the development of comfort zones which afford practitioners with the poise and lucidity of acrobatic ease.

Acrobatic Ease and Comfort Zone

Through extensive engagement with the Taiga, triumph over risk, and diversity of activity, Dukhas form extremely expansive comfort zones. The comfort with which mentors engaged just about any situation I witnessed them encounter, even those which seemed harsh and those which *were* harsh for *me* as I lived these alongside them, affords mentors with the poise with which highly performant, often acrobatic, improvisatory movements can be conducted. Freestyle bearing emerges in this comfort and in the outstanding improvisatory movements with which it affords practitioners.



Comfort Zone And Environmental Immersion:

My Tsaatan mentors often impressed me with what in the world of outdoor adventure sports is called ‘hard-core’, or extremely developed, ‘comfort zones’, meaning resiliently acrobatic parameters within which a sense of wellbeing and practical functionality are sustained in rugged or challenging environmental conditions. Hard-core comfort zones emerge as results of effective acclimation to a habitat, especially when the acclimation is embodied extensively over time along nomadic life itinerancies. Through extensive exposure to powerful weather, rugged terrain, messy traces of animal presence, and risk, my mentors in the taiga demonstrated acute abilities to deal with harsh weather, to move and position their bodies in ways which supplely integrate the latter to diverse terrains, to be at ease with being surrounded by animal by-products, and to engage risky situations with comfort and poise. As has been discussed, whether in or out of indoor domestic spaces, to some degree or another Tsaatans are constantly exposed to meteorological phenomena. Through this exposure, tolerances to being wet and cold are developed. Tsaatans’ tolerance to wetness allows them to move out of doors in the rain and snow without much in the way of water-resistant materials other than their rubber boots and old plastic ponchos. Heading out into September rain-drenched tundra on horseback dressed in his rudimentary poncho, Tartak displayed more comfort than many of my canoe-trip clients albeit their being dressed in state of the art Gore-Tex rain gear in half as much precipitation for half as much time of exposure. As the autumn gave way to winter, I witnessed on a daily basis how significantly more tolerant of the cold Dukhas were in comparison to me. For example, upon one outing to fetch firewood with Baatar and a pack-reindeer, I noticed how he was much quicker and more unrestrained than I to kneel in the snow as we cut a fallen tree with a tandem saw, even though I was wearing Gore-Tex pants and he wasn’t wearing any such gear that would keep his knees and shins from getting colder with the humidity. He also seemed more comfortable than I was holding the cold saw handle. As will be highlighted in chapter 6, Dukha men and women display significant ability in warding off the cold when butchering animals and cleaning the latter’s organs during the winter.

Comfort in rugged terrains is not just demonstrated through skilled practice, but also, and perhaps *especially*, through rest. When I went out with participants to gather firewood, or when I built walls, floors, roofs, and doors with them, we commonly interspersed our work with breaks. These breaks would usually consist of nestling ourselves comfortably into nooks in the bumpy terrain using bumps, logs or rocks as arm rests, and rolling tobacco before smoking it. We would then get back to work before finishing the cigarettes, allowing these to hang from our lips or, especially in the case of Marchi, from the tongue as the cigarette would be moved around from one position between the lips to another. Just as I can now more effectively and creatively nestle my body into a place’s physical folds and allow myself to feel the resulting comfort more than I had once been able to as a novice canoe-tripper, or than most of the clients I guide on expeditions can, Dukha mentors appeared to comfortably nestle themselves much more effectively and enjoyably than I did. Such comfort is also translated into acceptance of what many city-dwellers would perceive as uncomfortably gross. As non-human animals abound around camp so do their

droppings and urine, and so it is common to not only see poo and urine on a daily basis, but also to walk or even kneel in it. Exemplary of this is how I knelt in droppings as I stabilized two-year-old reindeer while Baatar and Owgen castrated them. Another animal by-product that is intimately associated with is blood. By the muscular relaxedness and the lack of hesitation with which participants moved their hands when handling bloody materials, it is evident that their comfort zones include significant ease in touching animal blood. Dukhas regularly wash their bodies and clothing, and so their functional comfort with 'dirtiness' is an aptitude of environmental integration rather than a lack of hygienic standards.



Being this comfortable with life in the Taiga is an important part of the ability to effectively engage risky situations because one succumbs much easier to danger if one is not at ease with the situation at hand. A particular environmental risk, encountered within my first week in the Taiga, is that of forest fires. Albeit the potential dangers to lives, possessions, and livelihoods associated with wildfires, my mentors took these dangers into account without stressing over them. As Jargal spoke with people in Tsagaan Nuur using my satellite phone whilst her radio communication reception was momentarily out of service, about an approaching fire (then 15km away) any worries I may have had concerning our safety in relation to the fire were dispelled by the calm, playful demeanor of my hosts comfortably sprawled out on the ground chatting. When I asked what we should do if the fire kept approaching, they told me not to worry as the fire would not reach us for at least another two days, and that if it did we could simply pack up and change locations. Nonetheless, a few men from nearby encampments and ours joined firefighters in the efforts of digging firewall trenches and managing controlled counter-fires in order to subdue the fire. In addition to the direct actions against the fire, according to what Tartak and Biijei's brother Galaa (a shaman) told me, an elder employed a special 'zan' stone found in an animal's body to draw rain and snow into the area to help extinguish the wildfire, and the desired outcome of all efforts was eventually obtained. Whichever way in which Dukha comfort zones are expressed, they embody acrobatic ease and improvisatory freedom.

Acrobatic Ease And Improvisation:

Moving through the taiga involves conditions which favour the emergence of freestyle bearing in the sense that this habitat's ruggedness is most effectively interacted with through movement qualified by improvisatory freedom and acrobatic ease. The motor dynamics which occur in accordance with moving along paths in the taiga with such freedom and ease also emerge in the execution of other, more stationary activities such as crafting axe handles as well as stone

or antler carvings and knives. Whether stationary or in transit, any action is always moving *in* the taiga, and therefore the environmentally enmeshing conditions which happen to favour the emergence of freestyle must be interacted with in order to effectively engender intended goals. As will be evidenced in subsequent chapters, the motor dynamics which emerge along with freestyle movements in the moments of performance are also engaged in long-term decision making processes such as choosing migration routes and settlement patterns, as well as managing livestock in ways which successfully mediate domination with trustful permissiveness. In order to edifyingly conceptualize the dynamics of taiga-infused freestyle, and how these are expressed in decision making processes that are abstracted from actual physical performances for extended periods of time, I encourage you to allow yourself to *sense* what freestyle bearing feels like in practice by *feeling into* my descriptions, photos and videos of Dukha livelihood practices in real performances.

The most frequently occurring practice of moving through the taiga along transitory paths – of *wayfaring* – is performed on foot. Walking through tundra, bogs and forested areas necessitates sustained awareness of one’s environment and of one’s movement in it. Features such as uneven ground, roots, bushes, trees, branches, rocks, and waterways must be taken into account if they are not to be stumbled upon²⁸. I frequently noticed how much men my own age, younger, or older often walked faster than me even though, as I measure just over six feet, my legs are longer than many of theirs are. Most participants also often displayed much more elegance in their acrobatic ease and *with-the-flow* trailblazing. In addition to mentors’ extensive habituation to the activity of walking through such terrain and to the relatively high altitude in which walking is performed, they walked faster than me with the speed with which they improvise goal-oriented movements, and the instinctual understanding of how one’s own body moves most effectively and, often, most effortlessly as possible. As I followed Xüche a few kilometers through snow, at places sparse and others half-foot deep, up and along mountainsides when retrieving and herding reindeer back from pasture to camp, I noticed the intelligence and grace of his movements. Engaging diverse angles and directions in which his muscles can move, he placed his feet in positions which most comfortably corresponded with the specificities of the diversely angled ground. He swooped his hips, thorax, shoulders, arms, and spine around in ways which allowed him to move around the obstacles of the tree-, rock-, and gully-cluttered terrain in accordance with a continually improvised itinerary which efficiently attained places that served as azimuths on the way to finding thirty-three reindeer.



Intently observing Xüche move, I tried following his path but, as our body shapes and sizes do not match, it was not the most effective way for me to keep up with him, even less to look out

²⁸ Follow link to see video 7 (V7): <https://www.youtube.com/watch?v=POBZRP7QJDK>

for reindeer tracks in the snow as he was doing. I therefore blazed my own trails behind and alongside of him, doing my best to move my body with the suppleness necessary to walk as quick as possible along a continually improvised itinerary, which took into account what I anticipated Xüche's itinerary to become, while watching how Xüche tracked the animals, and trying to emulate those techniques in understanding the storied landscape. Moving this way and thereby drawing a lot of oxygen through rhythmic breathing, I engaged a flow in which my movements emerged in practical resonance with features of the environment which present themselves in part as obstacles along an infinitely diversely navigable field of past, potential, and actual itineraries. Whether tracking reindeer, fetching wood, or finding an appropriate spot to defecate, there were so many potential paths to engage. Trails of diverse sizes, traced through years of many animals wayfaring, cover the taiga like capillaries, arterioles, and arteries shooting into unique directions and meshing with other paths, at times disappearing into or springing from one or another.

Navigating this abundance of potential sinuous trails allowed for freedom in the ways and directions in which I could move. This qualified the task of walking with an easily engaged playfulness that, especially due to trails being covered by and surrounded with obstacles, allowed me to perform acrobatic feats with relative ease in manners which creatively carried me through the taiga and effectively engendered the realization of my intended goals²⁹. The 'ease' of such acrobatic ease feels like what in the way of Tao is called *wu-wei*. Wu-wei, translated from Chinese as 'non-action', can be understood as action which is *not* forcefully exerted *against* the grains along which living things naturally flow (Watts, 1975: 76). The phenomenon of wu-wei significantly resembles extreme sports practitioners' feelings of 'going *with the flow, in the moment*'³⁰. I believe this flow is appropriately, whilst perhaps unintentionally, alluded to in Ingold's (2013) presentation of making as participating with active materials, 'joining forces' with them, "[...]bringing them together or splitting them apart, synthesizing and distilling, in anticipation of what might emerge" (21). Movements which glide along the 'flow of materials', or the 'grains' of the world, are effortlessly enacted in that they concord with the ways in which living materials move, don't move, and interact. Far from being a lack of action or power, wu-wei is practiced in every aspect of life. Wu-wei is "[...] the lifestyle of [...] knowing the principles, structures, and trends of human and natural affairs so well that one uses the least amount of energy in dealing with them" (Watts, 1975: 76). Without proclaiming any intrinsic spiritual relation between wu-wei and freestyle bearing or Ingold's conception of making, I admit that I experienced the ease which qualifies freestyle acrobatics as a form of wu-wei. Furthermore, I suggest that the notion of movement which yieldingly propels itself along with the powerful flows and ebbs of materials' innate interactive dynamics can help in conceiving not only the practical effectiveness of freestyle task performances, but also the dynamics of environmentally sympathetic correspondence at play in long-term processes such as migration and livestock grazing. Acrobatic ease and the improvisatory skills with which it is embodied are significantly called upon in riding

²⁹ Follow link to see video 8 (V8): <https://www.youtube.com/watch?v=77EuNNRIUK0>

³⁰ Follow link to sound clip 2 (S2) : <https://www.youtube.com/watch?v=3TMUw01B07Y>

reindeer and horses because these practices' movements and decisions' immense potentials of execution are exponentially increased (in comparison to walking) by the joint participation in between unique deciding bodies of different species that characterises riding.

Whether the other body participating is a reindeer or a horse, the joint participation involved in riding is embodied on the part of the human through improvisatory negotiation with the steed. Drawing on my own experiences riding animals in the taiga³¹, and on my observations of my co-inhabitants riding, I suggest that a rider's negotiation consists of finding balance between asserting his or her will over the steed and permitting the steed with freedom. Riders effectively induce their mount to move where the former want to go, while allowing the latter to move how it wants along the itinerary willed by its rider. Allowing the steed to move much in accordance with its will sympathises a rider's itinerary with the often minute specifications of the particular path which along which the pair fares. In addition to engaging the steed's high-performance intelligence regarding the physical layout of the terrain, allowing the animal relative freedom of movement makes the task of riding much less exigent on the rider's exertion of energy and authority. In this way, the rider can more easily execute tasks effectively when entertaining productive relations with animal co-participants. Both asserting will and allowing the exertion of the steed's will are embodied in acrobatic movements which emerge both instinctually and anticipatorily in the moments of riding.

In order to steer a steed along a willed itinerary, the rider must exert diverse intensities and directions of force through the arm(s) and legs. Arm power is used to move a steed's head and neck into intended directions using the reins, whilst leg power is used to secure the rider's body on the steed's body and to impel the latter to keep or change a particular pace. Horses' reins form a loop extending towards the rider from its bounded positions on each side of the halter, whilst reindeer reins are usually shorter, and bound only to the halter³² on one side of the animal's head. As I learned guiding a pack horse and riding another from Xarmai to an autumn camp in Xuulag with Erdene and Jargal in October, the latter's family horses' paces are impelled much more like reindeers' than like those of every horse I have ridden which was not domesticated by Dukhas. Whereas I impelled my rental horse forward by squeezing its flanks with my shins and heels or whipping its bum with a rope, I figured out on the fly that Jargal's horses are impelled most effectively by pulling forward along the left side of the steed's head, effectively yanking its chin further ahead in quick, rhythmic succession, just as one would do with reindeer. Regardless of pace-impelling techniques, executing the movements which propel animals and secure oneself atop of a steed along through rugged, obstacle-ridden, mountainous terrain necessitates significant prowess of improvisatorially performed corporeal strength, balance, and suppleness. This prowess in improvisatory acrobatics is also engaged in allowing animals some freedom of movement.

³¹ 7 full days of riding on horseback, 2 full days on reindeer-back migrating, several other rides on wood runs and on one 'tsaa yawax' (see chapter for more information on tsaa yawax).

³² Reindeer halters are made of old clothing scraps and/or store bought straps joined together with knots.

In order to most effectively allow a mounted steed to move freely, without losing my balance and control over the animal, I relaxed my body and let my core and thigh muscles to secure myself on the steed's back while allowing my hips and thorax to yield to the movements exerted by the steed. Albeit the engagement of my muscles in this yielding, not as much energy was needed to be exerted in comparison to impelling paces and directions. Observing Dukha riders alongside of whom I travelled, I emulated their relaxed, stooped positions which, although never still, appeared to maintain an effective center of balance and control which flowed along natural grains of movement through specific places. This outward display, and in my case an embodied feeling, of ease while engaging high-performance acrobatics can be described and experienced as a poised embodiment of steez, in similar fashion to the ease with which some snowboarders effortlessly slash snow off of a mountain spine or fly through the air spinning their bodies in off-axis and inverted rotations. This steez, characteristic of freestyle bearing, is expressed in the resourceful execution of an important diversity of tasks inherent to Dukha livelihood practices.

Versatility In Diversity

The realization of Tsaatan livelihoods involves plethora of different practices and tasks. This diversity in activities both requires and develops versatility of skillful performance. Versatility is expressed in the performance of diverse tasks, as well as in the diversity of ways in which a single task can be performed and in the ways in which a single material can be used. Diversity of task performance and material function affords practitioners with the improvisational ability to appropriately engage generative conditions as they arise. The versatility in skills and material uses catalyzes a resourcefulness with which both new and familiar materials can be wielded, shaped, and combined. As will be discussed further in the following chapters, the resourcefulness embodied in direct engagement with materials is also expressed in the creative approaches to engaging diverse livelihood practices.

Versatile Performances And Materials:

I observed my hosts and their friends perform a significant variety of livelihood practices, ranging across many enmeshed domains such as those of housekeeping, animal husbandry, nomadism, equipment crafting, artisanal crafting, and leisure. Although many tasks are habitually separated among genders, both women and men commonly perform tasks usually executed by people of the other gender. Milking reindeer – reserved for women – and butchering animals – reserved for men – are the only tasks I became aware of as performed exclusively by people of one gender. The variety of livelihood practices and their relative ambivalence regarding gender afford practitioners with extensive engagement with diverse and versatilely useable materials in the realization of diverse goals. The creatively diverse use of any material available embodies prowess in improvisatory experimentation and learned technical performance with familiar and

new materials. Taking into account how these practices are usually performed in rugged terrain and upon uneven surfaces, it is easy to conceive how such activity embodies freestyle bearing in practitioners' comfortable, creative, often acrobatic movements and intentional manipulations of materials. The improvisatory and practically flexible nature of such bearing affords practitioners with the creativity with which traditional and otherwise learned knowledge can be applied in poised behaviour that mediates unique nexuses of materials, people, places, and meteorological conditions. Crafting axe handles, axe sheaths, 'tatlaks' ('таглага': 'tatlak', buckled strap) and clothing are exemplary of such freestyle mediation of persistently unique generative nexuses.

In October I had the opportunity to, in between spurts of my own household work, watch and video-record Owgen craft a wooden axe handle inside his mother's orts. As Owgen had never before mediated this particular nexus of unique people, wood, blade, axe head, and environmental conditions with the intention of shaping a handle, this performance which I was witnessing was a unique, calculated improvisational execution of familiar techniques. Each one of his gestures and of their corresponding effects in the wood was a "[...] crystallization of ongoing current of skilled activity [...]", each a "[...] testimony to a life of working with the material" (Ingold, 2013: 44). Each gesture and effect was testimony to how traditional and pre-conceived architecture can be synergetically applied in improvisatory 'joining forces' with materials in and unique to the moments and places of making. Owgen sat on the ground by the radio and rope rack made of antler, hunched over his legs pointing straight West, axe rested against his stomach. At times the head rested against his stomach, at others the handle, as he flipped the axe and laid the large, strong and sharp steel head on the inside of his boots. Owgen focused his blade on particular sections at a time, rhythmically moving along the length of the wood in smooth, erratic yet rhythmic flow between axe head and handle butt. The movements of his blade emerged as interactions between Owgen's conceptual design and the particular piece of wood's unique embodiments of material specifications, such as grains, knots and wood densities, with which he is intimately familiar.

To make a practical, sturdy, and comfortable handle Owgen works out knots by both partially dissecting them, and yielding to some of their constituent grains with improvised movements of his blade. At times he uses fingers from his left hand to push the knuckle of his right hand clasping the blade of his pocket knife, directing the edge in varying acute angles so as to responsively slice in concordance with the movements of the grains. At other times he quickly runs the blade back and forth along the handle at a right angle, effectively shaving off the minute edges left over from slicing, rendering the wood smooth and thereby comfortable to handle. Having no particular work surface designed for handle-making, Owgen comfortably and supplely stabilizes and works the blade in many positions using his body, itself dynamically nestled into the uneven orts floor. This way of working without a premade work station is a common characteristic of task performance in the taiga.

In addition to wood, Dukhas also work antler, bone, and stone with their blades. Bone is wielded to make things such as bag rims, antler to make sheaths³³, hooks, handles, and commercial carvings, and soap stones to make figurines also intended for sale. In the shaping of any of these materials their constituent grains are both dominated and yielded to by practitioners. As the physical properties of these materials, and the intentions driving their practical transformation vary widely, diverse aptitudes are required and developed in the improvisatory resolution of structural challenges into functional, inexactly preconceived realization of intentions. This fashion of performing is also expressed in work that does not emphasize the use of blades, such as in the practices of making tatlaks and clothing.



A few days before moving from autumn to winter settlements, as Tartak and Tuya made a written tabulation of their total reindeer count in one of their daughter's notebooks, and as Gakhai herself played nearby, Marchi made a prong for a tatlak buckle out of an old nail. Assisted by the conceptual, manual, and comedic contributions of Owgen and of Tartak's sister's husband Agwa, Marchi worked the strap and nail into shape on the split planks constituting the floor in the southern half of Tartak and Tuya's ortz. Using an axe butt as hammer and floor planks as stabilizing surface, the pointy end of the nail was beat blunt and into a flat shape which fit into the prong-groove in the buckle frame. This prong's shape was subsequently fine-tuned using a file. The head of the nail was then fastened into a hole in the tight bight formed by the strap sewn in a rigid, folded position. The leisurely participation of many people in this one task afforded practitioners with creative brainstorming and subsequent actions, an effective way of applying socially informed decisions in improvisatory performance. The versatile use of nail, axe, and flooring is exemplary of the resourcefulness Dukhas embody in the manipulation of familiar and new materials to realize diverse intentions.

Resourcefulness:

My co-inhabitants demonstrated resourcefulness in the creative, diversely practical ways in which they manipulated hand-made, store-bought, and brute environmental materials. Making mittens, collecting natural bandages, repairing crutches, as well as using and repairing electrical and mechanical equipment all exemplify acrobatic and improvisatory decision-making enmeshed with freestyle bearing. My co-inhabitants also expressed resourcefulness in their creative livelihood diversifications which complement animal husbandry and foraging. My own experiences of becoming more and more resourceful, the longer I was into my expedition among Dukha people in the taiga and the larger my comfort zone in this habitat became, impel me to suggest that comfortable performance of diverse tasks with diverse yet limited³⁴ materials along a

³³ Follow link to see video: <https://www.youtube.com/watch?v=K0JDm-N2tmY&feature=youtu.be>

³⁴ Understood here as 'limited' in comparison to the diversity of potentially available materials in places such as rural areas of Canada where both brute environmental materials and various store-bought objects are readily obtainable. It is important to note that there are many items sold in Tsagaan Nuur that my hosts hadn't purchased, and that had thereby not burdened hosts with extra weight when moving from one settlement to another.

nomadic way of life in wilderness places necessarily engages a resourcefulness which allows oneself to effectively perform a wide variety of livelihood practices.

Paraphrasing a unilineal conversation I had with my camera during migration in West Taiga, resourcefulness is a craftiness which makes creative use of things, such as a nail cleaner out of a stick. Quoting that very conversation, ‘resourcefulness’ is: “[...]you know, using what you got and finding new ways to use the things you got to do what you need”³⁵. As the remoteness of taiga settlements limits the availability and diversity of store-bought items, and as nomadic life deters people from possessing more than they can transport, resourcefully making diverse usage of available materials allows people to effectively realize tasks without necessarily having access to tools specifically designed for the execution of such particular tasks. Such resourcefulness is expressed in improvisatory experimentation regarding the fashions in which familiar materials can be wielded in new ways, and in the engendering of intentions which reach beyond materials’ usual and familiar practical functions. Such creative, improvisatory experimentation also lies at the heart of another form of resourcefulness expressed by Dukhas: the ability to learn new skills with new materials, and thereby inhibit the potentials of engendering new forms of ends, and familiar ends in new ways. Before discussing the skilled and improvised uses of items such as solar panels, batteries, satellite dishes, chainsaws, and motor vehicles, I will discuss the creative versatility of wielding materials beyond their usual functions, such as transforming old coats into mittens.

In October and early November I frequently watched Jargal at work on the floors of her orts and cabin sewing mittens for Erdene, Owgen, and Tartak to wear. In similarly periodic fashion to my observations of her sewing between executing my own household tasks, Jargal periodically engaged sewing tasks in counterpoint with many other rhythmically realized tasks such as tending the hearth fire, making and serving tea or food, cleaning, and collecting water or snow. And so I rhythmically observed her begin and complete mittens over the course of several days. She began by cutting out, from sheets of coarse, padded cotton collected from old deel coats, shapes of mittens concurring with her idea of the items’ eventual recipient’s hand size and of the ways in which sewing would alter the cut-out’s shape and size. She then joined together pairs of mirrored cut-outs into one mitt at a time using a portable sewing machine laid on the floor in front of her half-cross-legged seating position. Supplely hunched over the machine, Jargal would use her fingers to draw the string from its bobbin, balancing in a small bowl, and feed the string into the machine’s arm shaft, and sometimes down along its needle bar to the needle, in freestyle fashion. Her dexterous and responsive arm, hand, and finger movements mediated the nexus of unique rolls of string, bobbin movements in the bowl, and technical challenges emergent in rhythmic hand-spun driving of the metronomically designed wheel mechanism, and in the stabbing of unique pieces of cotton with a rhythmically driven needle. By mediating these ephemeral generative conditions in graceful, technically proficient bearing, Jargal skilfully transformed available materials into unique, functional mittens for her sons and son-in-law, just as winter was settling in.

³⁵ Follow link to see video 9 (V9): <https://www.youtube.com/watch?v=7D4deolhLNk>

The creative, improvisatory use of materials exemplified in making things with a sewing machine and reused fabric is otherwise expressed in the syncretic practices of using materials of both pharmaceuticals and traditional medicines. Some of my co-inhabitants, especially elders and children, ingested a variety of pharmaceutical pills, some acquired by personal prescriptions for long term use and others gifted by tourists for occasional use, as remedies to diverse ailments of both occasional and chronic natures. As many of these pills' posology and intended uses are indicated in foreign languages and at best translated into Mongolian³⁶ or alluded to with body language by tourists, the use of such pills is often characterized by improvisatory yet prudent experimentation. Rather than replacing traditional medicinal practices, pharmaceutical pills are



wielded in tandem with medicinal materials gathered in the taiga, such as 'чонийн өвс' ('wolf-grass') leaves and leafy lingonberry³⁷ stems used for boosts in vitality and in vitamin C respectively. Once, as Tuya was out on a wood-run with Marchi and I asking Marchi to cut a specific tree for her, I noticed her pick small sheets of pine wood whose particular phase of decomposition afforded it with a soft, malleable, absorbent sponginess. She later explained that she collects such sheets as bandages in the case of cuts. Living or dead, trees commonly feature as versatile materials prominent to the execution of many other tasks such as equipment repair.

In September I watched Dawta make use of a tree root as work surface when repairing the hand-made crutches he walked with while nursing a fracture in his tibia suffered by falling off his motorcycle. Stabilizing old salvaged nails with pliers on a larch root protruding from the ground near a solar panel outside his orts covered in yellow larch needles, Dawta hammered the bent nails into shape with a small hammer until they were straight enough to use. Once straightened, he would hammer the nails through the crutch pads and into fixed positions in the crutch uprights. Dawta's resourceful reuse of nails and versatile use of a conveniently placed tree root significantly contributed to his effective crutch repair and thereby to his ability to walk. The art of repair, as well as the resourcefulness and versatile use of materials intrinsic to its practice, abound in particularly experimental ways in the use of diverse electrical and mechanical equipment. As repair can often emerge alongside of use, my co-inhabitants' repair of such equipment can be understood as a rhythmic tinkering only minimally extricable from practice rather than as a domain of activity completely distinct from practice. For this reason, I present the resourcefulness related to the repair of electrical and mechanical gear in tandem with the improvisatory ways in which Dukhas integrate new technologies to their lifestyles.

As electricity is used to power household items such as televisions, satellite dishes, long-distance radios, walkie-talkies, mobile phones, and portable digital music players, every Dukha

³⁶ Using my abilities in French and Mongolian languages, and my English-Mongolian and Mongolian-English dictionaries, I wrote a Mongolian translation of the French indications for intended uses, directions, posology, warnings and expiry date of an anti-inflammatory medication manufactured in France given to Jargal by tourists.

³⁷ Follow link to video 10 (V10): <https://www.youtube.com/watch?v=Jii78HadfOE>

home I saw was equipped with at least one solar panel³⁸, and commonly with two or three of these. The portability of these panels makes these sources of electricity well suited for nomadic lifestyles, as they are easily packed with blankets atop of reindeer when migrating. Most families use car and motorcycle batteries to store and transmit solar electricity, whereas some families are equipped with larger, more sophisticated batteries designed for managing efficient use of electricity. In the case of automotive batteries, live wires coming from solar panels and appliances are connected to the terminal posts with (often makeshift) clamps or wire-wraps. As there are often many different wires connecting with the limited space on the terminal posts, and less clamps than there are wires, finger dexterity must be creatively engaged so as to immobilize multiple wires in strategic positions on the posts with the available clamps. Whichever the model, these batteries occasionally require tinkering in order to continue performing effectively. This tinkering is done creatively with the materials at hand. For example, the motorcycle battery which Jargal provided Sascha, Gana and I with in order to power a lightbulb in our orts had been previously repaired by replacing a broken plastic vent plug with a small stick.



Wood is also resourcefully used in the installation of satellite TV dishes, as these are commonly screwed or nailed into place on logs or tree stumps. The exact position of the dish is periodically tinkered with when reception fails or falters. It was a common occurrence for Owgen to go outside the orts at night, equipped with his lighter adorned with a small, built-in flashlight, and play with the dish's position in complete improvisation, moving the dish in response to the connection percentage numbers called out from people watching them erratically change on the TV screen and in anticipation of how his responsive tweaks would affect the connection. Sticks found nearby and snapped to a custom length are sometimes used to help stabilize the dish in the desired position once it is found.

Such sustained, resourceful tinkering is also demonstrated in the use and maintenance of chainsaws and motor vehicles. Although chainsaws are relatively new items³⁹ in the taiga, many of them have been purchased second-hand, and all of them are subject to robust use and transport



³⁸Equipped with my own portable solar panel and battery, on a daily basis I performed improvised mediations of tie-down designs with characteristics of the environmental materials used in installing my panel and battery. As seen in these 2 photos, my installations got became skilled as I intimated myself with the practice.

³⁹ According to my conversations with Dawta and Xöö, chainsaws seem to have been put into use since the beginning of the 21st Century.

in a rugged environment. In addition to standard maintenance⁴⁰, these items therefore require frequent tinkering in order to ensure sustained mechanical effectiveness. These gasoline engine saws, often held together in one place or another with tape, commonly cough out in mid-use or become difficult to start. Working alongside of Erdene, Owgen, Baatar, and Marchi I often watched one of them work away at the choke lever or some other component with a stick, screwdriver, axe, or knife, usually fixing the problem – at least temporarily – within a few minutes. Drawing on his huge comfort zone, Marchi would occasionally resort to covering the gas tank opening with his lips and blowing in the tank in order to help deliver fuel to the motor. This technique proved itself rather effective, and I have successfully reproduced its effectiveness back in Canada. Sometimes Marchi or someone else would light a match under the muffler to help catalyze the engine’s combustive start. This occasionally effective technique may be a cross-application of a method for helping motor vehicles start in the severe cold by lighting a fire underneath the engine. Both chainsaw and automotive maintenance are domains in which practitioners engage the improvisatory resourcefulness of what, in reference to independent automotive repair in remote areas such as in the case of Nenets reindeer herder Yuri Vella in Western Siberia, Liiva Niglas (2011) calls ‘bush-mechanics’ (45).



Since approximately 2011, previously-owned automobiles have been commonly used by Dukha people to move from perimeter regions of the taiga to places such as Tsagaan Nuur or other urban centers. Whereas large vehicles such as Russian-made UAZ mini-buses and SUVs or Japanese-made Isuzu SUVs are relatively rare, motorcycles are rather common, especially among men in their thirties and forties. Whichever the type of vehicle, ‘bush-mechanics’ abound as whatever pertinent materials available are employed in the frequent tinkering with engines and other automotive parts. It was a common experience for me to see or help my co-inhabitants or their friends work away at parts with knives, sockets, or sticks, using tape and reused rubber fittings or tubes, as well as carving makeshift automotive parts out of plastic bottles. The improvised creativity and positive morale needed for the vehicle’s owner to patiently troubleshoot and fix problems with limited tools, and without materials specifically designed for automotive use, are often significantly contributed to by the participation of friends or family members. Significant in Dukha lifestyles, such cooperativeness is expressed in teamwork through which many livelihood practices are realized.

Team Players

The Tsaatans with whom I co-inhabited and cooperatively engaged livelihood practices frequently demonstrated teamwork characterised by group synergy and playful, effective practice.

⁴⁰ Standard maintenance includes resetting and sharpening the chain.

Such playful and synergetic teamwork is exemplified in the practice of herding many reindeer into a pen and holding them within it while some particular animals are identified and removed from the pen for various reasons. While living in Jargal's autumn settlement in October I seized multiple opportunities to engage this practice with my hosts.

The activity would begin as riders coming back from pasture with anywhere from a dozen to 300 reindeer would drive the herd towards the open pen with their spatial positions and voice calls. Especially in the case of larger quantities of reindeer, many animals would stray from the herd and so riders would cooperate with pedestrians in driving the stray animals back towards the pen with strategic spatial positions and voice calls. We pedestrians would cover distinct areas around camp, each driving reindeer from within particular, loosely defined radiuses. Much as in the manner of 'zone defense' strategies in team sports such as football, hockey, and basketball, our strategic dispersal around camp afforded our cooperatively formed team with the size and mobility necessary to both effectively keep stray animals from dispersing, and drive them into the pen from our positions of containment. As such containment and directional driving frequently necessitated chasing after reindeer outside our respective positional radiuses, boundaries between individual zones were often blurred or renounced in order to swap zones with other teammates. For example, although Jargal commonly told me to guard a zone comprising both the southeastern entrance to the pen and an edge of a plateau from which a gulley drops down south towards the river which served as our water source, I frequently sprinted after reindeer and, while a teammate such as Agwa or Tuya drifted to occupy a vacant zone, took over theirs. The opposite would also frequently happen, where I would notice others drifting out from their zones and responsively sprint to cover their zone, often calling upon the person towards whom the drifting teammate was heading to cover my newly vacant zone⁴¹. Done together in cheerful fashion, we had fun effectively engendering our intended goals of containing and driving reindeer into the pen.

Once in the pen, the next step would consist of containing the reindeer within it by keeping them from escaping through the unbarred gate, or from jumping over the gate's at times incompletely barred gate, while certain reindeer were guided by the halter out from the pen. The individuals removed from the pen were treated as such in order to keep them handy for milking, riding or packing, or, in the case of bulls in rut, to keep them from attacking other males or from mounting females in the pen. My go-to role during this stage of practice was guarding the approximately 15 foot wide, iced over, urine and poo covered, inclined ground at the entrance of the pen as owners retrieved the reindeer they desired to remove. While slipping all around on the icy, inclined ground, I was able to keep unselected animals in containment by use of spatial positions and voice calls, as well as by smacking antlers with a stick. Although I felt uneasy at first employing the latter technique, after sustained encouragement from Marchi I grew my affective comfort zone and effectively wielded sticks to my strategic advantage. At times I resorted to catching reindeer in mid-dash out the entrance or in mid-flight over the incompletely barred gate

⁴¹ See video (V11) of releasing reindeer for winter pasture, many of the same techniques and teamwork present: <https://www.youtube.com/watch?v=ZM2D3kYJGgQ>

with my hands, arms, and chest, wrestling them back into the pen to the appreciative entertainment of my teammates. I suggest that, in addition to the higher number of labourers which comes with group activity, teamwork contributes to the effective execution of tasks through the complementarity of individual skillsets and characters, as well as through the cheerfulness which emerges when playfully working with others. In order to understand the effective realization of livelihoods, it is therefore crucial to discuss some of the ways in which teamwork characterizes Dukha dwelling practices such as co-habitation, home-making, and migrating.

5. Companionship and Dwelling as Livelihood

Communal life is an important feature of Dukha life, as families and friends often live in close proximity to one another, indulging together in the pleasures of life, as well as cooperatively enacting livelihoods. As evidenced in Jargal's, Naranxöö's, and Dawta's careful keeping of family photos taken and gifted by foreign friends, family and the memories associated with a family's storied lifetime are precious things for Dukha people. Honouring their love for one another, and how much more enjoyable and effective it is to work with people with whom relations of affinity are grown, Dukhas take family and friends into account when deciding where to set up their seasonal camps. As large amounts of people and their livestock cannot live at the same place for long periods of time without impeding on the health and availability of an ecosystem and its resources, Dukhas must therefore disperse themselves throughout their territory. It is often only people of the closest affinities, usually nuclear family members of a prominent individual and the former's spouses and children, who set up camp in the same location (Inamura 2005:7). Families will nonetheless commonly settle in locations a few hours at most of travel away from close friends or family members living with in-laws in other settlements. For instance, on the separate occasions where I lived among Jargal, her айл (settlement group) consisted of herself, all her sons except the eldest⁴², her son Baatar's wife Biijei and their daughter, as well as Jargal's youngest daughter Mama and her husband and daughter. During my first stay with this айл, Jargal's eldest daughter Tuya lived half a kilometer away with her husband and family friends on the other side of a river serving as water source for both settlement groups. During my second stay among Jargal's айл, Tuya, Tartak and their daughter Gakhai were settled in the same location as Jargal. As friends of Jargal's family, and family members of Biijei and of Tartak, lived within daylong riding distances, Jargal frequently received them as guests. Without any official agreement of any kind, in addition to sharing stories and laughter, the guests would usually provide labour for Jargal's айл members and receive from them food and lodging. In this way, families and friends cooperatively engage livelihoods in cheerful, effective fashions.

⁴² Jargal's eldest son Naranxöö lives in Xarmai from autumn to spring, taking care of his and his taiga-dwelling family members' Mongol mal livestock.

The More The Merrier

In my experience, the Dukhas with whom I co-inhabited are very funny people. During my time among my hosts, humorous storytelling, sharp-witted and good-hearted teasing, as well as resulting laughter were phenomena which rhythmically contributed to the sonic environment of our habitat almost as frequently as the sounds of the blowing wind, barking dogs, and reindeer's tendons clicking as they wrap around the ossature of their feet as they walk. I was the butt end of many jokes, as my hosts would relate funny anecdotes concerning my inexperience in the taiga, notably the inexperience of my immune system and its undeveloped ability to ward off excessive vomiting and diarrhea. I would laugh at myself with them, often recounting the story of how I inadvertently lit a patch of my beard on fire with a match. I also developed the well-received knack of good-heartedly teasing the young men with whom I worked. On one occasion, upon Owgen's request, I told a joke ridiculously extrapolated from a real experience lived with Owgen and Gambat. As I delivered the punchline of the joke, twisting Owgen's failed attempt at a prank into an absurd scene placing Gambat in a fictitious butt-end position, Owgen dropped both the piece of wood he was holding up, and the tatlak with which he was trying to fasten the former to a reindeer, and fell to the ground laughing. Although in the moment of delivering this joke Owgen's laughter rendered his work temporarily ineffective, once he recovered from the hysteria and returned to work he effortlessly completed the task at hand. Whereas the incapacitating hysteria of humour was limited to an ephemeral moment, the mood to which the humour contributed both preceded and followed the joke's delivery, exemplifying how both living and working in a comedic atmosphere contributes to people's habitual cheerfulness. Such cheerfulness, catalyzed by the enmeshment of work and leisure which family members and friends engage cooperatively on a daily basis, facilitates effective performance of tasks because of the lucid mindsets, un-impinged upon by fear and doubt, which characterize jovial moods. Although Dukha people are not necessarily always ecstatic or do not always appear to be having fun – in fact, like any other person they can be sad or frustrated, and sometimes absolutely bored – they demonstrate sustained cheerfulness and playfulness. Such states of being qualify the ways in which freestyle bearing is embodied in communal life.

Living Together:

Companionship, hospitality, and teamwork are phenomena necessary to thrive as both individuals and communities in the rugged, complex, task-filled environment of the taiga. One important way in which these social phenomena are embodied is in commensality. Eating together, people enjoy one another's presence, relax, leisurely discuss livelihood affairs, and often engage a form of generalized reciprocity. Even though I lived at times in my own orts, at so not always in their home or in our temporarily shared home, I frequently ate with my hosts, and so my abundant participant observation in commensality with Dukha people afforded me with experiences which informed the following descriptions of and insight into this domain of cohabitation.

The most common form of commensality among my hosts was drinking tea and eating bread or biscuits together. Hosts and I would engage this practice as means of breaking fast in the morning, of taking quick, nutritious breaks between rhythmic bursts of work, and of both commencing and finishing more hearty meals. These meals, usually occurring at mid-day and after bringing animals back from pasture at the end of each day, commonly consisted of either boiled meat on its own, meat in soups, or meat and root-vegetable stir-fries made with rice or homemade noodles. In addition to nourishment, meals provide people with leisurely opportunities to rest, joke around and chat. Conversation topics were quite diverse but commonly focused on livelihood practices. For instance, in between bites my co-inhabitants would often discuss where they had seen livestock grazing, where they anticipated recently unseen livestock to be found, characteristics of specific places, behaviour of whole herds or of individual animals, as well as herding techniques which would be pertinently applied to the aforementioned phenomena. The relaxed yet productive nature of these livelihood-oriented discussions exemplifies how enmeshed leisure and work are. These discussions were often interspersed with interventions where one of us would keep a dog from entering the home by employing voice commands, and brandishing or throwing sticks from our seated position.

Each household usually made their own meal, but it was very common for at least one member of at least one other household to join in another's meal. One instance of such practice which exemplifies not only commensality and the enmeshment of work and leisure but also the improvisatory embodiment of resourcefulness, occurred as Mama and Marchi received Tuya, Gakhai, and I for supper in their orts. We listened to music as I peeled potatoes, collecting the peels with my deel as they fell, as mama prepared the meal, quickly dicing onions with a cleaver on a cutting board placed on the ground and laughing at how the task was making her cry, and as Marchi used Tartak's seasoned carpentry plane to thin out and smoothen the blade of a pinewood shovel he had crafted with his axe for Tuya. After eating, I watched my dinner partners as I played with Gakhai and Ondra⁴³. While chatting leisurely, each adult was effectively working. Mama was quickly weaving horse hair, standing end tied to an ortz pole, into a braided rope. Marchi was cutting a several meter long strap into multiple, shorter segments appropriate for use as tatlaks. By placing them momentarily on the stove side-panel, Marchi melted the sliced tips so as to eliminate frays and protectively seal off the straps' ruptured weaves from further fraying. As for Tuya, she was making a headband for Gakhai, eventually to be adorned with fresh flowers, by interlinkingly folding empty candy wrappers together, effectively transforming simple trash into a useful, intricately constructed artefact. In addition to being an occasion for playful work among neighbours, commensality between households exemplifies a form of cooperative sharing.

Although Dukha people privately own things such as livestock, household materials, equipment, and money, they commonly engage practices which blur the boundaries of personal property. In cooperatively enacting livelihoods, people share equipment, food, lodging, and labour.

⁴³ Gakhai and Ondra would often play by pretending to perform livelihood practices, notably domestic activities such as making tea and bread as well as serving it as would a woman of the household. (See Figure 2 in annexe 7)

Although, as in the case of offering tea, food and even sometimes lodging to passers-by such as soldiers, firemen, and park rangers, sharing does not necessarily imply a reciprocal exchange, reciprocity is commonly expressed in the ways in which guests recipient of hospitality share with their hosts entertainment, news, and labour. In this fashion, through sharing goods and services both hosts and guests cooperate in the enacting of one another's livelihood. As a guest in Dukha households I had ample opportunities to both practice and observe such practices of cooperative sharing. In terms of my own practice, I received meals and lodging while providing entertainment, intercultural exchange, food staples, and labour. Such labour included fetching water and wood, cutting firewood, and, as will be further discussed, house-sitting a cabin, caring for puppies and participating in the construction of a new cabin. In terms of my observing Dukha guests engage cooperative sharing, Gambat's visits to Jargal's winter cabin shed insight on the ways in which friends cooperatively engage livelihoods.

As his deceased father was a dear friend of Jargal's late husband, Gambat grew up alongside of Erdene and Owgen, and has continued to be a close acquaintance of Jargal's family. On several occasions he absented himself from his mother's winter settlement in Xarmai to cohabit with Jargal's family in the taiga. After travelling the icy Naran Dawaa pass on his motorcycle, Gambat would receive food and lodging in Jargal's household. During his stays he would perform tasks such as obtaining and cutting firewood, bringing and retrieving animals to or from pasture, as well as building an extension to Jargal's store-house with Erdene and I. More than just labour, Gambat provided his hosts with companionship, entertainment, and news concerning friends and events in Xarmai or Tsagaan Nuur. As exemplified by many other friends occasionally visiting Jargal without staying the night or providing any labour but still receiving food, companionship itself is an important element of livelihoods, and thus worthy to engage with friends regardless of productivity or not. Such companionship is qualified by both relaxation and play.

Many men commonly smoke tobacco as a means of relaxing. Although traditional pipes are still handcrafted and used, the Dukhas with whom I lived mostly smoked cigarettes, usually hand-rolled with non-adherent papers not designed for such use. Rolling with these papers requires dexterity informed by an understanding of the material and of its interaction with saliva and finger movements. Men would often share tobacco among themselves, and so engaging such practices of sharing helped me develop friendships with Dukha men. Men smoke tobacco during work breaks, while working, and while hanging out inside homes. Activities commonly engaged when hanging out are watching TV, as well as playing cards or chess. Singing and listening to music are playful activities frequently engaged both at rest and at work.

Although Dukhas often listen to and watch music videos on television, the most common device used in listening to music is a portable music player, equipped with built-in speakers, into which a digital memory card containing songs acquired from friends in Tsagaan Nuur is inserted. These music players are used both inside the home and outdoors, during both rest and work. My co-inhabitants, notably Erdene, often knew the song lyrics and sang along with the digital recordings. Whether with or without these portable devices, Dukhas frequently sing. When done

with others, singing can be a way of playfully interacting with others. When done alone, singing can be a way of diverting oneself albeit the lack of company. For instance, a night where Owgen and I were the only people at Jargal's winter settlement, and Owgen was particularly bored, he sang songs over walkie-talkie radio-waves for Baatar and Biijei in their orts a half-kilometer away near their almost finished cabin. When the couple stopped answering his songs with requests or jests, Owgen became so bored he began overtone singing – the first and only time a Dukha performed this traditional art in my presence. Owgen, and other people such as Erdene, would also entertain themselves by singing when they rode afield retrieving livestock from pasture. From camp I would occasionally hear faint sounds of Owgen's songs carried from pasture along the wind. His playful singing also served a practical function which facilitated effective teamwork. As the volume of his singing would increase, indicating his approach, people around camp would prepare to retrieve the animals he would return with, and either tie them or herd them into the pen.

My own practice of singing Mongolian songs helped me develop friendships with my hosts, as it demonstrated both a knack and an affinity for Mongolian language and art, as well as afforded me with a means with which I could participate in playful activities with them. Dukhas particularly enjoyed a song about them and the taiga which I composed in Mongolian⁴⁴. Whilst briefly visiting Jargal's settlement to say goodbye to his friends before leaving for two years of military service in a faraway region of the country, an 18 year old man heard me perform this song upon Jargal's request. The young man apparently really liked the song, as he asked me to write down the lyrics for him on a piece of paper, which he kept, in order for him to sing it and thereby be reminded of his homeland and community. His desire to learn this song exemplified a desire to keep in touch with family and friends as, even when living faraway from each other, Dukhas in different settlements usually maintain communication in one way or another.

Keeping In Touch:

My co-inhabitants evidently liked to know what was going on with others. As I was moving back and forth between East and West Taigas, many people, notably Jargal and Suren, would ask me of any news from the region which they did not inhabit. Dukhas are quite capable of gathering such news without me but, as they do not all frequently travel to Tsagaan Nuur and meet people from across taiga regions, information I provided, such as Dawta no-longer using crutches to walk, were appreciated. The only way to directly communicate between East and West Taigas is by long-distance radios or by mobile phone, although only one household in East Taiga is equipped with such a radio, and cellular reception is a rarity upon which people cannot practically depend on outside of winter settlements located nearer to Tsagaan Nuur. Whereas only one household in East Taiga is equipped with a long-distance radio device, this technology is more common in West Taiga, where the few dispersed families equipped with these radios chat together at regular, pre-

⁴⁴ To hear the song, listen to S3 (<https://www.youtube.com/watch?v=6cLqJHfaKYE&feature=youtu.be>). For an English translation of the song, see Annexe 4.

determined times twice a day. These scheduled chats serve the functions of both *divertissement* and sharing information. Adults will often sing or play digital music recordings over the radio, or get children to sing, the latter drawing appreciative encouragement from correspondents. People will also share information pertaining to their specific locality, such as recent events, actual activities going on, and amateur weather reports. Sharing such information can facilitate the making of decisions such as where to search for reindeer in faraway pastures, and when to migrate.

Mobile phone⁴⁵ conversations also commonly serve these same functions, with added dimensions of joking with friends or courting lovers via text-messages. As previously mentioned, cellular reception in the taiga is spotty at best, and so Dukhas draw on their resourcefulness in creatively obtaining reception. Methods can include displacing oneself to an area favourable to reception, as in the occasion where Tartak successfully climbed halfway up mountain atop of a reindeer in order to reach a specific spot where he knew from previous experience that he could obtain reception. Another method involves drawing cellular frequencies into specific spots with materials such as CDs hanging from orts poles or cabin walls. As different cellular service providers often reach different areas of the taiga, Dukhas commonly cycle between at least two different SIN cards and their related service providers or, if lacking multiple service providers, will borrow a phone serviced by another provider from a friend or family member. People would also share their phone with others who did not possess such equipment. In Uultsang and Zaya's cabin there were two plastic bottles, cut in half and nailed to a wall a few feet from each other, which served to hold phones in place. The exact positions in which these severed bottles held phones in place were hotspots for reception. Albeit their proximity, one bottle was designated for Unitel service, and the other to Mobicom service. I can attest to the fact that these hotspots were very effective. Another way in which dispersed Dukhas keep touch is by attending concerts and dance-parties in Tsagaan Nuur or Xarmai. Regardless of methods, it is clear that maintaining communication with others is an important element of Dukha life. Other, very important elements of Dukha people's communal life are the practices related to making homes.

Making Homes In The Taiga

An important part of Dukha livelihoods is the continual making of homes, as these are foundational hubs from which families emerge as inhabitant practitioners in the taiga. The taiga is composed of lands which are both appropriate and inappropriate for human habitation. Such appropriateness overlays the taiga in rhizomatic fashion, smoothly encompassing particular trails made by past and present human habitation. This meshwork of inhabitable areas covers territory ecologically favourable to reindeer husbandry along corridors appropriate for travel, whilst steering clear from places, such as lands used for leaving the deceased exposed to the sky or lands

⁴⁵ Mobile phones range from aged black and white screen models to modern touch screen ones. The only Bluetooth file transfer from one phone to another I have ever seen anywhere was in East Taiga when 2 people shared an mp3 music file.

inhabited by ezen or chötgör spirits⁴⁶, the natures of which are incongruent with conditions necessary for Dukha domestic life (Kristensen, 2004). Although inhabited areas are shaped in part by human activity, and have been for uncountable generations, it would be descriptively imprecise to qualify this domestic land as a domain removed from wilderness. I suggest that Dukhas inhabit a wilderness ‘semi-domesticated’⁴⁷ through making homes and erring out into the field and back into these gravitational hubs of habitation, as well as by moving from one settlement to another. The practices which make homes and enact migration exemplify how acrobatic, creatively effective, playful, cooperative short and long term bearings are embodied in improvisatory fashion.

Foundations Of A Home:

As Dukhas embody livelihoods largely through inhabitation, it is pertinent to discuss the foundational elements of a Dukha home. Such homes are fashioned in semi-domesticated wilderness places which, albeit their ruggedness, remoteness, and bounty in non-human life, incarnate a continued history of human itinerancy and use. Just as the comfortable domestic spaces which homes occupy, and which immediately surround the former, are incessantly immersed in the wild material flows of the taiga, the rugged, presently uninhabited areas beyond the blurry boundaries of household grounds are intricately adorned with traces of previous human habitation and activity. In Jargal’s advanced autumn camp I did not have to walk far from any ortz to feel surrounded by wildness whilst still seeing traces of domesticity such as the wood of old pens or of storage tables decaying⁴⁸. Contemporary embodiments and historical vestiges of human activity are scattered around the taiga like monuments of semi-domesticated wilderness which express what Ingold (2011B) has denoted as the ‘temporality of the landscape’ (189), understood as the chronologically embodied traces of human dwelling. A significant part of Dukha dwelling is making domestic space in wilderness places through the fashioning and inhabiting of homes.

The domestic spaces which I co-inhabited with Dukhas were composed of domestic home-edifices (i.e. ortz, cabin, ‘ger’⁴⁹ or Russian army tent) which they usually refer to as ‘гэр’ (‘ger’: ‘home’), and the surrounding household grounds adorned with storage tables, fences, stumps of cut trees, woodpiles, garbage bags, as well as reindeer and their traces. Integral to homes are the physical structures of the home-edifices, the making of which will be discussed further in this chapter. It is within the open-air shelter of these edifices that homes emerge as hubs of domestic life. Fundamental to this domesticity is the making and maintenance of hearth fires. The hearth consists of a woodstove, solidly balanced in place by wedging split logs or flat rocks found



⁴⁶ Ezens are land-owner spirits, and chötgörs are demons.

⁴⁷ ‘Domesticated’ here understood as rendered ‘domestic’ (relating to the home or family).

⁴⁸ Follow link to see video 12 (V12): <https://www.youtube.com/watch?v=EVcVTOKiKz0>

⁴⁹ Traditional Mongolian felt tent, commonly referred to in English as ‘yurt’, a term derived from Russian. (See figure 3 in annexe 7)

nearby the home, equipped with a pipe through which smoke is expelled outside the edifice. On November 1st I helped Baatar install a stove in his nearly finished cabin for the first time. After Baatar made a hole in an old metal bowl provided by Jargal with his axe, he and I climbed onto the roof of the cabin where Baatar used the butt of his axe to nail the open bowl in place over a hole pre-emptively cut into two roof-planks. We then walked around in a radius of 50m or so around the cabin's northern hemisphere to find and gather flat stones. In addition to finding a few stones of my own, I observed Baatar gently tap rocks protruding from the earth with the butt of his axe, unearthing mostly flat rocks when the mass and sound of his axe taps felt appropriate. We built four mounds to support the stove in a level position by experimenting with different combinations of rock arrangements until a particular one satisfied us. After placing the rectangular stove atop of these corner mounds, we assembled the three segments of stove pipe together. Using his tough hands, Baatar bent a few areas of the flaky, rusty pipe ends in order to make them fit together. He then climbed the wall back onto the roof and received the pipe which I delivered to him through the opening in the roof-planks and reused bowl. The bowl, the opening in which was measured by eye to be just a tad bigger than the pipe, would effectively hold the stovepipe in place regardless of the wind. As he fixed one end of the pipe in the bowl, I fixed the other end around the hole in the stove intended for that use. Using a match Baatar lit dry larch branches⁵⁰, collected near the cabin, on fire before looking me in the eye and verbally acknowledging the specialness of this occasion in which his soon to be inhabited home was being warmed by a fire for the first time.

A hearth-fire is started first thing every morning, and is usually kept alive throughout the day. Stoking and adding wood to the fire, homesteaders improvise decisions regarding quantities and qualities of wood used and the latter's placements in the continually changing fire. In addition to its evident practical uses and comforts (i.e. heat, cooking, etc.), the fire serves the functions of incarnating a home for a spirit which watches over the hearth's household members, as well as of keeping the spirit happy by feeding it milk-tea every morning, as well as food before eating gifted items or before eating for the first time after arriving at a new camp. The fire spirit shares the offerings it eats with Oron Khangai⁵¹, the physical and personal entity of the taiga as a whole (Kristensen, 2004: NP). In the cases where a family is embedded with a cloth bag inhabited by an 'ongod' spirit, another function served by the hearth-fire is to keep this household ongod spirit warm, happy and, by virtue of these qualities, helpful.

One of the more important tasks involved in house-sitting Uultsang and Zaya's cabin, upon Zaya's request, was making and maintaining the hearth-fire every day in order to satisfy the ongod inhabiting a cloth bag given to Uultsang by his father years ago upon the former's first hunt. Just as every household ongod is unique and serves different functions (i.e. successful subsistence, health, etc.), every ongod-bag is rhythmically filled over time with both common and unique

⁵⁰ As larches lose their needles in the autumn, dry branches can be harder to discern in comparison to other coniferous species. With a skilled, habituated eye, larch branches are quickly recognized by virtue of their buds being dark, almost black. Follow link to see video 13 (V13): <https://www.youtube.com/watch?v=384aMWSxgys>

⁵¹ 'Орон Хангай': territory/dwelling hilly and wooded, with cool climate, abundant water and fresh pastures.

offerings as diverse as xadags, other cotton ribbons, animal hairs, medallions, and eagle talons. As is the case in Öwngdorjoo and Dari's household, one ongod-bag can be inhabited by multiple enmeshed ancestral ongod-spirits. Decisions regarding when and which specific materials to contribute are made drawing on advice from family members, elders, and shamans, as well as on personally intuited and sometimes interpersonally conceptualized interpretations of signs manifest through natural phenomena such as dreams and animal sightings or sounds. Ongods are purified on a daily basis by smudging their bags with the smoke of sappy branches and foliage, usually issued from juniper bushes, charred in the hearth-fire. This domestic fire must be treated with respect and must not be soiled with garbage. As it is culturally improper for Dukhas to dig, and consequently cannot bury garbage, my mentors gathered their garbage in empty flour pouches until winter when they would burn the trash in outdoor fires with scrap wood in piles dispersed in the woods with snow helping prevent forest fires from catching.

Hearth-fires are made and maintained with wood commonly collected upon wood-runs, at least a few hundred meters or even several kilometers away from camp, with the use of reindeer for riding and packing. Although I developed the skills related to the practice of such wood-runs throughout my entire trip, an account of my first excursion harvesting firewood with a Dukha mentor effectively communicates some of these skills.

Having noticed me return from wooded areas no closer than 700m on foot carrying my own bucksaw and several wood beams at once, Baatar perceived me to be skilled enough to accompany him on a wood-run, and subsequently invited me on such an excursion. On this occasion Baatar and I left camp, each of us riding a reindeer, with one pack reindeer⁵² equipped with a yangartsak⁵³ and tatlaks, atop of which was fastened a beautiful axe. While riding Baatar held on to his chainsaw, sliding his bum off to the side of the saddle and arching his upper body to the same side, thereby compensating for the weight and cumber of the petrol-powered tool. Baatar scanned our surroundings as we rode, and asked me where I thought there might be good timber. After pointing towards a particular patch of trees rising out from the alpine tundra, I followed Baatar and the pack reindeer he was leading towards that patch with a rope. He gripped this rope with his right hand while the rest of that same arm held onto the saw. We rode atop and around jagged rocks, through and around dense thickets, as well as over a creek until we arrived at a fallen tree, stripped of bark, which satisfied Baatar.

We tied the reindeer to small trees and climbed onto the desired log which rested fallen over a ditch. Keeping his balance on the fallen tree, Baatar sliced off a piece, approximately three feet long and two feet in diameter, of it with his saw. I then helped him lift the freshly cut log onto the trunk from which it was sectioned. In order to save on gas, Baatar began hacking away at the log with his sharp axe, trying to section the wood into four quadrants with his own strength as fuel.

⁵² By 'pack reindeer', I mean a reindeer used as a sumpter (animal used for transporting materials).

⁵³ 'Yangartsak' is a wooden A-frame which, placed over a reindeer's spine, is used to fasten loads. (See figure 4 in annexe 7)

The wood was much sappier than we had anticipated and, despite Baatar's impressive precision and power, was thus much more difficult to chop. We took turns hacking away at the wood, engaging our feet, legs, and core muscles in order to avoid falling off the trunk and into the ditch as we swung the axe. In order to speed up the process, using his axe Baatar quickly shaped a small piece of wood into a highly functional wedge. After planting it into the slits created by our axe hits, Baatar smacked the wedge with the butt of his axe until one piece of the log after another broke apart in sizes appropriate for transport. We then lifted the pieces up to the pack reindeer's flanks and fastened them there using tatlaks. Both lifting wood and tying them to the reindeer required lots of strength and dexterity. After shimmying the logs to ensure equilibrium between the loads on each of the animal's flanks we headed back to camp with ample firewood.

As demonstrated by these descriptions of some of the foundational elements of Dukha homes, and of some of the practices engaged in the fashioning of these elements, inhabiting the taiga involves cooperative embodiments of freestyle bearing, and of creative resourcefulness afforded by freestyle's improvisatory and versatile nature. These qualities are also embodied in the making of home-edifices themselves. Although some Dukhas, usually in winter, inhabit Mongol gers or Russian army tents – exemplifying versatile, improvisatory use of diverse architectures and household materials⁵⁴ – I focus my discussion regarding the making of home-edifices on the two most common types of such edifices: ortzes and log cabins.

Erecting An Ortz:

Ortzes are erected over open, flat ground, usually by at least two or three people⁵⁵. After clearing stumps and bumps in the ground with an axe or shovelling away the snow if necessary, three wooden poles are tied together near one end and erected towards the sky as the other end of the poles are firmly placed on the ground, forming a triangular based pyramid. Many of these poles have had their ground-side end shaped into a wedge with an axe in order to assist in immobilizing them in the ground without digging, an action considered by most Dukhas as improper, impure, and thereby avoided⁵⁶. The poles used tend to be found in neatly laid heaps near the sites of previous ortzes, or still standing as they were when serving as structure for a previous ortz. New poles are occasionally fashioned by cutting a young tree and shaving its branches off with an axe. Depending on the size of the ortz, approximately nine to twenty-one more poles are leaned on one another at the original pyramidal intersection of poles, their ground-side ends firmly placed around the triangular base in a circle, effectively creating the iconic conic structure of an ortz. Approximately 5 sheets, usually



⁵⁴ Follow link to see video 14 (V14): https://www.youtube.com/watch?v=mwRlb_w6mJs

⁵⁵ For more information on making ortzes and on ortz layouts, see V15 videos:

<https://www.youtube.com/watch?v=wx3tJpUUyfA> ; <https://www.youtube.com/watch?v=Rit2YHXBtlk>

⁵⁶ The taboo around digging may be a result of historical enmeshments of Dukha people with Tibetan Buddhism.

predominantly ones made of coarse canvas and one or two plastic tarpaulins, are then wrapped around the poles in positions which block out as much wind as possible from the center, leaving an opening at the pinnacle to pass the stove pipe through. These sheets are tied to either ortz poles or rocks with ropes, the latter being mostly scraps from old ropes or deel coats. One sheet is laden with a stick which helps it perform as a door flap.

Once the stove is installed, the pipe is usually fastened into position using a metal wire wrapped around the pipe and tied to a pole. In the construction of my own ortz in October, having too little length of wire to connect pole and stove, Owgen improvised a solution which consisted of wrapping the wire around the stovepipe, and hooking its end through the tip of a rope which was tied to a pole. This quickly executed solution is exemplary of the improvisatory fashion in which a very familiar structure is uniquely assembled each time an ortz is improvisatorially erected. The exact positions in which poles, sheets, and ropes are placed or tied always emerge in new ways as ephemeral nexuses of people, materials, and places are mediated in improvisatory



fashion by practitioners. Some families take the time to obtain poles and pegs with which they build fences⁵⁷ around their ortz to help keep reindeer, who enjoy licking the salty canvas⁵⁸ so much they sometimes attempt to climb the ortz in search of more surface to taste, away from the edifice. In this building practice, the improvisatory mediation of labourers, materials, and places once again make for uniquely fashioned structures. Such improvisatory mediation is also integral to making log cabins.

‘Байшин бариаа!’ (‘Baishing bariaa!’: ‘Log-house building!’), said with emphasis):

I was introduced to Dukha practices of building log houses by first helping Erdene build a vertical extension and new roof for a storehouse, then by helping Baatar finish his winter cabin’s walls, roof and doorframe, and finally by helping Marchi build his and Mama’s first winter cabin, from the gathering of the planks, to their assembling, through to the insulation of their assembled structure. In each building project I participated as I could in mentors’ acrobatic and improvisatory instantiation of conceptual designs. This instantiation emerged as a dance-like mediation between dominating materials, and yielding to their unique characteristics and inclinations, and to the unplanned ways in which irreversible fabrication ‘errors’ can emerge. Focusing my discussion regarding this freestyle building process on an ethnographic account of making a cabin with Marchi, I highlight the improvisatory and acrobatic natures of the practices involved, as well as the effective teamwork with which many of these practices were often performed, and the ways in which Dukha building processes do not precede habitation, but rather continue to emerge over time through inhabitation.

⁵⁷ Follow link to see video 16 (V16): <https://www.youtube.com/watch?v=MdDTKWDA64o>

⁵⁸ Ortz canvas sheets are imbued with salt in the vapours rising out from cooking cauldrons.

Over an eighteen day period, of which most but not every day involved building, I participated in the making of Mama and Marchi's winter cabin in Shangmak, West Taiga. The construction process was enmeshed with other livelihood practices which could not simply be put on hold. As the architecture and practices emerged in improvised correspondence through acrobatic mediation of practitioners, materials, places, and functions, the making of the cabin was effectively freestyle. My participation began on November 1st and 2nd as I assisted Marchi, Mama, and sometimes Tuya in gathering the scattered timber destined for use in construction, and transporting these materials to the building site utilizing two oxen as pack animals. Although alien to the taiga, these animals temporarily imported from family rangelands in Xarmai proved themselves to be highly effective in dragging heavy, 7-8m long beams of wood across up to 700m of rugged terrain per outing. In each of our outings Marchi led us by memory (occasionally assisted by conversational recalls with Mama) along meandering paths to spots where he had, during the previous spring, cut tall, foot-width larch trees, and had shaved off their branches with an axe and split them into pairs of planks with his chainsaw. Once the planks were fastened on the oxen's backs by tying rope around the timber, oxen and rope itself, we led the beasts back to camp by a rope tied to their nose-rings. Occasionally my mentors, or I at their request, released the lead rope and allowed the oxen to effectively choose their own paths to the construction site back at camp.

The constitution of the construction site, located at the spot in which the cabin would actually be assembled, emerged in correspondence with the construction process over its entire duration and, in short, comprised piles of timber, their sequentially developed assemblage, the notched wood blocks which together served as sawhorse, as well as the relatively flat grounds of the house, and the sawdust and woodchips with which the latter were increasingly covered as the construction carried on. The equipment used in this construction consisted primarily of axes, chainsaws, gasoline, motor oil, tandem crosscut handsaws, and improvised measuring poles. A rope, a pencil, a beat up level, as well as tatlaks and two improvised ramps were occasionally employed as well. Even when in the presence of level and pencil, most of the angle measurements were 'eyeballed' and the specific positional markings were done by scratching the wood with a blade rather than by striking it with a pencil. Such improvised measurements were integral to the freestyle instantiation of anticipatively foreseen architecture.

This architecture came to be as a monument – an 'unflinching record of generative gestures' (Ingold, 2013: 121) – to the ways in which Marchi's imagined design, informed by decisional conversations with Mama and by his experiences both observing already-made baishing structures and hearing about their fashioning from friends and family, came to be instantiated in an actual structure inexactly predictable before its joining. This structure, understood as actual in terms of its physical existence being irreversibly fabricated in a continual current of current moments, emerged as a correspondence between imaginary design, physical performance, material characteristics, places, functions, and inhabitation. Through this storied correspondence, a unique structure was constructed which effectively functions as a home-edifice. The skilled practitioners who cooperatively fashioned this cabin enacted improvisatory discernment in their quickly

executed choices of materials and movements in order to effectively craft the instantiation of Marchi's imagined design. Although this actual structure was inexactly predictable, it was 'anticipatively foreseen' (Ibid: 110) by Marchi who, orchestrating the fluctuating workforce team as he himself built along with them, 'felt his way forward' (Ibid: 110) in "opening up a path and improvising a passage" (Ingold, 2013: 69) towards a sympathetic tectonic arrangement which practically resembled his continually updated imaginary design, rather than exactly reproduced a predetermined design through forceful inscription onto the materials (Ibid: 115).

In this manner fabrication 'errors', emergent throughout the building process and as errors by virtue of incongruities between imagined architectural specifications and actual physical instantiations, are not blunders but rather trails of ephemeral yet irreversible actions which erred from a previously imagined design. Under Marchi's improvised orchestration, these errors were integrated into his continually emerging design through creatively adaptive adjustments of materials in sympathetic relation to one another. Orchestrating in such fashion, Marchi effectively performed effectively as an improvisatory architectural mediator of materials, design, and workers in their acrobatically harmonized arrangement in a functionally synergetic assemblage. Freestyle mediation proved itself to be an integral part of both architecture and the skillful practices engaged in its actual instantiation.

I became aware of these practices *in practice* by observing mentors, especially Marchi, assemble timber through its strategic placement and cutting while I assisted them in executing these tasks as I could, usually by moving and stabilizing materials or by fetching equipment, through an improvised mediation of personal initiative and mentors' requests⁵⁹, as well as by engaging – in my uniquely personalised memetic way – many of the techniques I observed. We began construction by assembling the first four logs, effectively establishing the house's foundation. Once the exact location of the foundation was cooperatively agreed upon by Mama and Marchi, the latter and I rhythmically lifted and reset the log ends down on the ground, always in slightly different positions until these corresponded with the rectangular alignment discerned – as commonly done by carpenters (Ibid: 121) – by lining up the ends of an 8m rope with the ends of each log until each corner of the foundation rested in positions equidistant from one another. Placing the southern end of the western wall's foundational plank on a spare piece of log, itself left over from cutting the foundation planks to size, raised that corner's position a few inches in relation to the ground, thereby harmonizing it in functional correspondence with the level of the three other corners. Once placed, the foundational logs were joined by fitting them together with plain dovetail notching.

This woodworking joinery technique, employed throughout the entire wall construction process, consists of interlocking a tenon and mortise hewn to fit together as tightly as possible. Through the timber's natural expansion as it dries and weathers, and by force of the weight imposed on the joint by additional logs being piled upon it, the tenon and mortise grow tighter and

⁵⁹ Follow link to see video 17 (V17) : <https://www.youtube.com/watch?v=lnZt9Ffp-Rs>

tighter along the lines fashioned through assemblage without additional input of manual force. As was the case with the foundational notches upon which the walls were constructed, many of the dovetail joints made in assembling the walls were crafted by Marchi with my help in the following way: after making a 1 to 3 inch deep slit through the log 6 inches or so from the end by cutting into its topmost face with me using a tandem handsaw, Marchi would strike down on the slit with the blade of his axe, effectively shearing off the six inches or so of wood between the log's end and the slit as single block, the height of which would equate more or less with the slit's depth. Then, occasionally asking for my strategic opinion before completing the notch, Marchi would shave chips out from the newly exposed wood faces so as to align them as flush as possible with the faces of the tenon or mortise with which they were thus interlocked. The latter were themselves adjusted in relation to the aforementioned faces. Once the notches were aligned, one man using a chainsaw or two men using a tandem handsaw would slip the tool's teeth in between the contiguous bases of the newly piled planks and slice along their length in as straight a line as possible, thereby effectively rendering them flush in relation to one another. After this horizontal cut was made, minute modifications to the implicated logs' notches often needed to be made. Foreseeing the ways in which each log pairing's sizes and grains could correspond with one another and with axe- or saw-borne transformations, Marchi eyeballed lengths and angles of both notches and the axe blows which generated the complementary shapes whereby notches interlocked together as dovetail joints. The improvisatory discernment and movement integral to Marchi's notch-making, as well as their incarnation in acrobatic ease in both conceptual design and physical performance, were expressed throughout the entire process of making the walls, roof, door, and windows.

As I planed the barked surfaces of planks with an axe, effectively rendering them flatter and thus easier to assemble in flush cohesion with one another, I would frequently pause this task in order to fetch particular planks specified at Marchi's request. Keeping a few particular logs for specific functions, such as serving as roof joists, Marchi decided which planks to join with which by discerning, out of the piles of already-planed timber, which pieces were characterized by shapes, sizes, and grains that corresponded most harmoniously with the yet bare-faced planks already in place as part of the walls. Once a plank was selected, I would help Marchi delineate a straight line from each opposing corner of the log with a home-made wooden device, similar to a carpenter's chalk-line, which imprinted a charcoal-gasoline mix marking compound on the wood by means of plucking a taught, unwound string. After Marchi trimmed excess wood, shaping the plank to the charcoal line, I would help him or someone else carry it from the field of timber piles to the house where, each of us holding an end of the heavy load and minding our footing on the uneven, obstacle-ridden ground, we would lift the log – sometimes above our head and shoulders – up and onto two adjacent mortises. Especially as the walls grew higher and higher, notching and assembling each new layer of planks required not only dexterous wood stabilization and blade-work, but also significant balance and suppleness. Whether working or briefly resting, Marchi and I would feel our way into improvised positions – standing on, sitting on, or hunched over planks – which often engaged our whole body in acrobatic movements which braced us to the timber frame

through an ebb and flow of diverse points of contact with the wood⁶⁰, much as one would do climbing a tree. Such improvised acrobatics, characterized by freestyle steez, were particularly evident in work and rest done on top of the roof as it was being constructed.

The roof was assembled by placing the ends of smaller logs, recently harvested and split, into notches on either two massive joists, or one end on a joist and the other on the top of a wall's topmost plank. Marchi and I lifted the heavy, un-split joist logs onto the roof using two planks which served as makeshift ramps connecting the ground and roof, as well as two tatlaks. Fastening a tatlak around each end of a joist log and looping the working end of each strap around a tenon protruding from the wall's dovetail joints



near the roof, we effectively used these protrusions as points of tension with which we could hoist up each joist end a foot or so at a time until we could shoulder-press the beam over our heads and onto the roof. The smaller roof planks, harvested nearby the cabin during its construction, were cut into approximately 2½ metre segments measured with a wooden pole cut to a size approximate to the necessary length through improvised eyeballing. Once carried through the rugged forest terrain to the construction site, these heavy segments were laid on two notched logs serving as a sawhorse, where each was split with a chainsaw. Once split, these planks were light enough to lift onto the roof without the need for ramps and hoists. Up on the roof, the lateral faces of these planks yet unstripped of their bark were planed with an axe so as to fit flush side by side. Marchi and Owgen would often demonstrate impressively acrobatic balance and comfort as they hewed the planks while standing on the latter over a potential 8 foot drop onto frozen ground.

The steez in such risky yet skillfully and comfortably performed movements was beautifully incarnated in Marchi's making of the cabin's first window frame. While standing on a large log that kept teetering from one side to another, Marchi kept enough of his balance to effectively cut out a square in the wall with the chainsaw that he held up over his head as he bobbed his to dodge woodchips flying towards his squinting eyes, and as the ground beneath him teetered and tottered⁶¹. After this square hole was formed, it was made into a window frame by Owgen who planed the newly exposed faces with his axe and with Marchi's chainsaw. The cooperative nature of this task calls to attention the importance with which teamwork, and the playfulness integral to such synergetic group dynamics, contributed to the building process as a whole and in its particular tasks.

Although Marchi occasionally worked alone, the bulk of the construction process engaged teamwork. This teamwork was expressed in our diverse workforce, the improvised constitution of which fluctuated with people's presence and availability. In addition to Marchi, myself, and Amitie

⁶⁰ Follow link to see video 18 (V18), and note the enmeshment of play and work:

https://www.youtube.com/watch?v=cxNBK_OIMAE

⁶¹ Follow link to see similar technique in V19, although done without teetering for window #2:

<https://www.youtube.com/watch?v=DiLtvzSpQas>

– an Israeli tourist staying with Tuya, keen on immersive participation in Dukha livelihoods, to whom I provided communicative assistance through translation from Mongolian to English and vice versa – our workforce was composed of friends and family members of Marchi’s living in Xarmai, notably my former horse-guide Bugwe, Marchi’s brother, and the latter’s wife’s brother. During the two particularly productive days these men participated in the construction, the three of them ate and slept with Mama and Marchi in the latter’s ortz. The temporary augmentation of our workforce was characterized by an increase in efficiency due to the relative autonomy of Marchi’s guests (appropriately skilled and equipped for the tasks of building) and to our team’s ability to execute multiple tasks at once, both effectively dispersing practitioners’ labour and engaging each member’s unique skillset in complementary relation to one another’s skillsets. For example, Bugwe and Marchi’s cousin-in-law would focus on woodwork while Marchi’s brother would work the wood *and* help Marchi orchestrate the instantiation of the latter’s imagined design.

The augmentation of our workforce also involved increased playfulness and related cheerfulness, engaging the correspondence between each person’s unique character, which in turn increased practitioners’ effectiveness. Joking, chatting, and singing together as we worked, as well as sharing tobacco as we briefly rested in rhythmic counterpoint to our labour, our team cheerfully played its way through tasks, thereby accomplishing the latter without (or with less) mental and physical limitations because these can arise in tandem with gloominess, fatigue or doubt. Exemplary of such playful teamwork, when building an extension and roof for Jargal’s storehouse with Erdene the two of us had so much fun as we laboured that we became even closer friends through that labour⁶². During one of our breaks, Erdene and I discussed his major desires and life plans before laughing hysterically as we both performed core-muscle strengthening exercises I showed him atop of the roof we had just constructed. In the particular case of building Marchi and Mama’s cabin, teamwork was utmost importance due to the magnitude of the project, and of utmost pertinence due to the project’s domestic nature. After all, the project’s successfully achieved goal was to fashion a home which would function as a hub for the comings and goings of a household and its constituent member’s family and friends. It is through inhabitation that the final touches, which effectively completed the cabin’s assemblage, were executed, and that the cabin’s continual process of growth and change would continue through its being dwelled within.

After helping them transport a significant bulk of their disassembled ortz’s contents to their newly assembled cabin, I worked at insulating the latter while Mama and Marchi rhythmically flowed through settling into their new home and insulating it with me. As I learned through observation and discovered for myself in practice, the insulation of the cabin consisted of three complementary practices. The first of these insulating practices consisted of pinning canvas sheets, which had until recently covered the family’s ortz, to the inside of the cabin’s walls with tacks hammered into logs with axe-butts – or in my case with a rock I had found nearby – so as to cover the walls and effectively block the wind from infiltrating the cabin through cracks between wall-planks. Marchi and I also climbed tenons, protruding from dovetail joints, onto the roof in order

⁶² Follow link to see video 20 (V20): <https://www.youtube.com/watch?v=QhJv23xk08Q>



to cover the latter with additional sheets of canvas which, once in position, we stabilized with the weights of a few spare logs left over from the construction. The cabin floor, then only covered with the canvas sheets which had covered the ground within the family's orts, would be further insulated the following spring as Marchi would build timber plank flooring. The second insulating practice in which I participated consisted of filling cracks between the logs constituting the walls by prodding old scraps of clothing and flour sacks into these cracks with a long, pointy, and thin knife. The final insulating practice in which I participated consisted of filling rectangular frames, assembled along the foundation of each wall by Marchi's interlocking saddle-notching of leftover logs, with sawdust and wood chips which I scraped from the ground onto a large piece of dried cow-hide which, once full, I would dump into the frames and condense into position with my feet until the frames were full and the bottom of the walls thereby effectively insulated.

After only a few hours inhabiting the cabin and watching Ondra rhythmically struggle as she frequently went in and out the small, ger-style door fitted into a frame a foot and a half from the ground, Marchi removed the door, cut the frame lower with his chainsaw and, after Owgen and I fitted a custom plank to plug the space between the lowered door position and the previous doorframe, replaced the door in place as part of the cabin. According to Ingold's (2011B) dwelling perspective, not only is the initial assemblage of a house understood to be part of inhabitation, the fashioning of the house and of its domestic grounds over time through inhabitation effectively extends the building of the edifice beyond its initial assemblage (187-188). Ways in which inhabitation continuously fashions the changing structure of an edifice include practical use and the house-maintenance which is enmeshed with such use. For example, one day Owgen built a new timber panel for a window in his cabin in order to replace its predecessor which had been deteriorated along its extensive exposure to powerful winds and to the hands of inhabitants leaning on it as they would peer out the window. Another example of building through maintenance was the occasion in which I helped Erdene hammer out one of his cabin ceiling's support beams, that had leaned over to one side due to years of compression from the ceiling, from its position wedged between floor and ceiling joist, and then rearrange the beam in a functional, upright position.



Exemplary of building through use, Erdene and Owgen once assembled a pole along their cabin's southern wall, utilizing ropes and tenons protruding from dovetail joints, atop of which was fastened a solar panel. As the pole could be swiveled by hand, Jargal could thus benefit from the effectiveness of having the panel out from the shade covering the ground without sacrificing the ease with which a panel on the ground can be repositioned throughout the day to follow the movements of the sun. Rhythmically assembling and disassembling ortzes is another noteworthy example of how making is continuously enacted through inhabitation. Although, as Ingold would argue, the making of any structure is characterized by the continuation of building beyond the

duration of initial joining together, the nomadic nature of Dukha inhabitation may account for the ways in which Dukha people particularly emphatically express the imminence of such making. In addition to being a context in which such making emerges, nomadic lifestyles involve migratory practices which incarnate freestyle bearing in acrobatic, improvisatory discernment and movement performed through teamwork. These practices offer insight into the emergence of freestyle bearing and into the ways in which such bearing is informed by extensive environmental knowledge.

Carrying Life Onwards Through Pastoral Nomadism

As I am drawing on my own experiences of freestyle snowboarding to discuss freestyle bearing, I will allow myself to juxtapose freestyle snowboarding and nomadism. Snowboarding, as a sport and industry through which livelihoods are practiced, was born through the emergence of freestyle through assertion of personal creative and acrobatic freedom, freestyle continues to creatively develop as a domain of practice independent from notions of ‘sport’ and motivations of ‘industry’. Standard downhill snowboarding, understood as not being emphatically freestyle by virtue of its lack of creative improvisatory acrobatics, and the industry it fuels have thus arisen from freestyle snowboarding without supplanting or completely redesigning it. Along corresponding yet extremely different dynamics, it is commonly agreed upon that nomadic lifestyles preceded domestic ones in time, and that the latter emerged out of the former. Rather than embodying a progression along a teleological itinerary of evolution, the aforementioned emergence has over time set the stage for a contemporary situation in which nomadic and domestic lifestyles continue developing as unique and, in some cases enmeshed, methods of inhabiting this world. Nomadism can be understood as a way of life which rhythmically ‘carries on’ (Ingold, 2013: 110). Dukha people carry most of their possessions and equipment in their jackets and on the backs of their pack animals as humans and livestock carry their lives onwards along continually emerging itineraries of migration and travel, effectively carrying on ancestral traditions into the ephemerally imminent present.

Dukha people engage a nomadic way of life which is sometimes characterized as a form of ‘transhumance’⁶³ even though, as Schuyler Jones (2005) would argue, Dukha practices of domestic itinerancy can be more accurately qualified as instantiations of ‘pastoral nomadism’ (1). Jones presents a misunderstanding, commonly committed by anthropologists, in which transhumance and pastoral nomadism are confounded as one and the same due to both systems’ characteristic contiguousness of human and livestock itinerancy (Ibid: 1). Although Jones presents a limited portrait of pastoral nomadism which, claiming that pastoral nomads necessarily inhabit marginal lands due to their inability to inhabit better quality pastures already occupied by agriculturalists (Ibid: 1), fails to acknowledge the possibility, which among Dukhas is a reality, that the territory in which pastoral nomads live is *chosen*, rather than *resorted to* by virtue of the lack of accessibility to better lands. Jones nonetheless offers a salient definition of transhumance,

⁶³ http://www.france2.fr/emissions/rendez-vous-en-terre-inconnue/diffusions/14-12-2010_1635

according to which this system is understood as a limited form of nomadism undertaken for the sake of livestock usually by only some members of a community to and from a sedentary hub where agriculture is practiced (Ibid: 2-3). On the other hand, pastoral nomadism is understood as a way of life the seasonal itinerancy of which is engaged by in order to ensure the wellbeing of livestock (Ibid: 1). As many of my mentors told me, Dukha people choose to inhabit their taiga homeland, which is marginal in comparison to the total expanse of their ancestral territory, because it is home to the *only* type of ecosystem within Mongolia in which reindeer husbandry can be practiced, and because such practice is an important part of what Dukhas do and who they are.

Dukhas engage pastoral nomadism in the sense that the rhythms and itineraries of their domestic itinerancy harmonize with both the human and livestock inclinations, and the ecological conditions characteristic of the rotary synergy of four seasons. In their rapport on reindeer herding in Mongolia to the Arctic Council, Jernsletten and Klovov (2002) reported that Dukha herders nomadize in a “defined pattern of seasonal grazing areas” (144). Whether such patterns were ever defined or not – and I would incline towards a negative answer were I to argue the question – they were certainly not defined among the herders with whom I co-inhabited. These herders’ migratory movements are not subject to clearly defined boundaries of space and performance, and can thus only be ‘defined’ by virtue of the distinct, improvised itineraries which actually emerge. As the specifications of my mentors’ migratory movements arose through improvisatory decision-making and performance, an authoritative, total, and perennial definition of Dukha nomadism cannot completely and accurately be written. The telling of Dukha nomadism is nonetheless embodied in people’s actual migratory practices, and can be empathetically *felt-into* through attentive participation. It can then be subsequently described, qualified, and discussed in relation to the bearings with which many livelihood practices in particular and in general are performed. In discussion, mentors also told me of how they enjoy nomadic life, notably its implication of seeing and living in an important diversity of places and landscapes.

My Dukha mentors orchestrate their complex itinerancy in ways which mediate their rhythmically fluctuating ecological context with the various needs of diverse livestock species, relationships with friends and family, as well as access to Tsagaan Nuur, cellular reception, places of religious worship, and tourism-based income opportunities. Albeit the diversity of factors taken into account by my mentors, their movements necessarily accommodate first and foremost the needs of their reindeer because of the importance of these animals. As Keay (2006) has noted, many Dukha herders assert that reindeer are “[...] the most valuable of all possessions and are the central feature of life” (3). As stewards of forest reindeer herds, they practice what Charles Stépanoff (2012) calls ‘vertical nomadism’ (304), a system of itinerancy which cycles from higher altitude areas home to alpine tundra valleys, to lower altitude areas characterized by boreal forest and boggy valleys, and back again. The highlands, characterized by cooler temperatures and more vivacious winds, serve as ideal places for summering, as both humans and reindeer live more comfortably with less oppressive heat and flies, the latter nuisance being a potential source of diseases among reindeer (Stépanoff, 2012: 304; Haigh and Keay, 2006: 5) and, potentially through

subsequence, herders alike. In addition to being rich in lichen, a fundamental staple of reindeer diet, these cool, windswept areas are also characterized by considerably more grass than are other seasonal pastures, and so it is possible for families who herd both reindeer and Mongol мал to practice both these livelihoods in these locations during the summer (Haigh and Keay, 2006: 5). These alpine areas are also home to an abundance of berries such as blueberries and lingonberries which, at summer's end and in earliest autumn, offer valuable nutrition easily obtained by humans. When speaking of how they enjoyed their nomadic way of life, many mentors mentioned how they like autumn because the weather is not too hot nor too cold, and tasty foraged berries and pine nut seeds are abundant.

As early as August, Dukhas move to autumn camps situated at the edges of forests in slightly lower and tighter valleys (Ibid: 5) of alpine regions rich in mushrooms serving as important nutrition for reindeer. In these locations, as the taiga grows more and more cold, people find some respite from the wind, rain and snow (Ibid: 5), whilst continuing to offer their reindeer favourable ecological conditions such as just enough snow depth to render it both difficult for wolves to catch up to reindeer and still possible for the latter to access lichen by digging at it with their hooves (Stépanoff, 2012: 305). Jargal's advanced autumn settlement was located in a place which offered a high density of pine trees uncharacteristic of the surrounding area. Pines, in contrast to the more populous larches, do not lose all their needles in autumn and therefore offer more protection from wind and snow⁶⁴. As early as October families move in order to winter in lower lands, usually rich in lichen and located deeper within the protective confines of forests, and in tighter valleys (Keay, 2006: 5). Since the beginning of the 21st Century, most families have begun inhabiting regions which, albeit being located conveniently close to Tsagaan Nuur, do not offer optimal ecological conditions for complete reindeer herds. These families thus release most of their herds into quality winter pastures, keeping only the few reindeer necessary for a few men to ride and transport goods between winter camps and pastures in order to keep watch over the herds. Usually in April, families traditionally migrate to spring camps situated in lands characterized in similar ways to their autumn counterparts (Ibid: 6). However, some families remain in their winter settlement until May, at which point they return to higher altitude regions where they spend a few months in relatively populous summer settlements. By moving rhythmically from one settlement to another over the years, Dukhas cycle through different locations so as to ensure the perdurance and bounty of pastures and adjacent forests' stocks of usable wood.

In conversation with Öwngdorjoo and Dari I learned that at the time of their youth, before families increased both the proximity of their camps to Tsagaan Nuur and the duration of stays at these camps in order to facilitate the accessibility of interactions with children in school, other family members in Tsagaan Nuur and tourists, most Dukha people migrated every few weeks, ensuring consistent bounty of pasture, game, and plant-based resources. According to what I learned in conversation with other mentors, many Dukhas now migrate approximately four to seven times a year. In 2014 Tuya, Tartak, and Gakhai settled in four different locations, whereas

⁶⁴ Follow link to see video 21 (V21): https://www.youtube.com/watch?v=y1vwPZEhv_M

Öwngdorjoo and Dari inhabited, often only the two of them, seven different places that year. Although these two elder mentors considered frequent mobility and life in homelands farther North, away from Tsagaan Nuur, as meaningful ancestral traditions important to continue practicing but which are to some degree forsaken by today's youth, some young people such as Uultsang and Zaya, two of the more exposed to modern globalization, nonetheless figure among the Tsaatans who migrate most often⁶⁵.

It so happens that the examples of most frequent contemporary migration of which I became aware were among inhabitants of East Taiga. Considering how families in West Taiga, including Uultsang's and Öwngdorjoo's, possess on average smaller herds in comparison to inhabitants of West Taiga, and taking into account Stépanoff's (2012) evidence that, among Thozu forest reindeer herders, larger herds are migrated with along less diverse routes whilst smaller herds are along more diverse routes, it is possible that the lower reindeer population in East Taiga affords its inhabitants with more migratory freedom. This said, decreases in migrations do not necessarily imply decreases in mobility. In both East and West Taiga, as winter settlements are now situated further from reindeer's winter pastures (and past winter settlement territory), men frequently travel to and from winter pastures where they find and watch over (often) many families' reindeer in small squads for shifts of diverse durations. Furthermore both men and women, adults, and children alike fare trails blazed by years of migrations as they travel to and from Tsagaan Nuur for the diverse reasons with which they do. However often they have migrated and continue to move from one settlement to another, over the course of their history families continue to cycle through various locations favourable to life according to different seasons, inhabiting familiar places without any necessary repetition of exact locations. As will be evidenced and further discussed in this chapter, long-term nomadic inhabitation of the taiga inscribes the latter with cognizable storied traces. Many of these stories appeared to me as expressions of freestyle bearing and the improvisatory mediation of complex, continually new nexuses of generative conditions.

Learning How To Migrate In Practice:

In October I had an opportunity to migrate with Jargal and the co-inhabitants of her second autumn settlement from this snowy camp to their winter settlement in the lower lands of Shangmak⁶⁶. Our itinerary consisted first of disassembling the five ortzes which made up our camp before leaving the poles and packing the rest of the tent materials, along with the rest of our household possessions, atop of pack reindeer. Each Dukha adult leading two or three pack animals (some laden with children) by ropes attached to reindeer's saddle or halter and yangartsak, we advanced as a caravan



⁶⁵ Öwngdorjoo and Dari also considered life in an ortz for a home as another important ancestral tradition now often forsaken in winter. Some younger people, such as Sansar and his wife, nonetheless continue this tradition.

⁶⁶ Follow link to see migration video : <https://www.youtube.com/watch?v=vhe-BYs8brA>

of family units and their reindeer⁶⁷ and belongings along diverse paths. On the first day we passed by two past camps, including the families' first autumn settlement of that year, remembering events that had recently occurred there, before trekking up and over Xuulag Dawa pass. After descending from this high altitude mountain pass we crossed a river running from a frozen-over lake and rode by the still-standing orts poles of an old autumn camp nestled on the bank of the aforementioned lake. From there we trekked over another, smaller mountain before arriving in Suurnak well after the fall of darkness, and there assembled our camp. The following day my mentors dispersed themselves during daylight, retrieving goods stored in nearby caches, or making productive daytrips to either Xuulag or Shangmak, before returning to our provisional camp in Suurnak to pass



the night. On the third day we once again dis-assembled our camp, assembled our caravan anew and pursued our journey towards Shangmak. We passed over multiple rivers and mountains, and saw many traces of past human inhabitation such as horse skulls left commemoratively in trees, cotton ribbons tied in religious worship, as well as piles of old firewood, storage tables, and relatively flat, open spaces where, as Owgen told me while riding, Jargal's family had spent a few winters a decade before



our passing. As the snow depth receded we entered the grassy, frozen-over, boggy valley of Shangmak, where we arrived at the families' winter cabins and orts spots in a forest edge overlooking the pen and pasture for their horses, a short travel away from family and friends wintering in Xarmai or Tsagaan Nuur.

Organizing The Move:

The day of our departure was discerned by my co-inhabitants in an improvised mediation of the fixed rotary logic of the Mongolian Buddhist lunisolar calendar with the unpredictable yet skillfully foreseeable dynamics of local weather movements which acrobatically synergized these unpredictably adjacent systems. Our departure needed to coincide with the synergetic alignment of a day astrologically favourable for travel, and a multi-day respite from the heavy snow that had been falling in the region – and that would continue to do so before long. My mentors foresaw favourable weather by complementing their anticipative feel for meteorological conditions, informed by and developed through lifetimes of ecologically attentive inhabitation, with predictive weather reports for areas 80 or so kilometers away viewed on television. The facts that all three days of the actual migration were illuminated by sunny, blue-bird sky as anticipated, and that the actual performance of the move was well executed without any unfortunate events arising, suggest that my co-inhabitants' mediation of astrology with meteorological foresight effectively discerned

⁶⁷ Total reindeer: approximately 45-46.

an optimal timing for lugging household items as diverse as food, stoves, bedding, sacred ongod bags, satellite dishes, and plastic toy-trucks⁶⁸.

The arrangement of luggage in both packing and distribution exemplified improvised planning in strategic mediation of goods, luggage space, and reindeer carrying-capacity. Packing was done progressively on the days and nights leading up to the migration, during which Jargal made large batches of buurtsuk biscuits for her, her children, and their families throughout the move and upon settling in Shangmak, and on the day of the move itself. My mentors assembled luggage by arranging various items in other diversely sized, shaped, and padded items either designed as, or temporarily serving as, luggage containers. Many of these arrangements, such as of ongod bags and television screens with snugly wrapped blankets intended for placement on the topmost of pack reindeer' backs, appeared to be very familiar to my mentors, as they efficiently and effortlessly assembled these arrangements. Other luggage arrangements, such as food stocks, clothing, and footwear, by virtue of their more frequently changing in quantity and form, were efficiently and easily assembled whilst presenting more minor puzzles solved through improvised orchestration of spatio-material correspondence. The transport of luggage was anticipatively organized as a strategic distribution of loads over periods of time which both preceded and constituted the duration of the actual migration, as well as in multiple areas along the migratory itinerary. This distribution included a few day-treks to Shangmak fared by the men before our group migration in order to bring luggage to our eventual destination, as well as the anticipative scattering of goods in caches along our migratory route. The fixed domestic space of the migration's second day allowed my mentors to temporarily scatter to gather goods from caches in and around Suurnak and back in Xuulag, as well as to simultaneously transport luggage, the mass of which equalled or surpassed as much as possible that of the goods retrieved from caches, to Shangmak and in so doing ensured the persistence of their fixed reindeer carrying-capacity. Jargal, Mama, and Biijei stayed at or near camp that day to care for the children and to maintain a warm home laden with food ready to eat when the men returned from their day-treks⁶⁹.

Performing The Move:

The day before moving camps my mentors released most of their reindeer herd for winter pasture, keeping only enough adult castrated males to ride and pack for collective travel to Shangmak, as well as for small squads of men to travel to winter pasturelands in order to find and watch over the herd in winter pasture, and still leave enough reindeer in Shangmak for domestic uses such as transporting firewood. On October 25th, day of the yellow dragon, we disassembled our ortzes, as well as melted and dried the snow and ice covering the outer face of the canvas sheets⁷⁰, before assembling the materials and other household items into luggage arrangements

⁶⁸ Follow link to see video 23 (V23): <https://www.youtube.com/watch?v=56vk4ucY3go>

⁶⁹ Follow link to see video 24 (V24): <https://www.youtube.com/watch?v=qsoP70wY8L0>

⁷⁰ Follow links to see video 25 (V25): <https://www.youtube.com/watch?v=Ep-lm1xoMGw> ; <https://www.youtube.com/watch?v=7RZB3rrf0gA> ; <https://www.youtube.com/watch?v=GVMVgtOnT04>

and packing these onto the backs of reindeer. My mentors displayed freestyle bearing in the ways in which they fitted and fastened a panoply of diversely arrangeable luggage. For instance, stabilizing an oftentimes somewhat reticent reindeer whilst lifting often heavy loads and tying them together onto the back of said reindeer required playful teamwork and acrobatic poise in terms of suppleness, strength, spatio-material arrangement, and knot-work⁷¹. Packing reindeer frequently involved creative problem-solving such as discerning how to most effectively fasten a large piece of frozen meat, and subsequently cutting a hole into the piece, the vacated substance of which would be gobbled up by an attentive dog as it would fall to the ground, in order to securely pass a rope through it⁷². The problem of making due without a yangartsak, forgotten by mistake by someone in Shangmak on a day-trek the previous day, was solved by Owgen and Naranxöö as they resourcefully joined together two axes with ropes into a timber a-frame characteristic of yangartsaks. The wooden handles, each dangling on opposite sides of a reindeer's spine, were successfully used to effectively fasten luggage onto the sumpter, and so Jargal's family was able to utilize all of its pack reindeer without all of their actual yangartsaks.

The pace of our caravan consisted of a slow trot which rhythmically increased in speed or subsided into brief halts during which my mentors would re-secure or re-arrange luggage and children, the latter wrapped in warm blankets and fastened into a wooden frame itself fastened to the back of a reindeer. On an occasion where the rope connecting two pack reindeer snapped apart as a result of it getting caught around the trunk of a short tree, I quickly got off my steed, ran after and caught the loose reindeer, then securely re-tied its lead-rope to the reindeer ahead of it in the caravan before Biijei and I quickened our paces to rejoin Baatar ahead. This event demonstrates the need for practitioners to simultaneously take into account the navigation of trails as well as the welfare of luggage and children whilst riding reindeer along an itinerary laden with abundant obstacles such as ditches, frozen or semi-frozen rivers, and steep mountain pitches, a practice which, as mentioned in chapter 4, requires significant improvisatory and acrobatic poise. Among Baatar and Marchi's household units, the fathers navigated trails while the mothers tended to the children by rhythmically looking back at them while smiling and saying cheerful things.

Although each family fared much of the same itinerary, individual household squads frequently split from one another's path. For instance, in the expanse leading up to Xuulag Dawa Baatar and Marchi led their families along divergent trails, blazed in the snow by the men along their anticipative day-treks to Shangmak, which later joined together as one on the climb up the mountain. Tartak and Gakhai took an altogether different path out of the valley and arrived in Suurnak considerably earlier than did I along with Baatar and Marchi's caravan. Jargal's household unit, having more luggage to pack and thereby taking a longer time to depart our autumn camp, formed an altogether distinct caravan on the first day. The following day, as they had enough carrying-capacity for their particular loads, Tartak, Tuya, and Gakhai went directly to Shangmak instead of staying a second night in Suurnak with the rest of our group. Individuals within the same

⁷¹ Follow link to see video 26 (V26): <https://www.youtube.com/watch?v=4Sanu7qPpo8>

⁷² Follow link to see video 27 (V27): <https://www.youtube.com/watch?v=gMW3oYkmeJ8>

household unit also occasionally split apart. For example, while Tartak and Gakhai fared their own, unique path to Suurnak on day one, Tuya diverged from her household's path in order to join Owgen, forming a temporary squad with him, and cooperatively drive their collective horse herd in challenging snow-depth by corralling them along an improvised itinerary which eventually followed the path slightly beaten into the snow by Marchi and Baatar's caravan earlier that afternoon.

In Suurnak, my mentors expressed impressive efficiency and ease in the ways in which they assembled and dis-assembled camp, and re-packed the reindeer with new arrangements of luggage. Arriving after the fall of darkness, Baatar, Biijei, and I quickly assembled their ortz without access to any electrical source of light. As Biijei finished overlaying canvas sheets and tarpaulins around the conic structure made with poles buried in the snow nearby following past use, Baatar and I lit a fire in the stove once again without the assistance of any light. By the time we lit the fire, Biijei had already set up an electric lightbulb and placed a cauldron full of snow upon the stovetop to melt and drink as tea. I was astonished at how cheerful, playful, and effective we were as we efficiently worked in the cold and dark. For instance, while clearing the ground for the ortz – and as Boomboole laughed and cheerfully mumbled things to her warmly bundled self – Baatar and I laughed heartily when I, at his request following his vain attempts at the task, managed to tear a heavy piece of wood from the frozen ground in which it had been lodged. He exclaimed “Saxal Bawgai!”, adorning me with the new nickname of ‘Beard Bear’. The ease with which these and other practices intrinsic to migration, as well as with which cheerful playfulness emerges along with the performance of the tasks constituting those practices, is accountable for the habituation to such activities through lifetimes of engaging nomadism.



Nomadism As Storied Participation In A Habitat's Transformative Generation:

As they functionally interact with their habitat, “[...] following and reconciling the inclinations of alternately pliable and recalcitrant materials [...]” (Ingold, 2013: 70) which correspondingly compose this habitat, Dukha people participate with those diversely characterized and inclined materials in their common ecosystem's generative processes of relationally embodying an imminent meshwork of emergence, consummation, repulsion, friction, synthesis, and productive extenuation. Dwelling in a habitat's open-air, people's every movement in one way or another inevitably transforms the physical constitution of that habitat. These transformations are undeniably relational in terms of the inevitability of human interaction with materials. Among Dukha people many of these transformations are furthermore relational in terms of the cooperative ways in which livelihood practices are performed with one another and with animals of other species. Over days, weeks, months, years, and lifetimes, human interactions with the taiga's constituent materials and inhabitants are inscribed in the environment as storied trails overlaying

one another and, in so doing, enveloping themselves in one another as an enmeshed tapestry of ephemeral, diversely persistent monuments of inhabitation. Sightings of such monuments abounded when migrating with my co-inhabitants.

Monuments were not only perceivable in obvious traces such as the actual trails we navigated, or the variously aged timber structures left over from past settlements, caches or campsites. Storied traces of nomadic inhabitation also abounded in the almost imperceptible effects of flinging a pine tree branch full of snow whilst passing beneath it on a reindeer, of removing a cone from a pine tree to munch on its seeds, or of feeding nitrogen into the soil beneath a larch tree by urinating whilst resting one's shoulder and flank, calmly watching the wind blow through a horse's mane as it eats grass and gently swats persistent flies away with its tail. On many occasions while migrating, my co-inhabitants told me brief, storied accounts of specific monuments which we momentarily passed. These stories testify to both the significantly extensive time in which their tellers have been participating in the taiga's own transformation the taiga, and the large expanses of territory in which this participation has been embodied. Extensive, expansive, and immersive inhabitation of the taiga accounts for the acute geographic knowledge with which such a lifestyle is effectively performed without the use of navigation equipment such as maps, compasses, or GPS devices. The geographical and ecological knowledge with which my mentors are bestowed is also expressed in improvisatory and acrobatic fashions when executing the diverse practices involved engaging animal husbandry as a main element of livelihoods.



6. Animal Husbandry: Living With Interspecific Companions

As alluded to throughout this thesis, many Tsaatans complement reindeer husbandry in varying degrees of intensity with canine and equine stewardship as well as, more recently, with the husbandry of typically Mongolian livestock, or Mongol мал, such as cows, oxen, yaks, goats, and sheep. In diversifying the specific extent of their husbandry practices, many mentors of mine and their families resiliently rearrange their livelihoods in functional correspondence with both reindeer's familiar requirements and new situations emerging in the 21st Century. As such livestock diversification is a practice which has not spanned more than three generations of Dukha people, in great contrast to age-old reindeer husbandry⁷³, its organisation and performance requires significant improvisation and experimentation. In order to cater to the environmental requirements of animals native to steppe lands while still and most importantly tending to the needs of reindeer and of their husbandry, families express cooperatively organized and performed acrobatic

⁷³ Although Dukhas' ancestors have been herding reindeer for thousands of years (Keay, 2006: 1), they have only relatively recently become a primary source of meat for Dukha people. Now, especially due to the hunting and fishing ban imposed by the NSPA regulations, Dukha Tsaatans must steward populous herds, a requirement implying improvisatory and acrobatic experimentations in its own right.

dispersal of livestock and herders along fluctuating paths throughout the taiga and its peripheral regions, such as Xarmai, composing the ecotone between taiga and steppe ecosystems. Such diversifications, and the dispersals which allow the former to be effectively executed, often draw on the participation of friends and family members according to their various abilities and availabilities. For example, Jargal's eldest son Naranxöö and his wife inhabit Xarmai from autumn until early summer in order to watch over Mongol мал belonging to themselves, Jargal, and other family members or in-laws, while the couple's own reindeer are stewarded by the same people for whom Naranxöö and his wife watch over Mongol мал. During the time Naranxöö's household inhabits the taiga with their own reindeer, the Mongol livestock under their care the rest of the year is watched over in Xarmai by his wife's sister. Another instance of acrobatic dispersal, and of cooperative practices which afford such dispersal, is when small squads of men stewarding winter pastures watch over not only their own reindeer, but also those of family and friends inhabiting regions nearer to Mongol мал, and to family members and friends wintering in and near the steppe.

Herding Mongol мал or not, reindeer remain the fundamental livestock at the heart of Tsaatan livelihoods, and both dogs and horses have long been utilized not only in tandem with reindeer but also in the very husbandry of the latter. My discussion on Dukha animal husbandry and its related expressions of freestyle bearing thus focuses on practices involving dogs, horses and, especially, reindeer. I suggest that Tsaatans are ideal people with whom relations of shared domesticity and cooperative practice can be learned about because, as their herds number much smaller than those of most other pastoralist communities, Tsaatans may have more intimate relationships with their livestock than do other communities with larger flocks. This seems to be the case regarding relations with reindeer because of how few they live with in comparison to most other reindeer pastoralist communities, especially more Nordic herders (Inamura, 2005: p.124). For instance, whereas Finnish Saami herders incarnate reindeer

possession with permanent earmarks on animals performed with a knife (Ingold, 1975: 530), Dukha reindeer possession, unlike horse ownership indicated with brands, is materialized in fur rather than in flesh, as Dukhas cut their household furmark into their reindeer's hair. Scissoring furmarks is much less painful for animals and, by virtue of its impermanence, must be rhythmically refashioned over time, affording herders with the time to carefully inspect individuals of a herd to learn the state of their health in the reading of their physical condition. Such careful inspection effectively embodies the persistent renewal of herders' engaging their reindeer with significant intimacy, through which human and reindeer companions attend to one another's body and its presence. In presenting Dukha animal husbandry, I first discuss how interspecific companionship emerges before describing practices in which such companionship is embodied in the cooperative execution of interspecific livelihoods.



Interspecific Companionship: Cooperative Livelihoods In Shared Spaces

Although Tsaatans generally perceive their reindeer as distinct from these animals' 'зэрлиг' ('zerlig': 'wild') counterparts by virtue of the former's condition as 'мал' ('mal'), *livestock*, and of the relative relinquishment of freedoms which engender such a condition, their herds of forest reindeer are recognized by anthropologists as 'semi-domesticated' (Küçüküstel, 2013: 62). Rather than fully subjugated to human control, the reindeer playfully dance in and out of the fluid boundaries of human authority. Discussing Thozu reindeer pastoralists, Stépanoff (2012) posits that in order for reindeer, who remain largely free to escape humans and their encampments, to willfully decide to come back towards camps and ultimately allow themselves to be herded, caught, led, and ridden, and handled in many other ways by humans, herders must mediate practices of dominating reindeer with the sensibilities which take into account the assemblage of a domestic space which fosters conditions desirable to these ungulates (190). As reindeer foraging necessitates their travelling away from camp with bodies unrestricted so as to effectively outrun wolves if such predation attempts are encountered, but the practical use of reindeer requires these ungulates to co-inhabit human-fashioned domestic space, Dukha Tsaatans must temper their control over reindeer with attractiveness.



My mentors evidently embodied poised improvisation in the sensible mediation of control and pampering as their reindeer, although frequently released into pasture (often un-hobbled), and albeit hobbled reindeer's ropes occasionally breaking out in the field, commonly returned to or near camps unsolicited. If not unsolicited they complacently allowed themselves to be herded into pens or caught and tethered into fixed locations. Although even the reindeer which most actively attempt to avoid capture often quickly relinquish their fight once they have been skillfully caught, much in the same playful manner as a friend would after being caught in a game of tag, some reindeer are occasionally left free from capture. This is done when capture seems unpractical to continue attempting, and when the surrounding lands do not communicate threats of wolf presence, trusting that the reindeer won't roam far from the herd. Evidently so, I frequently noticed fugitive reindeer casually hanging around penned or tethered reindeer, and around ortzes, licking salt off the canvas imbued with salty vapours rising daily from stovetop cauldrons, or licking nearby spots where humans habitually pee. Reindeer lick human urine because of the salt therein contained. They absolutely *love* salt. For this reason, my mentors carried plastic bags filled with salt in their pockets which were thereby always handy to be noisily rubbed on itself while making puckering noises with their tongue and pallet. These actions and sounds would help them attract and catch reindeer, upon successful achievement of which they would commonly reward the animals with a tasty salt lick from their palm. Stépanoff (2012) suggests that, through sustained kinaesthetic contact with human hands during the obtainment of salt from youth to old age, reindeer "[...] learn to associate pleasure with the scent of man and the contact of human skin" (294).

I noticed mentors such as Xadaa and Marchi practice a nifty trick for when they did not, for some reason, have salt on them or want to share it at that moment. The trick consisted of rubbing an empty plastic bag or candy wrapper on itself and in so doing fool reindeer into associating the sounds and movements of plastic bags with rewarding salt licks. In addition to playing that trick on the animals, I myself quickly practiced carrying a bag of my own salt in my pocket and used it for catching and rewarding reindeer. Both I and individual reindeer came to know each other through sensuous encounters of tongue, salt and palm, as well as through the relative domination over them afforded to me by them through my sharing salt and handling them. Although possessing salt helps in encouraging reindeer to temporarily relinquish their freedom, it is not a fool-proof means of catching them, and even less of subjugating them to practical use. In order to instill in them enough confidence in me to allow me to ride, lead, and pack them, we had to become thoroughly co-habituated to one another. Our relatively thorough co-habituation emerged through our co-inhabitation and cooperative execution of one another's livelihoods. My habitual co-inhabitation and cooperation with reindeer coincided with a growing sentiment of companionship between myself and both individual reindeer and the herd as a whole.

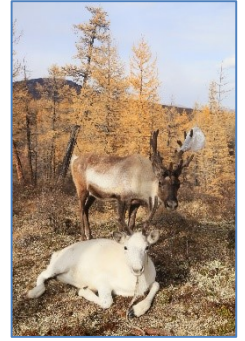
By engaging symbiotic livelihoods with their livestock animals for entire lifetimes, my mentors seemed to entertain relations of companionship with these animals, notably with reindeer and horses. This companionship establishes the trust with which members of all species involved cooperatively participate in one another's livelihoods. For me, living in domestic spaces home to livestock animals involved expanding my comfort zone to grow habituated to moving and working in fields of animal droppings, as well as to reindeer casting sideways glances at me with their big eyeballs as they sniff me, closing in on me to lick my urine in mid-flight or once on the ground. For most of my mentors, such expansion of personal comfort zones has been thorough, as they have been born into the conditions characteristic to pastoral

life. Animal traces are so abundantly habitual that even the mats and blankets with which we sleep at night are rhythmically used during certain days as pads for packing or riding reindeer, and thereby persistently covered with reindeer hair and sweat. Habitually living among and working with reindeer, my mentors have come to recognize individual reindeer, of both their own herd and of herds belonging to family and friends. They recognize reindeer according to their abilities and histories, as well as to their specific aesthetic and behavioural characteristics. In this manner, individuals can be efficiently spotted among the herd, which significantly contributes to the effective execution of tasks such as retrieving specific reindeer from within a pen.



Recognizing individual reindeer characters allows herders to appropriately control more subversive reindeer. For example, my mentors commonly tethered the halter of a subversive reindeer with the halter of a habitually relaxed and generally tame reindeer, forming a multi-corporeal knot, referred to as 'oyuaasang tsaa' (tethered reindeer), which behaves in a functional bearing that embodies the synergy of each animal's unique character. Although their participation

in accomplishing herders' dominion is arguably unconscious and unintentional, tamer reindeer utilized in bi-animal tethering nonetheless act in ways which cooperatively align themselves with the interests of their herders. Differentially exemplifying the pertinence of recognizing individual reindeer characters, Suren fastened a plastic bag to мыанд ('myand': adult female)⁷⁴ in her flock, reputed for her tendency to attempt prolonged escapades far away from camp, in order to increase the ease with which she could be spotted and thereby maintained within the herd by either Suren or other people to whom she confided the supervision of her flock when in pasture.



Suren, one of my most elderly mentors, demonstrated particularly intimate relations with the few reindeer who composed her flock. As Zaya noted in conversation, Suren loves her reindeer so much she doesn't draw from all four nipples when milking her females⁷⁵. Zaya also noted how other herders rarely even attempt to handle Suren's reindeer, as the latter embody effective subversion when people other than their owner try subjugating them to control. I frequently noticed the graceful ease with which Suren handled her flock. Once, discussing with Suren in her ertz winterized with a blanket laid over the door flap, with a timber plank floor, and with a particularly strongly burning fire, she answered my question (at the hearing of which she had chuckled) of whether her reindeer were her friends with a 'yes'. Although laughing was a common initial reaction to this question among my mentors, people displayed a significant discrepancy in their answers. Many said that reindeer were livestock, not friends. Nonetheless some herders, including well-respected Suren, claim that these animals are in fact their friends. Friend statuses (or lack thereof) aside, through extended co-inhabitation and cooperative livelihood practice, all mentors agreed upon liking reindeer and enjoying living among them. As German anthropologist Jürg Endres helped me perceive through conversation whilst herding reindeer through pasture on foot in East Taiga together, mentors' care for reindeer arises not only out of practical necessity, but also through a sentiment of companionship. Such sentiment of companionship exists also in relation with horses.

Both reindeer and horses are cared for in various ways. For instance, Tsaatans avoid packing their animals with loads beyond their carrying-capacity in order to avoid hurting or, even worse, injuring them. When riding reindeer my mentors took the wellbeing of their steeds into account, gently mounting them from on top of stumps or rocks so as to not injure their spines, as well as dismounting their steeds to lead them down severe or potentially slippery inclines on foot so as to not injure their legs and spine. From what mentors told me, when journeying with reindeer for multiple days in a row they are cycled between use for riding and packing, giving them alternated breaks as pack-animals, a function which allows for both increased freedom of movement and often lighter and less persistent loads. Mentors occasionally performed improvised

⁷⁴ Follow link to see video 28 (V28): <https://www.youtube.com/watch?v=UnK1h9YTFJo>

⁷⁵ Usually Dukhas do not milk the reindeer for up to 10 days after the birth of new fawns to allow the latter to fortify themselves, then milk one nipple per female until June, at which point the fawns begin eating lichen so the herders milk two nipples. They milk three nipples from July to August, at which point they milk all four nipples until they run dry just before winter. The females do not produce more milk until the following Spring.

surgeries on livestock, diagnosing problems by noticing irregular behaviours or superficial oddities, and resourcefully using available materials to solve these problems. For example, in subsequence to an infection suffered a horse after it was bitten by a wolf before escaping its predation, with Marchi and Baatar's assistance in stabilizing the ill horse and in playfully brainstorming diagnostics and solutions, Tartak relieved the pressure growing upon the horse's stomach. He did so by first making an incision into the horse's gut and then placing a stick, itself found and snapped to size without moving his feet, in between the animal's skin and stomach in a position which alleviated both the pressure of the skin on the infected area of the stomach, and its related pain. In another instance, the day before migrating from Xuulag to Shangmak a few of my mentors assembled around a limping reindeer. Having found a splinter in the animal's footpad, one of the men removed the wood by digging it out as gently and un-obstructively as possible with his knife. He then cleaned the wound with snow, and the knife by rubbing it on his pants rather than on his deel, as the latter is less frequently washed due to its size, extended drying time and quasi-daily use.

Another way in which Tsaatans care for their reindeer is by keeping wolves away from them. In addition to trying to live in regions characterized by snow too deep for wolves or too far away from easier and more bountiful hunting ranges in the steppe, some herders will occasionally fire a single shot into the night with a rifle if the threatening presence of wolves presses too intensely on the herd. In addition to hearing wolf howls – an ability that Jargal had sharpened much more than I had, hearing them when I could not – and spotting storied wolf tracks in the soil or snow, herders are alerted of wolves by the avid barks of dogs. I became habituated to such barking as sonic rhythms which accompanied most nights spent in regions close to the ecotone between taiga and steppe. Although relatively undiscussed in this thesis, Siberian laika dogs are significant teammates with whom livelihoods are practiced. Traditionally used for hunting, domestic canines double as communicative alarms, intelligible to their owners, which sound in varying degrees of intensity when wolves are near, as well as upon the arrival and departure of humans, livestock and motor-vehicles. One particular dog belonging to Xadaa, on some of the occasions where her accompanied a herd to pasture, even helped me herd reindeer in directions along which I was intending to herd them.

My mentors entertained relations of companionship with their laika dogs in varying degrees, but generally treated them as animals belonging outdoors. Mentors therefore build shelters for their dogs. Dogs also find their own shelters such as the relatively dry spots underneath pine trees⁷⁶. These dogs have the freedom to find such shelters, or to join humans out in pasture with reindeer and depart again for home as they wish, due to their being trusted by humans and thereby frequently allowed to roam freely without being tethering to a fixed location. Dukhas nonetheless tether their dogs, however not always consistently, often in the evening to avoid them chasing after animals



⁷⁶ See figure 5 in annexe 7.

overnight. Dukhas also tether dogs as a disciplinary measure taken in the instances where dogs are caught abusing human trust, or as a preventative measure taken by humans when their trust in a particular dog is inappropriate for a current situation. The most common way in which dogs can cheat herder's trust is their daring attempts to steal food. Knowing that dogs can easily slip under orts door flaps or budge through cabin doorways, my mentors had nifty habits of rendering food unavailable to dogs before vacating their home for almost any stretch of time. Such habits included tying food items up high from ortz poles, as well as covering food with a bowl and stabilizing the latter by placing upon it a weighted object such as a spit log.

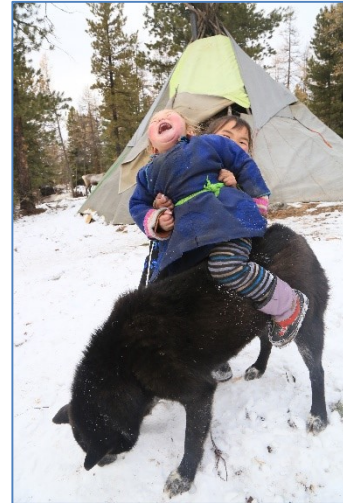
Although usually successful, these techniques were nonetheless commonly thwarted by clever, daring, and sometimes hungry dogs. Dogs even frequently attempted, sometimes successfully, to steal food from humans while the latter were present. For this reason, dogs are generally not allowed to enter the home. Observing the effective actions of mentors, I too grew to commonly prevent daring dogs from venturing any further into homes with the use of voice commands such as 'gar!' and 'gar chi!', or by picking up a nearby stick and even sometimes gently tossing in the direction of the animal, which at that point would bolt out of the edifice. Some dogs are allowed indoors, usually by their owners only, more often than others, and are consequentially fed more food as allowing canine companions inside the house often implies sharing snacks with them. Dogs most frequently allowed in the house – and this for only brief periods of time uncertainly anticipated by the dogs who were ready at any instant to bolt out from the home at an instant's notice – were commonly puppies, or trusted and well-behaved full-grown dogs such as an owner's finest work dog, or a dog who, having for many years been a finest labourer, receives hard-earned preferential treatment in its old age. Regardless of whether they are frequently allowed inside the home or not, dogs are not allowed to sleep indoors overnight. My particular relation of co-inhabitation with one dog was thus an anomaly in the taiga, although humorously accepted by my hosts.

On two separate occasions Baatar and Bijeji left Xuulag for Tsagaan Nuur during a few days, leaving their dogs behind to stay with the others. During these days, I began allowing Gulag, Baatar's honoured elderly canine pensioner, to rest and even sleep overnight in my personal ortz. In addition to the playful and endearing moments we shared staring into each other's eyes and gently petting or licking the other, we engaged cooperative practices in which I offered Gulag shelter,



care and food, and correspondingly he never once abused my trust and he frequently kept younger, stronger dogs away from my ortz and food with his snarls and growls. Albeit Gulags' unflinching loyalty to me and, from what I have seen, to Baatar, the old dog still embodied daring subversion among other humans. For instance, one afternoon I caught him leaving Tuya's ortz with his head

stuck in a plastic bag in which Tuya had stored her gambir fried-bread⁷⁷. Although involving occasional disciplinary measures, much of the prevention and subversion which go into human and dog relations correspond with the playfulness with which games are played. Gakhai and Ondra actually played with the former's elderly dog by trying to mount and ride it, with limited success in practice⁷⁸. While watching videos, filmed in the taiga by foreigners throughout the years and subsequently gifted to Dukha people, with some of my hosts in East Taiga by means of a DVD one person's DVD player and another's TV, I noticed children playing with reindeer in similar ways to Gakhai and Ondra with the dog. The children in these videos often playfully pulled on reindeer's halters or rode them bareback, effectively taming the younger reindeer through pure play, as these activities did not appear as being engaged as means of accomplishing work tasks, but merely to have fun.



In the practice of everyday life along with Dukha people in their nomadic pastoralist inhabitation of the taiga, I became aware of interspecific symbiosis. This phenomenon, which for years I quested to find among humans, did not show itself to me as a natural state of affairs innate to ecosystems but *not* to humans. Nor did it appear as merely a fluffy fairy tale, conjured by foolish hippies, that is unrealizable in the *real world* which, quoting Thomas Hobbes, is “[...] nasty, brutish and short” (1651: Ch.8). I actually became aware of human participation in interspecific symbiosis as a playfully and hard-earned relationship of co-habitational cooperation in sustaining one another's lives, regardless of the measures taken by a symbiont or its interspecific counterpart to either tame or subvert the other. For me symbiosis is the co-habitational process in which a reindeer – whose body and character I know well, and who knows my body and character perhaps even more acutely than I know theirs’ – prances over to where I will urinate as soon as they see me begin to unbuckle my pant belt or even just step out of my orts, at the customary times of day and night at which I tend to urinate. That reindeer arrives at my feet in the nick of time to lick the first, freshest streams of urine before the habitual onslaught of reindeer not as familiar with me or not as serendipitously situated in those brief moments between unbuckling and peeing, but just as avid for the taste of the physiologically edifying sodium mineral. Symbiosis is also sharing reindeer meat with a dog that has helped you hunt and has kept wolves at bay for years. It is also killing your horse, after years of protecting it from wolves, before it grows too old and weak and thereby falls prey to predation or sickness, in order both give it an honourable, swift death, and eat its preciously grown meat, sharing it with friends, family, and even a foreign visitor.

Eating Animals And Animals Eating

A major part of symbiosis with livestock animals is raising and caring for them in order to subsist by their means. This subsistence is realized in the ingestion of livestock products such as milk and meat.

⁷⁷ Follow link to see video 29 (V29): <https://www.youtube.com/watch?v=aAVWP3WVo40>

⁷⁸ Follow link to see video 30 (V30): <https://www.youtube.com/watch?v=nr6U3LCjRQE>

Reindeer Milk And Its Derived Tea In Livelihood And Practice:

Reindeer milk and its most common use in making ‘süütei tsai’, or ‘milk-tea’, are fundamental staples of Tsaatan diets, and meaningful materials engaged in livelihood practices. Much as among other Mongolian pastoralists, Dukha people relate with milk as a sacred material intimately linked with prosperity by means of its life-sustaining qualities, and of its embodiment of virtues, notably purity and prosperity, associated by Dukha people and other pastoral Mongols with the colour white. Tsaatans use milk in executing diverse libations offered to various spirits. For example, upon worship-based visits to sacred *owoo* stone cairns people will offer milk to the *owoo*, the *ezen*, or ancestor spirits which may inhabit it, and to Oron Khangai, the entire taiga. Furthermore, every morning just after sunrise, between milking the reindeer for the first time of the day and making the first batch of milk-tea, with their household ‘*ᠲᠠᠴᠠᠰᠠᠯ*’⁷⁹, women toss freshly drawn milk through the air along various directions in the blessing of diverse spirits, each corresponding with specific directions (i.e. celestial spirits with upwards, *ezen* spirits with their cardinal direction relative to the ritual practitioner in the act of libation). Tsaatans cooperatively embody improvisatory acrobatics in mediating thoroughly engrained practices (i.e. offering particular blessings to specific recipients) with always newly emerging ritual intentions and means.

Once reindeer milk has been arranged with other ingredients into a synergetic brew of *süütei tsai*, its purity blesses another important libation performed by women once every morning. This ritual consists of pouring a small portion of tea from the kettle onto the stovetop before filling any human’s cup as a way of honouring and feeding the household spirit which inhabits the family’s hearth-fire. As will be drawn out in the next paragraph, the minute tilt of the kettle and the subsequent encounter of fresh tea and hot stove, which together engender this libation, stand out as the final splash with which women embody practically effective and aesthetically impressive improvisatory acrobatics in the making of milk-tea. Through issuing their milk, albeit being greatly encouraged rather than forced by humans, reindeer unintentionally cooperate in their stewards’ livelihood by means of healthy and fortunate relations with spirits. Such cooperation is orchestrated by women in their dynamic manipulation of reindeer, as well as in the freestyle arrangement of milk with other materials over the hearth-fire.

Tsaatan women make *süütei tsai* along the lines of a common traditional recipe, yet each woman makes brews unique to their person and to each occasion of fabrication, the latter emerging in continually new nexuses of generative conditions such as specific reindeer, specific milk batches, specific water source, specific tea(s), specific fire temperature and movements, extra ingredients (or lack thereof), equipment, and environmental conditions. Each unique brew is an improvised synergy of personal techniques and recipe(s), and ingredients chosen among those available. The basic procedures of assembling ingredients into an arrangement true to the form of *süütei tsai* consist of first crushing green tea in a sewn pouch with a stone pestle (found in the taiga) or with a (store-bought) metal equivalent, then mixing the crushed leaves with *xojir* powder

⁷⁹ ‘*ᠲᠠᠴᠠᠰᠠᠯ*’ (‘*tsatsal*’): ceremonial carved-wood flat spoon.

and salt into the milk-infused water within a cauldron resting in its designated position over the fire in the stove. As the brew begins to simmer and then boil, each in their own bearing, and with each bearing remarkably unique culinary characteristics, women skillfully scoop the brew with a colourful plastic ladle and lift it up to a foot and half in the air over the cauldron before releasing the liquid back into the cauldron, thereby shaking the potion with oxygenated movement. Once this animating of the liquid's movement has been performed, and the tea thereby finally fashioned, the human conductor of this synergetic brew commonly filters out larger shreds of tea leaves using a strainer before pouring the sacred, life-sustaining concoction into kettle(s) and thermos(es)⁸⁰. Pouring from considerable heights into recipients characterised by relatively small openings, women embody precise aim as they supplely and responsively tilt the ladle and draw their spring-like wrists, arms, shoulders, thoraxes, and knees up or down in unique angles which effectively engender the falling of tea in intended recipients without making any mess, which would require time to clean that could otherwise be used working and/or relaxing. As it is almost impossible to collect the last half-cup or so of liquid at the bottom of the cauldron with thick-rimmed ladles, many women embody the same, steezy functional ease of pouring with a downturned cauldron as they do with a ladle.



Women embody creative experimental discernment in the improvised joining of familiar ingredients, such as sugary and lightly cooked flour, and synergization of süütei tsaï with relatively new ingredients, such as fruity bagged tea gifted by foreign visitors, as they self-expressively give their own unique touches to tea flavours and consistencies. Women were often visibly pleased when I detected and complimented their use of less common ingredients, such as sweet flour and fruity teas, without their having informed me beforehand. New ingredients cannot, however, be undiscernibly synergized with süütei tsaï. For example quality hot-cocoa powder, although sweet and agreeably mixed with bovine milk, once synergized with Jargal's milk-tea in my canteen made for a disagreeable tasting concoction. On the other hand Canadian maple sugar, to my hosts' delight and mine, actually mixed well with tea and, as I discovered sharing loaves I had made on my own stovetop – an assemblage emphatically qualified by freestyle in its own right –, with other traditional foods such as homemade bread. Much of the improvisatory and acrobatic dynamics involved in making food such as bread and süütei tsaï are also expressed in the killing, butchering, and eating of livestock animals such as horses and reindeer.

⁸⁰ Follow link to see video 31 (V31): <https://www.youtube.com/watch?v=-fr3PqnCDr0>

Eating Animals As Utilizing Resources And Ingesting Companions:

An important part of subsisting by means of livestock is inevitably in eating them. The primary practices involved in eating livestock are slaughtering, butchering, and feasting. In discussing these practices, I draw on my experiences assisting mentors transforming horses and reindeer into food.

One very cold day in Shangmak I helped kill, skin and butcher a horse for the first time. After Baatar wrapped the standing horse's legs with rope, he and Owgen pulled on each end of the rope. This tightened the rope's hold on the horse's legs until the latter lost its balance and fell over onto his side. I lay over the horse's flank as Baatar held the rope firmly and Erdene held the reins. Tartak removed his hat and placed it over his 27 year old horse's upwards-glancing eye before powerfully striking its forehead with the butt of an axe, and quickly following up with two, soft thumps which were seemingly inconsequential but necessary to prevent the animal from feeling any unnecessary pain in case the first blow did not instantaneously end its life. As the axe first contacted the horse's head, its entire body seized with an immense surge of electricity that transferred into my body through his back and ribs. The muscles would sometimes keep twitching well into the skinning and butchering process. It was cold and windy, but the men removed their coats and rolled up their sleeves to keep them clean of blood. Over the next two hours, we knelt and squatted around the carcass. I held and angled equine body parts in movements which facilitated the work of my mentors. This work consisted of disjoining organically arranged anatomical parts into segments shaped for practical storage or specifically dissected as particular culinary cuts. This strategic disjoining was improvised by supplely and responsively wielding blades –one, aged 69 years, handmade by Tartak's father – in movements which followed the very lines of growth along which the flesh and bones being butchered had assembled themselves throughout the life of the organism from which they were being skillfully removed.

Sometimes it was required of me to firmly hold onto the horse's skin with my freezing hands as Baatar or Gambat, having cheerfully joined us in our task, struck the skin with an axe-but as hard as they could to separate it from the corpse. As my hands grew unbearably cold, I was amazed to watch the coatless men laughing and rolling cigarettes with bloody hands and arms, seemingly unaffected by the cold. I also watched Tuya, Mama, and Biijei, albeit their wet hands, ward off the cold with ease as they cleaned the horse's guts with warm water prepared in advance and in practice for the occasion⁸¹, and as they knotted segments of intestines, with hair removed from the dead horse's tail, before and after filling these with blood collected from the animal. At Tartak's verbal request, to which he added 'snow is white....pure', I mixed clean snow into the blood before Tartak skillfully poured into clean intestine segments to make blood sausages. As is customary among my hosts, once the animal was completely dis-assembled, all those involved in

⁸¹ Tuya and Tartak had erected an extra orts the previous day in order to keep two stoves burning simultaneously and thereby prepare twice as much hot water for the butchering event.

the butchering or otherwise present retreated to the warmth of the animal's owners' orts and feasted on a specific arrangement of organs and culinary cuts boiled in water with salt.

In the case of transforming Marchi's horse into food, I participated in the killing, butchering and eating of a mentor's companion. As Marchi had lived almost his whole life with this 33 year old horse, an animal that had belonged to his father before it was given to my mentor to help assemble his own herd, he was visibly fond of this animal. A few days before covering the horse's vision with his mitten, and killing it with his axe, Marchi had me take photos of his wife and daughter upon its back in order to have something of his companion with which to look back with after its flesh would have long since edified his and his family's bodies. During the butchering of Marchi's horse a friend of his, who happened to be around as he was retrieving his horse-rental client Amitie, assisted in the deed. Hoping this move would serve as an entry point to myself taking part in the actual wielding of blade along flesh, I brought my own knife to the butchering. Marchi's friend took my knife, positioned it at the nexus of spine and rib, and smacked the blade with the butt of an axe. Instead of severing the bones apart, he actually shattered my blade in two. As a means of proving to my hosts once more that I am 'chatana', or someone characterized by ability, I improvised the resourceful use of a broken blade as an effective utensil in the feast which followed the butchering.



Thankfully not exemplary of any more destruction of useful equipment, transforming Erdene's reindeer into food was nonetheless exemplary of butchering and cooking techniques applied to a long-standing companion. As I learned, the techniques engaged in slaughtering and butchering reindeer greatly resemble those performed with horses. This resemblance is perhaps due in part to Dukhas transposing their known techniques, passed along from generation to generation, and developed through most common practices involving reindeer, into the treatment of horses and their meat. For example, with both horses and reindeer, bodies were disjoined into relatively identical cuts. One major discrepancy, however, was expressed in the different techniques employed in preparing blood sausages. In contrast to equine blood sausages, their reindeer equivalents are closed shut by twisting the intestines around a sharpened twig poked through the flesh. Furthermore, reindeer blood is not synergized with snow, but rather with seasonings such as salt. Although I did not think of enquiring upon this technical discrepancy at the time, I currently hypothesize that the blood of reindeer does not require mixing with snow in order to become pure, because reindeer blood is innately pure. Their blood is considered as such because they are animals intimately involved in sacred practices by virtue of their producing pure, white milk, of their potential performance as ribbon-adorned spiritual offerings, and by association with their often predominantly white fur colouring characteristic of relatively inbred semi-domesticated *Rangifer tarandus* organisms (Rødven et al., 2009: 600). Furthermore, whereas horses are only butchered in winter, when snow is available, reindeer may be slaughtered at any time of year, especially when horse meat is not available, that is during seasons *other* than winter.

The reindeer we butchered in Shangmak happened to be Erdene's 13 year old riding steed, atop of which and around whom he had grown to be the man he now was. The morning before killing it Erdene had me photograph himself with it, much as Marchi had done with his cherished horse. Later in the day, during the communal feast following the butchering event, Erdene shared the flesh of his deceased companion. Skillfully cleaning one of its boiled ribs with his teeth and tongue, Erdene occasionally smiled and said: 'this was a *good* reindeer'. I had seen a brain be cooked on the stovetop during the autumn, but had not been offered to eat it. On this special occasion of eating this particularly meaningful reindeer, Erdene kindly and generously offered me a small, hand-cut slice of the brain which had until that morning driven his long-standing companion's bodily functions and movements. As I ate the tasty organ Erdene, perhaps – but not certainly – only as a joke, told me that eating reindeer brain is good for one's mind. A few weeks later, mentors in East Taiga confirmed this notion without explaining it in detail. Regardless of brains' edifying properties, eating one's interspecific companion, be it horse or reindeer, is a visceral reminder of the rewarding sustenance and livelihood one engenders through dedicated hard work managing livestock over several years with the appropriately composed synergy of domination and care. This appropriate composition is performed in the practices through which livestock both feeds off of expansive pastures, and returns to the confines of human settlements.

Cooperatively Participating In Reindeer Livelihoods:

As practices involved in herding reindeer to, in, and from pasture are among those most unique to Dukha people, and among those which I practiced most actively during my time in the taiga, my discussion on the ways in which Tsaatans orchestrate the feeding of livestock focuses on the three foundational practices of тсаа хариуулаг, тсаанд явах, and тсаа авах. Each of these practices involves freestyle in both organizing and performing trustful yet dominant herd-management, all this in the rugged, obstacle-ridden taiga environment while often attending to many other livelihood tasks and leisurely desires. All of these practices spring from the focal goal of facilitating reindeer's access to nutritional lichen, shrub roots, and mushrooms without compromising their safety at any point.

A most common of ways in which herders manage to get their reindeer to both eat out in pasture and return to camp afterwards is in the performance of two tandem practices by means of which herders steer the herd into pasture along strategic lines of movement in the morning, and later track the herd's traces until they locate it and corral its members back to camp in the afternoon. In sequential order, these tandem practices are called 'тсаанд явах' ('going to deer') and 'тсаа авах' ('obtaining deer'). Although both horses and reindeer are employed as riding steeds in the performance of these practices, reindeer are the only animals which can be utilized at any and every time of year for the task. As pastures are immense, reindeer are free to move un-hobbled and unsupervised, and factions within the herd commonly separate and rejoin the herd in rhythmic fluctuation, herders commonly manage to either drive back to camp only a portion of the animals release that morning, return with other reindeer released a on a previous day, or return with only

the steeds they are riding. These three potential daily results of tsaawax seem particularly common to especially large conglomerations of cooperatively managed herds, as these include more individuals which can split from the group, increasing the different directions in which reindeer can be dispersed, and are composed by distinct filially assembled flocks which, although relating with and hanging around other flocks, tend to faction off as separate grazing units.

I learned what I know of tsaand yawax and tsaawax practices with members of Jargal's extended family. I came to know the performance of tsaand yawax in practice as, one October morning in Xuulag, I had the occasion to steer an un-hobbled herd to pasture on the back of a steed for the first time. With the speed and smoothness affordable in this terrain only by riding a reindeer, I followed and assisted Marchi, Owgen, and Erdene as we drove the herd with voice-commands and by positioning ourselves along flanks moving the herd towards where my mentors intended them to go. We drove the reindeer uphill out of the forest surrounding our camp, away from the open, boggy valley in which run several frozen streams fed by a mostly frozen lake, across a gully and up an open field of lichen buried in snow deep enough to slow the reindeer's footing whilst shallow enough to allow them to access this food, before doubling back to camp, making sure to dismount our steeds and hike down a slope with them so as to avoid harming their spines. Charles Stépanoff (2012) remarks on similar practices of leading deer to pasture among Tozhu Tuvian reindeer herders approximately 200km northeast of Tsagaan Nuur, positing that herders drive reindeer into areas in directions which feature tiresome characteristics such as uphill slopes, rocks, or deep snow in order for the animals to prefer returning to camp rather than continuing to forage in a relatively challenging landscape (304). This, in reading Stépanoff, is one of the many ways in which reindeer herding practices both satisfy livestock's need for wild foraging and seduce the animals to willingly choose to return to the domestic settlement they share with humans.

Albeit the fact that reindeer often return to camp of their own volition, without being corralled back by herders, they are energetic animals that enjoy and are effectively able to venture and graze far and wide, and thus require daily retrieval on the part of the herders. The practice by means of which this is achieved is tsaawax. Although I lived the experience of finding and retrieving hobbled reindeer from pasture on foot both alone and with a partner, and although horses are also commonly utilized in the performance when season permits, I focus my discussion regarding tsaawax practices on performances delivered on the backs of reindeer by mentors in snowy Xuulag. In watching mentors leave for and return from tsaawax, and listening to them talk about it with others and myself, I learned about its organisation and performance in correspondence with a large conglomerate population of approximately 500 reindeer⁸², and with a particularly immense pasture territory which, by virtue of its openness, was easy for reindeer to move through quickly. Retrieving these reindeer thus required improvised and acrobatic discernment in order for herders to find them scattered throughout the territory. Locations in which reindeer could possibly be found were first anticipated by mentors as they drew on their

⁸² Households composing Jargal's settlement possessed relatively large herds, but the especially large size at the time was due to their watching over the herds of extended family and friends.

experienced understanding of herd itineraries, recently informed by first-and experience seeing them afar while corralling other factions and/or by daily leisurely conversations with others regarding reindeer's current locations and general positional tendencies. Once out in the field, these anticipations were mediated with the clues inscribed in the snow as mentors improvised the tracking of unpredictable and imminently emerging traces of reindeer hooves until they found the hooves' executive bodies. Once localised, the reindeer are steered back towards camp – much in the same manner as in which they were driven out to pasture in the first place – along the quickest and most practical itinerary herders manage to negotiate with the herd.

As the Xuulag area is both ridden with obstacles and risks, and vulnerable to diverse and extreme weather, my mentors occasionally encountered unforeseen problems which needed to be solved out in the field on the fly. For instance, one particularly snowy evening Jargal and I ate supper together, wondering where Owgen, Tuya, and Marchi – having departed for tsaawax several hours earlier – were and why they weren't back at camp yet. Jargal did not seem worried, telling me that her missing family members were each able to safely spend the night out in the field. After hearing the 'koo!' voice commands of the missing herders driving reindeer onwards, and then helping corral the arriving livestock into their pen, I listened intently to the herders' storied account of why they were late for the supper they were finally eating. After finding the herd in a location particularly distant from camp, they were steering the reindeer across a frozen lake when the ice broke. Two pairs of reindeer tethered together at the halters encountered important difficulties in climbing out of the water and onto a solid sheet of ice. With the help of his companions Marchi quickly used a lasso, anticipatively fastened to his saddle prior to the excursion, to pull the animals out from the water. Although one reindeer per tethered pair had drowned before being rescued, the lives of half the endangered animals were spared. The bodies of the drowned animals were also spared. As the day was growing late and they were still a considerable distance from camp, the three companions quickly severed the legs from the two bodies with knives always at the ready, and fastened the legs to their saddles, leaving the rest of the corpses on location with the intention of retrieving them the following day. Having successfully located and retrieved the rest of the bodies the next day, no meat, bone, antler, sinew, or skin and fur was wasted in the loss of lives so far away from camp at such an impractical time. On another occasion, a recently deceased fawn was carried home from pasture after it, unsupervised at the time, had strangled itself with its lead rope (attached too loosely to the halter or too severely loosened by the animal) and halter around a tree. Although this was a sad occasion, it did not dim the overall cheerful mood pervading our settlement. Alas, the reindeer unfortunately lost before its prime was nonetheless food in the belly.

When inhabiting territory currently treaded by wolves, my mentors employed precautionary measures to avoid suffering from predation. Among Jargal's family in Shangmak, the reindeer were released into pasture in the morning and retrieved before sunset, times in between which the herd was unsupervised and thus free to move wherever and however its members wished in correspondence with their being hobbled. Having fastened a bell to the halter of a particularly

tame reindeer who is well-regarded by the rest of the herd, my mentors increased the likelihood of individual reindeer moving together as one unified herd. This both makes the task of finding and gathering the reindeer much easier and quicker, thus decreasing the chances of individual animals, vulnerable to predation without the defensive abilities of the gathered herd, straying towards wolves. Use of the bell also renders it easier for herders to hear the herd approach camp and, consequentially, to temporarily pause the performance of other tasks and prepare to retrieve, sort, and tie reindeer to trees. The bell technique increases the likelihood of the pack remaining together by virtue of the bell's sounding attractive to reindeer, and by means of this sound corralling individual animals' attention to the well-behaved reindeer, who they are socially inclined to follow, upon whose halter the bell is tethered. According to Stépanoff (2012), Tuvan reindeer herders claim that the sounds resounding from such bells protect reindeer by frightening wolves (301).

Another precautionary technique is employed in the practice of both hobbling and accompanying reindeer to pasture, thereby supervising their behaviour and movements. This practice is called 'тсаа хариуулар' ('tsaa xariulag'), which literally means 'reindeer herding' but which in practice and in the following paragraphs commonly refers to the specific practice of steering hobbled reindeer through pasture. Among Gantuya and her neighbours near Rechindlunbe Mountain in East Taiga, the practice of tsaa xariulag was sprawled throughout the day in two distinct acts, 'acts' here understood much as in the manner of sequentially separate stagings constituting the live performance of stories such as plays and operas.

The first act began after breakfast and quick tidying of the ortz at 9am, by the telling of more or less synchronized clocks and watches, when practitioners would untether reindeer, those not intended to be used for the next three hours, from their nocturnal spots before hobbling and releasing them in unified movement along a specific direction away from camp. The reindeer are then allowed to graze along autonomous itineraries which, by means of herders' orchestration, functionally correspond with the herders' cooperatively anticipated itinerary. This orchestration is performed primarily through strategic body positioning and vocal commands, and with the use of sticks. The design of the anticipated itinerary, negotiated between herders, is at first only vaguely imagined, and is from the outset dependant on individual reindeer and human's unique synergizations of movement in correspondence with the territory, weather, and time of day. Herders typically steer the herd along a circular itinerary slowly away from camp and then back, unless the lichen is saturated enough with snow, via a source of water where the animals excitedly drink their fill. The herders then steer the animals to a patch of forest 50-100m from ortzes and, as the sun reaches its zenith, tie them to roots and fallen or standing trees. Here the reindeer laze around, munching at the food that they can reach around them as they wait for Act II.

At 2pm practitioners once again untie the reindeer not needed for practical use within the next three hours, this time from their mid-day rest-spots. Herders steer the herd along a similarly designed and performed itinerary as in the previous act, this time around driving all the way home from the drinking area. Once the reindeer are signaled to return to camp from the drinking area, many of them bolt towards the settlement with little or no effort on the part of the herders. The

reindeer are there retrieved by their owners, or by others as habitually executed and reciprocated favours for the owners. Although some individuals present more challenge in avoiding capture, each reindeer is swiftly lured, caught, and tied to the root, tree or, in the case of younger, less powerful animals, planed beams of wood placed horizontally on the ground nearest the ortz.

Although reindeer prefer moving un-impinged upon by hobbles, they offer limited resistance to the hobbling knot being fastened around their leg, and show ease and relative comfort in the manners in which they move once hobbled, as they have been thoroughly habituated to the practice throughout their lives. Fawns are trained throughout the summer by hobbling their halter to their foreleg with their lead rope and watching over them learn how to move comfortably through open fields. This is a pedagogic practice in which young children can effectively participate, engaging their own playful habituation to the performance of livelihood tasks. For the first year of their lives, reindeer accompany their hobbled elders with their foreleg tethered to their halter, learning the practice of grazing while hobbled and under the supervised direction of humans. Once reindeer graduate to full hind-leg hobbling, they are so habituated to the practices of tsaá xariulag that they usually graze quite calmly enough, and respond easily enough to herder voice commands or positional arrangements, that herders can afford to simultaneously engage other activities such as relaxing, observing the beautiful territory, eating berries when available, and executing portable tasks such as crafting. Keeping track of thirty or so reindeer moving erratically through expansive pastures, which include forests whose lichen and trees effectively camouflage the animals, while simultaneously occupying oneself with other things requires acrobatic attention and sharp vision. I hypothesize that watching over reindeer in pasture trains eyesight to be highly effective in other uses such as spotting and interpreting the movements of reindeer, dogs, or humans from far away when performing tsaá awax, or simply being aware of their surroundings. On many occasions it was made evident to me that, albeit my sharp eyesight, my mentors were able to see in the distance much more clearly than I.

In Gantuya's neighbourhood, the household makeup of which was composed largely along lines of friendship rather than of filial kinship, the practice of tsaá xariulag was performed in shifts, not only during two different acts, but in the rotation of squads, or unique assemblages of herders. The distribution of the task throughout the neighbourhood was improvised through non-centralized decision-making according to which each household rhythmically contributed labourers to work shifts with others, taking into account each household's unique circumstances. Although the practice can be performed alone, shifts are usually worked in groups of two or three. These people assemble as a squad, arranged in correspondence with social circumstances, which in working its shift effectively contributes to the long-term success of the livelihoods of their own households and those of neighbours. As Gantuya's neighbourhood at the time of my visit was usually small and characterized by an unusually high ratio of women to men, as well as of children and elderly to advanced teenagers or adults, the women carried out a significant portions of tsaá xariulag shiftwork. Women worked almost every morning shift and frequently formed the afternoon squads as well. As Dawta was relatively immobilized, albeit with stubborn reticence, by his broken leg

and their children were away at school, it was up to Gantuya to almost double her participation in shiftwork as a means of sustaining her household's contribution to the neighbourhood's labour pool. Gantuya's extensive shiftwork was rendered possible in large part to Dawta's help, irregularly extensive for men, in performing their household's domestic tasks.

As mentioned earlier, *tsaa xariulag* shiftwork is scheduled around two start times and two finish times organized with the use of watches and clocks. Although the inclusion of metronomic devices may seem at odds with the rhythmically and acrobatically flowing improvisatory lifestyle I am presenting, the mechanical clockwork of the practice does not strip it of its improvisatory and acrobatic qualities. Corralling hungry reindeer during one of their only two pasture runs of the day along sinuously fluctuating paths through the expansive forests and grassy wetlands of the ecotone requires improvisatory thinking and moving that are both supple and quick. As it is, for practical reasons, synchronized with astral movements, *tsaa xariulag*'s metronomic timing does however assist herders in their practice. The familiar temporal sequence of straying away from camp then back towards it, easily perceived by reindeer in the sun's movement towards its zenith during the morning shift and its western set during the afternoon shift, via a limited array of water sources, enhances the ease with which reindeer submit to the familiar habits of herders' schedule and generally strategized itinerary.

By following and joining mentors in the field, and then being integrated into the communal pool of labour through my position in Gantuya's household (thereby saving her from working afternoon shifts), I learned about *tsaa xariulag* in practice⁸³ with various mentors in diversely unique shiftwork squads. Herding with them not only afforded me with knowledge about and proficiency in the practice, but also with occasions to hang out with them or simply watch them inhabit their homeland from afar as I did the same thing in my own ways, many of which were



more and more inspired by my admiration for Dukha people. The person with whom I worked the most shifts was Xöö, and this work was often done just the two of us. On one such occasion I noticed him have fun tossing branches, discerned as dry by virtue of recognizable visual keys, and flex and feel to the touch, behind individual reindeer, sequentially making the latter double back from a direction undesired by Xöö whilst avoiding the necessity for him to displace his body to a position from which he could shoo away the reindeer in a more desired direction. The technique of throwing a stick, one which I quickly integrated to my arsenal of herding skills, usually comes into play when the 'hauüi!' call, intended to stop a reindeer from pursuing its current direction, is not proving successful or doesn't feel appropriate in the moment. As the technique implies the risks of hitting a reindeer, and of thereby causing it unnecessary harm, or of undershooting the

⁸³ Follow link to see video 32 (V32): https://www.youtube.com/watch?v=Y_rPrYfx2Ws

reindeer, and thus making it move with even more gusto in an undesired direction, it must be performed with skillfully corresponding strength and accuracy. Later on during our shift, as we chatted while walking among the nearly thirty year old traces of an autumn camp he had inhabited as a child, Xöö spoke of what life was like in his youth, playfully recounting the efforts needed to make firewood before the introduction of chainsaws.

When I worked shifts with Xöö's brother Uultsang, I would notice how the latter carried a piece of antler and a carving tool in his pant pockets in order to nestle himself a seat in the mossy lichen or grassy hillocks when the herd was under control, and work away at his craft. Although many men make antler carvings for sale, Uultsang is the person I noticed as being not only the most skilled in that craft and subsequently effective in that business, but also the one who appeared to most thoroughly enjoy the performance of such artwork. Inspired by his surrounding environment, co-inhabitants, and practices, his artwork beautifully communicates a deep love of his homeland, reindeer, and lifestyle. Xadaa, another man with whom I frequently worked afternoon shifts, also enjoyed himself while herding, often climbing trees or tall stumps. Although from these vantage points Xadaa's work did benefit from a better view over the herd, he climbed admittedly for the pure fun of it. Once, atop of a tall, weathered stump, he jokingly proclaimed himself as 'Xar Showoo' ('Black Bird'). This name stuck with Ashley, a helpful traveller from Oregon, USA, who for more than a week accompanied many tsaaxariulag shift squads. It is with Ashley's help that I executed my most memorable tsaaxariulag performance.



One afternoon, as I returned from another shift out in pasture, in the presence of Dawta, and of Xadaa's wife Sainaa, Gantuya celebrated my quickly developed proficiency in the practice, and joked that soon I would be able to work a shift all by myself. I laughed with her and the others until she asked me one of the most commonly re-occurring questions: "Чарaxyy?" ('are you able?'). After saying that I was indeed able, I accepted to lead a squad composed entirely of foreigners for an entire afternoon shift. Our squad, composed of Ashley, Max and Oli (two travelling friends from Montréal, Canada and Belgium respectively), and myself, was consecrated with thirty-two reindeer belonging to people of every household in the neighbourhood. As dictated by Gantuya, my role was to effectively steer the reindeer along a complete grazing and watering itinerary, being for the duration of that shift in charge of the wellbeing of the herd. She encouraged me to direct the rest of my squad as helpers in achieving my task. And so I set off with thirty-two reindeer, aided by my newly encountered friends, especially Ashley by virtue of her prior experience with the practice. The first hour and a half of the shift was sublimely fun, as I was totally relaxed and in complete, attentive control of the herd whilst leisurely conversing with my friends about both herding tactics and just about anything unrelated to such practices. Our effective and relaxed teamwork was a perfect synergy of work and play. At our shift's mid-point, Xadaa

approached us looking for five of his full-size male reindeer that had gone missing, before quickly realizing that they were not among our flock. Although the missing reindeer weren't at any point members of our flock, I began worrying that I had lost five animals because I had misheard Xadaa's words and thus misunderstood the situation. With this newfound stress, the next hour and a half of the shift was a whole other ball game. My companions were not stressed, and in their company I felt more cheerful and hopeful, but I couldn't help but feel the huge weight of mentors' livelihoods on my shoulders. In my stress and mild fear it became sensorially and mentally challenging to keep count of the reindeer. I nonetheless accepted my fate and did as best I could to keep the herd together.

Suddenly, five full-grown and un-hobbled males appeared as if out of thin air. They had actually come from a nearby field where they had been running loose to Xadaa's dismay. When these excited and completely freely moving reindeer came upon our calm flock, chaotic dispersal of the herd occurred. As half our flock eagerly chased after the free-running reindeer, and the other half kept on grazing calmly as if nothing worthy of note had happened, I quickly delegated control of the calm half of our flock to Ashley before sprinting out into the nearby field and after the frenzied reindeer quickly prancing all over as they pleased. While running in angles which allowed me to steer individuals towards the general direction of the water hole, I effectively steered out-of-reach reindeer with voice-commands until they all conglomerated by the water. At this point Ashley and the others had effectively led their portion of our flock towards the water. After catching our breaths with the flock at the water hole we ushered the animals back towards camp. It is only after every reindeer was retrieved and counted by their rightful owners that I received confirmation that we had effectively not only brought all thirty-two reindeer back at 5pm on the dot, but had also managed to return with the five individuals who had escaped earlier that day. When we received this confirmation, we the squad members of this unforgettable shift joyfully embraced one another, celebrating our cooperatively achieved accomplishment. Gana told me that he had been told by Gantuya that the emotions visible in that memorable embrace were meaningful for her and her neighbours to see, as they bore testament to not only the importance that we had attributed to the task that had been confided in us, but also to the cooperative teamwork with which we had effectively executed that important task. I am forever grateful to my hosts for having honoured me with such trust, because my performing this task helped me both develop my abilities as a Tsaatan and prove myself to these mentors, and others through subsequent storytelling, as an able person pertinent to share life with in the taiga.



Conclusion

Dukha nomadic pastoral lifestyles involve frequent multi-tasking through which acrobatic juggling of one's diverse abilities is embodied in performances which mediate unpredictably arrangeable practices with effectively improvised orchestral strategies. Tending an open fire while simultaneously serving one's child tea, drying dis-assembled ortz sheets, packing luggage, keeping daring dogs away from meat, and collecting bits of garbage from the ground, one cannot help but improvise a dance of balance between diverse, simultaneously occurring tasks in continually new ways in order to effectively synergize them as one realizable practice: everyday life.

Freestyle Livelihoods

With aesthetic sensibility, and along engaged nomadic co-inhabitation with Dukha people and other Tsaatans within their communities, I have felt into what sort of material arrangements compose effectively executed tasks, and into both what sort of movements engender these arrangements, and how such movements are performed in relation to the materials and beings which constitutively inhabit the taiga. My Dukha and otherwise Tsaatan mentors effectively realize livelihood practices as they cheerfully embody poised improvisation and acrobatics in anticipating and performing diverse tasks simultaneously, each involving skillful discernment and movement, in playful cooperation with friends, family, and other animals along nomadic ways of life in a wilderness habitat. Mentors' lifestyles catalyze the development of poised improvisation and acrobatics, or *freestyle bearing*, and environmental knowledge with which such bearing is informed and thereby rendered that much more effective. As taiga-based livelihoods involving reindeer husbandry include the occurrences of tasks at any and all times, the practice of said livelihoods are undistinguishable from the everyday experience of inhabitation itself. Throughout their entire lives, Dukha people learn and enskill themselves more and more as they resourcefully engage diverse materials in diverse ways, effectively engendering anticipatively intended goals. The physical traces of these enskilling performances left in the land in their wake incarnate the stories of their occurrences as monuments of past inhabitation potentially meaningful to those who attend to these monuments with their attentive senses, memory, and imagination.

It has been evidenced in this thesis that, as they inhabit this storied taiga, Dukha people embody freestyle bearing in practices of making things and homes, of moving around in the taiga, and of stewarding animal herds. The quick-witted and materially sensitive acrobatic improvisation of Dukha freestyle makes Tsaatans extremely resilient people, capable of continuing a several thousand year old evolving tradition of reindeer husbandry in a quickly changing social, economic, technological and geo-political context. Through my storied co-inhabitation with many mentors, I became aware of ways in which many Dukha people also express poised improvisation and acrobatics, and related resilience, in organizing and performing habitat stewardship in cooperation with other humans and other beings such as ongod, fire, and ezen spirits, as well as Oron Khangai.

Stewardship Meets Conservation

For Dukhas such as Mama, stewardship is not a distinct domain of activity and intent, but rather a meshwork of actions and relations embodied in daily life, not necessarily with the teleological purpose of ‘conserving’ nature. When asked if they ‘хамгаалах’ (protect) ‘байгал’ (nature), many interlocutors answered ‘no’, some adding that NSPA wardens are the ones who protect nature. I believe that Dukha perception of ‘protecting nature’ associates this notion with the Mongolian government’s model of nature conservancy, and with the latter’s related restrictions enforced by wardens. Particularly apt at both understanding my Mongolian speech and having me understand hers, Mama offered a different answer to my questioning: she said ‘yes’. When I asked her *how* she protects nature, she asked *me* how *I* protect nature. After I told her that I do so by trying to avoid unnecessarily harming animals and plants, by not using resources unless I need them, and by not littering, she told me that she also protects nature in this way, in small, daily actions or lack thereof. Later on, re-reading Kristensen’s MA thesis in East Taiga and spending much time discussing with Öwngdorjoo and Dari, I realized that Dukhas identify more with the practice of *watching over* (‘xapax’) than with *protecting* nature. Rather than physically safeguarding nature, Mama, Öwngdorjoo, Dari, and others’ behaviour takes into account the wellbeing of Oron Khangai and its constitutive beings. Such behaviour makes Dukha land management one of stewardship through ecologically intelligent and responsive inhabitation, rather than one of conservancy through isolation. Instead of trying to regulate human activity in ways which intend to allow ecosystems to flourishingly exist as they would without the existence of humans, these Dukhas caringly watch over and actively manage their habitat through the practice of everyday life. Furthermore, unlike nature conservancy’s positioning of humanity as ultimate ruler of our planet, Dukha people do not singlehandedly manage the Taiga as its only agentive inhabitants, but rather participate in a process of stewardship with more powerful beings such as Ongods, Ezens, and Oron Khangai.

In many ways, Dukhas engage their habitat as a community, composed of themselves, other animals, spirits, and the physical forms these spirits can embody, in ways which catalyze local ecological wellbeing. Dukhas recognize the necessity to harmonize human inhabitation of the taiga with the other constituents of its community. This necessity is acted upon through the performance of ‘*asjigtai*’ (Kristensen, 2004: NP), species-specific livelihood behaviour that does not impinge on other community members’ own *asjigtai*. In performing Dukha *asjigtai* practitioners calibrate their behaviour with that of their non-human co-inhabitants in a correspondence of mutual non-obstruction. As herding reindeer is an important part of Dukha *asjigtai*, ensuring the health and bounty of pastures is of equal importance. Because pastures consist not only of fodder such as lichen, mushrooms, and roots, but also of surrounding organisms such as mosses, bushes, trees, and animals, the stewardship of said pastures must involve behaviour that facilitates the health of their whole ecosystem. An important way in which Dukhas do this is in entertaining functional relations with ezen spirits.

As ezens' *asjigtai* is to watch over the living inhabitants of the land they possess, and the offerings they receive help them continue doing this (Kristensen, 2004: NP), Dukha worship catalyzes ezens' abilities to steward the local ecosystem. I autonomously perceived this logic in the days nearing the culmination of my fieldwork, but the few mentors with whom I discussed this logic agreed with it. Whether or not you believe in the existence of ezens or not, the practices through which Dukhas perceive themselves as entertaining relations with ezens effectively engender ecosystem stewardship. In entertaining these relations practitioners refrain from harvesting resources from multiple, dispersed areas watched over by ezens, making the taiga a land in which protected zones, serving as spaces wherein non-human life can flourish in particular abundance, spawn organisms that naturally spread to areas unprotected by ezens where Dukhas are able to gather resources. Although this form of stewardship has been functioning for uncountable generations, it is now impeded upon by an exogenous land-management system.

As mentioned in chapter 1, Dukha people are confronted with new, challenging regulatory restrictions on hunting, fishing, and nomadic itineraries as a result of the 'National Special Protected Area' (NSPA), and under the guise of 'nature conservancy'. Adding insult, and potentially more damage, to injury, the NSPA's movement restrictions deter or restrict access to some of many Dukha people's places of worship, notably owoo cairns at ezen-inhabited mountains. This new NSPA system thus not only impedes on Dukha livelihoods, but also on the functioning of their homeland stewardship. The pertinence of introducing a new conservation system is thus extremely questionable, and its respect of Dukha people even harder to swallow. The institutional imposition of a system that dualistically opposes *humanity* and *nature* in a conflictual struggle simply ignores the Dukhas' land management abilities, albeit their being steeped in traditional knowledge, and empowered by a freedom to improvise creative performance. It also ignores their rights to inhabit their land and practice self-determined ecosystem stewardship, rights included in the *UN Declaration On Indigenous People's Rights*, a declaration that Mongolia signed in 2008. This disregard for Dukha people's rights seems even more unjust when one considers how they and their nomadic, pastoral lifestyle are advertised as main attractions in the NSPA's tourism information handouts, yet antagonized by the NSPA's regulations in practice.

Albeit this disregard for their rights, Dukhas manage to continue living in the taiga with their reindeer. As habitat stewardship, as well as the practices limited or prohibited by the NSPA regulations, and the resilience with which Dukhas mediate regulatory challenges with personal lifestyles and motivations, are important elements of Dukha livelihoods, it seems pertinent for more research to be done into the dynamic practice of Dukha stewardship and its current encounter with legislatively determined nature conservancy. Fortunately, Dukhas and otherwise Tsaatan people form a proud and cooperatively resilient people capable of surmounting or homeostatically transforming through every challenge they have yet encountered. Although many tourists visit the Tsaatans in order to briefly contact perceived crusaders of a lost, ancient, fading way of life, by inhabiting several months with Tsaatan mentors I cultivated my attention, not only to the practical

expressions of freestyle, but also and most viscerally to a realistic foresight of Dukha people continuing to inhabit the taiga together with reindeer, dogs, and horses into the foreseeable future.

Freestyling a Future

I intend on engaging PhD research, into the ways in which freestyle and cooperation may be embodied (or not) in Dukha stewardship of their homeland, as a platform whence I can participate with other people, such as anthropologists like Selcen Küçüküstel⁸⁴, in an ongoing movement aimed at empowering Dukha people's self-determined inhabitation of the taiga by assisting them in reclaiming their hunting, fishing, and movement rights. Such assistance, which I encourage to be done in conjunction with the Tsaatan Community and Visitors Center, could take forms as diverse as organizing and facilitating meetings in which Dukha people can plan collective actions, linking Dukhas with pertinent Mongolian NGOs and people such as Mongolian anthropologists, as well as informing a widespread and strategically focused public about Dukha self-determinacy movement and potential ways to get involved.

Epilogue

In my bedroom inside my childhood home, I kneel on my prayer cloud, the soft, warm circular doggy-pillow wrapped in a tie-dye sheet emblazoned with a divine OM in Sanskrit script that rests next to a similar pillow serving as altar to myself and the divine Entirety. As I let my gaze rest in inattention to the phenomena of my surrounding world, I am for a long moment unshakeably aware of both the generative indivisibility of the Universe and my complete participation in this indivisibility. Somehow, as usual, I am brought back to an attention to stuff as *things*. I sweep my arms up, reaching out to the extremities of my body's energetic field, and concentrate the energy in the clasping together of my hands near the intersection of my diaphragm and heart. I bow down to the altar of special *things* that emerged over the years, including the recently mummified coyote paw, rest my forehead on the leather-burn mandala I recently made, and thereby yield my energy to the planet that encompasses me. I thank the Everything we *all are* for so much....for everything... for my whole life, the good and the bad. I visualize a tree in the taiga with whom I established a relationship through offerings of white cotton ribbons, juniper incense and wholehearted prayers. I thank the ezen that looks over this tree, the land in which its roots take hold, and the people who inhabit this endearing homeland. I thank these people...for so much... Letting my diaphragm expand downwards along my spine, I breathe softly and profoundly before hopping to my feet, hands clasped at my forehead, communicating recognition to the prayer cloud and to the world to whom it is altar. Releasing my diaphragm upwards along my spine, I breathe out and smile.

⁸⁴ Küçüküstel recently collaborated with Survival International in producing this news piece: <http://www.survivalinternational.org/news/11072>

Annexe 1: A Tapestry Woven of Diversely Flavoured Strands

I acknowledge the production of anthropological literature as a work of real life fiction, a process of learning with people, interpreting those educational experiences through personal flavours and biases, constructing a strategic assemblage of limited storytelling and analysis, and alas readers interpreting the constructed whole along their own lines of understanding. In such a world of knowledge production and communication, anthropological knowledge is far removed from any semblance of unquestionable, objective truth.

Facing the acknowledgement of such a chaos of subjective knowledge, many anthropologists have developed and continue to develop creative ways of engaging subjectivity as an inescapable avenue of meaning production. Others, disenchanted with the esoteric-like squishiness of post-modernism, have pushed anthropology towards a semblance to objective, *hard-fact* science by abstracting themselves as much as possible from their research and analysis so as to avoid tainting it with their own subjective existence. Personally, I embrace the inescapable subjectivity of both experience and knowledge derived from the experience. Rather than attempting to minimize the effects of my existence on my research and ton its presentation to others, I wield my inescapably *affective* subjectivity to *effectively* communicate meaning. By speaking personally through ethnographic literature, I can transmit experience of phenomena in such a way that allows readers to apprehend my subjective flavour and thereby detect my biases and choose how to subsequently interpret my text in an informed manner.

This self-reflexive enterprise is not self-centered, but rather an opening of myself through which others and I mesh. Sharing communal experience and interpretation requires genuine determination to be honest. In the moments where I experience phenomena in the field with others, I must concentrate on being aware of the rawest qualities of what is happening. As I take note of what has happened, I must fully harmonise my pen with my most lucid memory in order to trace a most accurate expression of past happenings, and how they are meaningful today. As I assemble my memories and notes into a comprehensive thesis, I must not shy away from the facts as I have lived them with others. This necessitates a setting aside of ego, in the sense of tempering a personal pride that can shape memories into a picture most favourable to others' perception of me as a 'good person and anthropologist'. Truth is unobjectifiable, but honesty is personally poured forth into the world through subjective existence. I open my honest self as an aqueduct through which others' personalities and thoughts can flow along to you. This document is a tapestry woven of diversely flavoured strands in freestyle fashion. It is an expression of fashioning both the *materials* and *meanings* of the world *with* other people along the dynamics through which Dukha habitat and its constituent beings emerge together. It is important that you taste this ethnographic tapestry's constituent strands' hermeneutic flavours in order for you to lucidly interpret the literary weaves' collective expression.

Sipping Strands: A Palate-Cleansing Degustation Of Hermeneutic Flavours

Cinnamon, Cumin, and Maple Syrup:

Born of Canadian parents in Vienna, Austria, in 1991, I have lived most of my life in Ottawa, Canada. The territory occupied by this municipality, in which my university is situated and in which my country erects its castle of sovereignty, is land seized from Algonquin people without consensual concession through treaty. I grew up in and still inhabit a highly francophone suburb constructed over former colonial farmland, itself once seized from its original Algonquin inhabitants. Thankfully, amidst this maze of poorly diversified semi-luxury houses springs forth creeks alongside of which rise moss, flowers, shrubs and trees that grow in the soil of a large sloping, forest, itself home to many animals. For years I have been finding momentary reprieves from urban life in these woods. My lust for wild, open, well oxygenated places was ignited canoe-tripping in Québec. Since my brother led our parents and me on our first canoe trip, I have avidly and frequently lived nomadically along multi-week expeditions through both remote and urban areas, as well as the indefinite spaces in between. After several years following guides such as my brother and other Air-Eau-Bois summer camp councillors, I myself worked as a councillor and guide from 2009 to 2013, specializing in two to four week expeditions with older adolescents and in pedagogically inclined programs.

Spending so much time living while moving through wild places, I have developed profound personal, communal, and spiritual wellbeing as well as a deep, honest relationship with nature, understood here as the life-process in along all its particular, total, material and semantic expressions. I love life, hug trees, feel bark sensually with my hands, smell flowers, burry my bare feet in soil, smile at pedestrians, wave at automobile drivers, move out of cyclists' trajectories, and genuinely wish wellness for every living being, however it may be embodied by individuals, and whether it is even possible or not. Perhaps a wellbeing incarnated as a vibration of serenity undulating along all beings and their relations in continually changing equilibrium?

I have been sliding down mountains on sticks since 1994, snowboards since 1999. Especially since my teenage years, I have continually expanded my body and mind's limits of creative movement and interaction with mountains and artificial features, and of related acrobatic ease, through freestyle snowboarding. This ability to both think and move 'outside the box' helped shape me into a proficient football player. Playing mostly running back, I applied my freestyle skills to improvisatory play with teammates, learning the values of teamwork and group resilience.

I think I know a few things, I feel a lot of things, and I am occasionally aware of EVERYTHING and nothing else in particular. More rarely, I am aware of NOTHING and nothing else in particular or in general. I am sometimes experienced, by myself and my close acquaintances (and probably even by some strangers casting glances my way), as a contradiction. I am a hermit and a leader, a hippy and a jock, an adventurer and a creature of habit (much like a hobbit is), a

good listener and an unreserved beast of speech, hypercritical and forgiving, a utopic idealist and a pragmatic realist, as well as both a demolition expert, and creative author, of ideology.

Green Tea, Salt, and Xojir:

Every Dukha person is unique, yet often shares many attributes and qualities with other Dukhas and Tsaatans. Most Dukhas are usually very welcoming. They will not refuse into their home a traveller reposing him or herself from the road, whomever the person may be. They will share tea and bread as they can, offering sugar or candy if they possess such delicacies. Upon first meeting me and other strangers (especially foreigners), Dukhas can be quiet and reserved. In the presence of strangers, they won't shy from behaving as they usually would with their friends and family. Amongst themselves, they move along calm, quiet, attentive rhythms of demeanour that are often and suddenly interjected with lively, expressive vocalizations and other movements. Their demeanour, both at rest and at work, is relaxed, in control and sketchy. To borrow a uniquely appropriate term from the jargon of extreme sports (especially freestyle snowboarding and skiing), it is *steez*, an ease of action expressing a creative stylistic flare.

For people quiet enough to listen as well as they do, Dukhas are impressively expressive. Their actions are accompanied by socially learned and personally invented vocal sounds. A man wielding his axe will blow out of his mouth with his diaphragm and tongue, kind of whistling through his teeth. A woman will let out a sharp-tongued slur of words scolding her son or an endearingly innocent moan as she smiles and laughs. Dukhas' colloquial twist to Mongolian language is simple in the sense that mostly small linguistic modifications are made. The distinct quality of Dukha colloquial Mongolian is in the stylish flare with which they speak it. Most of them are quite humble yet proud. With men and women alike, Dukha humour is often well-witted teasing of one another.

Combined with their humour at the expense of others (and often themselves), some men expressed a certain male bravado⁸⁵ which was often playful, but at times incarnated somewhat confrontationally in relation with me. Attentively listening to the jokes, rhetorical questions or insults muttered in my regards, I confidently rebuked many men's confrontations with appropriately serious or humorous rebuttals – precise answers and clever jests worded as best I could. By proving a limited but effective proficiency in Mongolian, and by demonstrating a certain reserved but expressive bravado of my own, I transformed confrontations into amicable, productive, leisurely and/or educational encounters, and sometimes even initiated the growth of longer-term friendships.

⁸⁵ Bravado expressed in certain attitudes or showboating regarding male toughness and virility (ex: “Real men don't need to warm up by the fire.” – West Taiga, Nov. 1st).

Annexe 2: Methodological Reflections On Fieldwork

Having arrived in the Tsagaan Nuur area with the primary objective of learning about relations between Dukhas and their domestic animals as they share domestic space, my own lack of proficiency in Dukha livelihood and Mongolian language skills naturally denied me access to the intricate depths of Dukha relations with other animals to which I initially wanted my research to plunge, and that could sustain a thesis on the specifics of human-animal relations alone. I necessarily set aside my initial research objective and released the scope of my inquiry along the immensity of Dukha life. I continued co-inhabiting with my hosts, learning the ropes more and more, often times forgetting I was even doing fieldwork. When I would remember I was *performing ethnography*, I would ask myself these two questions: ‘what should I do right now to be a real good anthropologist and do proper fieldwork?’ and ‘what *really* is *proper* fieldwork?’. I felt as though ‘proper fieldwork’ was an ideal concept that doesn’t actually exist in practice as it is a semantic totalization which supersedes most if not all of its constituent real life expressions. I came to understand the notion, studied in depth for years in University as well as anticipated and practiced on my own, as a conceptual ideal pre-existing actual fieldwork itself. In the juicy reality of fieldwork I thought of how I am always trying to be a ‘good anthropologist’ without really knowing how, and one day I decided for myself that *pertinent* ethnography is anything that arises in the moments I live when I am genuinely interested, attentive, motivated, and engaged with people in anything that is going on. Anything that happens is worthy of inquiry because it is *real*, and thereby seeping with sensation(s) and meaning(s). As humans are unable to be aware of everything, or of anything *all the time*, anthropological inquiries are never totalizing.

I decided that, as long as it is both *feasible* and *ethical*, I could do *anything*. Every moment and participant of my research is uniquely transforming along a continual movement of growth within the world. In such conditions, valid research must incessantly shape itself to the uniqueness of its subject. With this new concept of ‘pertinent fieldwork’ issuing forth through my engagement with the world at hand, I did whatever allowed me to actively participate in Dukha lives with genuine curiosity, motivation, and kindness. This approach afforded me with the development of precious friendships and situations through which I learned much about both myself and Dukhas. That being said, the friendships and happenings were often catalyzed by my own mistakes. For instance, upon departing Jargal and her settlement for the first time, I offered her and her daughter blue sacred cloths. They and the others present all laughed wholeheartedly, knowing I did this because it is a Mongolian custom of showing respect and appreciation, but also and more viscerally seeing the humour in this custom’s resonance with one of their own: offering these cloths as display of intent to marry! The situation being quite funny, I laughed along with them.

Through mistakes, and our reactions to these, research-participants can see us as normal humans with flaws and personalities of our own, beyond our role as researchers. In my case, opening my beyond-the-researcher self to Dukhas allowed us to form honest relations through which truthful and mutually-negotiated cohabitation and research could happen. Some may object

to such a subjective and methodologically unstructured engagement in what is being researched, but I passionately believe that wholehearted, free-flowing participation in the world is the most direct way of *experiencing* and thus of *knowing* it. In the case of Dukha mentors and I, had I not given myself to the former through practical service and genuinely personal behaviour, we would not have formed the relations that afforded me with the knowledge of Dukha life that I am now bestowed with, and that I have shared with you herein this thesis.

Free to fashion my own style of ethnography, my fieldwork became an apprenticeship in Dukha livelihoods. Each moment of every day was an opportunity (often seized) for me to attune my mindful body to the movements of skilled people, the materials with which they work, and the environment in which they mingle. By migrating with Dukhas and joining in their daily tasks I learned how to handle reindeer, horses, taiga-dogs and oxen, build and inhabit ortzes and log homes, receive, prepare and share Dukha food. The corporeal engagement and academic freedom with which I freestyled my fieldwork is a testament to pedagogically sound teamwork between students and faculty who acknowledge the liberating potentials of contemporary anthropology. My thesis supervisor Julie Laplante has introduced me to theoretical currents as well as helped me navigate the specifics and generalities of academic research, while always allowing me (and encouraging me to own up to) complete autonomy. Her, and other members of my thesis committee, being available to me in their own personal time as both mentors and friends has allowed me to craft a sound research project.

This project complements other autonomous projects crafted by other students with the help of our shared supervisor. She relates with her students as a cohesive team, encouraging us to participate in each other's meetings with her concerning our respective projects. This informs us about other burgeoning examples of creative anthropology, and instills within us a feeling of mutual belonging with which we operate as a team. By becoming friends, sharing literature and offering feedback on each other's ideas and writings, students in our team help one another realize their full potential both as people and as anthropologists. Drawing on my experience as a student of Anthropology, I suggest that more professors and Anthropology departments should encourage students to participate in crafting an anthropology that is personally fulfilling, socially beneficial, and developed *in-the-world* with its diverse inhabitants. Emerging in such a fruitful network of colleagues, I anticipate ambitious opportunities for anthropology to truly *breathe itself into life*.

I have begun the adventure of crafting *freestyle anthropology*, an academic inquiry which engages humans, other beings, our environment and its constituent materials by improvisatorially applying pedagogical training in practice along the same dynamics as these engaged actors emerge. Rooted in a diversely developed academic tradition, such an anthropology has allowed me to put a wealth of methods, theories and ethics into creative practice by attuning my mind and actions to the unique ways in which life unfolds among the specifically enmeshed actors with whom, and environment within, I learned. All along this unfolding process was a homeostasis, breathing as relationally rhythmic, organic movements, with which my own breathing and inquiry could harmonize, at times sketchily and at others proficiently. Working in such an unfolding process, I

began practicing the ideal concept of *applied anthropology* as wholeheartedly engaging social life as an opportunity for reciprocal learning and assistance. For me, the application of ‘applied’ anthropology is in offering myself to those with whom I learn by serving them in mundane, special, daily and occasional tasks while appreciating their company and assistance in my domestic and academic endeavours. These actions all contribute to both developing the relationships necessary for reciprocal learning and assistance, and enacting the methods with which such reciprocity can work towards real mutual wellbeing.

If this approach to applied anthropology is to be valid, assisting collective reclamation of rights to resources and freedom of movement is to be as pertinent and worthy of application as is fetching water and cutting wood for an elder or a pregnant woman. These actions would be as pertinent and valuable as both thanking someone for the reindeer milk tea they hand you, and savouring its specifically rich texture and taste which uniquely emerged in the moment as a relation between recipe and ephemeral cooking conditions. Applied, freestyle anthropology is giving ourselves wholeheartedly towards the wellbeing of the people with whom we learn, not just in impacting policy and institutional things of the sort, but also in the moments that make up daily life during fieldwork. These applications are among many others which I tried, with varying success, to participate in, and which I continue to pursue with my thesis and other related projects, as well as with the preparation of my eventual PhD project.

Annexe 3: Financial Economy, TCVC, And External Assistance

Money is an important tool employed in realizing Dukha livelihoods. It is used to acquire many staple subsistence items, canvas sheets and plastic tarpaulins for constructing ortzes, clothing or fabric for making clothes, school supplies for children, electrical equipment, cell phone service, gasoline, mechanical equipment, taxes, and to travel outside the region. The collapse of the communist economy, the closure of the state-owned fishery, and Mongolian banks’ refusal to recognize reindeer as financial capital all contributed to making money a hard thing to come by for Dukhas. In 2008, many Dukha Household incomes were as low as 100USD\$ per year (Keay, 2008: 11). Ways in which Dukhas autonomously acquire money include the sales of berries and medicinal or religious plants foraged in the taiga. Dukhas also sell reindeer meat, skin, reindeer skin boots, living reindeer (usually to other Dukhas), as well as reindeer testicles. Some Dukhas run their own unofficial convenience store in a steppe-land area bordering the taiga, or bring food staples into the taiga with the intent of selling them to people there, reducing the latter’s need to restock food in Tsagaan Nuur. As will be discussed further, the local tourism industry is an important source of financial income, but is flawed in ways which do not allow the Dukhas to benefit financially as much as they could and once did. The recent history of the Tsaatan tourism industry is enmeshed with the storied TCVC.

Tsaatan Community And Visitors Center: Unclear History And Current Situation

Keay (2008) suggests that Itgel, an NGO she co-founded, and the TCVC (initially funded and trained by Itgel) have improved Dukhas' socio-economic situation by facilitating access to veterinary services and training, and by funneling visitors through a structure of community-run tourism that finances conservation, health, education, economy and radio-communication projects for the whole community (13). In 2008, Itgel helped the Dukha form the Tsaatan Nohoorlol, a legal entity representing all Dukha reindeer herders, and access pro-bono legal representation by a Mongolian law firm. Itgel then passed full ownership and control of the TCVC to the Tsaatan Nohoorlol (Keay, 2008: 12). It is hard to find a single, unified account of what happened with the TCVC since Morgan Keay and Itgel removed themselves from the area. Many people will say nearly as many different stories about what worked and what went wrong. Most people I asked admitted to not *really* knowing all that transpired and how it affected the TCVC. Most of whom I asked agree that TCVC operations continued and grew successfully for two or three years under the management of a Dukha woman named Bayanjargal. Most of the confusion about the TCVC's recent history is regarding the reasons why Bayanjargal left both the management of the TCVC and the Tsagaan Nuur area itself, and why the TCVC has not yet since been able to continue operating as successfully as it once had. It is clear that TCVC tourism operations and relatedly financed community projects have diminished, and that many of its members now infrequently participate in both the technical operation and (especially) the management of TCVC activities.

The local gold-rush around 2009 may have played a significant part in obstructing the development of the TCVC. The rapid influx of armed outsiders poised on illegally mining the then minimally policed taiga saw some Dukhas engage this illegal economy and become ninja miners⁸⁶. The lawlessness and irregularly high income of money, and perhaps some inappropriate behaviour in sacred *ezentei* (inhabited by an *ezen* spirit), created a chaotic atmosphere in the taiga. Many families were affected by the presence of alien criminals, and by Dukha ninja miners' periodic neglect of herds and association with said criminals. The recent instauration and enforcement of the NSPA has been successful in attenuating the area's illegal mining boom, but the latter's effects on the TCVC have nonetheless remained important.

Jürg Endres, a German anthropologist who worked with the TCVC in the 2000s, has told me that the chaos that arose with the gold rush directly contributed to the unforeseen dismantlement of the 'Our Taiga, Our Future' program, an operation that he helped launch. This program consisted of equipping Dukhas with GPS equipment and training them in the use of these tools in collecting information on the populations and movements of wild animals in the area which could be used in responsibly managing the local ecosystem. Management positions became vacant or unclear, and partnerships with tourism companies faded or failed to materialize. Burxuu, one of the early guides with the TCVC and its seasoned groundskeeper, has de facto become the

⁸⁶ Due to the plastic pans strung on their backs as they travel, and the slight resemblance their silhouettes have with those of Ninja Turtles, illegal miners such as these have been coined as 'ninja miners'.

organism's interim manager. He has since been lodging some visitors to the area and facilitating their travel to and from Dukha settlements, but with few clients, and with subsequently meager financial income, little or no money is available for reinvestment into the TCVC's headquarters, its tourism services and into the community fund which serves as financial pool for both community projects and individual emergency loans to individuals or families. Most if not all the money from that fund goes to paying the TCVC headquarters' property taxes and the organisms' NGO status registration fees. Albeit the diverse challenges the NGO faces, as well as his inability to speak English, Burxuu is an essential person in keeping the TCVC afloat.

The continued existence of the TCVC is also in part due to an inhabitant of East Taiga named Zaya. Zaya is an English speaking Mongolian woman from Ulaanbaatar who, having encountered Morgan Keay while studying abroad in Colorado, worked as project coordinator for the TCVC before becoming a Tsaatan herself as she married a Dukha man named Uultsang. Her contact information being listed in relation to the TCVC in Lonely Planet's newest editions of their literary guide to travelling in Mongolia, and her ability to communicate with English-speaking tourists helps tourists coordinate trips into the taiga with the TCVC. Not all her coordination of tourism activities goes directly through the TCVC, but her presence, activeness and rapport with foreigners significantly contribute to maintaining tourism-related income for the TCVC, for her and her husband, as well as for many other Dukha families. Whether Dukha tourism goes through the TCVC or not, this industry remains important to the livelihoods of many if not most Dukhas.

Tourism: Income, Flaws, Efforts to Improve the Industry

For many years now tourists from elsewhere in Asia, as well as from Europe and North-America, have been visiting the Dukhas and their homeland uninvited. By tour companies and unofficial tour guide operators, the hosts are advertised under the allure of the shamanic Tsaatans, living in harmony with reindeer and the taiga. Without saying it, they are appealing to popular curiosity towards, and lust for, the encounter with rare remnants of humanity's primitive past in an immaculate nature. As will be discussed further, even the new national environmental protection area advertises the Dukha in this way⁸⁷. Rather than the Dukha people themselves, it is their externally attributed mysteriousness as an archaic culture, as well as their reindeer and homeland, that are the main attractions advertised. The Tsaatan attractions appeal not only to international tourists, but also to Mongolians from other communities and regions. From what I have seen and heard, many of the Mongolian tourists come for spiritual interest, healing and learning – and to take photos of the reindeer and immense moss, lichen and larch- spewing taiga of course. Many foreign tourists are also drawn to the Tsaatans with spiritual motivations, along with a genuine interest in Dukha people and a lust for rich sensory experience in the taiga – and the photos to record it, of course! It is not uncommon for tourists to have séances with a Dukha

⁸⁷ See tourism information brochure in annexe 7 (Figure 6).

shaman who, using the former's food, tobacco, and money offerings, will drum and dance into trance and communicate with his or her *ongod* spirit, and at times other spirits as well. This is one way in which tourism is engaged by Dukhas as a livelihood practice.

For Dukhas, the primary pertinence of tourism is its related financial income. With minimal or no investment, hosting tourists affords with an almost guaranteed profit. Hosts generally charge people 10,000MNT per person/per night to lodge in either an inhabited home or in an ortz hotel. The latter, usually constructed with a mix of new canvas materials and old hand-me-down canvas, tarpaulins, and stove from domestic ortzes, allows tourists to occupy their own private space in an emblematically and experientially Dukha edifice. Some tourists stay in tents, usually paying smaller fees or even avoiding payment, but tourist lodging most frequently contributes to Dukha incomes. Dukhas can also obtain money from tourists through horse rental and trek guiding fees, the sales of handcrafts made with antlers or other local materials, as well as by offering special services such as reindeer rides and on-camera performances for filmmakers. In addition the financial income, hosts often receive gifts from tourists, such as subsistence items like flour, rice, noodles, candy, teas, and materials like pencils, notebooks, books, clothing, tobacco, rolling papers (usually kept but not used, as most Dukha smokers prefer rolling with thicker, non-gummed paper such as brown work paper or newspaper), and alcohol. Shamans often derive income and gifts from tourists by performing shamanic ceremonies for them.

More than just financial income and material gain, benefits derived from tourism include mutual learning and friendships in international encounters. Many of my research participants would smile while telling me of a particular tourist that has visited multiple times, referring to them as their 'Czech friend', 'American friend', German friend. Some participants showed me pictures of themselves and their family taken by some of these foreign friends. Some friendships with tourists remain more ephemeral in duration and character, but each encounter with a foreigner is an opportunity for agreeable company and learning. Together, tourists and Dukhas can share, laugh, play, and relax, and in so doing can learn about one another's unique personalities and different socio-cultural contexts. For example, research participants and I would sometimes share our views on religion as well as Mongolian and Canadian lifestyles and politics. There is even the reputed case of a Dukha man having 2 wives since marrying his French friend.

For Dukhas, tourism is a phenomenon that can come with money as well as with intercultural learning and international friendships. Unfortunately, in conjunction with increased travel to and habitation in Tsagaan Nuur, and with recent institutionally sanctioned migration restrictions, tourism can also entice Dukhas to inhabit settlements which are closer to Tsagaan Nuur, and to migrate less often than they used to in order to be easier for tourists to access. These changes in migration patterns may contribute to Dukhas and tourists over-harvesting inhabited areas' lumber, as well as to reindeer over-grazing the pastures to which they have access. These changes in mobility are not the only potential challenges related to tourism. Many Dukhas feel cheated by tour companies and sometimes by individual tourists. A crucial part of this feeling is the fact that the majority of money spent by tourists in order to visit the Dukhas does not become

income for their hosts. Fees for renting horses and hiring guides, services difficult to avoid engaging as a tourist, are amongst the most expensive elements of tourists' expenditures, but most tourists obtain these services through tour companies and/or local entrepreneurs in Tsagaan Nuur, neighbouring Ulaan Uul and Rechindlumbe, or more distant places such as Lake Khovsgol, Khovsgol Aimag's capital city Moron, or even Ulaanbaatar.

Furthermore, probably due primarily to miscommunication, which can be frequent as most visitors do not speak Mongolian nor are accompanied by translators, disagreements over issues regarding money sometimes arise between tourists and their hosts. Many research participants told me stories of arrogant, impolite tourists refusing to pay for their stay. In the case of my own travels, I once found myself in an argument with a woman with whom I was not well acquainted over who owed whom money over the course of a confusing, multi-transactional payment. After paying one woman (upon her request) part of the money I owed for lodging a night in an ortz hotel, I purchased a loaf of homemade bread from another woman. The latter added the price of the bread to that of the lodging fee without taking into account or really understanding my claim to have already paid a portion of the lodging fee to another woman. My translator, annoyed with the confusion inherent to our misunderstanding, did not help clarify what the woman and I were saying to one another. Together, after an uncomfortable argument, we agreed upon both the total amount owed and the completion of my payment. Although our misunderstanding was resolved, and my relationship with the woman in question was improved over the course of brief, subsequent encounters, in the moments following both our argument and its resolution we were left with bitter tastes of mistrust and misunderstanding in our mouths.

Tourism can also make Dukhas feel other disagreeable sensations. As many research participants told me, it can make them feel like they are perceived and related with by tourists as one would animals in a zoo. Often, tourists minimally mingle with their hosts, spending most of their time hanging out in their tent or ortz hotel, enjoying the freshness of the land and air, taking photos of themselves, the environment, reindeer, and Dukha hosts, sometimes even if the latter ask the tourists not to photograph them. Some tourists will unknowingly commit cultural faux-pas by pointing their feet at an ortz's hearth or digging holes, as well as by urinating, defecating or washing themselves at inappropriate spots. Despite the real and potential frictions between tourists and their hosts, the financial, intellectual and social opportunities tourism creates are desired by many Dukhas without necessarily being sought after. Whether Dukhas desire or seek tourists to host, they seem to come anyway, usually without communicating their visit before their arrival and without spending the majority of trip expenses within the Dukha economy.

One of the main roles of the TCVC is to serve as a portal through which visitors can spend trip expenses within the Dukha economy. When it was operating more successfully, the TCVC engaged a system in which every family who desired receiving tourists was placed on a list through which they cycled. In turn, families obtained money by providing tourists with horses, guides and lodging, in addition to the other income potentials mentioned above. Each family contributed small, equal portions of the income from lodging fees to the TCVC community fund. Most if not

all research participants I asked said they appreciated the financial opportunities and safety channelled through the TCVC when it was running this way. Now that the TCVC's management lacks fluency in English and specialization in the tourism industry, partnerships with most tour companies with which it was once allied have effectively ceased to exist. Making the TCVC even more obscure for tourists, its website has been inactive since 2008. Unfortunately, there are not many solid partnerships between the TCVC and unofficial tour operators or freelance guides in the Tsagaan Nuur, Ulaan Uul and Rechindlumbe areas from which tourists most often depart on horseback treks to the see the Tsaatans.

Albeit Burxuu's progress in establishing a partnership with one small tour company based in Moron, the portion of tourists arriving through the TCVC has diminished, and the ways in which host families are most often selected depend on the chaotic meshwork of guides' acquaintances among the Dukha, and knowledge concerning settlement locations. Some families now host more tourists than others, and some have become minor celebrities which different TV and film crews will hire more than others for shoots. On November 30th, 2014, during one of these shoots, this time for a Mongolian cooking show, representatives from a tour company met with the wintertime residents of East Taiga. These representatives presented a plan according to which their company would provide tourists, and their automotive transport to the Tsagaan Nuur area, whereas East Taiga Dukhas would provide horses for rental and guides. In a fair cycle, willing families would guide and host tourists, much like they did with the TCVC. The Dukhas who participated in the meeting were happy with the plan, but evidence is still needed to verify whether or not the tour company has come through on their offer, and if West Taiga residents have also established an unofficial partnership of the sort with this company. Although profits from opportunities like this do not contribute to the TCVC community fund, they go to Dukha people thanks to their cooperation amongst themselves and with people from beyond the taiga.

Charity and Assistance:

Charitable assistance is another way in which money from beyond Dukha communities contributes to the former's livelihoods. Many Dukhas have told me they do not seek charity, but as many or more Dukhas accept it. Some foreign philanthropists donate money to individuals and families, or finance various projects involving Dukha people. Such projects include American nurse and energy healer Sas Carrey's health monitoring program and university tuition assistance, and an Italian veterinary's volunteer vaccinations of reindeer against brucellosis. Occasionally, applied researchers or artists will facilitate small projects, such as Dutch photographer Jeroen Toirken's university tuition assistance project⁸⁸. Various NGOs also offer assistance, especially in regards to projects intended to benefit Dukha economy and health. Major efforts by such NGOs include the Totem People Project's reindeer population increase projects, Itgel's multiple and

⁸⁸ Operated in tandem with the Nomadslife Foundation (<http://www.nomadslife.nl/en/nomadslife-foundation/>)

diverse projects with the community, and the World Reindeer Herders and International Society for Reindeer Herders' financing travel expenses for Dukhas to participate in an international colloquium in China in 2013. Sansar told me that he enjoyed meeting herders from different countries, and learning more about what sort of actions are being taken elsewhere to ensure the viability of reindeer herding livelihoods. Dukhas also receive assistance from their municipal and national governments.

As discussed, the Tsagaan Nuur Sum government has facilitated the import of Russian reindeer. In addition, the Sum's local school operates a sort of pre-school in the taiga in which Dukha children can develop basic reading, writing and mathematical aptitudes that will greatly facilitate their eventual transition to official schooling in the village when they come of age, or when their parents are ready to send them to school. In 2013, the Mongolian national government began offering Dukhas a stipend aimed at encouraging them to continue herding reindeer. Every Tsaatan receives a monthly allocation. Many research participants told me that they often notice people who do not herd reindeer that were somehow equipped with the special card with which the stipend in question can be claimed at a bank in Tsagaan Nuur. Some Dukhas are unsure whether or not the national government will continue paying this stipend in the long run because they lack confidence in Mongolia's financial ability to do so, and they are aware that the corruption in the stipend's distribution process will unnecessarily drain the governments' funds reserved for Dukha stipends.

If this stipend were to cease being distributed, there would be diverse responses from Dukhas, as it is a contested stipend. On the one hand, it is regularly obtained money that can be wielded to ensure livelihoods, which directly and indirectly benefits recipients. Since receiving this stipend has reduced the need to sell reindeer in order to obtain money, reindeer sales have dropped and prices have risen from 200 000 – 500 000MNT to 700 000 – 1 000 000MNT⁸⁹. Nonetheless, this useful stipend is contested by some members of the community who believe that, by guaranteeing income, no matter how hard recipients work to acquire money in other ways, it allows for laziness to exist within the community. Some particularly foresighted individuals fear that the stipend increases the difficulty of reclaiming their rights to hunt and fish in their homeland, because the Mongolian government has grounds upon which they can claim that offering financial assistance nullifies the need for recipients to hunt and fish.

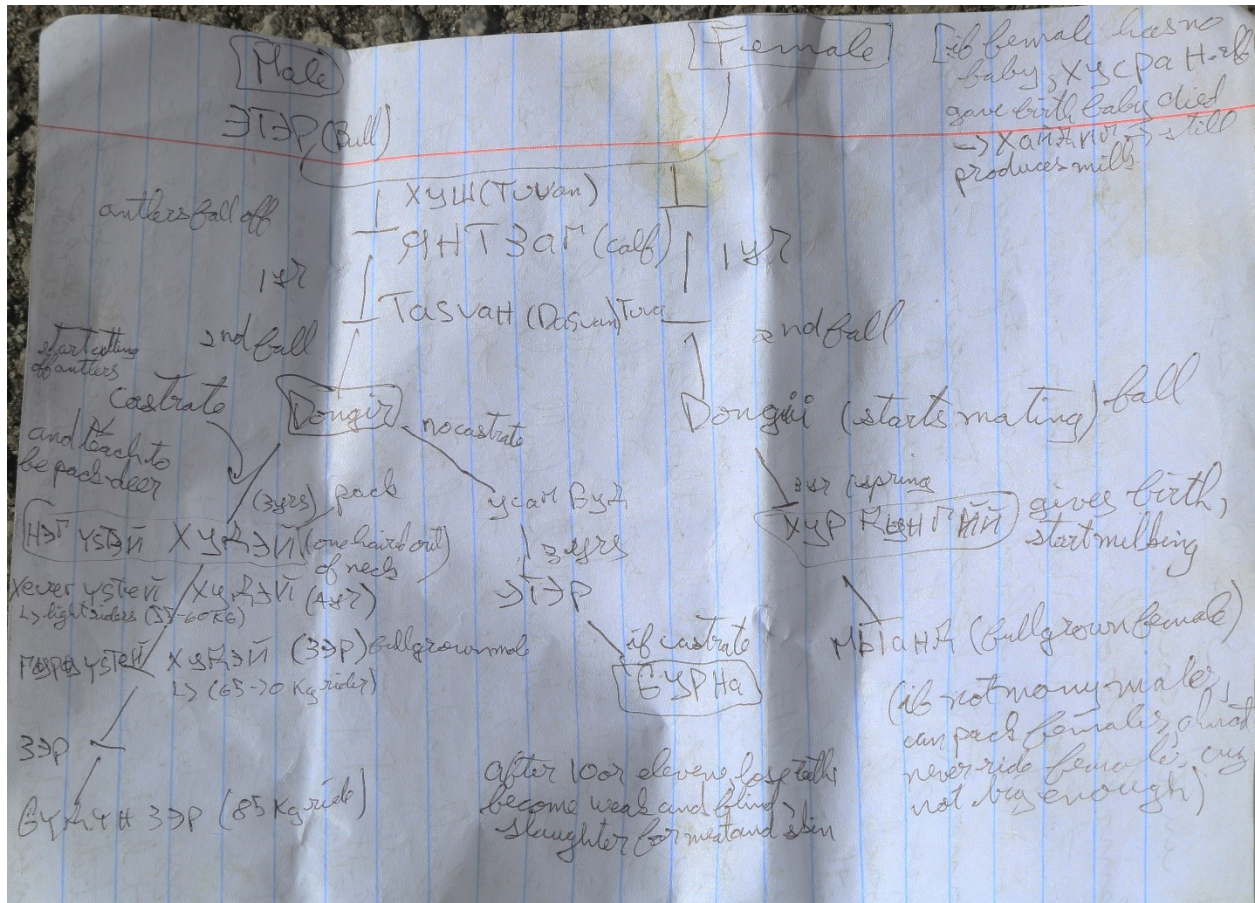
⁸⁹ Costs learned in dialogue with Batzaya September 10th, 2014.

Annexe 4: Taigiin Duu Lyrics (English Translation)

Life-sustaining fresh air of the taiga
 Living wind blows pure, beautiful forests
 Clean river water, snowy land
 Tasty wild animals and beloved reindeer

Dukha people, the strongest
 Skillfully live in Oron Khangai
 Farsighted, they know their homeland well
 Milk-tea hot like family love

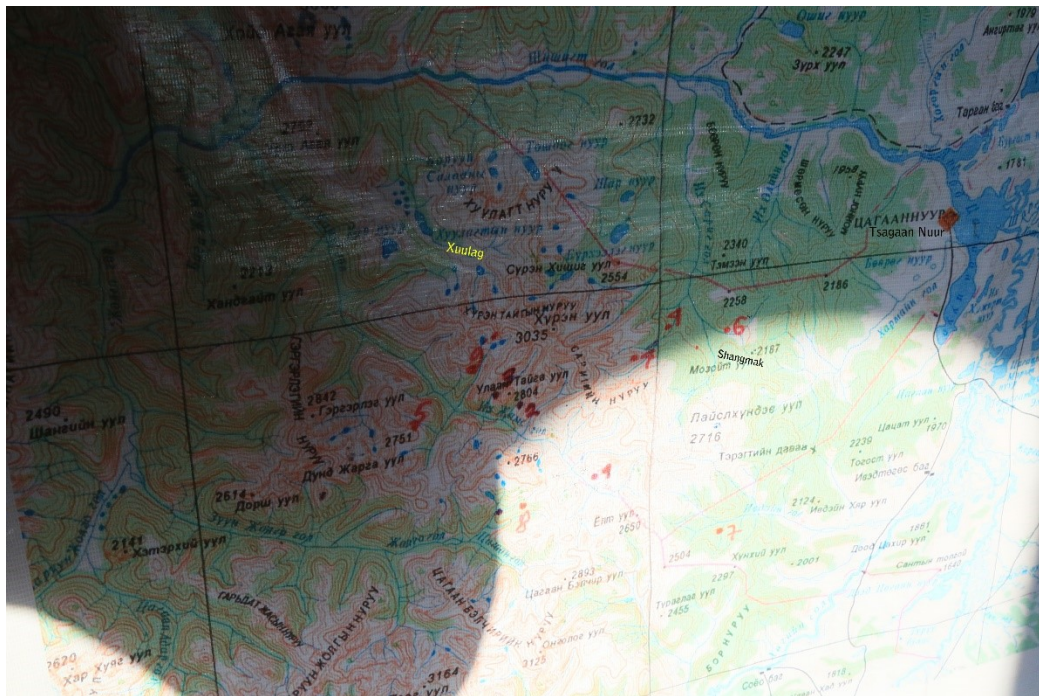
Annexe 5: Reindeer Nomenclature Chart



Annexe 6: Maps



West and East Taigas

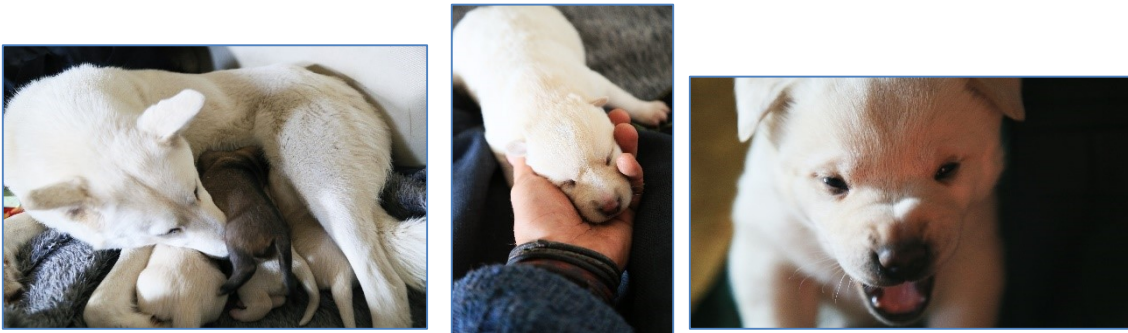


West Taiga



East Taiga Inhabitation Boundaries (Yellow lines indicate where inhabitation is prohibited)

Annexe 7: Additional Images



**Figure 1: Laika
mother and
puppies under
my care**



Figure 2: Gakhai's play kitchen



Figure 3: 'Ger' (felt tent)



Figure 4: 'Yangartsak' (wood A-frame support for packing animals)



Figure 5: Dog Shelters

ХӨВСГӨЛИЙН УЛААН ТАЙГЫН УЛСЫН ТУСГАЙ ХАМГААЛАЛТАЙ ГАЗРУУД

Хөвсгөлийн Улаан тайгын УТХГ-ын хамгаалалтын захиргааны товч танилцуулга

Хөвсгөлийн Улаан тайгын улсын тусгай хамгаалалттай газрын хамгаалалтын захиргаа нь 2012 онд Хөвсгөл аймгийн Улаан-Уул суманд шинээр байгуулагдан үйл ажиллагаа явуулж эхлээд байна. Манай хамгаалалтын захиргаа нь

- Хорьдол-Сарьдагийн ДЦГ- 227.413 га
- Улаан тайгын ДЦГ- 434.900 га
- Тэнгис-Шишгэдийн БЦГ- 869.070 га

нийт 1.531.383 га газрын хамгаалалт, хяналт шалгалт, судалгаа шинжилгээ, сургалт, зурталчилгаа, байгалийн нөөц ашиглалт хамгаалал, ялал жуулчлалыг хариуцан 39 орон тоотойгоор зохион байгуулагдан ажиллаж байна.

Тэнгис-Шишгэдийн гол:

Шишгэдийн гол нь Хойт, Урьд Агайн хадан дохионд анх дундуур урсаж улсын хил давж дэлхийн 10 том мөрний нэг цэвэр усны их нөөц Енисей мөрний эх болдгоороо дэлхийн ач холбогдолтой. Улаан-Уул-Цагааннуур-Тэнгис-Шишгэдийн гол чиглэлд

Цаатан иргэд:

Хөвсгөл аймгийн Цагааннуур сумын нутаг Тэнгис-Шишгэдийн БЦГ-ын зүүн тайгын Тэнгис-Шарга голын ай сав, баруун тайгад Мэнгэбулаг, Жамс гол орчимд цаа буга маллан ой тайгад цаачин иргэд нүүдэллэн амьдардаг. Улаан-Уул сум-Баруун тайга чиглэлд зөвхөн мориор аялана. Хөг хяналтын пост ажиллаж бйагаа. Улаан-Уул-Цагааннуур-Зүүн тайга чиглэлд машин болон мориор аялана.

Хорьдол-Сарьдагийн нуруу:

Хорьдол-Сарьдагийн ноён оргил Дэлгэр нууц, Дундговь, ондоор өвөр мөнх, үзэс тэмдэг юм. Хөвсгөлийн Сарьдагийн нуурын Улаан-Уул сумын зүүн урд талаа зайд байрлана. Хорьдол сар нурууны зүүн талаар Рэнчинлхүм Хөвсөл нуур-Хатгал чиглэлд авто морин аялал хийх маршруттай. Арсайд хяналтын пост ажиллаж Хорьдол сарьдагийн нурууны баруун Дархадын хотгор-Улаан-Уул сум-чиглэлд машин болон мориор аяла эрэг» нэвтрэх цэг ажиллаж байгаа.

Улаан тайгын нуруу:

Улаан тайгын нурууны ноён оргил ууднаас Мунгарга Дэлгэрмор том, т салбарууд урдаг голууд болон мөрний эх болдог төдийгүй цэвэр

Figure 6: NSPA Tourism Attraction Brochure

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