‘In the Flesh’:
Skeletal Embodiment and Subjectivities in Practice

by

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BA, University of British Columbia, 2011
MFA, University of British Columbia, 2014

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We acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with the land continue to this day.

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Abstract

This dissertation presents the results of a two-year ethnographic study among individuals who practice yoga and/or chiropractic care in Victoria, British Columbia, focussing on their experiences of their musculoskeletal systems. Anthropological research has examined the ways in which we live and experience our bodies as part of how we are in the world (cf. Csordas 1994, 1990; Merleau-Ponty 2007). In comparison with fleshed bodies, skeletons, as foundational aspects of living, breathing corporeality, have remained under-theorised and under-examined as essential aspects of how we perceive our everyday lives. I approach the skeleton as a critical space of bodies, a part of the internal material world that shapes not only the body as an object, but how we are in the world as subjects. Observations at two yoga studios and interviews with 21 individuals enable me to explore the skeleton's space and place in the lived experiences of embodied selves. My analysis of interview narratives draws principally from theories of materiality and material(s) (Sofaer 2012; Ingold 2007), Mol's "the body multiple" (2002) and Taylor's notion of "surfacing" (2005). I argue that skeletal embodiment is deeply material, sensory and sensorial, personal, and critical in the formation of what I am calling the "skeletal subjectivity" of an individual. Specifically, I suggest how, skeletally, bodily-ness is experienced by participants as a means to *se prendre en main*, that is, 'taking hold', 'taking care of one's self', 'taking one's self in one's hands.' I argue that, among these yoga and chiropractic practitioners, skeletal embodiment and subjectivity is navigated through materiality—that bodies "surface" in various ways through participants experiences and stories (Taylor 2005). My analysis contributes to the anthropology of the body by including skeletal lives as part of our embodiment without discounting previous notions of embodiment or of bodies in general. My idea of *se prennent en main* is a novel addition to conceptualizing embodiment, encouraging researchers to consider closely how individuals may respond to their sensorial and material body in living their lives.

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Dedication

Quand tu regarderas le ciel, la nuit, puisque j'abiterai dans l'une d'elles, puisque je rirai dans l'une d'elles, alors ce sera pour toi comme si riaient toutes les étoiles [...] Et quand tu seras consolé (on se console toujours) tu seras content de m'avoir connu. Tu seras toujours mon ami. Tu auras evie de rire avec moi.

- Le Petit Prince, Antoine de Saint-Exupéry

Voici mon secret. Il est très simple: on ne voit bien qu'avec le coeur. L'essentiel est invisible pour les yeux.

- Le Petit Prince, Antoine de Saint-Exupéry

For Luna.

Chapter 1: Embodying the Skeleton

Introduction and Research Questions:

The human body, at birth, contains approximately 300 bones. At adulthood, there are approximately 206. Human skeletons don't come out of the womb fully formed, but rather as a series of smaller components that, as we grow and develop, fuse to form the shapes that we examine in a set of adult human remains (again, more or less—also context is important[1]). My dissertation discusses the skeleton's space and place that it occupies in our lived experiences of our embodied selves.

Canadian popular culture generally depicts skeletons as ghoulish, despite their essential role in life. From 'skeletons in closets (or cupboards)' to spinelessness, the bony body features pejoratively in our language—someone 'has guts' or 'tough skin' (i.e. the skeletal attributes become invisible). Visually, skeletons come through in broader concepts of illness, poverty, and trauma; outside of medical, scientific imaging (and images), the skeleton is a sign of morbidity and mortality (for example, in the bodies of youths with eating disorders or in the skeletal bodies of malnourished children). Moreover, skeletal remains have featured prominently (especially in Europe) in religious displays of relics, and catacombs where loved ones are laid to rest (e.g. Catacombe dei Cappuccini in Palermo and the well known Paris catacombs).

Where skeletal material used to be relegated to the fields of medicine, religious items and rites, and the morbid displays of Halloween decorations, today, it's not unusual to encounter bones in art, clothing, and jewelry (e.g. I was recently gifted a necklace featuring a human ribcage). Popular

1 Human remains found in a laboratory context will vary—sometimes dramatically—from those found in archaeological and forensic contexts.

television series such as *Bones* and the various versions of *CSI: Crime Scene Investigation* have also popularised human skeletal remains in various states of decomposition.

Bone is a living tissue and a bodily repository of our lives, accreting, wearing, and thinning as it stores information about our age, diet, ancestry, and activities (Sofaer 2006; White & Folkens 2005; Bergman 2007). Our skeletons give shape to our bodies, determining stature and facial structure, and, as recent advances in genetics suggest, also influencing the functioning of multiple organs in the body (Karsenty & Ferron 2012). Yet, the stories our skeletons hold and their transformations usually pass unnoticed/unremarked in our day to day lives. Injury can call attention to the skeleton but, once the pain is gone, skeletal presence fades away.

Over the past century, anthropological research has theorised and re-theorised bodies as part of our embodied, lived experience of the world in which we live. Our bodies are informed by and also inform the complexity of lived experiences—teasing out historical, cultural, and social contingencies (Blacking 1977; Polunin 1977; Lock & Farquhar 2007:9). Not only are bodies diversely and dynamically sensed and interpreted, but they also shape how we sense and interpret "being-in-the-world" (Merleau-Ponty 2007:141; Csordas 1994:10). In contrast, skeletons, as foundational aspects of living, breathing corporeality, have remained under-theorised and under-examined as aspects of how we perceive and experience our everyday lives.

Despite attention to the "material" and "lived body" (Lock & Farquhar 2007:6), these bodies are rarely addressed as other than "fleshed" by anthropological research—bodies are always already material/lived and the skeleton is reduced to a scaffolding on which 'the body' hangs. The effects of lived experiences (occupation, injury, growth, and pathology) on the musculoskeletal system are applied almost exclusively to the analysis of skeletal remains (cf. Sofaer 2006; and Reventlow, Hvas, & Malterud 2006 for an exception). While anthropological work on bodies has changed to examine bodies as complex and contingent—*skeletal* bodies (i.e. fleshed skeletons) have remained, for the most

part, unchanged: silent and hidden. By skeletal bodies, I mean the musculoskeletal system—and, more specifically, the *skeleton*—as a living, experiencing embodied structure of those bodies. Skeletal bodies, essentially, are our bodies interpellated as more than flesh, as living, experienced skeletons—that is, in other words, how bodies are lived, skeletally.

With the exception of medically oriented studies of pain assessment and body imaging, skeletons are an aspect of bodily-ness that is seldom examined in research about living bodies and embodiment(s). Thus, a central concern driving my research is how might we examine skeletons as more than a scaffolding for the body, more than the mould in the 'corporeality' recipe?

My research is an ethnographic exploration of the ideas and experiences of people's skeletal bodies in the context of two practices in Victoria, BC Canada that deal intimately with skeletons—chiropractic care and yoga. I originally framed my research questions as a comparative project between chiropractic care and yoga (both in terms of practitioners and clients[2]). However, soon after beginning the interviews and getting better acquainted with the environments of chiropractic care and yoga in Victoria, I realised that my assumption about the distinctiveness of these two areas of practice was problematic in three ways. One, the boundaries between clients and practitioners (i.e. chiropractors and yoga instructors) aren't clear-cut; and, two, the boundaries between clients of chiropractic care and yoga are fuzzy. Practitioners (especially in the case of yoga instructors) also take classes as clients (and some clients have teacher-training but don't give classes) or receive services from other practitioners (i.e. a chiropractor can't adjust themselves and thus must enter the role of client). Finally, it was common for participants in my research to engage in multiple forms of physical practices that involved both yoga and chiropractic care.

Keeping these blurred boundaries in mind, I revised my research questions as follows:

2 More on this definition in Chapter 2.

1. *How do bodies figure in the narratives and practices of people who practice/engage with yoga and chiropractic care in Victoria, BC?*
2. *How does their skeleton figure in their narratives and practices?*
3. *What does skeletal embodiment look like? How is skeletal embodiment and subjectivity negotiated by participants in Victoria, BC?*

The goal of my research is to bring individuals' experiences of their musculoskeletal systems into view for analysis; examine how the skeleton functions as a critical space for bodies, a part of the internal material world that shapes not only the body as an object, but how we are in the world as subjects (something I will address below). Skeletons aren't scaffolds but rather foundations for bodies.As an integral part of one's embodiment, skeletal relationships may have implications for current health practices surrounding the body in western Canada.

Before examining skeletal bodies in detail, it's important to understand 'how we got here': how skeletons, in general, have been approached in previous literature, how this literature informs current views about skeletal bodies, and what is missing from this literature. I begin by delineating how skeletal bodies and subjectivities are apprehended in the current literature, and I follow by outlining how these bodies and subjectivities will be apprehended in my research through the conceptual framework (cf. Chapter 2).

Literature Review:

Research about skeletons exists in a range of disciplines such as anthropology—usually biological (physical) and archaeology—and fields of nursing, medicine, etc. In this literature review, I'm including research from fields outside of anthropology to frame skeletons in academia in more concrete

and (w)holistic manner. By including works outside of the discipline of anthropology—or discipline adjacent—a more complex view of the skeleton can come into view. Also, there are no ethnographies of skeletal lives, which points to a crucial lacuna in the literature, and the need for the inclusion of studies outside of the discipline. For these reasons, I also include studies on bodies in general (not just skeletons) to highlight some of the areas that could address individuals' skeletal selves, but fail to do so in a direct and concrete manner. I discuss chronic and acute skeletal conditions; ontogeny (including body size); human osteology and bioarchaeology; and I also reserve a specific section to studies of chiropractic care bodies and yoga bodies.

Skeletal bodies, as they are approached in the current literature, don't come to the foreground for direct analysis (except in osteology and bioarchaeology). Instead, what we are left with are proxies for the skeleton (its surrounding tissues and musculature) through \ pain (chronic or otherwise), growth, etc. and dead bodies, who cannot speak directly about their embodied skeletal lives (which therefore must themselves be spoken about via the proxy of another).

Chronic and Acute Skeletal Conditions and Treatment of Skeletal Injuries:

Chronic and acute skeletal conditions include chronic conditions such as osteoarthritis (OA), rheumatoid arthritis (RA), osteoporosis (OP), and illnesses/injuries engendering these conditions (e.g. fibromyalgia). In medicine and anthropology, pain management and perceptions of pain, bodies, health, mobility, and risk are important themes discussed in the current literature (cf. Crooks 2007; Perruccio *et al.* 2010) but none address skeletons/skeletal lives in and of themselves. For example, Crooks' research on women with fibromyalgia examines, through the use of the "sickness impact profile" and interviews (2007:580-581), how women negotiate bodily risk in relation to their illness and daily activities (582-585). The impact profile, then, situates the embodied life of the individual through the

proxy of pain and circumvents addressing the skeleton directly and the potential impacts that fibromyalgia may have on individuals' skeletal lives. Similarly, Perruccio et al.' study examines individuals' "'Self-Rated Health' (SRH)" after a total joint replacement as a result of OA (2010:1636). Their study, as they state, "support[s] the enduring, self-concept interpretation of SRH in view of the fact that a considerable component of SRH remained stable in the face of significant changes in health status" (2010:1641). Henwood et al. examine "Chronic neuropathic pain (CNP) in spinal cord injury (SCI)", which, they explain, "is a significant problem that has physical, functional, and psychosocial repercussions beyond the consequences of the SCI itself" (2012:216). Though Henwood *et al.*'s study examines a different aspect of skeletal lives, pain is a central theme that comes through in relation to the notion of the skeletal body (also cf. Crooks 2007).

The majority of the research about skeletal lives use interviews and surveys with participants as means to assess pain and pain management by individuals with chronic skeletal conditions (and their families) (cf. Nemchand 1997; Twycross & Finley 2013). Much of this research shows how chronic skeletal pain can profoundly shape individual's sense of themselves. For example, Reventlow, Hvas, and Malterud (2006) examine how bone scans to diagnose osteoporosis among women in Denmark can change these women's perspectives of their bodies, defining their bodily selves as fragile or osteoporotic (though, as the authors point out, this may not necessarily be the case based on the medical imaging results) which, in turn, further affects their daily mores (2720, 2724-2728). Reventlow et al. (2008) examined how Danish women's interpretations of their osteoporosis bone scans affected how they positioned their bodies in relation to (perceived) risk-related activities. For instance, "[w]omen described osteoporosis as a hazard implying physical deviation from the healthy norms. This sense of risk was specifically couched in the metaphorical terms of a collapsing building and loss of the upright position" (2008:103). Reventlow *et al*. argue that

> [bodies] at risk would deviate from the norm comparable to the foundations of a normal and solid house. The path of future risk could be followed through the crumbling building material of the skeleton […]. Since the changes are viewed as irreparable, the conclusion would be that the foundations could not be trusted. As the ultimate endpoint, the body would no longer have the capacity of being a safe home for the person. (2008:107)

They also identify a distrust of one's body (and, in this case, of one's skeletal structure/solidity) in the presence of illness—the body fails at "normalcy" and at "safety", thereby constituting a risk for the individual (Reventlow *et al.* 2008:107).

The concept of the body as a risk is present in other research on chronic illnesses resulting from or affecting one's skeletal structure. For example, Thomsen et al. research the effects of sedentary behaviour and mobility on individuals with rheumatoid arthritis (2015:np.). Drawing on previous work, they suggest that "[r]eported worries about causing harm to the joints, painful joints, and severe fatigue are some of the reasons for not meeting physical activity recommendations" (2015:np.). Comparatively, Skuladottir and Halldorsdottir's study "[aims…] to describe the self-reported needs of women in chronic [non-malignant] pain" (2011:81-82), including multiple needs for women in chronic pain, notably "*the quest for normalcy*" as well as the overarching "*quest for well-being; physically, mentally, emotionally and socially*" (2011:84, 87-89, emphasis original). The majority of studies concerning skeletal lives and chronic pain identify the concepts of 'normalcy' (and its derivatives), 'projected normalcy' and 'normal bodily-ness' as central themes that come from the research process[3]. or the concept of self in relation to pain (risks, management, etc.)[4].

Treatment of skeletal injuries research (be that on joint replacements—as observed above—or on recovery from a broken limb) mainly focus on aspects of recovery and treatment following injury. For instance, some studies address athletes' and dancers' ability to recover from injury or their bodily

3 (cf. Reventlow 2007; Reventlow, Hvas, & Malterud 2006; Reventlow et al. 2008; Skuladottir & Halldorsdottir 2011)

4 (cf. Crooks 2007; Henwood *et al*. 2012; Melanson & Downe-Wamboldt 2003; Perruccio *et al*. 2010; Petursdottir, Arnadottir, & Haldorsdottir 2010; Thomsen *et al*. 2015)

perceptions in relation to those injuries[5]. Rather than focusing directly on the skeletal aspects of the body, greater attention is paid on the perception of one's ability or sense of recovery—effectively quashing any opportunity for skeletal bodies to be examined or engaged with. If the attention isn't directed at the individual recovering, it's directed to those around them and their perceptions of the injured individual. For example, Twycross and Finley's study explores familial postoperative pain management where "[m]ost children [participating in the study] experienced moderate to severe pain postoperatively although there were some individual discrepancies" (2013:3103). They indicate that "[g]iven the possible short- and long-term consequences of unrelieved pain" further research needs to be done with regards to postoperative pain assessment and management, especially in children (2013:3105). This relates to pain as a proxy through which bodies—including skeletal bodies—are observed.

Though much research focuses on bodily-ness, the skeletal body remains absent beyond noting the injury and rehabilitation (breaking a bone or rehabilitating a healed fracture). Pain and management are a proxy through which the skeleton is experienced, but these studies do not address the skeleton directly, relegating skeletal lives to an "as a result of" status. The focus remains largely on participants' perceptions of *injury* [6], healing [7], and 'the body'[8].

Ontogeny:

Overall, ontogenetic research rarely focuses on the skeleton as an aspect of the participants' embodiment, focusing rather on 'fleshed' perceptions in relation to age, pain, and health. Skeletal bodies become encoded with socioeconomic, dietary, and density indexes that don't acknowledge the

5 (cf. Hamilton, Meeuwisse, Emery, & Shrier 2012; Kazemi, Chuldolinski, Turgeon, Simon, Ho, & Coombe 2009; Laframboise, Borody, & Stern 2013; Rip, Fortin, & Vallerand 2006; Satama 2016; Tarr & Thomas 2011; Turner & Wainwright 2003; Wainwright & Turner 2004, 2006; Wainwright, Williams, & Turner 2006)

6 (cf. Laframboise, Borody, & Stern 2013; Lai, Krasnow, & Thomas 2008; Satama 2016; Tarr & Thomas 2011)

7 (cf. Laframboise, Borody, & Stern 2013; Lai, Krasnow, & Thomas 2008; Satama 2016; Tarr & Thomas 2011)

8 (cf. Spencer 2009; Wainwright & Turner 2006, 2004; Tarr & Thomas 2011)

skeleton's subjectivity in these 'codings'. Growth is an aspect of human life that is invariably associated with the skeleton. The recession of cartilaginous regions at the epiphyses of long bones (for example) both indicates patterns of growth and the loss of bony flexibility in individuals (White & Folkens 2005:372-374; White, Black, & Folkens 2011:391, 395).

Most ontogenetic research on skeletal lives (in Canada and elsewhere) is quantitative and archaeological in nature—focusing on commonalities between individuals within populations or certain aspects of growth (cf. Lazenby *et al*. 2008; Paul & Stojanowski 2015; White & Folkens 2005; also cf. Auerbach & Ruff 2006 for an example in a modern context). Ontogenetic studies that use qualitative methods, comparatively, focus on perceptions of one's body in relation to health, age, and disease (including aspects of pain associated with all three, as we noted in the previous section).

For example, Buch examines how,

> the ways paid home care workers in Chicago provided embodied care that sustained older adults' personhood. In practicing this form of care, workers regularly exceeded their official job descriptions, which involved assisting older adults who live in private homes with tasks that gerontologists call "instrumental activities of daily living" (IADLs), such as bathing, cooking, cleaning, shopping, toileting, and laundry. (2013:638)

The care workers, in this sense, *become* the individuals they come to care for—giving them a sense of security through the habits that they can continue to maintain *through* their care workers (2013:637-8, 641). Buch, through this study, examines how care workers for the elderly in Chicago can develop a physiological connection to their patients, in the sense that the bodily health of the individual being cared for takes precedence over the bodily health of the worker (2013:637, 646-647).

Clarke's study explores "older women's feelings about and experiences in their bodies" which "have been largely unexplored" (2001:442). She states that "the existing research, which is notably scant, suggests that older women, like their younger counterparts, tend to be ambivalent about their bodies" (442). The author thus examines "tensions and contradictions between the body and the self in

later life in relation to the physical changes that accompany aging" which results in "a disparity between […] bodies and […] sense of identity" (458, also cf. 458-461 for more details on how this 'disparity' manifests in various participants). Clarke's study eschews the skeletal lives of the participants, focusing rather on the overall bodily implication(s) of having an ageing body and being an ageing individual. With somewhat more attention to the skeleton, Melanson and Downe-Wamboldt (2003) examine how different stressors affect older individuals living with rheumatoid arthritis and what these individuals do to cope with these stressors. They state that "[p]articipants reported their most frequently perceived illness-related stressor to be physical limitations, followed by lack of control or independence and pain" (130).

Another aspect of ontogeny explored in anthropological research is change in body size. Body size and changes in the size of the body is affected by and in return affects the skeletal body. For example, Gremillion (2005) examines how writing about bodies and bodily-ness (in relation to their size) changes both historically, culturally, and geographically. Greenhalgh (2012), similarly, interrogates how the United States' "war on fat" affects individuals' ideas about bodies and bodily-ness in relation to their size and the 'ideal' projected by particular social, cultural, historical, and structural contexts.

Some studies that focus on the skeleton as an aspect of growing and ageing individuals' health usually tend to what can be done to prevent skeletal deterioration either through movement or dietary supplements. For example, Holland and Moffat have examined the effects of diet and nutrient intakes on risks of developing osteoporosis in teenagers and young adults (2017:1760-1). As the authors write, "[t]he difficulty of arresting bone loss and building bone mass has led to a focus on osteoporosis prevention, rather than treatment. [...] the focus here is on nutrition [...] essential for maintaining bone" (2017:1760). Holland and Moffat suggest that some of the fundamental aspects that concern bones and skeletal health in Canadians concern the preventative measures rather than the treatments for bone loss

diseases like osteoporosis (2017:1760-1). What this focus highlights is the *duality* (or perceived duality) between chronic conditions and prevention (i.e. the section discussed above) which is often a blurred line that can only be defined in particular circumstances. Moreover, Moffat, Galloway, and Latham have explored how socioeconomic status in relation to diet can affect stature in elementary school children, using anthropometric methods to determine how children's health is affected based on their socioeconomic status (2005:355-6, 364).

Similar studies by Goulding *et al*. examine how "adiposity" affects the bone mass of children and the development of their bone mass in comparison with children with lower levels of adiposity (2000; Goulding *et al.* 2002; also cf. Dimitri, Wales, & Bishop 2010; Han, Lawlor, & Kimm 2010). Comparatively, Ellis *et al*. didn't note any such stressors in their examination of bone mineral content, noting instead that the differences between overweight and obese, and non-overweight children was negligible (2003:s276; also cf. Oerter Klein *et al*. 1998; and Petit *et al*. 2005 for similar results).

Ontogenetic research that specifically concerns, and extensively deals with, skeletons is, generally, attributed to archaeological findings, demographic distinctions, indexing purposes (i.e. ageing and sexing purposes), or health profiling[9]. For example, White & Folkens outline specific data collection methods on the cataloguing of skeletal remains in terms of adult, subadult, diet, population, sex and age estimates, etc. (2005:359-418). They also suggest how to determine cultural modifications or health conditions that may affect the bony matrix (2005:309-323).

Though paying attention to aspects of socioeconomic status, diet, health, and bone history is important to examine, skeletons' presence 'in the flesh' is also important to examine in the context of embodied experiences and how the stressors on the body and the skeleton also affect individuals' day to day lives.

9 (cf. Auerbach & Ruff 2006; Dimitri, Wales, & Bishop 2010; Ellis *et* al. 2003; Goulding *et al*. 2000; Goulding *et al*. 2002; Han, Lawlor, & Kimm 2010; Holland & Moffat 2017; Lazenby *et al.* 2008; Moffat, Galloway, &Latham 2005; Oerter Klein *et al*. 1998; Paul & Stojanowski 2015; Petit *et al*. 2005; White & Folkens 2005; White, Black, & Folkens 2011)

Human Osteology and Bioarchaeology:

Research directly aimed at skeletons is principally conducted post-mortem by archaeologists and forensic anthropologists (cf. Doyle, Lazenby, & Pfeiffer 2011; Katzenberg & Saunders 2008; Lazenby, Cooper, Angus, & Hallgrímsson 2008; Passalacqua & Rainwater 2015; Paul & Stojanowski 2015). For example, White and Folkens (2005) offer a guide to archaeological identification of human remains, anatomical features, identification of sex and age at death, and skeletal indications of trauma (pathological or as a result of injury). White, Black, and Folkens (2011) present an extended version of this guide, while Buikstra and Ubelaker (1994) propose a compendium of quantitative data analysis and collection for the field as well as useful examples of pathology and cultural modifications. The skeletal body of the lab, the crime scene, or the archaeological dig is dead. It doesn't feel the hands touching it and, similarly, cannot touch back, cannot communicate its life verbally (cf. Sofaer 2012 for a discussion on this topic).

Increasingly, archaeological studies examine human skeletons through concepts of material and materiality (cf. Krmpotich, Fontein, & Harries 2010; Sofaer 2006, 2012). For example, Sofaer "takes on the materiality and historicity of the body by developing a relationship between the study of the human skeleton and archaeological approaches that rely on the investigation of objects" (2006:xiv). Krmpotich, Fontein, and Harries "pursue the emotive and affective potency of bone as material, and bones as uneasy, ambivalent subject/objects" (2010:372). Taking from Ingold (2007), the authors propose that

> we ground our investigations and theoretical approaches both in bones as things and bones as substance. In starting from this approach, we are not rendering bones as other-than-human, but rather focus attention on the very properties, processes and techniques through which bones and bone are constantly constituted and negotiated as persons or things, subjects or objects, meanings or matter. These categories, forms and states of being are neither permanent nor exclusive. The appearance, disappearance,

> fragmentation, reconstruction and destruction of bones and bone provide a means of contributing to wider theoretical debates. (Krmpotich, Fontein, & Harries 2010:372)

Though both Sofaer and Krmpotich, Fontein, and Harries take a 'material' approach to skeletons and skeletal remains, Krmpotich, Fontein, and Harries propose an 'or' approach to the materiality of bodies: "we […] focus our attention on the very properties, processes and techniques through which bones and bone are constantly constituted and negotiated as persons *or* things, subjects *or* objects, meanings *or* matter. These categories, forms and states of being are neither permanent nor exclusive." (2010:372, emphasis added). Sofaer, comparatively, proposes an 'and' approach: "[t]he porous character of the body means that it is difficult to identify clear boundaries between the body and the world. Furthermore, the divide between the living body as cultural and the skeletal body as natural cannot be sustained as bodies will always be both, albeit in different and changing configurations" (2006:62). I return to these points in the conceptual framework below.

Recent studies in biological anthropology (also physical anthropology) have examined modern bone plasticity among certain groups (cf. Macintosh & Stock 2018), and compared these groups to archaeological populations to question assumptions previously made about females and their roles in load-bearing activities (cf. Macintosh, Pinhasi, & Stock 2017; and Macintosh, Pinhasi, & Stock 2016).Macintosh, Pinhasi, and Stock suggest that there is "very high levels of upper limb loading among most prehistoric agricultural women when compared to both living female athletes and controls" (2017:5). By building on the recent studies on skeletal analysis of modern populations, my research seeks to bring the experiences of the living skeletal body to light—to give these bodies a voice in the context of the participants' lived experiences of their skeletal embodiment.

Chiropractic Care and Yoga:

Studies dedicated to chiropractic care and yoga merit a more direct approach as frames for my research. Situating the lack of attention brought to the skeletal body in anthropological approaches to both practices is integral to building the groundwork for my research purposes.

Research on chiropractic care focuses mainly on treatment of patients through musculoskeletal adjustment(s), especially on the relationship(s) between patient and practitioner, and the integration of chiropractic within the wider frame of '(bio)medicine' and medical treatment[10].

Anthropologist Katherine Oths suggests that,

> given the unorthodox nature of the chiropractic system, the chiropractor goes to great lengths to educate new patients to a new way of thinking about their often long-standing problems. [...] Chiropractic explanations are simple and understandable. The mechanistic conceptual symbolism of the chiropractic system is appropriate to the mechanistic conceptual system of our industrialized society. Heavy emphasis is placed on leading patients to realize they can understand and influence their own condition. (1994:90)

The ways in which patients are approached is, first, through the transmission of knowledge and second, through the patient's body. As Oths further suggests, educating patients is important for chiropractors because "patient expectations for a cure are unreasonable unless and until they understand the nature of the internal damage, why the healing process will take time, how he 'moves' bones, the necessity of frequent office visits, etc." (1994:90).

This reference to "mov[ing] bones" highlights the chiropractor's intimate relationship with another's skeletal body as part of the clinical encounter (1994:90). Oths writes that "the chiropractor first manipulates a patient's belief structure before setting about to manipulate his or her physical structure, providing an analogous realignment in both the mind and the body" (1994:91). However, the physical relationship is ignored to "explore the interactive patterns and communicative elements of

10 (cf. Baer 1987, 2001; Coulehan 1985; Green, Gilford, & Beacham 2020; Oths 1994; Oths & Hinojosa 2004; Redwood 2006; Senzon 2011a, 2011b, 2011c; Villanueva-Russell 2004, 2011).

chiropractic care without ignoring the content or process of clinical interaction" (1994:107). Though Oths points to the need for further research on "[t]ouch, or the laying on of hands" and the "[i]mplicit psychotherapeutic benefit of chiropractic care", these aspects are not explored as *part of* the "content or process of clinical interaction" (1994:107). My research attempts to examine how the skeletal bodies of chiropractors and patients may come into view during these interactions.

Oths and Hinojosa, in collaboration with various authors, explore different cultural settings in the field of manual medicine with specific attention to embodied practice (2004:xiii). For example, Jacobson suggests that "[c]lients of a methods of physical manipulation known as Rolfing describe a variety of physical, emotional, and psychological experiences as consequences of that therapy, including sensible changes in posture and movement, autonomic responses, negative affects, emergent memories, and increased confidence in their physical and social abilities" (2004:171). Jacobson further argues that "Rolfing experiences confirm the close genetic and functional links that others have noted between cultural disciplines of the body and codes of deportment, and the formation of embodied selves" (2004:171). Rolfing, in its treatment of bodies, is similar to chiropractic care with specific focus on the "main segments of the standing body—head, thorax, and pelvis—[which] would be centered both laterally and anterio-posteriorly [...] through the body's center of mass" (2004:174; Senzon 2011a). The body, in both practices, is meant to be approached (w)holistically and treated through specific areas that bring alignment to the individual's body (cf. Jacobson 2004; Senzon 2011a:10).

Senzon further suggests that "chiropractic was, in part, an attempt to unite matter, body, life, soul, and Spirit through contemplation, the chiropractic adjustment, and worldview development" (2011a:11-12). Bodies—as observed above—are an intrinsic aspect of chiropractic philosophy, beyond the matter of treatment. As Coulehan explains, in chiropractic in general, "illness results from imbalance, dysharmony, a failure of the positive homeostatic drive toward health" (1985:384).

Research on chiropractic care, then, mainly situates itself at the intersection of treatment and interaction with individuals' bodies for the restoration of health or, as Oths suggests, "the body's natural healing powers" (1994:83). Skeletal bodies are not examined in this literature as other than a tool through which treatment is provided.

Research on yoga practice, comparatively, focuses on its use as complementary treatment/therapy[11], the effects yoga may have on bodily perception(s)[12], and the use of yoga to promote 'health' and/or 'healing'[13]. Some research on yoga practice also critiques its integration into the wider '(bio)medical' umbrella of 'health' practices (often as part of self-regulatory practices) and the lack of attention paid to the non-physical aspects of yoga[14].

Tardan-Masquelier suggests that yoga's reception in western society (in general) depended on two fundamental aspects: the philosophical aspects of yoga, which allowed one's direct contact with a higher power (the author uses the term "*divin*"); and, secondly, the growing interest in physical activity promoted by the military and various inventions (and interventions) related to "gymnastiques, de danses et de sports, l'exploration du mouvement, l'hygiénisme et le culturisme" (2021:420; also cf. Philippe-Meden 2021:435-442).

Desikachar, Bragdon, and Bossart suggest that, "[t]oday, most people identify yoga with *âsana* [or *āsana*], the physical practice of yoga, but *âsana* is just one of many tools used for healing the individual" (2005:17). Their study focuses on the other aspect of yoga as a "healing system" where postural yoga forms only one part of this examination on the body's health (2005:17).

11 (cf. Busch *et al*. 2011; Slocum-Gori *et al*. 2012; Tamagawa *et al*. 2015; Tul, Unruh, & Dick 2011)
12 (cf. Dittmann & Freedman 2009; Hartranft 2003; Impett, Daubenmier, & Hirschman 2006; Liem 2012; McIlwain & Sutton 2014)
13 (cf. Desikachar, Bragdon, & Bossart 2005; Fries 2013; Liem 2012; McIlwain & Sutton 2014; Wertman, Wister, & Mitchell 2016)
14 (cf. Alter 2005; Boccio 2012; Desikachar, Bragdon, & Bossart 2005; Hartranft 2003; Klein 2012; Lavrence & Lozanski 2014; Markula 2014; White 2012)

Another aspect of yoga in its physical practice is observed by Alter (2005) when he interrogates how “the popularity of yoga manifest [sic] in the popular practice of *asana* (postural exercises) and *pranayama* (breathing exercises) is directly linked to very modern ideas about holistic health and wellness. [...] [A] systematised form of physical fitness training on the one hand and as applied medical therapy on the other” (Alter 2005:120).

However, even in its use both as a philosophy and a bodily practice, the skeleton is ignored and relegated to postural yoga as a series of cuesfor particular areas of focus on the body.

Overall, research on chiropractic care and yoga address the ‘em-body-ment’ of the individual without explicitly questioning what role—aside from treatment-focused—the skeleton may play in how individuals envision this bodily-ness. The skeleton is present as part of the individual, but often ‘assumed’ rather than explored as an aspect of how people live their everyday lives. Where it presents itself, it must be ‘transcended’ to attain a higher form of being—an enlightened bodily-ness where, seemingly, the skeleton doesn’t ‘weigh down’ or ‘ground’ the body (cf. Senzon 2011c; Hartranft 2003).

Discussion

As evident from this literature review, we have tended to think about skeletons as sites of injury and pain, as indicators of growth, age, and pathology, and, in the case of chiropractic care, as a site for the healing of bodies. Studies that concern skeletons directly usually operate in an archaeological context (i.e. when the individual is dead). Otherwise, skeletal bodies are dysfunctionally loud and functionally silent. In contrast, in anthropological research, we are very attentive to bodies, yet ignore skeletons as foundational aspects of living, breathing bodies. Skeletons are not a *châssis* for bodies: skeletal bodies are constantly implicated in every aspect of our experiences. Skeletal bodies could ‘materialise’ themselves in the interstices of the literature presented above, but this manifestation is always sidestepped in favour of the visible, fleshed bodily surface.

Outline of Dissertation:

In Chapter 2, I describe the anthropological theories and ideas that frame the research. Chapter 3 outlines the research methodology and contextualises the practices of chiropractic care and yoga in Victoria, BC, the field site of my research. In Chapter 4, I discuss participants' stories and experiences in the context of pain, and ageing and, then, in Chapter 5 focus on participants' notions of their bodies and/as energy. In Chapter 6, I explore how knowledge and knowing influence participants' notions of their embodied lives. Chapters 4, 5, and 6 seek to answer the first two research questions. Chapter 7 focuses on the analysis of the data provided by participants, seeking to answer the third research question. Using materiality and material(s) as a conceptual framework, in conjunction with participants' responses, I argue that skeletal embodiment is deeply material, personal, and critical in the formation of what constitutes what I am calling the "skeletal subjectivity" of an individual. I further argue that skeletal subjectivity can't be understood simply as an *aspect* of knowledge of the body or of the knowing body; it's also as a means for people to negotiate what they want their bodies to be. Chapter 8 concludes the dissertation and identifies further avenues that can be explored in the study of skeletal embodiment and skeletal subjectivity.

Chapter 2: Skeletal Sensations: Material(s) and Surfaces

Introduction:

In the previous chapter, I outlined the lack of attention paid to the skeleton as a fundamental aspect of one's embodiment. In this chapter, I discuss the conceptual frame of the research. I draw on theories of embodiment, materiality, surfacing (in Taylor's sense of the term [2005]), sensation and the senses, and interoception.

Material Frames:

The skeleton, as a lived and living part of how individuals experience and constitute themselves and the world has not been well studied. Though the skeleton forms the essential 'frame' of the fleshy body, it also is part of that body—though it may not be noticed frequently. To explore how skeletons, as bodies, can be approached, I draw upon anthropological theories of materiality and embodiment to propose a space where skeletons and skeletal bodies can be brought to the foreground for analysis, or, in Taylor's (2005) terms, to suggest how skeletons '(are) surface(d)'.

Before turning to these theories, however, I want take a closer look at material(s) and materiality through Krmpotich, Fontein, and Harries' (2010) research and Sofaer's work (2006, 2012). If we regard "bones as things and bones as substance", the implication arises that there must be a comparison between the two, as Krmpotich, Fontein, and Harries propose when they state that "bones and bone are constantly constituted and negotiated as persons or things, subjects or objects, meanings or matter" (2010:372). The implication of the comparison between the subjectivity and the objectivity —both in terms of the process of making into an object (objectifying) and the process of presuming distance between the researcher and the subject matter (something Sofaer 2012 discusses)—of skeletal

material implies that there is a clear separation between the two, despite the authors' claims that "[t]hese categories, forms and states of being are neither permanent nor exclusive" (2010:372).

The implication lies in the distinction of "bones" from "bone" that the authors suggest when they point to "bone as material, and bones as uneasy, ambivalent subject/objects" (2010:372). Bone, as the authors say, is material—literally as in bone is the material (read: tissue) from which bones are made. However, the authors also use this term to mean the theoretical sense of "material" as Ingold uses it—but, following Ingold (2007), doesn't it stand that *bones* themselves are also material for the very reason that they are "subject/objects" (2010:372)? Bone tissue doesn't exist independently from bony bodies—it doesn't stand outside of skeletal "subjects/objects" (to use the authors' terms) but rather infuses them with particular subjectivity. The very quality of bone tissue (because the use of the term 'material' can lead to confusion here) is important in the construction and reconstruction of skeletal bodies: osteons communicate with each other and transform depending on the 'needs' of the bony body at a particular point in time. The mutable quality of bone cells implies that a boundary between bone as material and bones as 'people' or 'objects' can't be formulated in Ingold's "ocean of materials" (2007:7) because this distinction calls for the discussion of *materiality* that Ingold pushes against (2007:7).

This critique of Krmpotich, Fontein, and Harries' conceptualisation of bony bodies serves as an arrow, a directional point from which I conducted my own research into the skeletal lives of my participants. In other words, the authors offer a door and my role as an anthropologist was to find out what was on the other side. In order to do so, I discuss how materiality figures in the larger context of my research on skeletal embodiment.

Materiality and Material(ising):

Rather than accepting 'materiality' and 'material' at face value, it is useful to question how these words entered our vocabulary and what their meaning(s) are in the context of anthropological research (Hicks & Beaudry 2010:2,4). Addressing how materiality and material arise and how they affect the objects (including bodies) to which they are bound (2010:4) allows a better understanding of how these words affect our everyday lives.

Materiality is defined by the Oxford English Dictionary as "[t]he quality of being composed of matter; material existence; solidity" and also as "[t]hat which is material; (in *pl.*) material things" (OED 2016a). Thus, materiality, in this instance, can literally be comprised of anything and everything that one would consider to be 'material'...which then begs the question of what is 'material'? However, materiality itself can't be 'boiled down' into a thing.

'Materiality' is, rather, a concept used to explore how things *become* 'material' in different and changing circumstances. Butler explains this idea when she examines how bodies (and sexed bodies, specifically) are constructed in the same manner that 'materiality' itself is a construct bound up in relations of power and historical contingencies (2007: 164-165, 170). Butler "[asks] how and why 'materiality' has become a sign of irreducibility, that is, how is it that the materiality of sex is understood as that which only *bears* cultural constructions and, therefore, cannot *be* a construction" (165, emphasis added)? Materiality, then is not just something *through* which we can examine cultural constructions (or, materials), but is itself context-dependent. Butler further explains, drawing on Foucault's notion of power relations, that

> 'Materiality' designates a certain effect of power or, rather, *is* power in its formative and constituting effects. Insofar as power operates successfully by constituting an object domain, a field of intelligibility, as a taken-for-granted ontology, its material effects are taken as material data or primary givens. These material positivities appear *outside* discourse and power, […b]ut this appearance is precisely the moment in which the

> power/discourse is most fully dissimulated and most insidiously effective. (Butler 2007:170)

Materiality, for Butler, effectively has the *power* to create material things, to make 'matter' (in the sense of creating 'things', and making certain 'things' important). Material, then, is an effect of materiality—it's made to appear 'apart from' (though intrinsically *a part of*) materiality. Materials are made to "appear *outside* discourse and power" (2007:170) when, in fact, there is a direct correlation between the two: materiality and materials function *together* to create a 'narrative of naturalness'. But this 'narrative' can only operate in a particular context within which the 'narrative' is perceived as intelligible.

Ian Hacking refers to this dependence on context when he speaks of "making up people": "As with almost every way in which it is possible to be a person, it is possible to be a *garçon de café* only at a certain time, in a certain place, in a certain social setting" (2007:156, 159). In other words, materiality, for Butler, seeks to operate in a vacuum or at least to propel materials inside a vacuum—but this is impossible, since objects (materials) stand and operate within particular socio-historic-cultural settings that can't be ignored. Butler's concerns with materiality reflect what is "characterized by a dissatisfaction by what we might term purely culturalist studies of material culture, which served simply to reduce things to meanings" all the while ignoring their contingencies (Hicks & Beaudry 2010:2). Though Butler doesn't want to dispense with materiality altogether, she calls attention to how materiality creates materials and that these, consequently, operate *in situ*, and should be interpreted as such.

Taylor addresses this issue of context and materiality when she explains that

> [w]hat ethnography as practice and mode of analysis unsettles, … anthropology as discipline and profession restores. […E]xperts who specialize in research and writings […] seek to dismantle and dissolve the very same objects on whose coherence and persistence their professional identity and expertise in some sense depends. (2005:742)

Taylor and Butler both bring to light that ‘objects’ (i.e. the material) of study (and this includes bodies), whose materiality goes unquestioned, become effectively objectified by the very parameters that seek to break them down. Thus, an anthropology of the body must question what constitutes ‘the body’ and how “field sciences […] can bring particular awareness of how research performs objects [and, again, this includes bodies]: how things emerge through research practice, rather than simply being bound up in social relations and webs of meaning” (Hicks & Beaudry 2010:4).

To trouble the risk of stasis and the solidification of objects, Taylor calls attention to the “ethnographic moment”, which she defines as “the work of exploring ethnographically how objects—objects of study, as well as objects of other sorts—precipitate out of practices and processes that are at once social, material, and representational” (2005:742). Fieldwork, as ‘ethnographic moment’, is reminiscent of Doreen Massey’s conceptualisation of space: “[s]eeing space as a moment in the intersection of configured social relations (rather than as an absolute dimension) means that it cannot be seen as static” (2011 [1992]:303). Thus, fieldwork (and the ethnographic moment) are reliant on constantly shifting contexts of research in order to trouble ‘materiality’ as a concept through which we can examine various ‘objects’.

Hicks and Beaudry argue that objects of research acquire meaning(s) through research *practice*, and, consequently, research relies on how things become material through what we term ‘materiality’ (2010:4, 7). They call for a renewed attention to the way in which “material things emerge in different ways from different disciplinary concerns and traditions of thought. This encourages us [as researchers] to move away from understanding research practices as ontologically distinct from the vernacular practices studied” (Hicks and Beaudry 2010:7). As Butler suggests, we must pay attention to “the genealogy of power relations by which [materiality] is constituted” (2007:170). Butler has already shown, through her examination of how sex is constructed, that bodies are also, in some sense, objects of inquiry with regards to materiality (2007:164). Hicks and Beaudry show that we must “question the

a priori distinctions between material objects and human subjects in a variety of different ways" (2010:10). Fowler further illustrates this point when he says that objects and people share the same material qualities and that these don't develop independently of each other, but rather, are involved in intimate relationships where the lines between objects and people become blurred (2010:377).

Materiality and material, then, are concepts that are inseparable from historical, social, and cultural contexts—they don't stand outside of context, they are implicated through and through with mechanisms that are constantly shifting, that can work towards producing, and attempt to solidify (to 'naturalise') particular bodies, and knowledges about these bodies. Bodies and objects are inextricable from each other; the lines that separate them are permeable, contingent, and context-specific. Skeletal bodies, then, by the same vein, are inextricable from fleshed bodies and the lines between fleshed and skeletal are (sometimes) blurred and permeable. The question, then, is to understand how skeletal bodies could become material in particular contexts.

Material Bodies:

Before examining how bodies may 'become' material, I want to explore broader epistemological changes in the ways anthropologists (and, more broadly, social scientists in general) have come to theorise and apprehend bodies. These theorists' attention to 'the body' displaces notions of the body as 'envelope' for the 'thinking' subject to develop an embodied, sensing, and experiencing subject-body.

At the beginning of the twentieth century, Marcel Mauss argued that "[l]e corps est le premier et le plus naturel instrument de l'homme [sic]" (2002[1936]:10) by developing what he terms "les techniques du corps[15]" (ibid.). Bodies are 'trained' through education and "tradition" to *be* a certain way and to interact with the world in culturally-specific manners (6, 9, 12). For Mauss, the body is

15 Loosely translated: Mauss explains that the body is the first and most natural human tool through which 'bodily techniques' are developed.

culturally inscribed through techniques of the body, inculcated "par et pour l'autorité sociale[16]" (21). Mauss points out that bodies, in all their constituencies and through all their techniques, are 'normal' and must be examined in their specific cultural, historical, and social contexts (14, 21-23).

Mauss also posited the notion of "habitus" which was later taken up by Pierre Bourdieu to suggest how certain practices are naturalised through individuals' bodies and capacities (1972:178-180; also cf. Wainwright, Williams, & Turner 2006 for an example of habitus in practice). As Bourdieu explains, a habitus is "entendu comme un système de dispositions durables et transposables qui, intégrant toutes les experiences passées, fonctionnne à chaque moment comme une *matrice de perceptions, d'appréciations et d'actions*, et rend possible l'accomplissement de tâches infiniment différenciées" (Bourdieu 1972:178). A habitus is inscribed in bodies at different levels: individual, group, and cultural (182-184); an habitus is the "position présente et passée dans la structure sociale que les individus entendus comme personnes physiques transportent avec eux, en tout temps et en tout lieu, sous la forme des habitus qu'ils portent comme des habits et qui, comme les habits, font le moine[17]" (184). Thus, habitus transforms the way people understand and 'situate' their bodies in various situations (188-189). Bodies are culturally-specific, socially-implicated, and historically-bound through actions that define and constitute them in a particular space (again, cf. Wainwright, Williams, & Turner 2006).

Bodies are, then, read not as sites of inscription (i.e. a blank slate where cultural attributes are lain), but rather are interpreted as malleable (i.e. plastic or elastic) and changing entities that, in

16 Translation: Bodily techniques or 'techniques of the body are inculcated by and for social authority (cf. Foucault 1990 for more on authority and bodily authority).

17 Essentially, Bourdieu here describes how habitus is a set of habits—like a set of clothes—one wears which is dependent on context, where the 'outfit' (re: *habits* in French) makes the person understandable in a bodily fashion. For example, wearing a school uniform attributes the body to a particular educational setting, which may also imply other contingencies of educational, economic, and social status. In another sense, when Bourdieu says "les habits, font le moine" (1972:184), the appropriate translation would be 'the clothes make the man'.

conjunction with the subjects they belong to, respond to different (often discursive) 'social cues' (or habitus) (Bourdieu 1972:188-189). Like Mauss, Bourdieu's interest in bodies lies in how language interpellates and forms subjects (and their bodies) into different and changing circumstances (Bourdieu 1972:185-187; Mauss 2002[1936]:7-8).

For Merleau-Ponty, bodies *are* subjects: through our senses, we perceive the world and its through our senses and our perceptions that we interpret "being-in-the-world" (2007:139-142). As he explains, "there is no inner man [sic], man is in the world, and only in the world does he know himself. […] The phenomenological world is not pure being, but sense which is revealed where the paths of my various experiences intersect, and also where my own and other people's intersect and engage each other like gears" (137). We interact with the world (and with others) through our bodies, and our senses always—by their rooted-ness *in* our bodies—send us back to those very bodies (139). For Merleau-Ponty, the distinction between the subject-mind and the object-body is dissolved (137; also cf. Blacking 1977:18, 22-23). Csordas, following from Merleau-Ponty, goes further to argue that "[b]eing-in-the-world is fundamentally conditional, and hence, we must speak of 'existence' and 'lived experience'" and bodies must be examined as involved *in* rather than infused *with* culture (1994:10; 1990:5). Bodies, then, aren't simply subjective in the sense of being embodied, but they are also subjectively constituted and must also be interpreted as such through their experience.

I use 'embodied' and 'embodiment' as Lock and Farquhar define it, as "a term that emphasizes process and contingency" (2007:1), but also to signify "the way in which self and others represent the body, drawing on local categories of knowledge and experience" (Lock 2001:483). When Mauss explains that bodies are 'trained' "*par* et *pour* l'autorité sociale" (2002 [1936]:21, emphasis added), he points towards structural forces that act upon bodies: culture and 'the world' (as Merleau-Ponty puts it) aren't objective, they're not "always 'already there' before reflection begins—as an inalienable

presence” (Merleau-Ponty 2007:133). Bodies must then be examined through the structures that seek to delineate them.

Michel Foucault explores how bodies, through their experiences, are also involved in relations of power (1990). He explains how power *over* bodies shifted over the course of history and how 'the state' developed 'technologies' of surveillance and control of human bodies (Foucault 1990:135-159). For Foucault, bodies are regulated (i.e. managed) alongside two poles: "anatomo-politics of the human body" and "biopolitics of the population" (139). These poles regulate bodies on the individual and societal level. As Foucault suggests, "the disciplines of the body and the regulations of the population [consist] of two poles around which the organization of power over life [is] deployed […] anatomic and biological, individualizing and specifying, directed toward the performances of the body, with attention to the processes of life" (139). Groups can be regulated as well as the bodies within these groups, leading to "an explosion of numerous and diverse techniques for achieving the subjugation of bodies and the control of populations, marking the beginning of an era of 'bio-power'" (140). Foucault uses 'bio-power' (also biopower) "to designate what brought life and its mechanisms into the realm of explicit calculations and made knowledge-power an agent of transformation of human life" (143). Bodies are involved in an *inobjective* world and are affected by (and also affect) mechanisms of power "increasingly incorporated into a continuum of apparatuses (medical, administrative, and so on) whose functions are for the most part regulatory" (144).

Not only are bodies managed through regulatory practices that were once (and in many way, still are) enforced by the state but now individuals 'manage' their own bodies through self-regulatory practices (1990:144; Lavrence & Lozanski 2014:79) which are themselves seemingly covert regulatory projects of those "apparatuses" Foucault makes reference to. It's important to note the neoliberal turn from regulatory practices prescribed by the state to self-regulatory practices, placing 'responsibility' in the hands of the individual (Foucault 1993; Polunin 1977). That isn't to say, however, that (self-)regulatory practices govern passive bodies; as Foucault explains, bodies slip through practices—practices that must constantly adapt in order to grasp (to get at) 'slippery' bodies (1990:143). These

'mechanisms' aren't limitless and can be affected by the bodies they seek to control: "[i]t is not that life [re: bodies] has been totally integrated into techniques that govern and administer it; it constantly escapes them" (Foucault 1990:143). Bodies (and individuals) aren't passively governed, and they can challenge and subvert mechanisms of power (143). Thus, regulatory practices, like bodies, and like materiality—are hard to grasp, to pinpoint, as they're mechanisms rather than concrete things that we can point at or contain. In this sense, we come to speak of what Lock and Farquhar term "lived bodies" through all their contingencies (2007:1). Here, I come back to the question, how do bodies come to be 'lived' (or, 'material')?

Becoming Material:

As examined above, bodies are malleable through their experiences and through (self-) regulatory practices. John Blacking unsettles the divide between humans and nonhumans when he says that, like nonhuman animals, we are influenced by physiological and biosocial phenomena, and, thus, the "nature/culture divide" that supposedly separates us from nonhumans can't hold (1977:2-3). Humans are plastic on a social level (their sociality and culture changes them)—in other words, their interactions with their environments (social and physical) 'molds' them into subjects (3). However, as Blacking writes, "the body is never infinitely malleable, it follows that there can be tensions between people's training and education in the techniques of the body and their bodies' own inner forces and proclivities" (4). The notion of plastic bodies (i.e. bodies that are physically changeable) is present especially in osteoarchaeological investigations.

Joanna Sofaer, an osteoarchaeologist, sees plasticity as cultural and biological forces that act upon and fundamentally change the constitution of bodies through "dynamic irreversible ontogenetic modifications" (2006:71). Though her concerns lie almost exclusively with the archaeological (i.e. skeletal) body, Sofaer offers a different way of looking at how bodies are constituted through the

'material' world. Indeed, as she says, "[t]he porous character of the body means that it is difficult to identify clear boundaries between the body and the world. Furthermore, the divide between the living body as cultural and the skeletal body as natural cannot be sustained as bodies will always be both, albeit in different and changing configurations" (62; also cf. Crossland 2010). As I have already touched on, boundaries between bodies and objects are unstable and malleable, but so are the boundaries between bodies and the material world; these boundaries become blurred and offer avenues of research where materiality and 'material bodies' can be explored (Hicks & Beaudry 2010:11).

Plasticity also confers material qualities to bodies. Sofaer explains that, in her research, "[a]n insistence on bodies first and foremost as living persons means that, while bodies are identified in terms of their materiality, they are not understood in terms of their 'material'" (2006:66). Sofaer defines materiality, in this context, "as the foundation of embodiment where the effects of the materiality of specific bodies lead to particular embodied experiences of individuals" (66). For Sofaer, then, it is not so much the body overall that is material, but rather its foundation—its skeleton. Though this is a problematic fragmentation of the body (something I return to in chapter 5), Sofaer's analysis can allow the examination of *how* bodies can, through their skeletal structure, *become* material.

Becoming material also involves the body in various forms of relationships with its environment. This relational aspect is echoed by Jane Bennett when she says:

> Vital materiality better captures an "alien" quality of our own flesh, and in so doing reminds humans of the very radical character of the (fractious) kinship between the human and the nonhuman. My "own" body is material, and yet this vital materiality is not fully or exclusively human. My flesh is populated and constituted by different swarms of foreigners. [...] We are, rather, an array of bodies [...]. (2009:112)

The body, as a composite of relations, is constantly changing, embedded with foreign agents (in Bennett's example here, she refers to bacteria) that themselves may change as bodies are negotiated in particular spaces and enter particular experiences. As the fleshed body goes through the day to day, as

it lives and dies, so does the composition of its relations: “All forces and flows (materialities) are or can become lively, affective, and signaling” (Bennett 2009:117). Bennett’s notion of materiality implies the ocean of materials that Ingold points to as a disruptive and all encompassing ‘flow’ in which we—as material bodies—enter into relations with the other materials we encounter (including other bodies) (2007:7).

Sofaer refers to bodies as “material culture” to “[dissolve] the perceived dichotomy between persons and artefacts” and “[provide] a potential vehicle for the reconciliation between science and humanism” (86; also cf. Crossland 2010 for more on archaeology and materiality). Seeing the body as material culture, then, “changes the subject-object relationship; the body becomes the object of study but, as a person, is also an active subject” (Sofaer 2006:86). Taking this concept out of the skeletal realm, we can also posit that, through its involvement in our day to day lives, bodies are both affected by and affect our lived experiences (as Lock and Farquhar would say). However, that skeletal bodies (or archaeological bodies in general) can be seen as material whereas fleshed, living bodies are seen as ‘lived’ is erroneous, for, if we follow Sofaer’s argument, “bodies will always be both, albeit in different and changing configurations” (2006:62). We can think of bodies (both living and archaeological) as “[sites] of articulation of the material and the social” (87) and the ways in which these are historically, culturally, and socially specific (Hicks & Beaudry 2010:11), but we must remember that the separation between material bodies as archaeological (i.e. dead) and lived bodies as fleshed (i.e. living, experiencing) is an arbitrary division that is itself a material construct.

Though it’s useful to think with Sofaer’s analysis of the skeletal body, the idea of “the body as material culture” (2006:86) focuses on the individual (skeletal) ‘body’, leaving little room for cultural interpretations of ‘what makes bodies’ or the question of ‘what constitutes a body’. As Fowler (2010) notes, anthropologists must “consider personhood and concepts of the person to be socially and culturally varied” (352). Fowler speaks of researching “personhood” (rather than identity or

subjectivity), because it "requires an interrogation of the relationship[s] between human beings, objects, animals, substances, and places at a most fundamental level: the boundaries between persons and objects, persons and animals, and persons and divinities can be shown to vary culturally" (353). This idea can be applied to bodies, which, for Fowler, would constitute an aspect of personhood (353). However, as he notes,

> [a] thing may become invested with identity but not be a person: for example, a garment may be gendered or be used to convey an ethnic identity. Identity consists of aspects or axes such as gender, ethnicity, class, age, sexuality, and a host of other phenomena. The idea of *personhood* stands in the same relation to identity as these other phenomena, all of which are investigated in parallel conceptual frames. For instance, we can ask to what extent personhood is a category, to what extent it is natural or naturalized, to what extent it is performed, or to what extent it springs from relationships or practices. (2010:365)

Materiality—or material objects—may share qualities with personhood, but can't cross over into that particular realm. Conversely, bodies, because of their dual quality, can be material *and* be tied to personhood, but shouldn't be blindly accepted as such. As Butler questions the constructed-ness of materiality, so we should question the constructed-ness of personhood and—by extension—bodies. Bodies, like materials, can be 'circulated' (to borrow Fowler's term) through their 'objectification' (as in Fowler's example of photography, also cf. Taylor 2005), either as complete or as partial, thereby troubling the western concept of the singular, "[in]divisible […] person" (Fowler 2010:372). Bodies can be considered as material through their association with it, but also through their inextricability from material things.

Both Merleau-Ponty and Csordas point towards "the phenomenological notion of intersubjectivity" (Csordas 1994:12; Merleau-Ponty 2007:137), referring to the way in which "we experience our world as a whole, and that distinguishing a separate sphere of artificial things [and of relationships between individuals] is misleading" (Fowler 2010:375). Like 'material things' (in Butler's sense of the term), bodies can't stand "*outside* discourse and power" for they are always already

invested with these and other socio-historical contingencies (Butler 2007:170). As Fowler suggests, as much as we build our worlds, we also build ourselves "according to the same principles", and we must examine these principles if we are to tease out how bodies and objects become material (2010:377).

Margaret Lock, to explain the cultural, historical, and social contingencies of bodies, put forth the term "local biologies" (2001:483). As she explains,

> [t]his concept does not refer to the idea that the categories of the biological sciences are historically and culturally constructed (although this is indeed the case) nor to measurable biological difference across human populations. Rather, *local biologies* refers to the way in which the embodied experience of physical sensations, including those of well-being, health, illness, and so on, is in part informed by the *material body*, itself contingent on evolutionary, environmental, and individual variables. (2001:483, emphasis on 'material body')

Bodies become material, then, through variables that, in turn, affect their materiality (i.e. their interpretation as 'lived bodies', but also how these bodies effectively *experience* their materiality). For example, the interpretation of my body (mine and others') affects how this 'body' is interpreted in various contexts (e.g. geographical, gendered, and socioeconomic, to name a few)—effectively affecting how 'I' am embodied (Lock 2001:483). Recalling Lock's concept of material bodies—and of embodiment—as "contingent on evolutionary, environmental, and individual variables", "[e]mbodiment is *also* constituted by the way in which self and others represent the body, drawing on local categories of *knowledge* and *experience*" (2001:483, emphasis added), we can thus see how bodies become material and that this material body is contextually constructed. As Lock points out, "[i]f embodiment is to be made social, then history, politics, language, and local knowledge, including scientific knowledge to the extent that it is available, must inevitably be implicated" (483-484). Again, this brings us back to the concept that materiality and bodies are constructed, or as Lock puts it, "[t]he material and the social are *both* contingent—both local" (484).

Annemarie Mol puts forth the notion of the body as “multiple” (2002). In discussing atherosclerosis, she suggests how the body becomes, in a particular “local biology”, so to speak, examined:

> In talk about meaning and interpretation the physical body stays *untouched*. All interpretations, whatever their number, are interpretations of. Of what? Of some matter that is projected somewhere. Of some nature that allows culture to attribute all these shapes to it. This is built into the very metaphor of ‘‘perspectives’’ itself. This multiplies the observers—but leaves the object observed alone. All alone. Untouched. It is only looked at. As if it were in the middle of a circle. A crowd of silent faces assembles around it. They seem to get to know the object by their eyes only. Maybe they have ears that listen. But no one ever touches the object. In a strange way that doesn’t make it recede and fade away, but makes it very solid. Intangibly strong. (2002:12)

Here, Mol explains how, in the social sciences (though, she argues, also in medical sciences as well), the physical body becomes a material through which observations are made. The body at the centre of the room recalls the operating theatres where the physician operates in the centre, viewed from the benches by students (and or other physicians). Mol criticises this view of the body as a singularity, explaining that

> The body, the patient, the disease, the doctor, the technician, the technology: all of these are more than one. More than singular. This begs the question of how they are related. For even if objects differ from one practice to another, there are relations between these practices. Thus, far from necessarily falling into fragments, multiple objects tend to hang together somehow. Attending to the multiplicity of reality opens up the possibility of studying this remarkable achievement. (2002:5)

The body’s relationship to others, how bodies ‘come together’ in various contexts, suggests the singularity of bodies by saying that “if instead of bracketing the practices in which objects are handled we foreground them—this has far-reaching effects. Reality multiplies” (2002:5). Practices produce particular bodies, but these bodies are never singular—they are lived in multiplicity. However, as Mol writes, “attending to the multiplicity of reality is also an act. It is something that may be done—or left undone. It is an intervention. It intervenes in the various available styles for describing practices”

(2002:6). Therefore, bodies are materialised through practices—they *become* through these practices which intervene in the production of particular bodies.

The question remains, then, of exactly what is 'the material body'. 'The material body' as a whole seems to be a 'taken for granted' and autonomous entity invested in our everyday lives. For example, there is no definition of 'material body' (although there are definitions of materiality, cf. OED 2016a), but 'material body' is referenced as a given within fifteen other definitions (OED 2016b).

Bodies *become* material, but they are also always already material—in the sense that this materiality is itself informed by historical, social, and cultural (and, following Lock, local) contingencies invested in relations of power, and that work towards the production of particular (knowledges about) bodies. To use the term 'material bodies' is to beg the question of *how* bodies come to be understood in particular way(s), and in particular contexts—in effect, materiality becomes a tool through which we can question assumptions about how bodies stand outside of culture, time, space, or social relations—for they don't. Materiality can be used to disentangle from *within*—from the inside—how we come to be 'materialised' in particular ways. Taylor tackles this question by using the term "surfacing" to speak of how bodies are constructed in particular ways and through particular interests (2005:749-750). Taylor proposes the notion of "surfacing the body interior" to address the problematic that "within the profession, anthropologists tend to organize knowledge-production practices in ways that serve to solidify and entrench the same objects that individual anthropologists in their ethnographic work seek to dismantle and contest" (742).

As outlined above, fieldwork practices are contextually dependent and in a constant state of flux, due to their taking place in the "ethnographic moment" (Taylor 2005:742; Massey 2011[1992]:303). The ethnographic moment, though, acts as a facet of surfacing the body interior (just as bodies are facets of Fowler's notion of 'personhood'. The goal of the ethnographic moment, as Taylor argues, drawing from Rosaldo (1989), is to "help anthropologists explore as 'busy intersections'

(Rosaldo 1989) what tend too often to be regarded as objects" (2005:742). Surfacing the body interior becomes "a way of framing explorations into bodies as made and unmade through practice" (742). Though Taylor doesn't define the terms 'practice' and 'practices', they can be understood to mean, in the context of her writing: 'being-in-the-world', fieldwork, and frame of research. Practice becomes a framing device—a 'frame' in Butler's sense of the term (2010)—a way for anthropologists to examine how bodies are materialised and the processes by which they become material (i.e. methods of research used by anthropologists, something I will return to in the next section).

Materialising bodies, in this sense, is a process that requires action—but this doesn't mean that bodies are inert entities overlaid with culture (Mol 2002; Ingold 1998:35 *in* Sofaer 2006:86-87). Bodies are an active part of the materialising process. Bodies 'surface' in particular historical, social, political, and cultural contexts that affect the ways in which bodies are 'read' (or interpreted/apprehended)—that is, the ways in which we interact with different bodies (including our own bodies—fleshed and skeletal) is contingent and fluid. For example, I can't separate my 'body-self' from my 'researcher-self'; my body is 'loaded' in a sense when I enter a space, independently from the purpose I have when entering that space. When I enter a yoga class, I am a yoga student with a female body, a cis-gendered woman, and an anthropologist. The three are not and *cannot* be extricated from each other, but they don't appear at the same time either. The yoga class, in this example, acts as the 'frame' and I 'act' as a yoga student (not unlike Butler's sense of performativity), but I also *become* a yoga student in the sense that my body behaves (and the way that it is dressed)—to the extent that it can—or materialises as a (female) body that is doing yoga. At the same time, my 'researcher-self' is constantly present as I engage with this particular space and in this particular practice—even though I may not be doing so in a conscious 'anthropological' agenda.

Skeletal Bodies:

Skeletal bodies intimately refer back to the skeletons that inhabit us. Though I know that the skeletal material I examine in a laboratory isn't me, I can recognise it as being human (Sofaer 2012). Being able to hold another's bony body in my hands and to feel its material refers me back to my own skeletal body (Ingold 2007; Sofaer 2012).

What's important to consider when speaking of the skeletal body is that this 'body' doesn't function on its own, it's intricately interactive with the other systems of the body—blood brings nutrients to bones, which themselves protect the vital organs of the 'fleshy' body as well as the spinal cord (the 'highway' of the nervous system), muscles move bones, allowing us to be locomotory (hence the reference to the *musculo*skeletal system).

Bodies *become* material, but they are also always *already* material—in the sense that this materiality is itself informed by historical, social, and cultural contingencies invested in relations of power, and that work towards the production of particular (knowledges about) bodies. These contingencies affect the way(s) in which skeletons (and skeletal bodies) develop, in turn affecting how these bodies are interpreted. I use the term 'skeletal bodies' to ask how bodies come to be understood in particular ways through their musculoskeletal system.

For example, a relic is, usually, a bone from a person considered to be a saint: this bone, then, carries—through its connection to Christianity and the Church—meaning for religious individuals, and also tremendous power. This bone is material, but its materiality is also contingent on the power it is allotted by the Church and religious individuals alike. Strictly speaking, a bone in a reliquary and a bone in an anatomy lab are no different (though they are unique and did belong to different individuals who lived very different lives, etc.).

The difference lies in how one bone is interpreted as significant, to be revered, and preserved, whereas the other is used for educational purposes and is subject to destruction and/or replacement.

However, that isn't to say that the relic has meaning for everyone—it is only meaningful for certain people in certain circumstances *because* of its connection to the living individual in whom it 'lived'. In other words, skeletal bodies are involved in all aspects of our lives and can also transcend death—our skeletons survive us, in a sense—but their interpretation is subject to processes that are within and outside of control.

I'm not suggesting that this is the only way in which bodies are (or should be) interpreted; rather, I want to suggest that skeletal bodies are a facet of bodily-ness that has been seldom examined in anthropological work that isn't concerned with the archaeological (i.e. deceased) body or with dimensions of pain. I want to ask *how* bodies, and more precisely, skeletal bodies, come to be materialised in particular way(s), and in particular contexts.

However, an important distinction that needs to be examined here is that material and materiality are part and parcel but they are not the same. The concept of materiality allows us to address materials theoretically, but also displaces the material from focus, something that this research will attempt to avoid. As Ingold explains,

> I can touch the rock, whether of a cave wall or of the ground underfoot, and can thereby gain a feel for what rock is like as a material. But I cannot touch the materiality of the rock. The surface of materiality, in short, is an illusion. We cannot touch it because it is not there. Like all other creatures, human beings do not exist on the 'other side' of materiality but swim in an ocean of materials. (2007:7)

Essentially materiality works against the material, like sandpaper buffing away at the felt, sensed embodied experience to smooth it out and make it 'digestible'. Just as Butler cautions against the idea that materiality is 'something' other than a useful tool to examine how things 'become material', Ingold cautions against the construction of materiality by construing that material is simply a cultural construction. These ideas may seem opposed, but they function together to draw out different aspects of lived experiences.

Ingold refers back to the rock, I will use another example: I can touch the skeleton of another but I can't touch my own skeletal body (although I am constantly in contact with it), however, that doesn't mean that this body doesn't exist. However, it would seem to be what Butler suggests: that my body can't exist because it is a social, cultural, and historical construction—and that this body can only *become* material through these contingencies. Although I can't touch my own skeletal body, I can trace its outlines, its contours, bumps and I can engage with it through my fleshy-ness. I can feel its material. But its materiality isn't something that I can access outside of the (cultural, historical, social, etc.) context of the material itself. Materiality becomes useful as a tool to examine materials and how these arise within a particular context, while remembering that tools do not stand outside of the ocean, but rather serve as a 'buoy' that helps 'make sense' of participants' stories and experiences.

Using concepts of materiality and embodiment may help get at skeletal experiences—phenomenological skeletal-ness while still accounting for the 'material' (i.e. the physical, tangible quality of bone) in particular historical, social, cultural, and political contexts. Examining how skeletons are apprehended in dimensions of health that are considered 'complementary and alternative' and holistic (cf. Baer 2001; Desikachar, Bragdon, & Bossart 2005; Oths 1994) may provide insight into further dimensions of embodiment in contemporary Canadian society.

Surfacing and Bodily Interiors:

Bodies, fleshed and skeletal, transcend rigid systems of classification (Sofaer 2006:62). This distinction between fields of reference—or dichotomisation—is discussed by Taylor (2005) in her idea of "surfacing". For example, she suggests that 'medical anthropology' distinguishes itself from 'environmental anthropology', while both specialisations fall under the wider umbrella of cultural

anthropology; the differentiation, according to Taylor, is illusory, as environment, medicine, and people all interact together. To disentangle each aspect is to bring something specific ‘to the surface’, briefly or temporarily, as though whatever lies in the ‘tangles’ (so to speak) are ‘soil deposits’ that must be ‘washed away’. Thus, she suggests that “[e]mbracing all these meanings, surfacing the body interior points toward the range of practices and processes that both materialize bodily surfaces as significant sites within broader orders, and surface that which lies hidden beneath them” (2005:742).

In participants’ stories, surfacing came through in the various ways that Taylor speaks about: they gave surface to their bodies, touched them, drew their body maps, and used them as visual cues or examples when speaking. Questions I asked participants brought their embodiment(s) to the surface through their sensations and concepts of their bodies. And, finally, our conversations led to the surfacing of experiences and thoughts that went beyond the scope of my questions.

Surfacing can be used in conjunction with the concept of interoception which speaks to the connection between the mind and the body:

> interoception [is] the complex iterative process of noticing and appraising and responding to signals originating within the body. Slow, controlled movement and breathing and attention to present moment interoceptive bodily sensations and feelings can help quiet the mind, calm the human system and build capacity for interoception” (Heeter *et al*. 2021:4-5).

Interoception, in this case, brings the body to the surface in the same way that Taylor uses the concept of surfacing. In some ways, surfacing bodies can give rise to interoception by bringing attention to the very thing that evades the participants and the researcher—in this case, the skeletal body. Skeletal bodies are interoceptive in the sense that they are deeply ‘interiorised’ and that the link between the brain and the skeleton is much like a two-way street (the brain signals the skeleton and the skeleton signals the brain) (Karsenty 2020, 2006; Oury *et al.* 2013; Takeda & Karsenty 2008). Moreover, the silent conversations between the bony body and the interior body (Karsenty 2012,2007, Karsenty & Marks 2010) invites the interoceptive quality of the skeletal body to the surface in

participants' stories. As I show in the following chapters, bringing attention to the skeleton brought about different experiences and different 'surfaces' for participants.

Interoception is further described as "the process of receiving, accessing and appraising internal bodily signals. Maintaining desired physiological states is critical for an organism's survival, and so interoception is a powerful motivator in the pursuit of these states (Craig, 2009, 2002). [...B]roader definitions cast interoception as a multi-dimensional construct that takes into account how people attend to, appraise and respond to these sensations (Vaitl, 1006; Cameron, 2001; Verdejo-Garcia et al., 2012)" (Farb *et al.* 2015:1-2). Interoception can be likened to one's sense of the interior of the body, of what is 'happening in there'. As Farb *et al.* write, "[i]nteroception is an iterative process, requiring the interplay between perception of body states and cognitive appraisal of these states to inform response selection. Afferent sensory signals continuously interact with higher order cognitive representations of goals, history, and environment, informing emotional experience and motivating regulatory behavior" (Craig 2009 *in* Farb *et al.* 2015:2). Interoception can also be interpreted through the attention one brings to the body in terms of

> contemplative practices [...] in the broadest sense, i.e., traditions of first-person reflection upon or cultivations of specific modes of experience, and focus on those practices that explicitly involve interoceptive awareness, including types of meditation and mindfulness-based approaches that allocate attention to body sensations (e.g. the breath), or to specific areas of the body [...], and yoga, tai chi, and other mind-body practices performed in or outside of an explicit spiritual context (Baer, 2003). (Farb *et al.* 2015:4)

Here, interoception refers back to bodily awareness less in the sense of afferent connections related to neurological inputs, but rather to the sensation(s) associated with being *in the body* (cf. Csordas 1990, 1994). Farb *et al.* go on to explain how "[c]lassical contemplative practices such as mindfulness and equanimity seem to speak to the issues of how interoceptive signals are integrated into a complex representation of self and the world beyond, and have models of how they affect health and well-being"

(2015:4). Health and well-being are an integral aspect of interoceptive practice as it's understood here, something that's reflected in participants' own notions of being healthy and having 'energy'.

Two things come into view in this use of interoception. One is that interoception can be likened to Little's conception of "the subtle body" (2016): "In the tradition of yoga, the subtle body suggests that which is fine, delicate, and infinitesimally small such as an atomic particle. It also speaks to the all-pervading spirit in the body" (1). Little aims to "undertake an investigation of the subtle body, bringing together notions of the animating spirit that appear in traditional yoga sources with the anatomical body [,...T]o provide insights into metaphysical speculations as they relate to the body, and through guided exercises, meditations, and reflections to give readers an experience of the subtle body" (1-2). The subtle body, then—or in this instance, the *experience* of it—can be likened to the process of interoception that Heeter *et al.* (2021) and Farb *et al.* (2015) describe : a sense of oneself that combines mind and body (and in Little's case, spirit), originating primarily in the body, but always in conversation with one's mind and sense of self. In a very literal sense, Farb *et al*. refer back to this concept when they say that "[d]espite the great heterogeneity among contemplative traditions, we may begin by selecting a common concept that may contribute to scientific discourse: that of the 'subtle body'" (Farb *et al*. 2015:4). This model reconciles the seeming dichotomy between the mind and the body that interoception seems to set up in its more neurological inclination (4, see below for more on this representation). Rather, interoception's link to the 'subtle body' comes through

> traditional sources [that] each have their own distinct theories of the psycho-physical complex and invoke concepts of subtle body structures and 'currents' flowing through those structures (Samuel, 2008; Klein, 2013). These structures and "flows" are amenable to influencing and being influenced by the mind, emotions, posture, and the conditions of the grosser (physical) body. [...] Exploring these somatic sensations, their sources, and their modulation has been an important focus of Tibetan, Chinese, and Indian medicine [...]. Every mental event – that is, all states of consciousness – are said to ride the "steed of wind" or "energy" currents. (4-5)

Interoception takes into account the physical, emotional, and mental sensations that surface in participants' narratives, giving them a space for exploration of the body (skeletal and fleshed), if only for a brief moment. But this surfacing isn't impermanent: interoception offers the ability to revisit and, effectively, 'resurface' (so to speak) the sensations that participants experienced in/through/with their bodies in the context of chiropractic care and yoga.

Second is the presentation of "afferent sensory signals" (Farb *et al.* 2015:2). Afferentation can be defined as "the transmission of afferent nerve impulses", meaning that the body sends signals to the central nervous system via the spinal cord. Dysafferentation, comparatively, "refers to an imbalance in afferent input such that there is an increase in nociceptor [pain receptor] input and a reduction in mechanoceptor ['sensory' receptor] input" (Seaman & Winterstein 1998:268). This definition, however, doesn't take into account the context in which these two terms usually find themselves: chiropractic care. As Henderson explains,

> long-term changes in intervertebral mobility or alignment provides altered afferent input to the central nervous system, causing neuroplastic changes that impact biological function (Haavik-Taylor and Murphy, 2010; Henderson,2005b; Seaman and Winterstein, 1998). This theory is generally extended to explain that SM [Spinal Manipulation] normalizes spine biomechanics, and as a consequence, normalizes afferent input to the central nervous system – resulting in normalized neurological function and improved health outcomes. (2012:636)

These explanations refer to how the body and the brain are in communication with each other via the spinal cord, which is housed in the vertebrae. Bodies send signals to the central nervous system, just as the brain sends inputs back to bodies. Chiropractic care treats perceived imbalances in the 'communication line'—that is, disruptions in the body's ability to communicate effectively with the central nervous system and vice versa (usually through an issue referred to as subluxation). This imbalance is called 'dysafferentation', meaning that the communication must then be restored via manipulation of the vertebrae.

Interoception, then, can be a way to connect both the ‘subtle body’ that Little presents in his philosophy of yoga and the (dys)afferentations present in the bodies that chiropractors engaged with in the research (though they didn’t all refer to subluxations in terms of dysafferentation, the concept remained an important part of their treatments). “[A]fferent sensory signals” (Farb *et al.* 2015:2) refer to how bodies communicate with the central nervous system, but it also refers to sensations that go beyond nerve input and output (2015:2).

In the following chapters, I use Taylor’s (2005) concept as well as interoception to ‘surface’ participants’ ideas and experiences (temporarily) and examine how what comes through is tied up in larger narratives and discourses of bodies as they are represented and created in Victoria, BC (cf. Chapter 3). I suggest that participants’ engagements with their bodies reflect larger narratives about how bodies are shaped and constructed in the practices of chiropractic care and yoga in Victoria, BC. Because, after all, it was their bodies (skeletal and fleshed) that participants wanted to speak to and about. Not only was it difficult to identify a “yoga” versus a “chiropractic” body, but participants’ narratives also ‘surfaced’ (to borrow Taylor’s term) different bodily-nesses, sometimes singular and at other times simultaneously multiple: for example, a model of the body wasn’t always separable from experienced sensation; thinking of the body as a system was entangled with thinking of it as parts; describing it as a machine or structure was entwined with the language of bodies as energy, and skeleton was enmeshed with flesh. Bodies are complex and complicated, and it was these complexities that I discuss in the following chapters. Bodies, fleshed and skeletal, are also felt, which is what I turn to in the next section.

Sense, sensation, sensory:

As noted in Chapter One, the body is inextricable from the individual 'inhabiting it'. That is to say, my body experiences the world because I *am* a body, albeit through ever changing and fluctuating contingencies and circumstances. Further, as Merleau-Ponty explains, "I regard my body, which is my point of view upon the world, as one of the objects of that world" (2007:148). Bodies are always both object and subject because it is through them that we experience the world and our day-to-day. This idea brings me back to Sofaer's notion of bodies as porous—both cultural and natural (2006:62); the world that I live in is not only something that I interact with in an embodied way, but is also very much a part of myself (and my self, so to speak). I am 'immersed' in my environment, as Grieder (2015) explains, "chacun d'entre nous est la *chair du monde*, immergé au sein d'un environnement dont il fait intégralement partie, comme une goutte d'eau dans l'océan" (20). Hence, the sensations I experience are also immersed, inextricable from the spaces, places, and individuals that I interact with.

Sensation, then, lends itself to what Ingold describes as "a particular nexus of growth and development within a field of relations. Skills of perception and action [...] differ from being to being, depending on where they stand in relation to others, that they perceive the environment in different ways" (2011:314). "Skills of perception and action" refer back to sensations that one experiences both through the physical senses and those experiences that are incommunicable or not easily communicated through language (e.g. energy, fatigue, release, etc.). "Field[s] of relation", then are the spaces where we can share these experiences with others—both in the sense of verbally sharing my experiences of my embodied self to someone else, but also share in an experience with individuals by engaging in a particular practice (e.g. a yoga class, a workshop, etc.). My own bodily-ness, my own sensory world, is based on my own phenomenological perspective, my own "skills of perception and action" which are always taking place within a "field of relation", but is not an all-encompassing experience: my experiences, my sensations, differ from those of others. Participants' sensations will differ from my

own because they have their own phenomenological experiences and their own "field[s] of relation" that will be different from mine.

However, Ingold goes on to say that,

> [i]n truth, [culturally informed practices that differ from one's own] would be inaccessible only if one's own self and the selves of others were individual subjects [...]: each locked in a private world of sensations, such that they can communicate with one another and share their experiences and understandings, only by framing these sensations within a system of collective representations common to a community and validated by verbal convention. [...] In reality, of course, this dilemma is circumvented by means of participant observation, which allows the ethnographer to access other people's ways of perceiving by joining with them in the same currents of practical activity, and by learning to attend to things—as would any novice practitioner—in terms of what they afford in the contexts of what has to be done. This communion of experience establishes a baseline of sociality on which all attempts at verbal communication subsequently build. (2011:314)

In short, what Ingold is getting at is that, through shared experiences, individuals can come to discuss and (attempt to) share their stories, their experiences of their embodied selves, their phenomenological perceptions. Although I can't say that I *know* what a participant is feeling or experiencing by taking a yoga class myself, doing yoga becomes a shared (albeit not entirely identical) experience that we can speak about in relation to bodily-ness and sensed experiences.

In the context of this research, the words sense, sensation, and sensory refer to multiple aspects of participants' experiences. According to the Oxford English Dictionary (OED), "sensation" can be defined as: "A physical feeling; *spec.* a mental state resulting from a stimulus operating on any of the senses or from a condition of part of the body. [...] An emotion; the feeling characteristic of a particular circumstance or situation" (OED 2021a). Hence, sensation refers both to the physical feeling one experiences in the body and the emotional charge that feeling produces for the individual experiencing it. For example, the sensation of nausea is both physical and intangible: one feels nauseated through physical symptoms, but this sensation could also be engendered by a particular situation.

Similarly, the OED defines the term “sense” as “[a] physical feeling or sensation; a mental state resulting from the effects of a stimulus operating on any sense organ or from the condition of a part of the body. [...] Chiefly with *of* specifying the nature of the sense. [...] A feeling or emotional sensation *of* a specified kind” (2021b). Again, ‘sense’ can refer both to the physical—material (more on this below)—feeling of a sense (e.g.: touch, smell, etc.) and to an emotional sensation (e.g. a sense of pride, shame, calm, etc.)

As for the term “sensory”, the OED defines it as: “Designating the organs of the special senses (sight, hearing, smell, and taste) [sic], or any part of the nervous system or of the body involved in the reception, transmission, and processing of sensations” (2021c). Though this definition of “sensory” is limited, it still functions to call attention to the field(s) of perception that participants engaged with through their embodied experiences. That is to say, the term ‘sensory’ encompasses both the idea of sensation and sense (as mentioned in the definition). To speak of the sensory, sensations, and senses, then, is to speak of the physical *and* emotional aspects of participants’ experiences.

These sensations are not mutually exclusive—physical sensations are not separate from emotional sensations, and often function together to produce *an experience* (embodied or otherwise). Therefore, I discuss them in conjunction with each other and separately to tease out salient sensations —emotional, physical, or combined about which participants spoke in their stories.

Conclusion:

In this chapter, I discussed the major theories and concepts that form the frame of my research and that may help discern how skeletal bodies come through in participants embodied stories and experiences. In the next chapter, I outline the context of Victoria as a field site and the methodology of the research.

Chapter 3: Methodology

Introduction:

The studio is tucked at the heart of Victoria's downtown, its frosted glass windows hiding what goes on within; I lock up my bicycle outside as I make idle chatter with another student. As I enter, the air changes, heavier, hotter, and sweeter than the air outside. The scent of patchouli and sandalwood (mixed with other essential oils) greets me from a diffuser at the front desk. Next to me, merchandise is displayed from local, organic sources—candles, athletic clothing, crystals, and oils—sitting on the shelves or hung on a rack. Standing at the side of the desk, an instructor chats with sweaty students putting on their shoes before they slowly spill out into the cloudy-skied streets of Victoria. I sign in, fumbling with the tags on my keychain. I slide off my shoes and kick them under one of the benches out of the way of other students doing the same thing before making their way down the stairs to change into their athletic clothes.

The change rooms are spacious and bodies in various states of undress make their way around the showers, toilets, and cubbies containing individual belongings. There is no privacy here and there are no individual change rooms. I change and fill my water at the "triple-filtered H2O" station before making my way out into the downstairs waiting area next to the community board. The waiting area has a small coffee table with a plant and a spirit animal guide with its assorted deck of cards. I make my way up the stairs, and wait as the "sun room" is being wiped down before the next class. To pass the time, students sit and chat with each other, peruse a book on yoga kept in a basket, or sip on a small mason jar filled with complementary (usually herbal) tea from a local tea provider.

Once the door to the “sun room” is opened, students pour in, finding coveted or habitual spots in front of the mirrors, in front of the Buddha and crystal altar to the left or in the alcove where mirrors can be found on three of the walls. The ritual unrolling of mats and towels disrupts the silence until stillness settles back as students take their seats or lie on their backs, disrupted intermittently by the entry of a few stragglers. I settle into my seat. The heat from above settles with the quiet, pressing down on my shoulders, humidifying my nose, drying my lips. I close my eyes and wait for the class to begin.

In this chapter, I address the research context of Victoria, British Columbia; the yoga studio and chiropractic clinic field sites; the methods of recruitment and research; the participants; the ethics surrounding the research; and the analysis process of the narratives. I also address throughout this chapter, my own positionality as both an outsider and insider to these communities.

Field: Victoria, BC

The Capital Regional District (CRD) which includes the provincial capital of Victoria has a population of 383, 360 people. The percentage of the population over fifty years of age is 44.3%, , with an average age of 44.4 (Statistics Canada 2019a), which is slightly higher than the average age of my participants (40) and comprising 28.6% of my sample. The median income is a little bit over sixty thousand dollars per year, 59.8% of CRD residents have a “[p]ost-secondary certificate, diploma or degree”, and 63.3% are homeowners (Statistics Canada 2019b). These numbers reflect various characteristics of the CRD residents: they are an ageing population, they are well-educated, and many are relatively affluent. The city of Victoria’s Annual Report (2015) also reflects this idea (and ideal), portraying the city as home to an active, health-oriented population, engaged in ‘active living’ and caring for the body. Images and

text in the report convey an image of Victoria residents—someone who is active in the community, participates in or attends events, and enjoying the region's mild climate to engage in indoor and outdoor physical activities which promote "social inclusion" (City of Victoria 2015:26-31). The concept of 'social inclusion' noted in the annual report is also related to larger ideas about community and bodily-ness: "A strong sense of community includes connections with neighbours and a sense of *ownership* and *identity*. A *healthy*, inclusive community offers services and opportunities for all members of [Victoria's] communities to improve their *physical health* and *emotional well-being*" (2015:26, emphasis added). This idea of 'health' is reflected in the CRD's walking, hiking, and cycling trails, and the numerous trails, beach, and regional parks in the region (71 to be exact), the proliferation of recreation and learning centres in the area (including public fitness centres such as the YWCA/YMCA), and the numerous privatised fitness and health businesses like yoga studios, crossfit gyms, herbalists, medicine shops, etc. (CRD 2020:n.p.).

When I moved to Victoria in 2014 to begin my PhD, I was surprised by the abundance of alternative care offices and 'fitness' oriented studios and stores within the city. From herbalists to Traditional Chinese Medicine (TCM) to acupuncture to physiotherapy, Victoria residents seemed to have a very wide range of options in terms of health care. Coming from Kelowna (where I'd spent six years over the course of my bachelor's and master's degrees), it was also fascinating to see how *active* the residents of Victoria appeared to be: many people cycle, hike, run, practice yoga, etc. and there are various initiatives to incite residents to engage in physical activities such as the Go by Bike Week (formerly the Bike to Work Week[18]).

This model of a CRD/Victoria resident (or Victorian) paints a pretty picture, but it also fails to account for those who don't ascribe to or fit that particular image. The city has significant numbers of individuals living in poverty or without the resources to spend on cultivating "an active lifestyle". The

18 Capital Bike 2021 (https://biketoworkvictoria.ca/)

high cost of housing in the region is not affordable for those who, despite having “an income from employment, social assistance, disability, and pensions” still can’t afford shelter (Everyone Counts 2020:27). Health isn’t equally accessible to everyone in the CRD; the idea of ‘social inclusion’ promoted is a privilege rather than a right given to bodies that live in the area. If, as the Annual Report suggests, social inclusion is about “connections with neighbours and a sense of ownership and identity” (City of Victoria 2015:26), then there is a clear line between those who have and those who don’t. “A healthy, inclusive community offers services and opportunities for *all* members of [the city’s] communities to improve their physical health and emotional well-being” (2015:26) is only possible for those who are considered as bodies that matter—bodies that imbue the ideal promoted by the CRD and Victoria’s literature. Those who don’t or can’t ascribe to this ideal are erased or deemed a “significant problem” that needs to be addressed (Everyone Counts 2020:27). Despite repeated calls for affordable housing and accessible mental and physical care for citizens experiencing precarity in the CRD (2020:27), these individuals still find themselves excluded from access to services and necessities that would allow them have the option to participate “to improve their physical health and emotional well-being” (City of Victoria 2015:26) in accordance with the Annual Report. However, it’s also important to note that organisations such as the Community Social Planning Council (CSPC) work with individuals and communities in the CRD to close disparities between citizens and work to create “affordable housing”, “community development”, and are working towards “poverty reduction and fair economy” (CSPC 2022[19]).

Generally, Victoria’s literature presents an ideal that corresponds to the “attentes qui animent certains milieux occidentaux [...]. D’une part [...] le contact direct avec le divin et avec la nature, un supplément d’âme, des méthodes de vie intérieure. D’autre part, l’intéret pour les exercices corporels, initié part la discipline militaire, se poursuit avec l’invention de gymnastiques, de danses et de sports,

19 https://communitycouncil.ca/program-areas/

l'exploration du mouvement, l'hygiénisme et le culturisme"[20] (Tardan-Masquelier 2021:420). These interests in physical fitness "[dont les] objectifs sont scientifiques et éducatifs: il s'agit de dégager les lois de l'effort, de la fatigue ou de l'économie du mouvement physique en tenant compte des effets hygiénique (santé), esthétique (beauté) et moral (cognitif). [...] La systématisation mécaniciste, hygiéniste et esthétique du geste irrigue la culture du corps à travers le culturisme" (Philippe-Meden 2021:436-7).

Physical fitness, in conjunction with larger aspirations related to health, 'beauty', and knowledge (2021:436), are reflected in Victoria's proliferation of institutions that promote these ideals. Victoria's population (as well as my own research sample) reflect the larger composition of those who engage in particular activities related to 'fitness' and 'health'. For example,

> Toute une population *urbaine*, souvent *éduquée* et *aisée*, inscrit le cours de yoga à son agenda hebdomadaire, au même titre que d'autres pratiques qui visent à une vie équilibrée. Cet engouement est stimulé par des personalités qui appartiennent au monde du cinéma, de la musique, de la télévision et [...] de réseaux sociaux. Une multitude de dénominations, empruntant au sanskrit (*ashtanga-*, *kundalini-*, *nada-*, *svara-*, *vinyasa-yoga*..) ou à l'anglais (*power-*, *hot-*, *flow-yoga*...) prolifèrent dans une logique de marché aux choix illimités et aux innovations constantes. (Tardan-Masquelier 2021:520, emphases added to 'urbaine', 'éduquée', and 'aisée')

Victoria's population reflects the larger, western cultural framework illustrated by Tardan-Masquelier above: a (generally) affluent population with the means and time to engage in various activities such as yoga and chiropractic care. However, this generalisation must also account for the cultural specificity with which practices such as yoga manifest themselves in particular countries and within those countries as well (Tardan-Masquelier 2021:520). I would infer that other practices, including chiropractic care, follow this type of 'modelisation' as well—adapting to cultural specificities and markets in given populations (2021:520).

20 In order to respect the meaning and the intention of the author, the citation remains in its original language.

Victoria, overall, presents an image of affluence, even as it tries to address the rampant economic, social, and cultural disparities that manifest themselves in its population. This is the field in which I conducted my research over the course of two years, from September 2017 to August 2019.

Field Sites:

Field sites: Chiropractic Care:

I had originally planned to observe chiropractic care sessions at several clinics in the city. All the chiropractors I spoke to expressed interest in the research, but saw the presence of an anthropologist as a hindrance to their practice and interaction with patients. Some chiropractors who declined to participate were concerned that my research would question their profession, some felt the consent process would conflict with their 10-15 minutes of patient adjustment time, and did not want me spending time in their waiting rooms.

Given the inability to observe at a chiropractic clinic, I opted to leave recruitment pamphlets at the chiropractic care offices to recruit patients and made phone calls and in person visits to recruit chiropractors.

Field sites: Yoga:

I recruited participants at multiple studios in the city through pamphlets posted on each studios' bulletin boards, and I observed classes and used face to face recruitment at two specific studios: Umi Yoga and Neko Studio. Both studios employed Vinyasa and Hatha practices which, "[w]hile they share many of the same poses, [...] each [has] a distinct focus and pacing. [...] Vinyasa moves at a faster pace and requires greater breathing control than Hatha yoga. Because it's done more slowly and poses are held longer, Hatha yoga allows for more stretching" (Roland 2019a:n.p.)[21]. This was illustrated at the studios

21 https://www.healthline.com/health/exercise-fitness/hatha-vs-vinyasa

through class names like “flow” to indicate a more Vinyasa style of practice and “restorative” to indicate a slower, more Hatha style. Though the styles of practice are similar at Umi and Neko, the reasoning for choosing seemingly similar forms of practice was singular in nature: perception. As Merleau-Ponty explains,

> Perception is not a science of the world, it is not even an act, a deliberate taking up of a position; it is the background from which all acts stand out, and is presupposed by them. The world is not an object such that I have in my possession the law of its making; it is the natural setting of, and field for, all my thoughts and all my explicit perceptions. Truth does not ‘inhabit’ only ‘the inner man,’ or more accurately, there is no inner man, man is in the world, and only in the world does he know himself. (2007:136-7)

People, including the research participants (and myself) don’t exist outside of the environment in which they live—or, in the context of the research, the environment in which they practice. This environment affects their perceptions of themselves and the practice itself. As Grieder (2015) explains, “chacun d’entre nous est la *chair du monde,* immergé au sein d’un environnement dont il fait intégralement partie, comme une goutte d’eau dans l’océan” (20). In other words, ‘being in the world’ is an immersive experience; I don’t only use a yoga studio as a space to ‘do yoga’ but I am also a *part* of that space, which will inherently affect my own perception (of myself, my environment, and myself *in* that environment), but will also affect the space I am inhabiting at that moment in time and how other individuals interact with it.

Umi Yoga:

Umi yoga is a small, hot yoga studio in Victoria’s downtown. The studio is easily visible from the sidewalk, part of its windows frosted (for the classroom) and the others, including the door to the entrance, obscured by steam. Walking in, the heated air fills the lungs, and the sound of conversations drowns out the noise of the street. Wooden shelves are bolted to the wall and display an array of plants and various goods for sale. This space, at the entrance of the studio is dedicated to selling merchandise

to patrons either as they wait in line to sign-in or as they exit. The shelves served as a ‘zone of consumption’: to purchase various forms of yoga memberships and yoga goods (mats, leggings, candles, bolsters, meditation cushions, and other—mainly—local items). There are cubbies where practitioners leave their shoes before shuffling past other yogis, brushing shoulders as they make their way to the stairs leading down to the change rooms. The small space is cramped and usually bustling in between classes. Offering herbal tea in small mason jars is a way to pass the time while waiting in line to enter the room, the line often spilling into the staircase that led to the change rooms. Umi offers non-hot yoga classes as well as other types of fitness such as barre, pilates, etc., which likens it more to a fitness-oriented studio rather than a space only dedicated to yoga.

I attended multiple classes at Umi Yoga, both as a client and as an anthropologist (meaning before and after beginning my fieldwork). The dual nature of my existence as a researcher and consumer meant that I would have to at times distance myself from the practice in order to observe and examine it through a different lens, all the while being aware that, as a practitioner myself, I couldn’t fully dissociate my experiences from my observations.

I attended a variety of hot yoga classes, observing both different types of classes and classes at different times of day. Umi has two classrooms: one main room where the hot yoga classes takes place and one, smaller, downstairs room where the other types of classes (including the non-hot yoga) are conducted. Both rooms have walled mirrors that serve both as bodily-guides for practitioners in terms of positioning (placement of limbs, etc.) and as a means of observation of oneself and others in the room. One of the most striking features that I only noticed after an extended amount of observation time was that the large hot yoga room had a small altar on a shelf: a Buddha figurine, some crystals, and—sometimes, depending on the instructor—a lighted incense stick. The shelving space was shared with the studio’s stereo system, which sometimes offered music or remained silent (depending on the classes offered at that time during the day).

The practice of hot yoga is different than Bikram yoga, which is a specific style that involves a set room temperature and a set series of poses (Roland 2019b: n.p.). As Roland explains, "Hot yoga sessions can include any variety of poses, and the time of each class will vary from studio to studio" (Roland 2019b[22]). The classes at Umi varied from a 'speed' class of 45 minutes to the regular scheduled classes of 60 minutes and the length of the class did not affect the intensity of the practice (e.g. some of the shorter time slots were dedicated to slower, more Hatha-based practice and some of the longer classes followed a more Vinyasa—or 'flow', as Umi calls it—style).

Umi's website describes itself as offering "[i]ntelligent, accessible, sustainable movement. [Umi Yoga] is a space for all levels and abilities to experiment with and explore yoga and mindful fitness, with expert guidance. We offer accessible yoga classes and rewarding group fitness classes to help discover the strength you didn't know you had. This is your space to be curious, fun and inspired. We're current and fresh and we're what you asked for. Breathe. Move. Explore" (2020:n.p.[23]). Umi Yoga[24] seems to provide for practitioners a sense of friendliness, approachability, and community, where students and instructors can engage with each other and the yoga (and wider active) community of Victoria.

Umi also offers an "ambassador" program that they describe as "a team of dedicated students who fuel a sense of community by ensuring our facility is organized, tidy and welcoming. Our ambassador program maintains the studio in exchange for yoga + fitness classes, both in-person and online" for the cost of 20 dollars (2020:n.p.). This program provides a way to access yoga for a smaller fee in exchange for time and work from the 'ambassadors.'

22 https://www.healthline.com/health/hot-yoga-benefits#what-is-hot-yoga
23 URL not provided to preserve the anonymity of the yoga studio.
24 Pseudonyms have been given to the studios and participants to preserve anonymity.

Neko Studio:

I first encountered Neko Studio when I attended a workshop on the relationship between yoga and the skeleton which was being held at the studio over the course of three days. The workshop functioned in collaboration between the studio and a local chiropractor (Colleen, who would later participate in the study). At the workshop I learned about the similarities between yoga and chiropractic care, both in terms of embodiment and philosophy, which I'd had inklings about through my readings on the topics, but hadn't encountered in situ. At the end of the three days, I approached the owner of the studio with my research plan and got permission to observe classes and recruit at the studio (as long as I had a paid membership to the studio).

The studio is situated in the touristic area of Victoria's downtown core, close to the waterfront. Access to the studio is through an office building dedicated to various practices. The hallways are carpeted and silent. The studio's frosted-glass door bears the studio's logo and name on a plaque.

Though Umi Yoga and Neko Studio share many similarities in their presentation (the wooden designs of the front desk area, the local products that are available for purchase displayed etc.), Neko displayed some marked differences. The space was open-concept and much larger than Umi; it also has a lounging area behind the sign-in desk, inviting people to stay a while and relax. Silence fills the space when you enter the studio, only faint whispered conversations can be heard. The studio also only has one classroom that is vast and spacious, devoid of mirrors. A large animal head painting adorns the wall in front of which the instructor stands—Neko Studio's brand symbol. A small altar adorned with either a statue, or fresh flowers with a few cushions splayed about stood in front of the painting. Students are also made to 'face off' in front of each other, rather than face the instructor at the front of the room. Classes offered at Neko are warm, meaning that the temperature is risen above normal room temperature, but doesn't reach the level of hot yoga present at studios like Umi.

Unlike Umi, Neko Studio stands behind a singular figurehead (or founder) described as:

> Dynamic and inspirational, [he] brings his unique energy to every class he teaches. Whether in his own […] studios or as an ambassador of yoga to communities around the world, his expression of this ancient, yet vital tradition consistently touches peo'le's hearts. [His] commitment to honouring his teachers leads him to be equally devoted to continuing his studies as to teaching. [The founder] is primarily a student of the Krishnamacharya yoga lineage and continues to study [various important figures in the practice]. (2021:n.p.[25])

The founder of Neko Studio is also an ambassador for an international yoga and athletic clothing brand. Further, he "believes that through steady practice and devotion, all people – regardless of their age, gender, race or religion, can experience [yoga]" (2021:n.p.).

Recruitment:

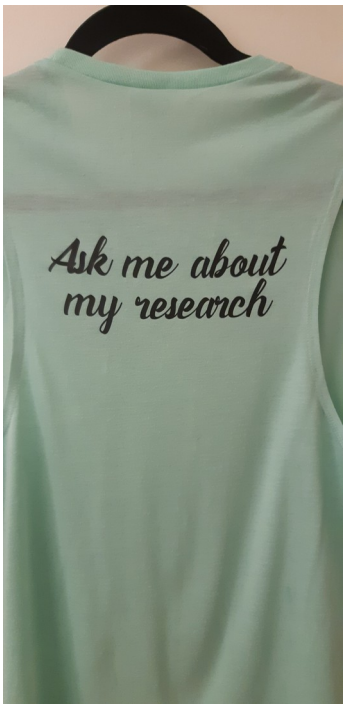
Since I was able to spend extended periods of time at the yoga studios, they are where I did much of the face to face recruiting of instructor and client participants. I also left some posters on community boards at the studios and in cafés close to yoga studios and in community centres.

Another, more unconventional, method that I used was a t-shirt which I wore in yoga classes that labelled me as an anthropologist and invited people to "ask me about my research" (see, figures 1 & 2 below). This method generated interest in the research and facilitated face to face recruitment.

25 Here again, URL not provided to preserve the studio's anonymity.

Figure 1: Anthropologist label shirt

Figure 2: "Ask me about my research" label



I also often attended the classes of the Umi manager with whom I kept in contact throughout the research. She would sometimes single me out at the beginning of a yoga class, especially because of the t-shirt. This also generated some recruitment, even though it wasn't something that I had requested.

I recruited chiropractors directly via telephone and e-mail recruitment. Since in-person recruitment was not possible at the chiropractic clinics, I recruited chiropractic users via pamphlets/mini-posters that I had left at various clinics (see, figure 3). There was also some snowball sampling as participants spoke to friends and colleagues about the research and participating.

Figure 3: Recruitment Pamphlet

After introducing myself to potential participants, I would tell them about my research by saying, "The purpose is to better understand how people relate to their skeletons and their bodies in the context of chiropractic care and yoga. The objective is to ask people, like yourself, about their experiences of their skeletons in those contexts and how these experiences may influence how people relate to their bodies as a facet of their identity." Then, if the individual was willing to participate, we arranged a time and place for the interview. Hoping to include participants across a range of ages and occupational backgrounds, my selection criteria were as follows: every participant had to be eighteen

years of age or older. Chiropractors had to have been practicing for over a year, and chiropractic clients had to have been patients for at least one year. For yoga, the same criteria applied in terms of time of practice and instruction, though I did not exclude home practice.

Gender, age, and ethnicity didn't feature in the criteria for recruitment. Since this was to be the first foray into the research topic, having a wide berth of criteria was important. My t participants identified predominantly as women (N=17), had an average age of 40 (as noted above), and were predominantly white-presenting; one participant identified as "brown" and another presented as South-east Asian.

The twenty-one participants were varied in ages and occupations (see Figure 4 below). Five participants were recruited from chiropractic care and sixteen from yoga. Of the five chiropractic care participants, four were chiropractors and one was a patient. Three chiropractic care participants identified as women and two identified as men, and their ages ranged between 34 and 53 years of age. Of the sixteen yoga participants, four were instructors (or mainly identified as instructors[26]) and twelve were clients. Of the sixteen yoga participants, two identified as men and fourteen identified as women, with an age range of 18 to 82 years of age. About three-quarters of the people I talked to worked in, studied, or had taken courses in the health care sector (both or either allopathic/biomedical practice and 'alternative' care medicines) (16/21, including chiropractors, otherwise 11/21—occupations indicated in figure 3). Many of the participants—including the men who participated—'self-selected' and contacted me directly after seeing the pamphlet or speaking to someone who suggested they participate in the study. I recruited 10 participants with face-to-face recruitment/phone recruitment, the rest being either self-selected (11/21).

26 Though some participants who identified as yoga students had a Yoga Teacher Training certification, they did not teach at the time of the research.

Figure 4: Table of participants:

Participant Name (pseudonym)	Age	Gender	Occupation
Yoga (N = 16)			
Amanda	53	F	Research Administrator
Beth	82	F	Member of clergy
Eva	24	F	Student (Health)/Desk Clerk/Management
Flora	47	F	Entertainment/Caregiver
Ivy	27	F	Business/Yoga Instructor
Jade	28	F	Restaurant Industry
John	55	M	Justice
June	66	F	Health Care/Other
Kate	39	F	Health Care
Leah	28	F	Health Care
Martine	18	F	Student/Barista
Nora	56	F	Education
Olivia	25	F	Student/Fitness Instructor
Percy	22	M	Landscaper/Yoga Instructor
Sophie	28	F	Health Care
Stephanie	29	F	Social Services/Yoga Instructor
Chiropractic Care (N = 5)			
April	53	F	Health Care
Clara	43	F	Chiropractor
Colleen	37	F	Chiropractor
Gerald	34	M	Chiropractor
Thomas	44	M	Chiropractor

Methods:

My methods of data collection were participant observation, interviews, and body maps. While preparing for fieldwork and doing my own yoga practice, I cultivated an ethnographer-practitioner position where I could both engage with the class and also ‘take note’ of relevant phrases or moments during my time at the studios. In some ways, I had to put aside my own skeletal bodily-ness to engage fully with the research context. Being in the classroom and being both the anthropologist and the yoga student allowed me to “[account] for [my] own sensory subjectivity, [...] to be reflexive about how this subjectivity might be implicated in the production of ethnographic knowledge, and an openness to

learning how to participate in other sensory ways of knowing" (Pink 2009:52). Being able to note particular moments where the skeletal body was mentioned or called to attention helped me pinpoint particular phrases or ideas that came up in participants' narratives during interviews.

Participant Observation:

Although I didn't observe any chiropractic care sessions, I was able to observe how the offices of chiropractors were organised. Of the spaces I visited, each resembled a walk-in clinic, with a front desk and a seated area where patients waited for their appointments, complete with informational pamphlets, and posters. Though there were variations between offices (some had more displays on the walls, others played music, and another office had a television set with the different services offered playing on a loop, the general atmosphere reproduced was strikingly similar: potted plants, information booklets/leaflets, seated areas, and a receptionist behind a tall counter. The resemblance created a double effect: people who sought chiropractic care services essentially would seek (medical) treatment for an ailment. This 'clinical' aspect was also present in the treatment rooms, which, again, reflected an examination room in a medical office: a chair for the patient to sit in, a rolling stool for the chiropractor, and a long foam-padded table where the patient would be 'treated'/'examined.' The resemblance to the walk-in clinic also gave a sense of legitimacy to the practice—an unspoken alignment with the biomedical field, and a silent promise of relief (from pain, injury, etc.).

In yoga studios, I observed several classes at different times of the day. I had to immerse myself in the spaces where the practice was conducted to gain an ethnographic perspective on how yoga was effectively 'practiced.' This was mainly to get an idea of who practiced at what time—if there was any difference (which there wasn't—except in the early evening classes, which tended to have a disproportionate number of younger individuals). Though this didn't relate to the research questions directly, it gave me a fairly good idea of the age-range I could expect from participants and perhaps the

types of occupations that they might have (shifts, part-timers, stay-at-home individuals, retirees, etc.). This would also help me form a better idea of how participants preferred to practice yoga: some classes at Umi were silent, others provided music—this became an important point for one participant in choosing which classes to attend, which indicated that this may be a factor in how some individuals decide where and when they attend yoga classes. Attending different classes also helped me engage with the space where I would be doing my observations, to note some of the details of the room, the way that the lighting changed depending on the time of day and the season, the changes in noise level outside the windows, where people tended to congregate in the area, or which places were the most coveted at a certain time of day, etc.. I recorded observations in a notebook while I also participated in the class, periodically stopping to take some notes. Or, at times, I attended the class and recorded notes in the change room after the class (either in a notebook or on my phone).

Developing intimate knowledge of the spaces where some participants might have engaged with yoga helped cement part of the participation that I sought to acquire. When Pink explains that “through active participation, one can also find routes to knowledge and memories perhaps otherwise inaccessible” (2009:65), she points to various aspects of the methods that surface as the research progressed, both in terms of participant observation, but also in the interviews and the body mapping process (points I will return to momentarily). Participating in yoga classes helped me develop an ethnographic lens into the practice, to hone and expand my skills as a participant observer (as it were). Practicing at different studios also helped open up these lenses and observe the difference in how people (and thereby participants) engaged with their bodies and with the particular spaces of studios they attended (even if those studios weren’t Umi Yoga or Neko Studio).

Interviews:

As Fontein explains, "[i]nterviews come in all shapes and sizes – from highly formalized, structured and strictly time-limited interviews with individual people to very casual, unstructured conversations with several people, to the kinds of focus group discussions that development researchers tend to adopt. In practice, there are many shades of grey between these poles" (2014:77). I experienced these "many shades of grey" as I conducted my own interviews in the field. The first five interviews were rather stiff as I was still trying to find my footing as an ethnographer, being mostly question and answer-led (the saving grace of these interviews were the body maps, which added an element of levity helping to diffuse any tension, including my own). What began as mostly questions and answers based on a list that I had printed off for myself became more conversational over the course of the research.

I returned to the questions periodically, if I thought I was missing something, but I learned to focus more on the stories participants were telling about how they experienced their bodies (fleshed and skeletal) through chiropractic care and yoga. There were some questions that were at the core of the interviews because they needed to be asked. For example, "What do you think is going on inside your body at X time?", "How would you describe the interior of your body?", and "What do you think about skeletons?". Because I conducted single interviews with participants, it was normal that they "involve[d] much more pointed questions" rather than be a more like an informal conversation (Fontein 2014:78). The questions still remained open-ended and sometimes the conversation went on tangents, but the three questions above were still very important to ask, unless the topics came up in the conversation 'naturally'.

I conducted interviews in various places as participants preferred, though coffee shops proved to be the least effective since they were noisy and eliminated the option of bodymapping. Some interviews were conducted at Umi after classes, at participants' offices, and at my office at the university. It was also important for me to stress at the beginning of the interview that "this isn't a test,

it's just two strangers having a talk about bodies". This seemed to diffuse the initial tension and to break the ice, often having the effect of making participants laugh.

It was important for me to create an environment where tension could be diffused, creating a 'frame' of sorts for the interview, while keeping in mind that generating this frame would change every time I met a new person. Framing, in this sense, can be used in Judith Butler's sense of the term:

> But if contexts are framed (there is no context without an implicit delimitation of context), and if a frame invariably breaks from itself as it moves through space and time [....], then the circulating frame has to break with the context in which it is formed if it is to land or arrive somewhere else. [...] The frame that seeks to contain, convey, and determine what is seen (and sometimes, for a stretch, succeeds in doing precisely that) depends upon the conditions of reproducibility in order to succeed. [...] As frames break from themselves in order to install themselves, other possibilities for apprehension emerge. (2010:10,12)

What Butler shows, in this case, is how 'framing' something allows us to apprehend it—to tend to it, and examine it, if only for a brief moment. Framing participants' stories and experiences allows their skeletal bodies (and their bodies in general) to surface, even if that surfacing isn't present in a continuous manner. As I noted above, participants' ideas followed an ebb and flow, calling attention to their skeletal embodiment at times and other time calling to their bodily-ness as a whole. The ways in which these responses varied can be likened to Taylor's notion of surfacing, the "ethnographic moment" (Taylor 2005:742), and Butler's notion of "framing".

The ethnographic moment, for Taylor,

> will entail seeking out ways to frame anthropology less as the "anthropology of" any particular object that preexists ethnography and more as the work of exploring ethnographically how objects—objects of study, as well as objects of other sorts—precipitate out of practices and process that are at once social, material, and representational. What is needed, then, are more labile and refractory framing devices that can help guide ethnographic explorations to discover just what are the contours of that which we study, the better to pursue "ethnography on an awkward scale" (Comaroff & Comaroff 2003). (2005:742)

Taylor's notion of surfacing becomes this particular 'device' she speaks of, that method of framing bodies that is both 'labile' and 'refractory'—something that lends itself well to Butler's notion of the frame that refuses to remain stable for an extended amount of time (2010). The interview space then became an ethnographic moment, or a frame, of its own, created anew every time I met a new participant. Using this device as a method of research allowed me to have more flexibility and to become more comfortable as a novel ethnographer.

Something that came through in the interviews that I hadn't anticipated was the ways in which participants moved and used their bodies during the interviews. Pink notes "an interview is not an exclusively aural encounter or event but one that also involves the materiality of the environment and of artefacts. While not a new point, it becomes particularly salient when rethinking the interview through the senses" (2009:85). Adding to this idea, however, I would suggest, based on the interviews that I conducted, that the materiality of the body also forms an important aspect of the interviews—participants *wanted* to show me how their bodies moved or where the pain was; this "encounter" was very much embodied by both participants and myself. The "environment" that Pink points to was a factor, in some cases, but the body mapping portion (which I turn to momentarily) added an element of movement that helped participants engage with their material bodies even in spaces like chiropractic care and law offices, which were not contextually as conducive to movement (as opposed to, for example, a yoga classroom or a carpeted, open office space).

The only difficulty that came up was the audio-recording of the interviews and the silences that sometimes came through in the transcription process as people moved about the space of the interviews or pointed to particular areas of their bodies, drawing sounds during the mapping process. The best way to mitigate these was to write down notes by hand over the entire duration of the interviews.

Body Maps:

Body mapping is used widely as a means to get at ideas about bodies with children and adolescents (Mitchell 2006a, 2006b), as well as adults as a way to explore reproductive health and gender identities (cf. Cornwall, Corrêa, & Jolly 2008; Cornwall, Edström, & Greig 2011; and Welbourn & Cornwall 2002), spatio-bodily relationships, and as a therapeutic method (de Jager, Tewson, Ludlow, & Boydell 2016). The goal in using them in my research was to get at particular ideas that participants expressed about their skeletal embodiment and 'put them' on paper.

Aside from my own experiences in elementary school, I hadn't done many body maps as part of my academic journey. The thought of doing body maps as part of the research wasn't as daunting as the interviews—being from an artistic background, I was used to performative and experiential research. The process was fairly simple: at the beginning of the interview, I would mention the body mapping portion and what it entailed. Participants would lie down on a large piece of paper and I would draw their outline with a pencil, always starting at the top of the head and ending at the top, drawing the feet however participants chose (one participant wanted a foot map, because of the importance it played in her yoga practice), and avoiding the groin area (maps ended at the top of the thighs, which were then linked after the participant stood). Afterwards they would be given a series of pencils and asked to draw the interior of their bodies while we continued speaking. I would check in again at the end of the interview and then we would begin the body mapping process. The reasoning behind doing the body maps after the interview rather than at the beginning was simple: if participants felt a level of discomfort with the body mapping process, the interview served to create a safe space where participants could feel comfortable. As de Jager *et al*. point out, "[i]t is also possible that there is a selection bias in such studies [which use body mapping], whereby people for whom it may be unhelpful tend to decline to participate" (2016:n.p.). Therefore, it became an important factor in my research to do the interview first (making the participant aware of the mapping process), and offer the

body map *after* the interview, to mitigate this potential bias. Though the interviews continued during the mapping process, it was important to me that participants had a chance to do the interview without feeling the pressure to do the body map as well (this was fortunate in a few cases—cf. below). What struck me over the course of the fieldwork was how participants responded to the idea of the body map and the mapping itself.

Participants' reactions were polarised: either they were very excited by the body mapping portion or they wholly rejected the idea. It's worth noting that, out of the total twenty-one participants, only two refused to take part in the body map (both who refused were chiropractors—two more participants didn't complete theirs because the interview took place at a café). Though I engaged with their personal space, I tried to diffuse discomfort (both mine and/or that of the participant) with small talk, which allowed me to build rapport. As de Jager *et al*. explain: "Body-mapping is visual, encourages connection to embodied experience, and involves a creative and reflexive process that is often beneficial for participants and amenable to knowledge translation", but "although digital stories, like body-mapping, are generally perceived as enjoyable or helpful for participants, it should not be assumed that this is the case for all people" (2016:n.p.) (see examples above).

I intended to have people draw their skeletal bodies on paper—effectively draw out their skeletons, what they thought it looked like, what it felt like, how they experienced it, etc. What came through when I observed how participants completed the body maps was something entirely different. Mostly, they drew the interior of their bodies in accordance with how they *viewed* and *explained* it to me. Some people focused on their skeletal structures (for example, Colleen and Eva), others focused on sensations of pain they experienced inside their bodies (for example, Kate and April), and some focused on the interiority of the body on a very specific level (for example, Gerald mainly focused on the brain and the nervous system, because "this is most important" [34, M]).

The body maps acted as traces of participants' negotiations with their embodied selves, as exteriorised referents to the participants' bodies and their visual representations of themselves. Though the maps weren't used for content analysis, participants made them relevant to how they responded to particular aspects of their own embodied experiences—they used them to illustrate (pun intended) their bodily-ness and explore aspects of their bodies (previous injuries, feelings, sensations, etc.) that weren't so easily described verbally (Pink 2009:34, 34-41). Participants didn't always choose particular colours—though some did—to show particular sensations; what became important for them was to communicate these sensations in a visual way, and an embodied way. The maps became a concrete trace of their embodied materiality—a culturally-produced object that they identified as both themselves and "alien" (Thomas, 44, M). Sometimes, participants performed movements (poses, touched particular areas of their bodies, etc.) and pointed to the maps as a reference point to their own bodies. Some participants also had a very personal attachment to the maps and wanted to sign their names on the paper. For example, Colleen said, "I'm going to put my name on, 'cause I really liked drawing on this" (37, F) (cf. Figure 5 – though the name has been hidden to preserve patient confidentiality).

Essentially, the body mapping process provided a space (in Massey's sense of the term) for the participants to engage more deeply and fully with their bodily experiences. What became clear when examining them was that participants pointed to areas that mattered to them individually: what was important, what was painful, or body areas and sensations which called their attention (cf. above). Body maps became a way for participants to exteriorise their materiality—to 'detach' themselves from their body. Though I can't *really* detach myself from my body (i.e. I can't deflesh myself to examine my body as I would a body in a cadaver lab), the map acted as a form of mirroring of one's body. As Singer, Baer, Long, and Pavlotski explain, "the body functions as a vehicle for learning about our environment. In the view of many societies, [...] it is an open system that links the self, society, nature,

and spiritual world" (2020:88). The maps allowed participants to explore the linkages between these different aspects by effectively 'putting it on paper'. Moreover, "[b]ody-mapping draws participants' attention to their bodies and embodied experience, encouraging awareness and reflection" (de Jager *et al*. 2016:n.p.).

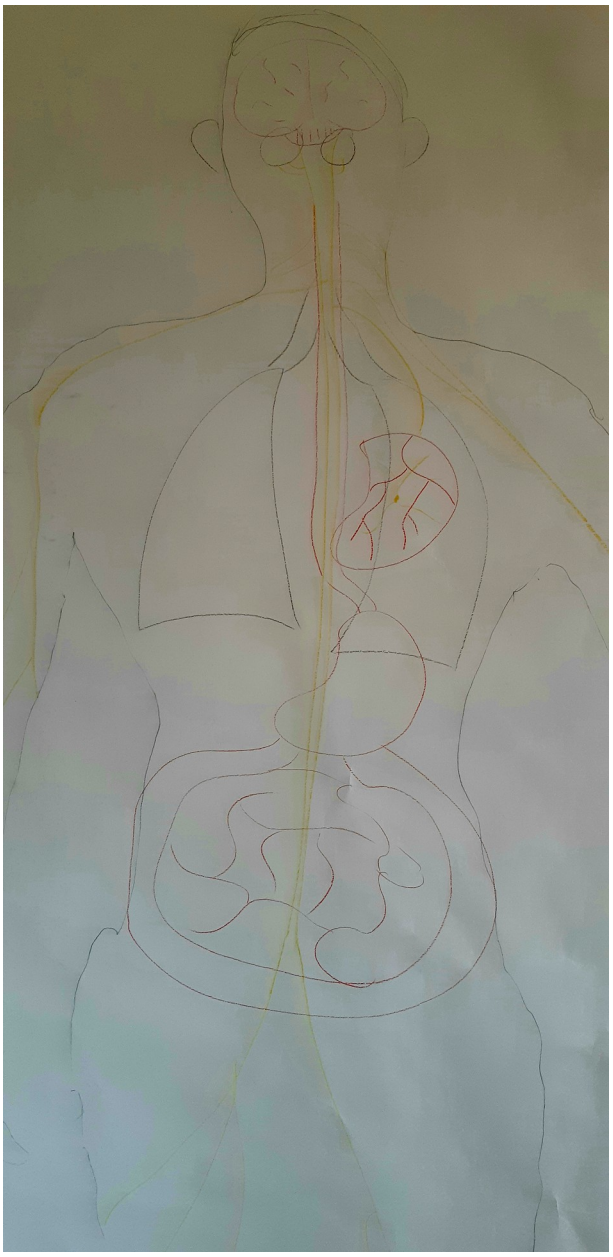
The maps offered this opportunity to participant to reflect on themselves and their bodily-ness, sometimes recalling particular experiences that they hadn't mentioned earlier or spoken of in much detail. Mapping offered participants a way to examine their own bodies before them. The outline on the map is me—because it's the outline of *my body* (and not someone else's)—and it's not me at the same time because it's a representation (cf. Chapter 7 for a deeper discussion on this topic). The detachment was a way for participants to draw particular things that they expressed in their interviews but that also couldn't be seen on their fleshed bodies (cf. Figures 5 and 6): sensations of pain, relief, flows of energy, etc., that can't be identified on the fleshed body in the same manner that a surgical scar can refer back to a particular experience.

Figure 5: Examples of Body Maps from Participants

Colleen’s body map

Sophie’s body map

Figure 6: Details from Gerald's Body Map



Positionality:

Aberese-Ako explores how the position of the ethnographer has an important impact on research, writing that "research projects give birth to the ethnographer – while learning about the 'other' the

ethnographer identifies communalities between herself and her research participants, thereby qualifying herself as an 'insider' of the research project" (2017:301). Moreover, Van der Geest and Finkler suggest that medical anthropology in hospital offer multiple options for anthropologists: "If the researcher in the hospital wants to be a 'natural' person whose presence in the ward can be continuous, he has, basically, three possibilities to choose from: joining the staff, the patients or the visitors" (2004:1998). Therefore, the positionality of the researcher shapes the research project through their involvement in practice and their presence in the environment where this practice is 'performed'. My interest in developing this research project and the steps I took towards it were long and numerous. My own positionality is rooted in my longtime fascination with skeletons, my work with skeletal materials, and my experiences as a yoga student.

Skeletons:

I first got interested in the concept of skeletal embodiment while attending a yoga class at a fitness studio in Kelowna, BC. I'd cultivated an interest for the human skeleton through my degree at UBCO, where I'd taken multiple anthropology courses. But it wasn't until the yoga instructor said, "pay attention to your spine" that I realised that I did, in fact, *have* a spine (and all the other bones that I'd observed and catalogued). What was created, for me, in that moment, was a question: How do we think about our bones—our skeletons—when we are asked to pay attention to them? What do we visualise? How and why (or why not)?

Yoga:

I started doing yoga in 2013 and have kept an intermittent practice until I started my fieldwork, which led me to more rigorous and steady attendance at yoga classes and home practice). Being part of Victoria's 'yoga community' meant that, as an individual and as a researcher, I had an insider

perspective in this aspect of my research. Being an insider meant, for me, that I began to pay more attention to what was going on in the studio, small details, certain phrases that instructors said—which had become part of the regular 'script'—and interactions between individuals in the studio.

My relationship to chiropractic care is quite different. I have not used chiropractic care services in the past, nor did I receive chiropractic care treatments over the course of the research. This meant that I needed to both familiarise myself with chiropractic care theoretically, and also in practice. It also involved speaking informally with friends and family who had used chiropractic care services in the past (these individuals did not participate in the study). I also spoke more at length with chiropractors during the interviews about what their practices consisted of: the techniques that they used, tools, specialties, length and frequency of adjustments, etc.

Anthropology:

My bachelor's degree was in creative writing and my interdisciplinary master's degree combined writing and anthropology at UBCO. The goal of my master's research was to bring the lived experiences of the human skeleton to life through poetry.

As I explained in my master's thesis:

> As a writer, I've had an interest in the untold story of the skeleton—the emotional side that is lost in the cataloguing of human remains. The poet Christopher Dewdney, in *The Soul of the World*, explains a method for calculating the distance of a storm: "You just count the seconds between flash and thunder" (45). I want to suggest that this is where the skeleton belongs: in those seconds of uncertainty and apprehension of sound. 'It' comes to take shape—to make us aware of its presence. This space—as I shall refer to it from now on—is where the concept of skeletal embodiment can materialise through writing. In that space, I create a body of work that can allow us to experience our skeletons. (Campeau-Bouthillier 2014:1)

Through poetry, I was able to bring about a space for the possibility of conversation between embodiment and poetry. Poetry reaches for its audience through sensation and feeling—it tugs at the

heartstrings to pull the reader in. As Leavy explains, poetry "surrounded by space and weighted by silence, [breaks] through the noise and present[s] an essence […] capturing heightened moments of social reality as if under a magnifying glass" (2009:63). Poetry is story through emotion—the moment of breath.

During my doctoral program I have several times been a teaching assistant for the human osteology course taught at UVic. Being the TA "bone person" brought me into frequent contact with human skeletal remains, and gave me a space to reflect on the collection that we have at the university and on my project. UBCO's skeletal collection is, for one, much smaller, but it also contains complete specimens only—which is not the case at UVic. This notion of disembodied (for lack of a better term) bones wasn't something that I was familiar with, but allowed me to reflect on how people's notion of skeletal and fleshed may be more contingent on social, economic, historical, and cultural contexts, and was much more complex than the notion of "this is my body and this is my skeleton"[27].

Although I was nervous about heading into the field for the first time and interviewing people was new to me, I became comfortable once I understood that anthropological research is, in some ways —at least for this project—about conversing with strangers, and creating spaces for their stories, ideas, and experiences. Hearing and listening to what people had to say about how they live inside their bodies brought a different perspective to the way I approach the world through my body as well. This project also allowed me to consider and examine how I interact with my own body through practices such as yoga and alternative medicines.

27 It's also interesting to note that this reflection came about while examining a mounted skeleton that had been received by the university with the wrong skull attached to it. The post-cranial material was male and robust, while the skull was that of a female (the other indicator was the colouring of the bone, which was entirely different between the two parts).

Bodies and Ethics:

Bodies are 'loaded'—they are not outside of culture and the day to day; our bodies carry our stories and our experiences, even if we may not be conscious of this 'load' in a constant manner. In other words, bodies carry both the physical and emotional 'baggage' of our experiences. In the research context, I had to take this 'load' into account and be aware of the potential emotional charge that participants would bring with them into the conversation.

During my fieldwork I was mindful of the ways in which bodies, and speaking about those bodies, can be a point of vulnerability. Body research can bring about intimate and personal feelings and experiences in participants as they share their stories, feelings that are an inextricable part of how we live in the world as subjects (cf. Csordas 1990, 1994; Merleau-Ponty 2007). Questions such as "how do you think about the inside of your body?" and "why do you think that this is the view you have about bodies?", can create discomfort in participants as they recall stressful or painful aspects of their histories. Body stories can also point to relationships of power, inequality, and privilege . For example, my idea of my body is tied to greater aspects of my life like gender, race, sexuality, socioeconomic status, etc. which affect how I interact with my body and the environment around me. Any one of these aspects can be a vulnerable point that one may not consider at first when participating in body research. As a researcher, I had to be conscious that things might "come up" that I hadn't expected. Creating comfort and neutral spaces was important to me. To help participants feel comfortable during the interviews and the body maps, I consistently 'checked in' with them at multiple times during the interview, and before and after the body map. I was also open about my own experiences and vulnerabilities with participants to create a space for sharing one's experiences: whether it be injury, discomfort, or crying during a yoga class. I had to be conscious of the sensitive nature of my research topic and the questions I asked participants; I didn't want people to speak about

skeletons *because* the research was about skeletal bodies; I wanted people to tell me stories about how they experienced their bodies, both fleshed and skeletal.

A moment that struck me during the fieldwork was Nora's story (cf. Chapter 7). Though we'd be talking about bodies for quite some time during the interview, at one point Nora recounted a particularly painful experience in her life where she had a stillbirth in her first pregnancy. Although Nora felt safe enough to share this story with me, I wasn't prepared for the impact that it would have on me as a researcher throughout the course of my research. During the interview, I was able to distance myself and go beyond the emotional charge of Nora's narrative: as an ethnographer, I was able to focus on the research topic and on Nora's wellbeing during the interview. It was during the transcription phase that I realised just how much that experience marked me.

Being an ethnographer who shares in participants' vulnerabilities means listening to participants' stories not once, but multiple times and thus living that moment both with and without them. Being alone in my office while I was transcribing I felt the weight of Nora's story and how it reverberated throughout her narrative about her body. This was also true in the narratives of other participants: particularly painful injuries, traumas, and emotions that they shared became part of my own understanding of the topic of bodily-ness and skeletal embodiment.

To protect participants involved in the research, I obtained ethics approval from the University of Victoria, along with signed informed consent forms from participants. Participants were given a consent form outlining the details of the research and the measures put in place to protect their identity and their information. I briefly explained (orally and in written form) the research objectives, what a body map was, and that participants were free to do the interview but could decline to do the body map (this occurred only once). Interviews were audio-recorded only with permission, and participants knew they could request a break at any time (and would be offered one at any sign of stress), and that they were free to withdraw completely from the study at any time. Participants were further informed that

the audio recordings would be transcribed (omitting private medical, personal, or identifying information) and kept in protected files. Pseudonyms were used throughout, and were chosen by the researcher. The participants' occupations were generalised and specific personal, health, and biographical details were generalised. Finally, confidentiality was preserved via password protected files, and on an encrypted hard drive, as well as locked in a cabinet only accessible to myself.

Analysis:

I analysed the data collected primarily through careful combing through, reading and re-reading of the interview transcripts as well as my field notes. I noted common words, phrases and vocabularies in participants' responses (mostly in the context of yoga, but also sometimes in the context of chiropractic care) that formed "un ensemble de mots permettant de cerner ce qui est abordé dans l'extrait du corpus correspondant tout en fournissant des indicateurs sur la teneur des propos" (Paillé and Mucchielli 2016:242), thus guiding my process through an inductive rather than deductive approach.

Then, I began to compile lists of themes based on these common phrases and words used by participants. When I use the word 'theme', I refer specifically to Ryan and Bernard's notion that "themes are abstract (and often fuzzy) constructs that link not only expressions found in texts but also expressions found in images, sounds, and objects" (2003:87). Themes, in this sense, were not always clear-cut expressions that people used, or things that they referred to verbally, but it was also how they made links between their expressions and their experiences of their bodies, how they used the room they were in, etc. The major themes that came through participants narratives were sensory in nature. People I spoke with told stories of pain; ageing in their bodies; the sensation of having, giving, holding or being energy; learning through sensations such as touch; and knowledge(s) of/in their bodies and in

the bodies of others (cf. Chapters 4, 5, and 6, for further discussion). Participants' narratives were experiential, and sensory; their bodily stories were felt through the senses and through sensed experience as bodies in particular spaces—in particular "ethnographic moment[s]" (Taylor 2005:742).

As Pink points out, "the analysis of experiential, imaginative, sensorial and emotional dimensions of ethnography is itself often an intuitive, messy and sometimes serendipitous task" (2009:119). I quickly came to see that the clear cut distinction between yoga and chiropractic care I had assumed wouldn't hold and that participants engaged in a myriad of activities (chiropractic care and yoga being only a fraction of the 'health' practices in which they took part). 'Energy' (cf. Chapter 5) wasn't a theme I had expected would be such a focal point for many participants. Moreover, the distinction between data collection and analysis process wasn't as clear cut as it sometimes is in anthropological research, but rather, the words and expressions that participants brought up concretised the themes that emerged in the narratives as the fieldwork continued (Pink 2009:119).

I did not analyse the body maps *as* body maps, as visual data, but they did form a large part of the interview context where participants used the outline and the drawing process as a reference to the sensations that they felt *in* their bodies (e.g. expressing the feeling of release orally while drawing on the paper) or to particular areas that were important to them (e.g. the nervous system).

Analysis of the data, then, became, a way to engage with sensorial experiences of participants and an effort, on my part, to makes these experiences intelligible to an academic audience without dissolving the context within which the stories and experiences took place (Pink 2009:120-2). This became important in the context of the participation aspect of my fieldwork, but also in the body mapping process that offered a way for me—as an outsider to the participants' personal, embodied experiences—to grapple with these experiences and make sense of them for the purposes of the research.

Ideas of *knowing* became an important part of how participants both experienced and explained their own bodily-nesses in the context of the research, something that stood outside of the western idea of identification of 'sensing': participants pointed out their bodies (either their own fleshed bodies or their body maps), touched those bodies, and moved them about the interview room to communicate specific experiences (Pink 2009:120-2). Going beyond the five senses was common as a theme in participants' sensory experiences. Emotion, knowledge, and feeling were also common strands that came to the surface when participants told their stories (cf. Chapters 4, 5, and 6).

As Pink notes, "[i]t is also essential to recognise that there is significant variation within cultures, although people of the same culture might share certain sensory categories and classifications, they may use these in different ways or give different meanings to them" (2009:52). This variation became clear in the analysis of participants' stories, where, for example, energy was a common theme, but explained and experienced differently by participants. Similarly, seemingly different sensations could be grouped together as similarly sensed by participants (such as the distinction between pain as being good or bad, different mechanistic models, differing definitions of what constituted 'energy' for the people I spoke to, etc.).

Conclusion:

In this chapter, I outlined the methodology of my research project. The next three chapters are devoted to the data collected during the field work with the people I spoke to. I now turn to these stories.

Chapter 4: Embodied Pain, Embodied Time: Stories of Pain and Ageing

Introduction:

In the previous chapter, I outlined the methodology of my research. In this chapter, I will explore the stories and experiences of the people I spoke to through the themes of pain and time.

Pain and Release:

Participants often brought up sensations of pain, strength, and flexibility in their responses as part of their embodied experiences of yoga and chiropractic care. They approached pain in multiple and varying ways through their bodies and their stories of pain were multilayered and sometimes simultaneous: experiences of pain were sometimes associated with positive feelings of strength and "getting stronger" (Kate, 39, F).

Pain encompassed things such as injury and what Nora referred to as "that twinge": an uncomfortable sensation in the body and the need to find the source of that sensation, to understand 'where it's coming from' (Nora, F, 56). However, pain also encompassed the sensation of soreness one feels after a workout: sore muscles, DOMS[28], etc. was a way for participants to engage with their bodily-ness through concepts such as strength and flexibility. One sensation didn't preclude the other because what changed was *how* participants defined how pain featured—what *kind* of pain and the moments where such pain was acceptable and where it wasn't. Interoception was a way for participants to negotiate where and when to 'push further' and where to 'take a step back' to avoid injury. Injury

28 Delayed Onset Muscle Soreness

was sometimes unavoidable in participants' experiences: for example, Kate's experience of pushing her body further to perform a post, and incurring and injury which subsequently made her cautious.

Each participants' embodied stories allowed their skeletal bodies to surface in different ways. To illustrate the fluctuation between how pain and 'soreness'/ flexibility/ strength 'surfaced' in participants bodies—skeletal and fleshed—it's worth delving deeper into their responses. I begin with Kate's stories, followed by those of Amanda, Colleen, and April.

Though it may seem that the skeletal body (or the body in general) may not 'come to the fore' in participants' experiences below, it's important to remember two concepts outlined in chapter one: primarily, the skeleton is always already involved in every action that we perform. Through musculature and bony movement, we effectively live in the world, interact with it, and become an integral part of it. Whether the injury or soreness incurred is muscular or skeletal, bodies in participants' stories 'call attention to themselves' by literally embodying "that twinge" that Nora refers to (56, F). Secondly, though participants may call attention to sensations that seem proprioceptive, they also experience these through interoceptive capacities: bodies are in constant communications with themselves (interior-ly) and in constant communications with their environments (exterior-ly). This recalls Sofaer's statement of the porous body, the body that is both cultural and natural—in other words, the body immersed in its environment (2006). Thus, when participants recount their stories below, they both recount them verbally and often bodily: they touch, examine, and use their bodies as part of their narrative (cf. below where participants show poses or touch their bodies). Using the body serves to amplify its presence in the narrative, in the interview, and in one's experiences.

<u>Kate:</u>

Kate, who works in health care and is a mother of two young children, experienced both sides of this 'pain coin', so to speak. She describes how she tore her hamstring during a particular pose:

> I was like warrior 2 legs and then like a—whatever the bind is. [shows pose] And then she said 'straighten your knee' and I kind of thought 'I don't feel like I have anywhere to go, but sometimes in yoga, sometimes you surprise yourself, right? Like, you don't feel like you should to a handstand until one day you actually can come up over. So I just straightened that leg and that's when it happened. It popped. So it's hard to know the feeling. (39, F)

She goes on to describe the experience:

> [...] I heard it. Yeah, and it was [name] who was the teaching and she heard it from like a couple of mats away and I was like [makes facial expression of concern]. And that was like a very tingly sensation that, like, you know immediately: do not go any further. [laughs] Stop whatever it is you're doing, yeah. Um. And that took a while to heal. (39, F)

Kate experienced an injury—a pain that wasn't what she considered to be normal, "a very tingly sensation that, like, you know immediately: do not go any further." The interoceptive body surfaced through injury, calling Kate's attention to it by 'telling' her to "not go any further". The musculoskeletal body 'makes itself heard' through injury—signalling through sensations of pain and the need to 'step down' and "stop whatever it is you're doing". She goes on to say that, to heal her injury, she:

> rested it, ice, ibuprophen, and then I was limping around quite a bit for a couple of weeks. And then after that, when I started coming back to yoga, I always made sure I had a block under this knee so that this hamstring wouldn't stretch out and just be really gentle with it until it felt like it had healed all the way. Which it does now. It's a good feeling. [...]

This sensation of pain also impacted her day-to-day activities as a mother:

> [...] I have little kids and all of a sudden, they're both running across the playground and I can't chase them, because I'm limping quite badly. [pause] So that balance of becoming strong and active and fit and agile, but not getting injuries, which is pretty much impossible to avoid...our control [of/over it] anyway.

Thus Kate had to reorient, renegotiate how her body moved in space, and her body no longer responded in the way that she wanted/needed it to, it was no longer the same body.

> It made me cautious, cause I didn't feel like I was overdoing it, I was just like, 'well, we'll just see what happens'. So, cautious about the feeling of where you can push yourself a little bit. To see what your limits are and what is actual [...] limitation of your body. [...] I'm a bit scared to know that you can so easily damage yourself. With very little effort. And the idea that you work your body to make it stronger and healthier but that at the same time you can damage it and set yourself back so much. (39, F)

The sensation and the consequences of injury means that, for Kate, "surprising [herself]" has to be negotiated in conjunction with "becoming strong and active and fit and agile, but not getting injuries" so that she can still participate in physical activities and 'keep up' with her children. Pain, in this case, is something to be wary of, something to be avoided. Kate's "cautiousness" after her injury also recalls Reventlow, Hvas, and Malterud's study of bone scans of Danish women and the apprehensions they had about performing particular activities (2006: 2724-8). Not knowing when one's body will reach its "limitation" and being "a bit scared that you can so easily damage yourself". "With very little effort" suggests that it's not necessarily the injury itself that makes one cautious, but rather the *possibility* of injury—the idea that one *can* and eventually *will* reach a bodily limit (2006:2724-8).

Notably, the "limitation of your body" signalled by pain is sometimes a blurred line between injury and 'soreness'.

> Yeah, like right now I can feel these muscles from climbing yesterday [touches arms]. But it's a good feeling, 'cause it's lengthening. It's like a lengthening all the way up. Um, and it's a good feeling because I pushed those muscles to work yesterday cause a couple of times I wanted to stop the climb and give up halfway up, but I was like, 'No, I'm ready for this, man'. *Burn through, and burn the muscles out. I went to a thrift store beside, 'cause I [had] a few minutes to kill after, but my arms were too sore to look through the clothes. So it's a good feeling* and it's a nice lengthening feeling, and something like I feel like I can do something about too. Um, to stretch it out and then that feels good. (Kate,39, F, emphasis added)

When asked what she imagines is happening inside her body after a workout, Kate says:

> I guess, from what I've learned or what I've gathered—it's not official learning but—that like the muscles are knitting back together, that's *sore*. [...] I guess for a while, it's like it first sprained it's like an *inflammation*, I

> assume, and that it's *healing*, but then you can feel when it moves passed that then it's just *stiffness* that needs to be stretched out, lengthened. (39, F, emphases added).

Soreness, in this case, is a sensation that resembles pain, but also differs from it. This sensation of soreness is a transitional point where Kate's injured ankles are healing, like when she "burn[s] the muscles out" during her workouts which leads to the "muscles knitting back together and stiff [muscles], so you have to lengthen them to get them back to being more supple". Kate also refers to this muscular sensation when she says,

> It's just like crow and plank pose, doing core work, holding plank, warrior two pose, the muscles are, are getting—getting worked out, they're getting stronger. [pause] Hopefully. Actually the place that I usually feel it is my back and my arms, cause, like the next day, I'm sore. That's where I'm feelin' it. And then I like that yoga sometimes you can, like, put a lot of practice—yoga particularly you can put a lot of power into it and then be a very strengthening and really invigorating session or you can just like relax and just focus on stretching and meditation and like that it's—you can do whatever your body needs for that time. You can give that to the practice and no one can help which, what, um, what you're feeling. And they're both equally good.

For Kate, the sensations she experiences in yoga are multiple: yoga is restorative because it allows her to "relax and just focus on stretching and meditation", but it's also a practice that allows her to "put a lot of power into it and then be a very strengthening and really invigorating session". In other words, yoga is contextually dependent for Kate; the sensations she experiences are complex and contradictory, but she acknowledges this by explaining that "you can give that to the practice and no one can help [...] what you're feeling". Sensation isn't only what Kate experiences *while* doing yoga, but also what guides her dedication to this particular physical practice.

Kate, who's been doing yoga for "almost twenty years" also relates her experiences of physical activities with the mental state that she finds herself in at particular points in her life:

> I guess I'd never imagined I'd do a handstand. So, that was quite invigorating to work up to it and feel somewhat confident and then to leap over that barrier. It was quite a mental barrier and what was going on

> in my life and what I wanted to achieve and then you can take that and be like, 'I can do a handstand and you know, I can move across the world.' Same with like if I can run a half-marathon then I can birth a baby. So, I take a lot of that from physical successes because it's mostly mental and you can apply it to other parts of your life. And then, if I can run a half-marathon, I can birth a baby and then when I was doing that, you know, out of wild play. (39, F)

Kate equates different sensations and experiences: "doing a handstand" and "moving across the world"; "run a half-marathon" and "birth a baby" through the mental strength they require. Thus, the mental and physical are conflated, where sensation is not one or the other, but rather a combination of both, as the interoceptive quality of sensation brings together the 'feeling body' and the 'goal sought by the individual mind' (Farb *et al.* 2015).

Kate's engagement in yoga practice forms a portion of her physical activity regime. As she says, "yoga is totally different. Running is about pushing past your limits and yoga is about listening to your body and holding out [...], so it's very different." This notion of yoga being about 'listening to the body' is important in the context of Kate's overall physical activity practice. Recalling how "burning out the muscles" that Kate speaks to earlier calls attention to the contradiction of pushing oneself while running, but also "surprising yourself" in yoga, which requires one to also, in some ways, "push [oneself]." This means that sensation, in Kate's experiences, surfaces differently at particular times and in particular places where she seeks specific results or experiences in/of/as her body. But it also means that the experiences that she seeks are also changing in real time, as in when she experienced her hamstring injury. That particular instance of injury, however, doesn't predict the experiences that Kate will have in her physical activities in the future. Injury doesn't beget injury, though the apprehension that Kate experiences in her future yoga classes may prevent further injury.

Moreover, to mitigate further injury, Kate not only exercises caution, but also works on making her body "stronger" to have better "alignment" through the modification of poses that can allow her to move her body in particular ways. She says,

> [...]—just building up strength, core strength throughout the body strengthens a lot like, the body alignment, so if my arms do actually go out a lot further than the average person's, then doing that kind of thing might actually not hold on while my bones are stacked. (39, F)

Modifying poses is important in Kate's experiences because it allows her to perform particular movements and postures that, in their 'classic forms', are not possible for her to do "when teachers say to do something that I'm like, no my body doesn't do it". Modification, in this instance, is twofold: one, it allows Kate to participate in the practice, and two, it prevents pain and possible injury. As Desikachar, Bragdon, and Bossart explore how yoga was primarily intended to be a one-on-one practice, and thus is very different from the way(s) in which it is practiced in North America in general (and Victoria) today (2005). Modifications are integral to the practice itself, but it is often up to the student/client to perform these modifications. Modifying the poses, in general, will alter the client's experience of the pose itself, the sensation that is brought on by a particular pose is then also altered. Overall, for Kate, "hot yoga [...] it's, like, a good meditation and good sweating detox, but also feels like it's also a workout. My muscles sometimes are sore the next day, so it tells me it's good for stretching, detoxing, meditation, and strengthening. Which is nice. [short pause] And taking time for myself" (39, F). In this case, she identifies the physical sensations that she gets from going to hot yoga (soreness, stretching, detoxing, etc.) as something positive, but she also attaches a particular meaning to those sensations—"it's also a workout". Kate's experiences of her body in the context of yoga illustrate the values that she associates with 'working out': "stretching, detoxing, meditation, and strengthening [,...a]nd taking time for [herself]".

<u>Amanda:</u>

Amanda's experiences were similar to Kate's. Despite their differences in age (Amanda, 53; Kate, 39), they shared similar concerns for the maintenance of flexibility (especially in relation to ageing or the

potential for skeletal degeneration—either as a part of ageing or because of family relations whom experienced skeletal difficulties). As someone who considers herself a “yogi”, “someone who does yoga, [...] who has taken classes from certified yoga teachers, as opposed to someone who [...] just does it with the TV or something,” Amanda expresses a clear idea both of how she wishes to experience yoga (in a class with a certified yoga teacher) and the sensations that she, as a yogi, experiences (53, F). She goes further to define a yoga body as:

> a body that, that's flexible, that is able to [...] bend, able to touch your toes or touch the ground. Um, [pause] you know at the most, at the most —basic. I guess, you know, strong enough to stand. And with some ability to balance. To balance, which I find hard sometimes. Um, yeah, and the bend, of course, like different levels of that. Like, there's gonna be some that are, *like you don't have to be super flexible, but you need to have some flexibility.* And I guess not, not overly, I'd say, like I'd add to that *not overly muscular*. Not super muscular. I was—like, some people are really muscular, so it's more of a toned and more toned and lean rather than muscular. I was gonna say skinny, but that doesn't really, yeah. Yeah, I don't really know about that. (53, F, emphases added)

The bodily-ness of yoga is only part of what Amanda equates with being a yogi: “Doing yoga is only ten percent of actual yoga. So, living peaceful and trying to be a positive force in the world”.

The idea of “*doing* yoga” as part of the physical aspect (which I have discussed, but will return to momentarily) and ‘doing yoga’ as part of being “peaceful and trying to be a positive force in the world” also comes into play in yoga classes where there is often references to yoga “on the mat” and yoga “off the mat”. So the physical and, let’s say, spiritual aspects (a term I used in questions which was also taken up by some of the participants) of yoga are seen as both part and parcel, but also separately. Doing yoga—the (physical) practice—is, for Amanda at least, a small part of doing yoga (off the mat) in the larger spiritual sense of “trying to be a positive force in the world”.

Oftentimes, people I spoke with would express, like Amanda, how the “ten percent” was what initially brought them to the practice and that the ‘spiritual’ aspect came after (or, as is important to note, did not feature at all in some participants’ experiences). Like Amanda says, what first brought her

to the practice was “the fitness aspect of it. But meaning fitness specifically for the fitness experience that it offers, so the yoga experience. So, not just like, ‘I wanna get fit, what's the best way to do that,’ but it's like, ‘I wanna get fit and this suits my temperament—myself.’ It suits me” (53, F). In other words, yoga, for Amanda, was a part of the sensations that she was seeking as part of her “fitness experience”, but also had implications in “strength and [the] potential for osteoporosis. Or osteoarthritis. So, you know, just concern for keeping a strong, strong bones”.

Amanda’s experiences with yoga reflect her larger concerns about her body’s flexibility and strength overall and also in terms of ageing and possible osteological degeneration (or complications). As she explains, yoga

> [is] a calm environment. It's [pause] something that I am physically suited to because I'm quite flexible, so it's—I'm physically suited to it, so it's a—I wouldn't say it's easy, but it's, there's just a match there. Also [pause] the calm, relaxed atmosphere. So it's calm and relaxed rather than sort of frenetic and I guess that you can do it at your own level, so it's like in some exercise classes where you know, the first time you go, you lift ten pounds, the next time you lift twenty pounds, and next one you have thirty pounds, and you just have to keep building, building and going further and further whereas *in yoga you can kind of just keep doing the same thing again and again and that's okay. You just kind of keep building on it, but it's different than how other exercises build*. Like other exercises they...I don't know how to express that...they don't let you—*in yoga you can just be happy with what you're doing, you don't always have to be trying to challenge yourself.* If that makes sense. (53, F, emphases added)

For Amanda, the practice of yoga suits her bodily-ness (“being quite flexible”) and but it enables her to “keep doing the same thing again and again and that’s okay. [...] you don’t always have to be trying to challenge yourself”, which aligns with Kate’s notion of “pushing past your limits” in particular physical activities (such as climbing or weight lifting) and yoga being “about listening to your body and holding out” (39, F).

Flexibility is also important for Amanda in the context of hyper-mobility:

> I'm also hyper-flexible so I often will go into hyper-mobile knees and stretch my legs out the way they're not supposed to stretch out [laughs]. And my arms, [yoga's] made me more aware of that. Like, I'm aware of how I'm standing, if I'm pushing something into sort of hyper-mobile mode rather than the way you're supposed to be. And sitting, you know, just being aware of my shoulders and my back. (53, F)

Hyper-mobility is both a positive sensation for Amanda because it allows flexibility, but it's also something that she is weary of in relation to how it can be detrimental to her bodily experiences (in cases of over-extension). Over-extension can lead to injury, which also is a concern for Amanda when she says,

> I broke my wrist once, so I think about that, 'cause my wrist is a little bit weak from that experience. Um, and I broke my patella [sic] in my left foot. So, I think about that sometimes. Um, and just um, I guess, um, yeah and then just I guess it's not really the bones, but with um, *flexibility, just like, when I feel tight*. Um, just wondering why and um, and I did—a friend told me once that he was in a yoga class and the instructor broke her leg and so—during a pose and [laughs] so I think about that. So, I was like oh, my god. It's awful. Um, the bones. Yeah. (53, F, emphasis added)

The idea of flexibility and tightness come into play together—tightness is felt negatively for Amanda, who is accustomed to a certain level of flexibility which she must now work towards as part of her 'recovery' from injury. In this sense, "stretching" out one's body can be a way of engaging with it sensorially. For Amanda, this comes through when she explains that yoga brings her

> positive feelings, happiness...what's the right word? Um, [pause]. Fulfillment? I'm trying to think of the right word when you um, it's almost, I guess it's a verb, but it's almost, I guess in the other way like, *stretched*. *Like stretch or achievement? Like stretched...to achieve the stretch 'cause when I do a really good back bend, it feels so good. Like a, an updog back bend, like to get that in my back, it really does something for my endorphins.* Sometimes, distraction. Focus, focus and then distraction. Both. (emphasis added)

The feeling of getting "stretched" which "feels so good" and "really does something for [Amanda's] endorphins" is similar to what Kate referred to when she used the notion of "lengthening". When Kate explains how "it's a good feeling, 'cause it's lengthening. It's like a lengthening all the way up" (39, F),

she refers to the sensation she experiences after participating in a particular physical activity (in this case, rock climbing) which leads to a sensation of soreness. Yoga instructors will often say, “keep the spine *long*” cueing clients to focus on their spine, on its length and encouraging the *sensation* that Kate and Amanda seek to attain through the physical practice of yoga.

Amanda also speaks about “working with” particular areas of the body to reach for “positive feelings”:

> I would say hips, anything with hips is always...*it feels very deep.* It's really *deep work when you're working with your hips*. In many ways, like, there's just multiple ways that can *bring that out*. But anything—when that's a really being worked on, it can be sort of very welcome to be working into that area and very, um, what's the word? *Releasing*? *Releasing. Releasing* and welcome, I guess. And, [pause] I guess *twists*. To be twisting can also be, just—I guess, *giving into, getting into areas and poses that are not easily accessed...so sort of the ones that are, you know, locked.* [...] In daily life, you don't really access those parts of your body so that, in yoga, *it feels really great to get in there*. (53, F, emphases added)

For Amanda, then, “deep work”, whether it be hips or “twists”, can “bring that out”. “That”, in this case, refers to the sensation of “releasing” that Amanda refers to repeatedly. The “release”, as the ‘lengthening’ and the ‘stretching’ refers to a sensation that is brought ‘out’ through physical “work”. Here, it’s important to recall both Ingold and Taylor. The sensation of “releasing”, here, recalls the way in which Ingold explains that people exist and engage in particular relational relationships within an environment that is in flux (2011:314). The sensation of ‘release’, ‘length’, and ‘stretching’ are relational to the particular context of physical activity (where these sensations occurred), and to the context of the research itself, which sought to engage in a conversation about these sensations. And, in keeping this in mind, Taylor’s notion of ‘surfacing’ (2005) is especially relevant when Amanda says, “It's really *deep work* when you're working with your hips. In many ways, like, there's just multiple ways that can *bring that out*” (53,F). The notion of depth and bringing something to the surface through “work” exists both figuratively through the analogy Amanda uses (something I return to momentarily),

but also *literally* in the sensation that it brings about for her. The release comes to the surface and is *felt*, deeply, through working on a particular area of her body.

It's important to distinguish between the figurative (or theoretical) sense of surfacing and the literal sense. For example, spinal "twists" in yoga classes are often done "from the navel up", because of the motions of the spine: the lumbar vertebrae don't actually permit rotation (they do allow for side-to-side bending, however), and thus, twisting is permitted, physiologically, from T12 to C1 (because cervical vertebrae allow one to look to the sides and up). In this sense, because the motions of the spine allow for rotation only in particular segments, "twisting from the navel up" is more of a figurative direction rather than a literal one, because the spine is a *deep*, murky area of the body. I can't accurately note my T12 on my own fleshed body, but I know where my navel is because it's on the surface of my skin. It's something that, tangibly, I can relate back to (through sensation) to "make adjustments to the pose".

However, biomechanically-speaking, vertebral segments don't function independently from one another—yes, the cervical, thoracic, and lumbar vertebrae allow different types of movements, but as I move through the world, my entire spine functions as a unit where one section can't act without the other responding in kind. The lines between what is figurative and what is biomechanic are blurred in this context: the analogy allows one to imagine—or visualise, interoceptively—the movement that must be done which results in the sensation of "release" Amanda speaks of. In other words, when instructors use the figure of speech "wring out your spine", they don't mean literally—of course—but they may be referring instead to the sensation that they expect their clients may feel in relation to a particular, physiological pose or movement (also cf. Colleen's examples in her chiropractic care practice below)—the kind of interoceptive feedback students should be getting out of a particular pose. In the same sense, when instructors say, for example, "breathe into your hip", they are not saying that I can effectively send air into my hips, but the stretch can *feel* like something has been, to borrow

Amanda's term "released" or "brought out" to the surface. The body responds through interoception by creating a sensation of "release". Sensation, then, is a way through which participants experience the surfacing of particular areas of their bodies—areas that are "worked on", "worked in", "stretched", "released", etc. That surfacing is a negotiation between the participants, their bodies, and the physical practices that they engage with (be that yoga, chiropractic care, or some other form of physical activity).

Colleen:

Colleen, who's a chiropractor and engages with yoga as a physical activity, also used the term "releasing" when explaining how she addressed her patients' sensations: "I *don't want* to be painful, especially if we're doing some of the active release [...]. I always ask when they get up, 'How're you feeling?' They say, 'Okay, better, change, nothing.' You know? And then I, uh, tell them it is really normal to be sore for the next couple days; if anything feels *abnormal*, call us" (37, F).

Sensation is also related to how Colleen's patients feel in their particular appointments with her and how she engages with those sensations through her practice. The "release", "soreness", and "pain" she speaks of isn't her own (though sometimes it is, something I'll address in a moment), but that of her patients, which is something that she can address through the relational field of sensory experience as a chiropractor. For example, when she says: "oftentimes people come in and the pendulum has kind of *swung*, they're concerned about something and they want to give *you*, their pain or irritation, whatever it is. And I'm like, 'okay I'm going to *take* it and hold on to it for a bit'" (37, F). The idea that she brings up in the next chapter about how"you can *feel* it, you'll *feel* her just like—her nervous system *relax* and she talks about something she loves and you get all this, like, parasympathetic joy in her" (37, F) when speaking about one of her patient's apprehensions brings me back to Ingold's example of the ethnographer (2011:314) because as much as Colleen is a "visitor" in her patients'

sensed experiences—a slice of their sensory lives, so to speak—she is also living her own sensory life through her practice (and outside of it, of course), where she effectively isn't a blank slate waiting to be filled with the knowledge, pain, and sensations of her patients. Just as the ethnographer Ingold points to observes and *participates*, so too does Colleen *participate* in her patients' sensory experiences.

Colleen's own sense of bodily-ness is brought up when she speaks about how she negotiates the space that she works in, in relation to her patients and her own mobility. While completing her body map, we shared this exchange:

> CCB – [...] So, you talked about your herniated disc.
> [...]
> Colleen – So, this disc is healed but it's at—so this is my L5 disc. It's on the right hand side, here. So, this would have broken out, and then, in between here—there's another layer and then you have posterior element so it's hard to show in 3D but these would come out towards there [points to map as she draws] and, then create joints on my other side, so it hits onto that joint as it comes out. But *that's* the nerve. Then it forms parts with those ones and it cuts through and then goes down the back to this leg.
> CCB – Okay. And so does is there a sensation associated with that?
> Colleen – Yeah, like, in through here up into—. So, five. That's my L5 disc, so L4, L3, L2, L1. They get smaller as you go up. Um, all the way up into this right—oh, this is—it's actually. I made these way too big. It's more here-ish so this, let's say this is T12, in through that junction, the muscles here get tight.
> CCB – Okay.
> Colleen – So I get tight along there and I get tight along there and then it goes into this right, this is called my Glute-mede. that's my QL[29] and that's my TL[30].
> CCB – Okay, so it goes through the, the back?
> Colleen – Yeah, I get tight all along there, 'cause it's a fascial chain that's protecting that region. [...] So this is with me lying on my stomach, but I'm gonna flip it over just for a—so my left knee, which looks mangled here [laughs]—femur comes down and it starts in there, and the tibial plateau comes there and then there's my fibular head. So, I get severe irritation along this outside of my left, it's called left posterior corner.
> CCB – Mmhmm.

29 The Quadratus lumborum is a muscle that extends from the bottom of the twelfth rib to the top of the posterior iliac crest (hip).

30 The Thoracolumbar fascia is a diamond shaped region in the lower back, ending just above the Gluteus maximus. It serves as an attachment point for some of the major muscles of the back.

> Colleen – And I get some irritation there because I tore my ACL. So ACL runs like your hand in your pocket, from back to front. Um, so I get *tight* in there along the muscles there on both sides.
> CCB – Okay, and so when you get tight there, how do you address that tightness?
> Colleen – Quad stretch and hamstring stretch are my two best and then, also, *because*—this is fun! I like drawing on this! So, because your tibia comes down and then makes this ankle mortis so, your fibular head comes in and inserts on the other side there, and you've got that. So, I also mobilize here. Both those like, 'cause it's the all muscle along that outside *chain*. If I get that moving, I'll feel way better.

Colleen spends a large portion of our exchange going through the various sensations that she experiences in her body regularly. The "tightness" in her back and in her knee joint is related to the larger concept of "getting that moving" which lends itself to Amanda's notion of "stretching" and Kate's "lengthening". Moving, stretching, lengthening the body is a way to treat the "tightness" one experiences within it. Another example of this came a little bit later during our conversation:

> Colleen – I tighten through my mid-back so I get some, like, my trap [whistles as she shows on body]. So your trap goes from the base of your head out to your shoulders, down, creates a little bit of a diamond. [CCB – Mmhmm.] So, I get tight right in there and then right across my sub-occipital.
> CCB – Okay and are there movements that you do to—
> Colleen – Extension. I stretch back and roll my head back. 'Cause the same thing I was saying with that creep and, like, e-centric load, 'cause I get stuck forward so I just do everything to undo it.

Colleen experiences what she qualifies as "tightness" and the sensation of "stretching" is what *releases* that sensation. Similarly to Kate and Amanda, Colleen's experiences of "tightness" require a form of release, an appeasement of the sensations that she experiences—which, in her particular case, cause her to "get stuck" and then she must "do everything to undo it". Release, then, becomes a central aspect of how Colleen (wants to) experiences her embodied self.

April:

Unlike Colleen, Amanda, and Kate, April is living with chronic pain, which makes her experiences different from those outlined above, but she also shares similarities in how she describes pain and how she 'deals with it'. When April (53, F) speaks of her pain, she explains how it's "just continued" and "shifted over the years": pain is part of her daily life and isn't something that can be "stretched out" or "lengthened" in the same sense that it can for Colleen, Amanda, and Kate. Chronic pain, for April, is physically taxing where she says, "most of the time I'm in pain, and it's exhausting." However, "moving" as for Colleen, is a coping mechanism even in the face of persistence. April states:

> But I just keep going. Like, when I'm moving my body—like when I go running, or if I go hiking and I'm using my hiking poles. I'm—it feels better. Like when I'm moving, it feels better. […] Yeah, yeah. So that's a good day where I have lots of energy. And I feel good. And then I have a good sleep [...]. (53, F)

She explains that moving is a way to manage something that she experiences on a day to day basis. The sensation of pain "feels better" when she's "moving", "running, or [...] hiking". Experiencing active movement is a form of release for April in the same way that stretching is a release of tension for Amanda. Her chiropractor's appointments are also another way for her to experience "that release", as she explains:

> April - You know, I trust the chiropractor. They've never done anything where they've hurt me. But I hear stories of other people—"Oh, I would never see a chiropractor, they crack you." That crack feels good, like, "Oh, finally, some *release*." [laughs]
> CCB - [laughs] So does that, that cracking sound play a role in that feeling?
> April - It just feels, like, "Oh, finally, that tightness is kind of *released* a bit." (emphases added)

The chiropractor's appointment offers "some release" that April seeks in her bodily experiences. The "tightness is kind of released a bit". During the body map, April also expanded on this idea of release when we spoke:

CCB - And when you feel release in that area of chronic pain, what does it kind of feel like?
April - The times that it has it's more like [drawing sounds—drawing long shapes/waves] ah, ah, ah. Like, it just flows. It's a flowy kind of movement.
CCB - Okay.
April - Yeah, it's just all like, oh my goodness. I mean, it's more like here actually, and then in the shoulder area.
CCB - Okay.
April - Yeah. It's just kind of like one swoop. [...] Yeah, just all like together instead of like. Yeah, because here it's like, it's like, okay it's here, it's here, it's here [points on page]. It's all these different parts when I feel the tightness.
CCB - Okay.
April - But when it's not it's like—it's all just in unison. [...] I'm always like looking for the muscle joint and massage it, and put pressure on it to release the tightness. Yeah.

For April, the idea of flow and release are intimately linked to how she thinks and experiences her body —and her pain. During the interview, the "unison" she alluded to above comes through as she likens the sensation of tightness in her shoulders to being "stuck. It's like ti, ti, what's that word? Tectonic plates colliding, and they just like mmmmmm [rubbing her hands together], they just can't move anymore". She goes further to say, "They're stuck. They're in a big jam. That's how I kind of see it in my mind" (53, F). Being "stiff" or "stuck" like "tectonic plates colliding" is a way for April to explain the sensations she experiences when her body is in pain. The sensation she experiences translates to how she manages her pain—how she manages the sensations she experiences through movement, chiropractic care appointments, and "massage [...] once a month." Because she experiences pain regularly, April's focus isn't only on bodily sensation, but also on health. She says, "For me health is feeling, you know, having energy, having a good appetite, you know like my body is functioning well and I'm not having any symptoms of fatigue. Lack of motivation. [pause] Yeah where I—I want to get up and do things". *Because* April's sensation of her body is focused on chronicity, everything around her is part of the pain she experiences and the things she does to *manage* that sensation. Health, movement and energy are meaningful aspects of the sensations that April seeks in her own bodily

experiences. The absence of pain is, in a sense, reaching what she seeks, though it may be "rare" (53, F).

Summary:

Pain and release were important aspects of Kate, Amanda, Colleen, and April's narratives in relation to how they experienced their bodies sensorially. Though they engaged with painful sensations in different ways that were sometimes analogous and contradictory, their search for *release* (as a sensation) was a common goal.

Sensing Bodies through Time:

Bouchard says, in a podcast about 'youthfulness':

> Puis, qu'est-ce que ça veut dire, la jeunesse? Une première observation, c'est que c'est pas si évident que ça. Ça peut varier selon les cultures, selon les époques. Et puis très souvent on entend de nos jours, *aujourd'hui*—ce qui n'était pas le cas autrefois, jadis, mais on l'entend très, très bien aujourd'hui—être jeune [...] c'est dans le coeur. C'est à l'intérieur. Ou on est jeune dans sa tête, ou des choses comme ça. Tout ça étant faux. Absolument faux. [...] On a toujours été obsédé, peut-être pas par la jeunesse, mais par le fait qu'on ne veut pas être vieux ou vieille et qu'on ne veut pas *mourir*. Parce que le mot "vieux" et "vieille", c'est le portail de la mort. [...] Le concept de la fontaine de jouvence, c'est le vieu phantasme de l'être humain: boire de l'eau qui te rendrait beau et jeune et énergique et vif, à jamais. (Bouchard & Pleau 2016: n.p.)[31]

Essentially, Bouchard suggests that humans have had two fundamentally intertwined ideas: the fear of death, and the obsession with what we now term as "youthfulness". The concept of the fountain of youth he speaks to is intimately related to the ways in which, culturally and historically, youthfulness is always defined and redefined based on particular ideals (Bouchard & Pleau 2016: n.p.). Some of these

31 In this excerpt, Bouchard questions what "youth" and "youthfulness" mean in every-day life, from the ways people speak of maintaining youth, or the feeling of staying young. He proposes that this feeling is based on a need to 'maintain' one's youth (either through speech or through mythologies such as the fountain of youth), because the opposite of youth is ageing—which inevitably brings one closer to death, something that people want to avoid.

ideals came through in participants' stories and experiences of bodies changing over time (e.g. mobility, the limits of the body, etc.). These stories and experiences varied but many expressed an interest in 'keeping the body limber, flexible, and strong'. Yoga and chiropractic care were ways for participants to 'support' their bodies.

From a skeletal standpoint, time is ageing or the specific changes in the bony structure of the body. Bone is a dynamic tissue of the body that both adds and takes away bone over the course of an individual's life. As children grow up, their bones also lengthen and build mass through growth plates. When we are born, we have 'more' bones than we do when we reach adulthood (or when we reach the end of our bony epiphyseal fusion) for two primary reasons: one, so that the infant can pass through the birth canal, and two, so that the individual can grow to full stature (Bass 1995, White & Folkens 2005). By adulthood, it's important to note that I do not refer to what we conventionally think of as age of majority, but rather to 'age of last epiphyseal fusion'—where an individual's skeleton has stopped fusing. In adulthood, humans have approximately 206 bones in their bodies, though they are born with "about 450 centers" of ossification (White & Folkens 2005:47). For example, the os coxa (hip bone, also sometimes called innominate or os innominatum) is formed of three bones that are separate at birth (pubis, ischium, and ilium) which join together in the centre of the acetabulum (the hip socket), fusing during puberty (White & Folkens:252, 372-3).

White and Folkens note that:

> [epiphyseal] union begins earlier in females than in males and that different individuals of the same sex can show very different times of union. The last epiphysis to fuse is usually the medial clavicle, at about 21 years. Late-fusing bones such as the clavicle, however, show wide variation in age at fusion. For example, some medial epiphyses fuse before 21 years, whereas other individuals show persistent non-fusion at age 30. (2005:374)

A common theme in participants' talk about sensing their bodies through time, was "persistence". For example supporting the skeleton comes into play for April (53, F) when she explains how her body

changes over time :“we're still here. A littler [sic] damaged and scratched up and all that of course, [laughs]”. She goes on to say: “You know, I work at a residential care facility and there are people like close to one hundred, over one hundred. And that's amazing. Mmhmm. What's their skeleton and the rest of their body, their organs? What are they like? They're still functioning, for the most part”.

In the context of her body being “damaged and scratched up”, April says: “I was walking one morning and I completely didn’t know what was happening to me and before I knew it, I was like—. And I fell on this hand and my metacarpal, still—when I do certain things—still really hurts” (53, F). April’s experience of her fall lingers in the “certain things” that she does which cause her pain—for her, the pain situates itself directly in her metacarpal (in the bone itself) rather than the surrounding tissue. This lingering pain is part of the “damage” and “scratches” of her body. The metacarpal is *part* of her body through this experience—it’s ‘visible’ through its “damage” and its ‘call for attention’ in the form of limitation and pain. Her own skeletal experiences come to the surface through the sensations that she experiences in her body, and that she will continue to carry with her.

As noted above, yoga and chiropractic care are ways to “ward off” potential ‘threats’ to one’s body. For example, Amanda (53, F) says, “I guess in terms of strength and potential for osteoporosis. Or osteoarthritis. So, you know, just concern for keeping a strong—strong bones”. Although we’ve already examined this particular response, it serves here to speak to greater apprehensions and discourses in Canadian society. One in three women and one in five men in Canada will experience osteoporosis (Osteoporosis Canada 2022). This prospect is present in one’s mind as we age, as we start to ‘feel’ our bodies more. Amanda’s practice is for her body—to keep it healthy and active, to ward off potential osteological/bodily deficiencies that may develop as a result of ageing or lack of movement.

Movement as one ages also is an important aspect of ‘upkeep’ or of ‘warding off’ particular effects of time. John (55, M) experiences the mobility of the body through his own relationship with his age and his ageing bodily-ness. He says,

> John – […] when you get to be my age, when you get out of bed in the morning, *everything is stiff, and sore, and you move slowly*, uh, whereas after I think only two or three sessions of yoga I felt like a teenager again getting out of bed. It was remarkable.
> CCB – Are there other 'benefits' that you've noticed over time?
> John – Um, well it's calming. Gives you a sense of well-being.
> [silence]
> CCB – And [beat], how does yoga address how you feel in your body, either physically or mentally?
> John – Uh, I would say enhanced energy, and fewer aches and pains. [pause] It should be mandatory for anybody over forty. (emphasis added)

For John, ageing and time are lived as "everything is stiff, and sore, and you move slowly", "whereas after [...] two or three sessions of yoga [he] felt like a teenager again getting out of bed". Moving, doing yoga, *having mobility in the body* is a way not only to 'ward off' ageing, but to turn back time—to retain youth or reclaim it.

Further, John uses the analogy of a rubber band by referencing his ageing body:

> Well, you know, as you get older, you kinda of get hunched or shrink and everything becomes more—well here's the analogy I use: You take a nice rubber band and you put it on the windowsill in the sun, and after a couple weeks it gets brittle and if you pull it too hard, it breaks. That's what it's like when you get old. And that's how I feel very often when I haven't been to yoga in a while. You go to yoga, *you feel like brand new rubber band*. (55, M, emphasis added)

In John's view, the body breaks down over time if not tended to, so it must be kept 'stretchy', so to speak, lest it should break. Yoga was a way for John to support his body as it ages, to tend to it and to *feel* like it's "brand new". Preventing or delaying 'breakdown' (or the possibility of breakdown) of the body was a common theme in participants' stories of their embodied experiences.

The idea of keeping the body 'strong' or 'healthy' is echoed in Nora's (56, F) experiences as well, in relationship to her mother's osteoarthritic condition. She says:

> my mother had osteoarthritis and so […] as she got older she got shorter, she had problems with her spine and the [pause] degenerative disc. Which I also have, but I became very aware of her—funnily enough—her skeleton when she was dying in 2010. She couldn't physically get out of

> her chair without a lot of effort and she got very thin and […] you could see her skeleton. […] I decided then that I was—like that was really solidified for me, even though I already ran and already was fit—that I was going to keep doing this until I was dead. Like. If I get to be 125, I'm going to keep running—or walking. Whatever. Shuffling. I'm going to keep doing that.

Ageing and the perception of one's fragility, of one's felt reality—even though it may not be the case (cf. Reventlow, Hvas & Malterud 2006)—centres on the idea that time (or the passage of time) somehow 'ravages' the body. The 'ravages of time' rob the body of its strength, its mobility, its energy, its vitality—its bone density. In Reventlow, Hvas, and Malterud's work (2006), women in Denmark examined their bone scans in the context of the *possibility* of osteoporosis. Regardless of the result (presence or absence of osteoporotic bone) the participants' interpretation of the results affected how they engaged with their bodies and how they went about their daily activities (2724-8). The perception of risk or potential risk affected their embodied experiences indicating that it wasn't the *diagnosis* of osteoporosis that affected the women's experiences, but rather the process of going through the testing itself (2729-30).

Chiropractic care and yoga are viewed as a means to protect and arm the body against the perceived assault of time (and the bio-/allopathic medical system, it seems). When Nora says that she's "going to keep doing that until [she is] dead" (running), she references her perception of her mother's osteoarthritic condition, the effort necessary for her mother to physically move—something she hopes to avoid by continuing to be active until death. When John does yoga, he's a teenager again when he gets out of bed. Compounded with the proliferation of notions of 'reversal', the idea that particular movements, poses, or actions can effectively 'reverse' the damages that one does to the body (or that time does to the body) creates particular narratives about caring for one's body, but also about maintaining this body so that it can go on—until death.

Ageing is a reminder of the limits of one's embodiment—in the sense that bodies have material limits in terms of movement. For example, Kate, a mother of two young children, says:

> What my body is capable of is always surprising, because we grew up in an athletic, active family. [...] And then, now that I'm getting a little bit older that I'm wondering, at what point do you stop getting better at things and that your body starts weakening or your joints or like with running where you know, where your knees start hurting or you have problems with your hips. Like I always wonder am I getting close to that? [chuckles]. (39, F)

Later on, we shared this exchange:

> CCB - So you were mentioning age. And how you were wondering when and how your body is going to change.
> Kate - Yeah, reach the peak. [laughs]
> CCB - Yes.
> Kate - And when pushing becomes more detrimental than helpful.
> CCB - So, what do you see as the peak?
> Kate - Like, let's see with running. It's quite satis—gratifying 'cause you get faster and faster. The more you practice, the faster you'll get. But at a certain point, you're not gonna run a 10K any faster. But I don't know what age—so that's different for everyone so, I don't know what age that is for me. Or, like, let's say if I was ever gonna try to train for a marathon, I think I'm, like, past that already. Mostly because, well my knees and hips support that kind of action and having that constant barraging almost on the joints, um, so I don't feel like I'm there yet, but I'm always wondering if I'm, *if it's just around the corner* [laughs]. So, it's nice to do gentle, like exercises, that how like yoga's nice and um, and the yoga stretches out everything that I feel like I'm compacting and impacting with all the other sports, you know, the hiking [...]. (emphasis added)

For Kate, the body's ageing is elusive and inevitable—"around the corner". One reaches a particular "peak" and from then on, "you stop getting better at things and [...] your body starts weakening". But yoga, for Kate, is a way of "[stretching] out everything that [she feels] like [she's] compacting and impacting with all the others sports". Yoga is a means to 'undo' the damages one does to the body—a counteractive measure to ensure that one can continue to further 'damage' the body.

This concern with the damages done to the body is echoed in younger participants as well. Eva, who is twenty-four and works as an X-ray technician and a volunteer at a yoga studio, says:

> I'm finding, as I get older and the more sitting that I'm doing and the different jobs that I'm doing—it can be really hard on your body over a long period of time. And, there's things in yoga that you will never do in the real world, so it kind of brings that muscle's memory back and stretching just feels so good, like certain muscles that you'll never ever use in your daily life, it's so important to still stretch them out and engage them. To kind of—like you use it or you lose it, kind of thing. (24, F)

Though Eva doesn't feel the immediacy of ageing bodily-ness in the same way that Kate does, her notion of "you use it or you lose it" recalls Kate's use of the "peak" of fitness and the counteracting of the impacts that one's day-to-day has on the body.

The concerns over the impact that activities *over time* have on one's bodily-ness are intimately tied to particular perceptions about ageing. For example, when Colleen shows her clients their X-rays, she is keenly aware of their concerns over an ageing body. She explains her process:

> I'll load it up and go through it with them, because often times they're *very scared* to read something. I have arthritis—they're 50 and I have arthritis in my neck and lower back. I'm like, well, everyone does. Having ar—like, having arthritis in your neck and lower back in your 50s is like saying I have wrinkles in my 70s. Like, of course you do. It's bodies' *natural* ageing. I'll load up and show them normal, I'll pull up another X-ray and show them this is normal for this stage in the **game**. Yeah, we'll go through it for sure. 'Cause, often times, that's one of the main benefits of having this style of practice is—the main medical system they're so overwrought and so busy like a GP tells you, like, this is you're okay. But they don't have time to kind of go through segment by segment, level by level, or they tell you, 'You have arthritis,' 'You have a disc herniation,' you have—they give you the *Coles Notes* of what's going on whereas I can, you know, at least give them the *Reader's Digest*, Right? (37, F, emphasis added in bold)

Osteologically, males begin to show symptoms of arthritis in the spine from ages ten to twenty, and females from twenty to thirty (Bass 1987). Compounded with a relatively early age of fusion of the last epiphysis (the sternal end of the clavicle), the body's degeneration begins in an individual in their early to mid-thirties (White & Folkens 2005:372-374; Osteoporosis Canada 2022). What comes through in participants' narratives is that the *fear* of ageing, or having *something wrong* with the body and not *know it* are at the core of participants' experiences of their embodied selves as they age. However, the

'signs' of ageing don't suddenly happen from one day to the next—bodies age over time, but we only acknowledge the passage of time when something 'goes wrong'. If I 'know' my body, I *must* also be able to tell what is wrong with it, *if* there is something wrong with it.

Summary:

Ageing surfaces through stiffness, damage, and the apprehension of the deterioration of the body—the notion that one's body 'degrades' over time, or could suddenly change and are 'less functional', as in Kate's apprehension of a time that may be "just around the corner". Participants negotiate the inevitability of time and the apprehension of (possible) bodily deterioration through movement—as in moving the body through space through chiropractic care or yoga practice, in hopes that mobility and youthfulness will remain. Knowing the body as it ages, through its various changes and sensations, is bound up in larger narratives about 'keeping the body going'—'to use it or to lose it' (Eva, 24, F).

Sensation is a means through which participants come to negotiate with the experience of 'time in the body'. Ageing is a way through which participants navigate changing bodily-ness, through growth, maintenance, or (perceived) deterioration.

Conclusion:

Sensation is an important aspect of one's body in relation to time, in relation to ageing and in relation to pain—its potential deterioration and the perception of the body as something that need to be kept limber and pliable. Bodies are elastic (in the physics sense of the term), and John's analogy of the rubber band refers acutely to this quality of the body and the skeleton.

Overall, engaging with one's sensations, both proprioceptively and interoceptively, allowed participants to be both participants and observers in the production of knowledges about their bodies. Knowing the body—how it felt, how it is the way that it is and why—was a point of interest in

participants' narratives of pain and time that informed both the ways in which they interacted with the world through their bodies, but also how they perceived those embodied 'surfaces'. In the next chapter, I examine how participants sensed their bodies through energy and touch—both in the sense of something that can be possessed and taken away, but also in the sense of something that can be felt in oneself and in others.

Chapter 5: Sensed: Material and Energy

Introduction:

In the previous chapter, I explored participants' experiences and stories in relation to pain and in the context of ageing as aspects of being bodies 'immersed in the world' (Grieder 2015; Merleau-Ponty 2007). In this chapter, I discuss how participants know their bodies through touch and (as) energy. Energy and movement (including touch) often surface simultaneously in participants' narratives because moving one's body *requires* energy and the two cannot be taken apart. The skeletal body also requires energy to maintain itself as a tissue and to move us about our daily lives (in conjunction with the musculature that helps it 'be moved'). Touching bodies can be material, but it's also a way for the people I spoke to to engage with intangible energy in a tactile manner (cf. Collen's story below).

Learning through Sensed, Material Bodies:

Materiality, in the context of the research refers to the physical, tangible body and the sensations associated with it. Seeing one's body and touching it were two concrete (and not mutually exclusive) ways through which participants experienced their materiality. Chiropractic care and yoga are touch-based activities. Chiropractors *touch* their patients' bodies to adjust them[32]; yoga instructors sometimes adjust clients' bodily positions. Yoga clients touch and move their own bodies during practise.[33] Some yoga studios have mirrors for clients to see their own practice. Chiropractic clinics may display images

32 Though they sometimes also use tools, the main mode of chiropractic practice still situates itself in manual adjustments

33 Also, it's important to note that the use of mats, blocks, bolsters, and any other 'non-bodily' object is part of this tactile quality, though it's not the focus of this particular research.

of the nervous system and the spine (vertebrae and sacrum) and chiropractors often used medical imaging (e.g. x-rays) for diagnosis and to discuss treatment options with their clients. For example, Gerald says:

> Gerald – [...] It's a real time video of the spine as it rotates and moves. So, I guess in a sense it is 3D but not like an MRI would be for example.
> CCB – Yeah, yeah, okay. And do you show these images to your patients?
> Gerald – Oh yeah. Yeah, absolutely. …They usually are really fascinated by it and also relieved that they're getting some kind of understanding as to why they may be having the issues that they are.

'Showing' or teaching/educating clients/patients comes through in Gerald's practice through his usage of medical imagery to show his patients how their bodies need to be adjusted.

> Gerald – Oh yeah. So, I'll put up an X-ray up next to the normal one here, and show them the differences between them. I'll, I'll explain, uh, what normal movement is for a neck when I'm showing them their video, for example. Yeah, so they get a real visual representation of what—[CCB – Okay.]—of what's going on with them. And I think that builds rapport and trust and just educates them as well.
> [...]
> CCB – Do you feel like people are educated enough in the knowledge of their bodies in general and their skeletons?
> Gerald – No. Not at all, no. If they would be, I think a lot more people would access chiropractic care or at the very least be more proactive about their, their health.
> CCB – Mmhmm.
> Gerald – Um, from both a spinal and just a joint related perspective. Because I'm —I quite often have to take people from square one not really knowing much at all about, um, about their spine to giving them some level of knowledge.

Showing and teaching clients/patients about their material bodies and what is 'normal' and what is presenting in the x-rays he shows his clients is an important part of Gerard's practice; though, it's worth noting that Gerald doesn't elaborate on the notion of "normal[34]" in his representations. Colleen uses a visual anatomy app in her patient assessments,

> we'll do what we call 'orthopedic tests': they're special tests to delineate what's going on, on a more focused level. And then, I take them over, I

34 This is relevant in relation to the visual representations Nora (56, F) referred to in chapters 6 and 7, and to the ageing section of chapter 4.

> open up the anatomy app, show them *exactly* where it is, what's going on, what I'm gonna do, demonstrate it, tell them, you know, 'You might be more sore over the next couple of days', [...] and I ask them, 'Does all that make sense? Do you have any questions?'. (37, F)

Knowing one's body, being able to define it through various means, is one of the ways in which participants made sense of their embodied selves, and sensation is also part of this knowledge. As much as I can define my body through various systems, parts, as an object or through various mechanisms that allow me to illustrate how it moves or how I go about my day to day, I can't distance these definitions from the material body that I have—and that I am: a body that is sensed and goes through various experiences. For example, the sensed, lived experience of crying in a yoga class isn't something that can be defined in the same way that it is felt/sensed *in* the body at that particular point in time and in that particular context.

Colleen further expands on this notion of 'educating' when she says: "I always joke around with my patients when they say 'Oh, it kind of feels like this is stuck' and I'm like, 'Yeah I believe you, you live in there twenty-four hours a day, seven days a week. I'm just visiting for a half an hour.' So, I like to make sure that we are *always* kind of <u>working together on it and they feel really educated and supported</u>" (underline added for emphasis). Colleen's chiropractic care practice emphasises Ingold's notion of relationality in the context of participant observation (2011:314). Colleen is "visiting" her patients' bodies and bodily sensations, because "oftentimes people come in and the pendulum has kind of *swung*, they're concerned about something and they want to give *you*, their pain or irritation, whatever it is. And I'm like, 'okay I'm going to *take* it and hold on to it for a bit'" (37, F). Similarly to the ethnographer who practices participant observation, Colleen observes how her patients move and participates in helping them regain mobility, but she also wants her patients to "feel really educated and supported" in her practice—the knowledge barrier is effaced in some ways through relationality because Colleen acknowledges that her patients experience particular bodily sensations that she

validates and also provides them with "support" and "education" on her bodily practice as a chiropractor.

Moreover, education is also visually presented in Colleen's practice. Going back to the exchange I pointed to in Chapter 4, Colleen says: "I tighten through my mid-back so I get some, like, my trap [whistles as she shows on body]. So your trap[35] goes from the base of your head out to your shoulders, down, creates a little bit of a diamond. [CCB – Mmhmm.] So, I get tight right in there and then right across my sub-occipital" (37, F).

What comes through is the notion of "educating" that Colleen alluded to in her practice. She didn't only speak of particular areas of tightness and of what she does to relieve that sensation (cf. Chapter 4), but also spent a considerable amount of time explaining these aspects of her bodily-ness to the ethnographer (myself), which may reflect how she also operates in her daily practice; this education-focused mindset was also exemplified in the workshop I attended which was led be her and a yoga instructor at one of the field sites (Neko Studio). The use of software that shows the musculoskeletal system to show attendees *how* the body functions and where the muscles originate and insert—what muscles are activated by a particular movement (or should be activated) were an integral part of our conversation both during the interview and over the course of the three-day workshop I attended. Sensation, for Colleen, in this sense, is a 'teaching opportunity' where she uses her own sensory experiences to explain the functioning of her musculoskeletal system. Thus, Colleen can effectively embody the ethnographer that Ingold uses as an example where sensation "allows the ethnographer to access other people's ways of perceiving by joining with them in the same currents of practical activity, and by learning to attend to things—as would any novice practitioner—in terms of what they afford in the contexts of what has to be done" (2011:314). Colleen is both the expert (the

35 Referring to the trapezius muscle.

chiropractor) and the "novice" when she "visits her patients' bodies" and "attends" to their sensed bodily experiences.

Participants often used their physical body as part of their responses—not only to speak about bodily movements and mobility, but in a literal sense, moving their bodies as part of their descriptions of their experiences:

> I'll always go neutral spine [places her hands on her back and stomach], like, arms—so, one of the things you have to do as a manual practitioner is shorten the lever, right? Long levers create lots of strain on joints; short leavers don't. So, my hands and my elbows are always really tight to my body [moves arms close to body], so whatever I'm doing I'm able to use my core more [hand over stomach area]. (Colleen, 37, F)

Colleen's body is a tool, a sensory—i.e. material—object that she can use to illustrate her point *and* as a teaching tool (cf. Chapter 6 for more on this). The body is a tool of interaction—something that can be pointed to and used to illustrate and make material what cannot be directly visualized. Gerald talks about the invisibility of certain parts of the skeleton:

> Gerald – [slight sigh] I think, for myself, the human skeleton, the human frame is probably the most neglected aspect of a person's health, really. It's—and the main conduit and source of structure, stability, and nerve function in the entire body. So, to me it's absolutely an essential piece of human health. Because of its relationship to the spinal cord, to the brain, and to the nerves exiting the spinal cord. [...] people generally take good care of their teeth, because they interact with them on a daily basis and they can see them, right? [CCB – Mmhmm.] The spine performs a *much* greater—much more important function than the teeth, yet the amount of time people put into caring for it is negligible—for most people—compared to their teeth, for example, right? So, I think it's just—the spine, it's an issue of abstraction. The spine is kind of an abstract concept to most people and therefore they don't spend a lot of time thinking about until it starts giving them an issue. (34, M)

In fact, teeth are a directly observable part of the skeleton. Furthermore, "[t]eeth constitute the part of the skeleton that directly interfaces with the environment, acting to seize and masticate (chew) food material" (White 1991:102). Teeth, then, act as the link between our environment and our "body interior" (Taylor 2005), so to speak; dentition acts as a fulcrum through which we 'energise' our bodies

(through diet). Thus, it's possible, at least in some way, to 'touch' the skeleton: I can touch my teeth, hold them between my fingers, and feel their surface with my tongue, and thereby interact with the material of the skeleton (on some level).

The materiality of chiropractic care is often through the physical contact between the practitioner's hands and the patient's body. Gerald and Colleen both described this contact as an essential, fundamental aspect of their chirpractic care.

> Gerald – I was actually in my first or second year at [general college], feeling really anxious and sort of lost as to my direction with my education and I was sitting there, literally praying for direction, and [...] I got this this really clear sense that I would do something with my hands. [...]
> CCB – Okay [pause—writing]. And in terms of doing something with your hands, how does that feature in your work?
> Gerald – It's my main mode of therapy, really. It's my form of communication and treatment of the body. At least on a visit-to-visit basis. I do an initial exam [...] and *then*, I'm able to *be* a little bit more focused with my hands and a little more efficient with my care, I believe. (34, M)

Gerald's use of medical imaging allows him to be "more focused with [his] hands and a little bit more efficient with [his] care", in some ways 'fine-tuning' the treatment he administers to his patients. Touch is pivotal to Gerald's vocation not only as part of his "calling" to his practice—in the "clear sense that [he] would do something with [his] hands"—but as part of his bodily experiences; his hands are essential to how he interacts with the world and people around him.

Colleen also talked about the importance of her hands in her practice: "Like, sometimes you put hands *on* someone and if they, if they feel anxious, if they feel nervous, like, you can you can feel that *in* them, right? If, uh—not to be too esoteric, but I think, if you're energetically aware, like, you can *definitely* feel that" (37, F). What stands out here, materially, is that the energy isn't simply present in the room or in the patient: the energy is felt through contact, through the hands of the chiropractor. Chiropractic care is a touch-based practice (as I've already mentioned). As Oths and Hinojosa suggest,

> the phenomenological aspects of manipulating with, and being manipulated by, human hands in a "somatic mode of attention" (Csordas

> 1994), [...] allows bodies to attend other suffering bodies on a nonconscious level [...]. [T]he scientific explanation for why Western musculoskeletal healers proceed as they do is really epiphenomenal to the experiential knowledge gained by long-term work with ailing bodies. The body is the teacher. (2004: 103, 105)

Touching the body is a way of knowing and learning the body, as such "the body is the teacher" (105). Touch, then, is both a somatic sensation but also interoceptive in its effect(s) and affect(s) on the individuals involved in the encounter. I return to Ingold's analogy of sensation and participant observation for a moment (2011:314). Here, the 'participant' aspect is primordial: the touching of patients, the involvement of the chiropractor's hands is a tactile relationship between individuals. It also is a means to "communicate" with patients' bodily-nesses through their practice and through their own embodied selves—albeit in a limited capacity. The hands are the vector through which Colleen and Gerald forge sensation-based relationships with their patients (Ingold 2011:314).
Knowledge, again, features as an important aspect of being in one's body for Gerald and 'having a handle' on the body's materiality through touch transference from chiropractor to client/patient..

Many of the sensations evoked during the interviews were not necessarily 'material'—for example, Colleen's sensation of 'tightness' in her back because of her herniated disc. Yet, the materiality of the body maps afforded Colleen and other participants an opportunity to pinpoint and 'materialise'—or, as it were, bring to the surface—their embodiment(s). Participants put on paper their sensations through the mapping process, through the strokes that they drew.

Participants also often touched their own bodies during both the mapping process and throughout the interview either to show their material sensations or to situate them in relation to their embodied selves. This may, at first glance, seem innocuous—after all, touching one's body is important in daily activities such as washing, dressing, etc. But in terms of material sensation, touching the body is a point of relation, a reference that positions one's self in the world. Bear with me for a moment: biologically, requiring me to "move my muscles around my bones" (Ivy, 27, F) is tantamount to asking

me to ‘create space in my rib cage’ or to ‘send my breath to my hip joint’. The analogy is there as a helpful *tool* to engage with the materiality of the body—to effectively manipulate it, without breaking the illusion that this malleability is contradictory. Touching my body allows me to situate areas of tension but also as a point of reference I can return to at any moment[36].

For example, Jade showed me a physical movement she does to relieve pressure on her back: “I take a tennis ball and a corner [shows in the office door way], so I put the tennis ball here and I just lean against this wall and it's a *really* good. It, like, gets right—'cause it's really hard to get that top pressure, but doing that way feels really good” (28, F). At another point in the interview, she said:

> I just go like this. [shows ‘ragdoll’ position] So, this is what I do, so I stand with my feet and then I'll [exhales loudly] and then I'll like pull my hair to create traction. So, that's my whole goal [...]. That's what my whole body feels like it needs. I feel like I have someone who's just pushing on my head all the time, and it crunches my lower back and it pulls my hamstrings and, you know, my shoulders are wonky and [...] coming upside down, going like this, pulling like this [shows position again], feels like the greatest thing in the whole world. *'Cause I can feel my whole back. I mean, I visualise my vertebrae being pulled apart.* (emphasis added)

In the same way that I can use my body to situate my own sensations of it (for example, it hurts when I press on a fresh bruise), I can use my body to communicate sensations to others (for example, when I show an injury to a doctor and say “it hurts when I do [x]”).

Eva (24, F) often referred back to her own body when completing the body map, sometimes manipulating her joints and mirroring her movements before putting them down on paper. She also said she thinks about her bodily-ness in relation to her skeleton:

> now that I know the anatomy of my skeleton more. But I only started to kind of recognise my own unique skeleton was after I learned what the f —hell—was in my body first off. When I started learning about anatomy I was like, ‘Oh my god, I didn't even know I had all these organs and bones and whatever’. But I have like a rib that pokes way out. So, it's kind of like this weird deformity, like party trick that I'll show people.

36 For example, in yoga classes, it’s common to tell students to “go back to their breath” to ‘re-situate’ themselves in their bodies.

> [laughs] So, once I noticed that, like, I started to notice my own quirks and like all the different bones that are in there.

In the same way that Jade shows how she moves her body to experience a particular sensation, Eva shows off her "weird deformity, like a party trick". Touching one's body is a way to think about it, but also to *know* its materiality. Touching the body is a way to gain knowledge about it—it's 'normal', its sensations, its 'deformities'. Touching one's own body is a way for participants to engage directly with their sensations materially—tangibly—in the same way that having another touch one's body (either in chiropractic care or yoga) requires a relinquishing of one's knowledge of the body. I place my body in the hands of another when I experience sensations that are uncomfortable (strain, injury, etc.), be it a doctor, a chiropractor, a yoga instructor, etc. Touching the body, then, is an integral part of engaging with its material qualities.

Through materiality, participants engaged with their bodies' sensations in a tangible form and similarly navigated the relationships between their bodies and their environments where the material could 'surface' and 'sink back' depending on the context. As a whale breeches for air, the body can breech through in particular situations—carefully monitored situations that are framed in particular ways: the yoga studio, the chiropractor's office, etc. (though not exclusively). Material sensations allowed participants to both observe their bodies and participate in their own embodiment. Being a body is also a fundamental part of being in the world as a sensing, feeling self who engages with other bodies (in the broadest sense of the word) (Ingold 2011:314).

Skin Deep:

An aspect of surfacing that comes to the fore when examining participants' narratives is their racialisation. Unlike the material that can surface and 'sink back', skin colour is always already surfaced—always present. I can't take off my skin the way I take off a piece of clothing or get

treatment for a subluxation. This permanent surfacing becomes important when considering that the majority of the people I spoke with presented as Caucasian. Two of my participants were people of colour, namely Eva and April (it's worth noting that April didn't reference her race as part of her experiences—and that this wasn't the goal of my research).

Eva was concerned with the spaces she engaged with, and the spaces where her body was seen and valued: "I'm a brown chick with brown eyes, brown hair. I'm short. There's certain things about me that don't fit that society model [of a perfect female body]. So, a lot of the teachers here [Umi Yoga] and, like, things I've learned here has taught me that it's okay to just be the way that you were born" (24, F). Being in this particular space (and, arguably other spaces as well), Eva can't 'submerge' her racialisation: it becomes a constant surfacing that she must negotiate in the spaces that she occupies (in this case, the Umi Yoga studio).

When she positions herself in yoga spaces, Eva notices her bodily differences, her "brown" skin, eyes and hair, and how society's expectations don't match her experiences, but that spaces like Umi Yoga have made her feel valued because "the way [she] looked is just enough". As spaces where bodies come together, yoga (and chiropractic care—as well as health care spaces in general) position bodies and represent them in particular ways. These bodies generally presented as white and female in the context of my research in Victoria (cf. Chapter 3 for a breakdown of participants' sexes and races and their proportions within the city in general); a profile that Eva sees as different from herself, but that she doesn't feel excluded from.

Eva's skeletal bodily-ness came through her experiences as a woman of colour, a student of radiology, an only child, someone who worked various employments, etc., in ways that didn't come up for other participants because she didn't see herself as a representative of 'the ideal body type' (especially in the context of Umi Yoga), but this didn't exclude her from finding a space for herself to feel "it's okay to just be the way that you were born" (Eva, F, 24).

Eva's narrative reminds me of this particular story from my field notes:

> I attended a day class today at Umi Yoga. It was busy, with mats almost touching in the biggest room of the studio. Aside from the free component, nothing was different from other classes. Amongst the athletic-geared individuals, I noticed a young indigenous couple in their early twenties dressed in shorts and t-shirts. There was something that struck me in the way they moved not in rhythm with the rest of the class, but in rhythm with each other.
> At the end, I rolled up my mat after the scheduled *Savasana* [corpse pose] and noticed the couple still lying down taking the extra time allotted between classes for extended *Savasana*. They were holding hands—something I had never imagined would happen in a yoga class I'd attended before. In a class where I assumed people came to be with themselves, I observed two individuals who were there *together*. […]
> I wanted to interview the couple from the day class hoping to recruit them at their next visit, but they never came back to the studio. (FN, 2018)

In light of this story and Eva's experiences, a further avenue for research on skeletal lives would be to examine them from the perspective of race. Though this is beyond the scope of the current research, Eva speaking of her experiences as a woman of colour means that there are surfaces that merit closer examination, despite the generalisation of the participant criteria.

Sensing Energy:

Energy was both a concept through which participants understood their bodies and the world around them, but also a feeling, a sense that one is 'imbued with' or lacks energy, vitality, force, etc.. The sensation of energy 'surfaced' for participants in two ways. One as energy of the self, apparent when participants spoke of their sense of "having energy" or "not having energy", and "being made up of energy". Two, participants described energy from others, 'feeling' other people's energy (either in a studio or in a clinic, in this case) through touch or other sensory means.

Colleen's notion of "abundance" is important in her own practice (for more, cf. Chapter 6), but is not a quantifiable, measurable form of bodily-ness. "Abundance" is a 'way of being'—a sensation of abundance, capacity, and so on that Colleen wants her patients/clients to experience through her chiropractic practice. In a similar way that abundance can signify capacity or capability (of movement), it can also refer back to 'energy' as in having the 'energy to perform a certain action or workout sequence'. The notion of energy or energetic bodies was important to how some participants experienced their relationship(s) to their own embodied selves. This 'energy' is sometimes translated in participants' responses as 'vitality.'

The definition of vitality relates to how participants in general referred to the sensed experiences of their bodies. The four definitions given to the term "vitality" are:

> 1. a. Vital force, power, or principle as possessed or manifested by living things [...]; the principle of life; animation. [...]
> 2. *figurative*. The ability or capacity on the part of something of continuing to exist or to perform its functions; power of enduring or continuing.
> 3. *figurative*. Active force or power; mental or physical vigour; activity, animation, liveliness.
> 4. With *a* and plural. Something possessed of vital force. Also *figurative*. (OED 2020: n.p.)

What's striking about the OED's definitions of "vitality" is its association with the concepts of "power" and "force"—concepts in participants' notions of energy—being imbued with life, being able to "*do* what [we would] like [our bodies] to do" (Thomas, 44, M). Power also comes through participants' experiences as the ability to move, to perform particular movements (or poses, in the case of yoga), and to do things without the 'interference' of the body. Gerald says:

> [pause] Because my job requires, uh, a high level of, of energy and a transfer of that physical energy into my work, I'm very *attuned* to, um, how much energy I have in my muscles, for example. Uh, I'll kind of listen to each individual part of my body, like, is *my back feeling kind of stiff and low on energy?* Uh, is my—how's my digestion today, is it feeling okay? Uh, is my *mind feeling a little bit foggy*? Because it's all in relation to how I'm able to do what I need to do. (34, M, emphases added [exc. the word attuned])

For Gerald, energy isn't something quantifiable, but rather a 'quality' that the body possesses, which he can (and does) pass on to his clients as part of his chiropractic care treatment where he can "do what [he needs] to do". His sense of energy also involves "listen[ing] to each individual part of [his] body" and assessing the 'energy levels' within those parts. Overall, his sense of embodiment is intimately tied to his perceived levels of energy.

'Vitalism is an important aspect of practice and "[a]lthough other professions may use the term vitalism, some chiropractors who use this term may use it to indicate chiropractic as an alternative form of health care compared to medicine" (Young & Theroux 2021:16). Vitalism is critical to the understanding of chiropractic care as standing apart from, while also standing alongside, (bio)medicine (2021:18), but its usage and understanding among "mixers" and "straights" has long been debated in chiropractic care circles (Thornhill 2020). In essence, the idea of vitalism, as understood and described by BJ Palmer (son of the inventor of chiropractic care, DD Palmer), is very closely linked to interoception. Thornhill suggests that "Innate intelligence [II] was considered an expression *in vivo* of a UI [Universal Intelligence] governing all natural phenomena. By this reasoning, the nervous system becomes a receiver and conduit of UI, expressed as an individual's II" (2020:69). Vitalism, thus, becomes another way of understanding interoception through energy that is sensed within the body.

Colleen's sensing of energy is not simply in herself, but she also "feels" the energy of her clients:

> CCB – And when you are treating someone else do you ever become aware of your own body in that treatment?
> Colleen – Like something going on in my own body or what my body's doing?
> CCB – Both.
> Colleen – Um, yeah, like, some people fer—from an energetic standpoint. Like, sometimes *you put hands on someone and if they, if they feel anxious, if they feel nervous, like, you can you can feel that in them, right?* If, uh—not to be too esoteric, but I think, if you're energetically aware, like, you can *definitely* feel that. Like, I can take in some of their energy and I've always been [beat] lucky [...]. So, I find I don't take on a lot of other people's stuff. (37, F, emphasis added)

Colleen compartmentalises the energy that she "take[s] in" from her clients. For example, if a patient is anxious (as in the example that she gives above), she can feel that anxiety, but she doesn't herself become anxious. "Grounding out" the energy can be a way to 're-purpose' it in her practice. For Colleen, the energetic body is tied to the haptic element of "put[ting] your hands *on* someone" in her practice.

> So I have one of my patients that has a bit of anxiety. *Fucking loves* her dogs. So I will always, like, when I can feel that she's starting to get nervous, I'll be like, 'What are the puppies up to? Tell me everything.' And then just like, let her—you can *feel* it, you'll *feel* her just like—her nervous system *relax* and she talks about something she loves and you get all this, like, parasympathetic joy in her. (37, F)

Energy and vitality—or their lack—are felt. Energy and vitality are sensations that participants 'have' inside their own, material bodies: in the same 'sense' that Colleen feels the "parasympathetic joy in [her patient's body]" when she's working on her, and dismisses the idea as 'esoteric', she still has that feeling inside her *own* body. Colleen's notion of sensing her own body in practice is intimately tied to the sensations of clients' bodies and their own energies. Though the two seem distinct, they were often intertwined with each other in participants' experiences and, sensorially, the 'messiness' of participants' felt subjectivities accounts for the "communion of experience" that Ingold points to (2011:314).

Moreover, when Colleen says that she can "*feel* her just like—her nervous system *relax*", she's putting into words the sensation of 'communal experience' (Ingold 2011:314). Though they may have different sensoria simultaneously, Colleen and her patient are sharing a space of sensation—a 'common' sensory experience, so to speak. Colleen's knowledge of her patient—and, in this case, also a sensory knowledge—allows her to diffuse tension and, in some ways, tend to her client's "nervous system". The 'energy' isn't directed solely towards Colleen or her patient, but to both simultaneously.

Comparatively, Thomas, who previously worked as a nurse and subsequently became a chiropractor, describes how bodily awareness—or lack thereof—figures in his practice:

> Thomas – I'd say I'm pretty aware of my body. I would say I try to be really aware of my breathing would be one. Um, [beat[37]] you know, my energy levels. My ability to move the way I wanna move. Or how, you know, to *feel* good.
> CCB – Mmhmm. Can you tell me what does that mean for you to feel good?
> Thomas – Hmm, you know, I guess to be able to live life without being distracted by my body. It being able to do what I would like it to do.
> [pause]
> CCB – Mmhmm. And when you say being distracted by your body, can you tell me what that would be like?
> Thomas – Yeah, I mean, I guess there's so many examples, you know, it could be anything from you're feeling some discomfort to you're stiff, there's an ache. You know, it could be anything, like […] your breathing isn't right or your digestion isn't right. Mostly it's, you know, the joints not moving the way—your *body's not moving the way it should.* (44, M, emphasis added)

Thomas' sense of embodiment lies in the presence of energy, and the absences of uncomfortable bodily sensations. When he says that "feeling good" means "being able to live life without being distracted by my body" he refers to sensation of "stiffness", "aches", discomforts in "breathing or [...] digestion". Thus, feeling one's body (in its discomfort) can be distracting and can take away from the body "moving the way it should". Hindrance of movement or the body calling attention to 'itself' through discomfort— "breathing" or "digestion" in Thomas' examples—surfaces through one's sense of energy and ability to "being able to live [one's] life".

Having energy, in this sense, can be likened to vitality—being, in some sense, imbued with life or 'having the energy' to engage in the day to day (cf. Rønberg 2019). This can be seen when Colleen refers to 'fatigue' or when Gerald refers to the notion of "a high level of energy and a transfer of that physical energy into [his] work". Working on the body requires energy; it requires stamina, which can be depleted and must subsequently be restored so that the body may move the "way it should" (Thomas, 44, M).

37 I use the term "beat" to refer to a pause that is similar to a pause for thought, but not long enough to be considered a full pause, similar to a breath, despite not being recorded as one. For example, translating a word I already know in my head mid-sentence will cause a beat in my sentence.

Gerald describes how he approaches his clients' bodies in his practice through their concepts, desires, and sensations:

> Gerald – […] I have a consultation with [clients], try to give an understanding of, first of all, what their looking for, what brings them in, but what do they want out of the experience. And, then I sort of—my, my consultation, my history sort of focuses in on, on that particular issue. And, at the same time, we'll, we'll touch a little bit on other, maybe, health-related issues that their having. Um, other goals and desires that they want. One of the big questions I ask is, 'Okay, what can you not do right now that you would want to do or that you would normally do?' Because it really centers around quality of life for a person—that's really what brings them in. They usually have some quality of life-related goal that their trying to achieve, and, so, in my examination, I try to do my best to *relate* my findings to that particular question that they're trying to answer. You know?
> CCB – And what is quality of life for you?
> Gerald – For me, it's health, energy, balance. Uh, being supported and loved, and being able to, uh, provide that for those close to me as well. And, and for my patients, who I also consider close to me, but in, in a more, uh, a more, um, more distant respect than certainly my family or friends.
> CCB – And in terms of health, how would you define health?
> Gerald – Uh, as being physically, emotionally, mentally, spiritually capable of [short pause] performing, uh, your daily tasks [short pause] to the greatest capacity possible for you.

For Gerald, Thomas, and Colleen, being able to move as one wishes, being able to use one's energy, is a crucial aspect of what bodies are and how they are defined in terms of "goals and desires" (Gerald, 34, M).

April also speaks about how energy and mobility are interconnected in her ideas about her embodied self:

> CCB – […] And you kept seeing chiropractors after that?
> April – Yes. Yes. Because my pain just continued and it's, it's shifted over the years. Yeah. Yeah. I mean there's just a few—there's been a few occasions where it's like, 'Oh my god, I have no pain!' *But that's rare, that I don't feel any tightness or pain in this part of my body.*
> CCB – Okay, okay. So, do you notice those moments when you don't feel—
> April – I do, but I mean, *most of the time I'm in pain, and it's exhausting.*
> CCB – Okay.
> April – Just, takes—*sucks a lot of my energy.* But I just keep going. Like, when I'm moving my body—like when I go running, or if I go hiking and I'm using my hiking poles. I'm—it feels better. Like when I'm moving, it feels better. […] Yeah, yeah. So that's a *good day where I have lots of energy. And I feel good.*

> And then I have a good sleep, I'm tired at the end of the night and I just konk out at night, I fall asleep right away. (53, F, emphases added)

Limitation of movement and lack of energy prevent one from reaching 'potential' levels of energy and movement. This 'limitation of movement' can come in many forms when one takes into account how "moving" allows one to "feel better". Not feeling "any tightness or pain in [her neck]" allows April to experience "a good day where [she] has lots of energy". Her pain "sucks a lot of [her] energy. But [she] just [keeps] going". Moving her body is a part of the activities that she has to do so that her body "feels better".

Mobility isn't set apart, but is rather a part of a sense of capacity. In the same way that energy for Jade meant a "feeling of being connected to something bigger" (28, F), the mobility of bodies, for Gerald, Thomas, and Colleen, means accessing a greater capacity (for movement, health, balance, wellbeing, etc.) that is part of the holism of chiropractic care and yoga.

Gerald describes his training as "more vitalistic […], I think. Um, a *little* more on the traditional spectrum. Uh, [pause] although, even that description is kind a muddy one because there used to be two real main schools of chiropractic, but now it's really hard to kind of easily define a chiropractor or colleges as ascribing to *one* in particular" (34, M). His response references the difference between two main types of chiropractic care, namely the 'mixers' and the 'straights' (Baer 2001; Stainsby *et al.* 2011:389). "[B]road scope/mixers [...are] those who graduated from a chiropractic college that focused on evidence and research [...]; described their practice as one with a focus on neuromusculoskeletal conditions; and included spinal manipulative therapy, soft tissue therapy, modalities, and active care in treatment plans" (Stainsby *et al.* 2011:389). Comparatively, "[n]arrow scope/straight practitioners were [...] described their practice with a focus on *subluxation* or the concept of *innate intelligence* and used predominantly spinal manipulative therapy in treatment plans" (2011:389). Historically, whereas Palmer Senior sought a more traditional, 'hands-on' (literally) approach to the practice, including its

connection to a greater sense of spirituality, his son sought to incorporate different ideas and methods to foster “acknowledging chiropractic as a separate and distinct profession with its own science, art, and philosophy” (Senzon 2011c:47; Senzon 2014:26). Today, some chiropractic schools involve a combination of practices, which came through in participants’ explanations of adjustments and their attention to particular aspects of bodies as well as overall ‘holistic’ health (patients, myself, etc.—cf. Gerald’s focus on the nervous system as an example, in combination with his ‘vitalistic training’, and Thomas’ attention to other aspects of a patient’s health in his treatments) (Senzon 2014:26).

Jade, a bartender who has been doing yoga for over eight years and has completed her Yoga Teacher Training (YTT), says:

> I always joke that yoga makes me a better human being. It makes me more understanding and more compassionate. And I don't know how it does that other than just, like, bringing you into consciousness and making you realise that none of this shit matters. Just let it go. It doesn't matter. The whole reason that I wanted to become a yoga teacher was because everyone has a body and I think that, although it might feel different, I think that yoga feels good—can feel good for everyone.

For Jade, the notion that everyone has a body is an important aspect of how one can use a health practice like yoga to engage with one’s bodily-ness, but may also extend beyond the physicality and or materiality of the body. She goes on to say:

> And I think that it's possible, you know, like, there's—everything is energy and when you're in stressful situations or traumatic situations or any of that, the energy stores itself in your body. Oftentimes in your hip or your chest or whatever and when you do a heart opener and you get that rush. Like, I think—I mean, I can't say everyone, I don't know everyone, but I think that—that's like a common human thing. That's a physiological reaction. […] It just needs to happen. It just like—that *release*. You can feel it when you stretch your muscles. I don't—it's like I always picture energy coming out from in between my muscles, like stress energy, like bad energy. And when I go to yoga and I stretch, that bad energy that you can't see and it just weasels its way into you from everyday life, it just kind of, like, dissipates. And then I'm empty in a good way and there's room for more of that stress, because I've gotten rid

> of the other stuff. So it's kind of like *ebb and flow*. [chuckles] (28, F, emphases added)

For Jade, energy is both qualitative, in the sense that she usually pictures it in a pejorative sense (stress, trauma, etc.), and quantitative in the way she explains that she can 'empty it out' of her body. The sense of "release" that Jade speaks of is intimately linked to the sense of release participants sought in Chapter 4. However it also differs from it. Where people spoke of release from pain in Chapter 4, release here is 'energetic', a "rush", a "physiological reaction" coming from the energy that Jade stores in her body. She needs to release it to be able to make "room" for more "of the other stuff". That energy that she describes as embodied is also discussed further when she explains how she had to change her image of herself:

> Jade – […] I used to identify with being a dancer, and a volleyball player. So, if I'm not those things, then what am I? And, this is another thing that yoga makes you realise is that, you're none of those things anyways. And, that those are just labels and judgements and hats that you wear. And it's okay if you want to wear them, but you can't—you can't think that that's all you are. 'Cause you're so much more than that.
>
> CCB - Like?
>
> [laughter]
>
> Jade – Um, you're so much more than that. Almost in the sense of you're nothingness, you're everything. You're inexplainable. You're energy, you're the—like, so after yoga. We're laying in *Savasana*, then the teacher says *Namaste* and the class is over. I lay there. If I have nothing to do, I'll lay there until every single human being is gone. I'd lay there as long as I can. And then, I very consciously. I roll up and I try and roll up each vertebrae. And then I'll do a forward fold and I'll just kind of get the last little bit. And then I'll slowly roll up to standing and then I'll put my hands on my third eye and I'll thank—it's different every time—but I'll thank you know, the sky, the cosmos, everything that is magical and unexplainable and then I'll bow down and I'll thank the earth and for reality and for the mountains and the food and the ocean and everything that is grounding, and strong. And then, I'll put my hands on my heart and then I say and I thank myself, because I'm this divine portal where the two meet and I thank myself for making time to be in my body and to show up on the mat and to be where the two meet. Um, and that's so much more than a dancer or [laughs] a volleyball player.

The ‘energy’ that Jade engages with through her sense of her embodied self changes and takes on different qualities that sometimes seem contradictory: “energy” is pejorative, but we are also “all energy” and “divine portals”. However, it helps to think of this contradiction as one of the many surfaces and surfacings that are present in participants’ narratives. This aspect of energy can be tied to broader theoretical discourses about yoga philosophy.

A Note on Chiropractic Care and Yoga Philosophy:

Yoga “is an ancient philosophy and practice of health and well-being” (Desikachar, Bragdon, & Bossart 2005:17), of which Patañjali’s Yoga Sūtras[38] are a foundational text. Also referred to as “[t]he Yoga-Sūtra”, this text is “[n]early two thousand years old” (Hartranft 2003:ix). According to Hartranft, “Patañjali analyzes how we know what we know and why we suffer. He then provides a meditative program through which each of us can fulfill the primary purposes of consciousness: to see things as they are and to achieve freedom from suffering” (2003:ix). Patañjali’s text forms the basis upon which many epistemological ideas about yoga and bodies are founded (Hartranft 2003; White 2012).

There is, generally, in North America, a greater emphasis on the physical, postural component of yoga (the *asanas*) rather than its meditative aspect (cf. Hartranft 2003; Hauser 2013; Klein 2012; White 2012). This emphasis on bodies within yoga practices in North America (specifically Canada and the United States) has generated discussions on the ‘consumption’ of yoga, its place in the production of particular bodies, and in the production of specific *discourses* about those bodies (cf. Alter 2012, 2005, 2004; Klein 2012; Lavrence & Lozanski 2014; Markula 2014; White 2012). As Butera (2010) explains, “The 2010 image (of Yoga) is one of health-conscious woman in form-fitting clothing, her designer mat bag slung over her shoulder on her way to the fitness club or Yoga studio”

38 Patanjali’s writing of the Yoga Sūtras dates back to the second century though some of the dating of the text put its origin in the first century.

(84). Though this image is outdated, it still holds in yoga promotional material and when Butera continues: “Essentially, when someone says that they do Yoga in the West, they mean Yoga postures. Hence, the Yoga therapy student expects to do *asana.* Unlike in India, there is no dominant cultural context in the Western world that references the original purpose of Yoga as a comprehensive path toward higher consciousness” (2010:84). Yoga is discussed both as a therapy by Butera (2010), and as a means to attain well-being by Desikachar, Bragdon and Bossart (2005), but its iteration in the west has departed from the philosophical approach to focus more on the physical aspect—hence, it would seem that the sensations participants felt would have stemmed primarily from the physical senses. But, as participants pointed out through their narratives and experiences, some sensations (such as energy, in this case), were not tangible. Thus, postural yoga, in the west, is, for participants like Jade (see below) a means to attain and interact with what is intangible.

Chiropractic care originated in the United States at the end of the nineteenth century in the work of Daniel David Palmer (D.D. Palmer) who proposed that the proper manual alignment of the spine could help cure individuals of various ailments (Baer 1987, 2001; Coulehan 1985; Redwood 2006; Senzon 2011a, 2011b, 2011c). Chiropractic “continues to operate on the fringes of mainstream medicine. It constitutes the most visible and successful example of alternative medicine in the United States today, despite the fact that its history has been marked by considerable factionalism” (Baer 2001:67; also cf. Villanueva-Russell [2011] for more on the alternative medicinal aspect of chiropractic). Though it’s imperative to note that there are many different branches of chiropractic and that each has its own particularities with regard to treatment(s), which was also the case for each participant chiropractor I spoke with, the aim here is to examine how chiropractic as a whole conceptualises bodies (cf. Coulehan 1985; Redwood 2006; and Senzon 2011b, 2011c for more on the different branches of chiropractic care and their history).

Oths explains and defines, drawing from White and Skipper, what chiropractic care is understood to be as a whole:

> [c]hiropractic is a drugless, non-invasive, manual form of outpatient treatment for musculoskeletal, functional and other chronic disorders. While acknowledging the existence of infectious disease agents, chiropractic relies on a monocausal disease etiology known as the 'subluxation theory' as the basis of diagnosis and treatment. This theory holds that the primary cause of illness is a misalignment or malfunctioning of the vertebrae which blocks nerve and blood flow. The main aim of treatment is to restore the mechanical structure and thereby the functional integrity of the body by means of spinal adjustment, which allows the body's natural healing powers to take effect (White & Skipper 1971). (1994:83)

Chiropractic, then, preoccupies itself with a single cause of illness, which situates itself in the musculoskeletal system of the individual and must be treated manually. Chiropractic, as a form of manual medicine (cf. Oths & Hinojosa 2004), is explicitly concerned with bodies and how bodies become both healthy and ill. This theory seems to hold true at first, but in practice, turns out to be too narrow. The participant chiropractors had a range of diagnostic methods to treat their patients, ranging from diet to exercise to sleep patterns (cf. Thomas's narrative). Yet, for other chiropractors, such as Gerald, the interoceptive quality of the nervous system was the primary concern:

> So, certainly, you know, the spine being locked up in a certain position, it's, it's—when that happens you're not getting that, uh, that joint information, that movement information to the brain, and then you're getting what you call 'dysafferentation'[39], so improper signals back down to that area [of the body]. (34, M)

The concern for Gerald isn't necessarily primary in nature, because dysafferentation can impact multiple areas of the body and restoring proper function through spinal manipulation is the treatment for this bodily dysfunction. And, for Colleen, for example, the primary imposition on the body of her patients is primarily muscular. Therefore, though Oths' notion of a primary cause of illness may be

39 "dysafferentation" is a term used in chiropractic care to refer to the dysfunction of nervous input through a subluxation of the spine (Seaman & Winterstein 1998). In other words, a maladjusted spine pinches a nerve, preventing it from firing properly.

relevant in the context of general theory about chiropractic care or a specific mode of 'chiropractice', it remains reductive in the context of what participants said in their narratives, in Victoria, BC.

Chiropractic, according to Senzon (2011a) "emerged from a unique worldview in the history of Western thought" (10). This worldview "had to do with the individual and universe communing through energetic and spiritual harmony […] combined […] with leading edge scientific thought" (ibid.). Palmer used the concepts of "Innate Intelligence (II)" and "Universal Intelligence (UI)" to attempt to reconcile what he saw as a split between mind and body that, if tended to through manual adjustment(s) of the musculoskeletal system, could allow individuals to be healthy (Senzon 2011a:11-12, 2011c). Effectively, "[a] chiropractor can intervene by adjusting subluxations, thereby releasing the flow and vibrations of innate [intelligence] and thus assisting humanity to express its divinity" (Senzon 2011c:40).

Innate Intelligence refers, in part, to "[t]he expression of intelligence through matter [which is] at the core of the philosophy of chiropractic" (Senzon 2011a:11). Oths' reference to "the body's natural healing powers" (1994:83) is essentially what can be defined as Innate Intelligence in the way that Senzon interprets it (2011a:11-12, 15). The concept that the body's communicative capabilities—or its interoceptive capabilities, as it were—may be hindered is, according to Palmer, at the source of illness, and, once restored, "free and unobstructed, we have normal action which is health" (Palmer 1921:457 *in* Senzon 2011a:11). Senzon further suggests that "chiropractic was, in part, an attempt to unite matter, body, life, soul, and Spirit through contemplation, the chiropractic adjustment, and worldview development" (2011a:11-12).

Participants' notions of 'energy' referred back to this concept of "unification" that Senzon speaks of. Though their terms varied and differed from one participant to the next in terms of what energy consisted of in their own experiences, the idea of restoring functionality to the body—whatever that may mean in a specific context—was the primary goal of the practice. Bodies—and, specifically,

healthy bodies—are an intrinsic aspect of chiropractic philosophy, beyond the matter of treatment. As Coulehan explains, in chiropractic in general, “illness results from imbalance, dysharmony, a failure of the positive homeostatic drive toward health” (1985:384). Healthy bodies are the ‘standard’ against which all other bodies are ‘evaluated’. Chiropractic conceptualisations of bodies presuppose that these bodies are, as a default, healthy.

Sensing Energy (cont’d):

Yoga and chiropractic care are practices through which participants interact with and conceptualise their bodily-ness. By opening up Alter’s conceptualisation of bodies through “secrecy [that] signifies an alternative, embodied reality’ where ‘a consciousness of “being” is undifferentiated from human consciousness” (2012:433), we can come to examine participants’ experiences with bodies of ‘energy’. The concept of bodies and energy is akin to the “subtle body” as defined by Little:

> The subtle body in yoga is not only the secret to the optimal functioning and alignment of the body; it is the key to delight, love, understanding and good relationships. […] At times it dissolves into pure awareness and at other times it cranks out the endless fabric of daily life. The subtle body is often represented as populated with gods, goddesses, wheels, flowers, amazing animals, and mythological realms. (2016:vii)

Jade, for example, delves further into this ‘subtle body’ when she speaks about the energy of her embodied self as well as when she discusses certain poses that allow other energies to be released:

> Hmmm, [pause] that one's harder to explain. It's this, like, feeling of being connected to something bigger. But I don't know how or why that happens. Um, potentially part of what makes me love it so much is the mystery of it. Um, [beat] kind of like talking about, like you said, you drop into that pulsation. It's like, when you—it's like feeling magic. It's like playing—have you ever played with a chi ball? And energy ball? Have you ever like—I've also done my Reiki level one healing and like, you ugh, even there you can feel it. You can feel it. And I think it's so much easier to believe things when there's evidence of it and that's—it's, you know, it's like talking about everything is energy and again, how it's

> not hippie-dippy bullshit. When you physically feel that, that heart opener, that energy between your hands [holds her hands out as if holding a ball]. *When you feel these things that feel like magic—they're like, indescribable, they don't make sense, I don't know where they come from. It makes me believe in something bigger*—in that, you know, you thank the sky and you thank the earth as like that balance and *asana* is the physical counterpart to the inexplicable, inexplainable, and, like, the stuff that you don't understand, you maybe start to understand it when you have the physical to show you. To lead you. To guide you. (28, F, emphasis added)

Jade brings together the energetic body through her narrative as something that can be explained, but also something that is beyond explanation. Something that she links both to "something bigger" and to "things that feel like magic". Participants' narratives describe a sense of embodiment that goes beyond the tangible aspects of corporeality. In this exploration of the body as energy—either in chiropractic care or yoga—participants engage with a sense of self and energy that goes beyond the physical, material body but is still attached to it through energy.

Energy, in relation to participants' experiences of their bodies, recalls Little's notion of the "subtle body": something that cannot be material, but simultaneously materialises our own bodily-ness (2016). The sense of "the stuff that you don't understand, you maybe start to understand it when you have the physical to show you. To lead you. To guide you" (Jade, 28, F).

Conclusion:

Participants' sense of embodiment, of bodily-ness involves something that they call 'energy.' Energy was both a tangible, physiological element of mobility and tactility, and intangible—the sense of being connected to *something else* through and transcending the material body. Being 'connected' for some participants meant to be connected to themselves—their interoceptive, deep, subtle (and skeletal) bodies—and for others it meant a connection to something that felt external to oneself, but not

altogether disconnected from their bodies. This ‘something else’ must be maintained or ‘taken care of’ so that the body functions “the way it should” (Thomas, 44, M). Gerald’s attention to being “physically, emotionally, mentally, spiritually [capable] of [short pause] performing your daily tasks [short pause] to the greatest capacity possible for you” (34, M) speaks directly to the link between the ‘proper’ functioning of the body and its ‘performance’ (or power, in the vitalistic sense)—in short, the (healthy, properly functioning) body allows us to ‘do’.

In the next chapter, I discuss the ways in which participants surface their experiences and stories: how ‘knowing bodies’ and *knowing* bodies (as in bodily knowing) in participants’ narratives complicates how bodies are conceptualised and understood.

Chapter 6: Bodily ‘Knowledge(s)’ and Knowing Bodies

Introduction:

In the previous chapter, I discussed participants stories and experiences through energy and tactility. Sensations of energy and touching bodies (their own and others) were ways for the people I spoke to to know their bodies and to be ‘knowingly’ embodied (through interoception). In this chapter, I discuss how participants commonly employed—or ‘surfaced’—knowledge(s) of systems and parts, and objects and machines to explain and conceptualise their bodily-ness.

Bodily Representations: Knowable and Knowing

In this chapter, I suggest that participants knew their bodies in various ways: through diagrams, images and training, and as partial or parts of a whole; and, how people described bodies through various terminologies (either medical or otherwise). Since ‘knowing’ bodies is a process for participants that is both exteriorised and interiorised through their stories and experiences, , I don’t separate what ‘surfaces’ from what is interoceptive, but rather discuss them simultaneously.

Systemic Bodies and Bodies of Parts:

In this section, I examine how participants referred to their bodies through various anatomical and functional systems, reflecting a more ‘(bio)medical’ approach to bodily-ness. These references often came through in terms of body systems, as well as in the notion that bodies can to be sectioned into various parts examined independently from their whole. Where systems are a reduction of bodily-ness,

parts, as I will show in participants' responses, were a further reduction of bodies into specific aspects of these 'systems'—fulcrums for 'working and knowing the body'. I begin with the narratives of April, Amanda, and Gerald. .

April (53, F), who has been a patient of chiropractic care for over twenty years, says that the body is "[c]omplicated" and comprised of "a lot of systems, all kind of interacting and working together. It's amazing, Mother Nature, how we're all put together like this". Bodies also undergo a process of deterioration through experiencing 'being-in-the-world' (Csordas 1990; Merleau-Ponty 2007). She says:

> [Y]ou know, our bodies, like after so many years—like I'm fifty—I've been on this planet for fifty-three years—it's gone through so much. But we're still here. A little damaged and scratched up and all that, of course, [laughs] we're not in perfect shape anymore, like when we're born, when we're newborn. Yeah. But, yeah, it's amazing how we can still be here […].

The body goes through a process of degradation over time, and is damaged like an object that goes through wear and tear. The "damaged and scratched up" bodily-ness that April references recalls how the 'subtle body' presented by Little (2016) and Farb *et al*. (2015) is affected by "the mind, emotions, posture, and the conditions of the grosser (physical) body" (Farb *et al*. 2015:4-5). The experience of the body is dependent on the experiences one has while being embodied. Time, as April points out, results in being "damaged and scratched up" but 'still here'; bodies are thus an aggregate of participants' experiences, influencing their interactions with the world—just as the world influences their bodily experiences (Farb *et al.* 2015:4-5). For example, following a Caesarean section, my body is damaged (at least temporarily) and scratched up, which in turn affects how I experience my embodiment in the world, how I walk, sit, etc.. My positionality in the world is altered through my body and the ways in which the world interacts with me—people, objects, situations, etc.—is also altered. Just as Grieder and Ingold point to the immersion of the individual, the world isn't a blank slate that takes on my surgically-altered body or inscribes itself on me, but rather is an ocean of which I'm constantly a part

of and never apart (Grieder 2015; Ingold 2007). My experiences of my body after a Caesarean are both internally felt (subtly and literally) and influence my interactions with my body and the world.

Bodies, in April's description can be divided into systems that work together to form a whole, 'complete' idea of what a body 'is' as she goes through experiences and gets "damaged and scratched up". That April works in the health sector may be relevant here: anatomy and human biology textbooks[40] often feature sections on different parts of the body—especially different systems—such as the digestive, reproductive, endocrine, and musculoskeletal systems.

Systems are also present in April's description of her skeletal experiences:

> Like even the skull. [laughs; CCB laughs] Like, if I, like, you know, didn't have the skin and everything, what my skel—my skull looked like. I sometimes do kind of ask myself that. I wonder what my skull, you know my eye sockets [laughs]. All that. Mmhmm. [pause] But yeah, first I think I used to be afraid of, like just, you know when you're looking—just kind of like, "Ooh." Yeah. Kind of scary. But this is what we're made up of. This is us, this is—yeah. It's part of our structure.

Here, April's concept of systems that make up the body includes the skeleton as "part of the structure" that gives our bodies shape, but that is also 'shrouded' in the ways it causes April to "wonder" and "ask" herself what that structure looks like. In spite of the knowledge that anatomy classes can bring here, April still wonders what *her* skeletal structure looks like.

This 'body as interconnected anatomical systems' view is echoed by Amanda, who's been practicing yoga for over twenty years. She says:

> I think it [the interior of her body] looks pretty similar […pause] to the illustration. [laughter] The textbook illustration where it's kind of like, you know, pink with veins and arteries and organs. But then I guess, is that, but also sort of—is that three-dimensional so that, you can also visualise where bones are as well? So it's kind of like blood and bones. Which you probably can't really see your bones, because they're covered in blood […]. So, yeah very much like that illustration. (53, F)

40 A clear example of this is *The Anatomy Student's Self-test Coloring Book* (Albertine 2007) which describes the body in terms of different 'workable' parts and also features translucent sheets superimposing these systems onto each other.

April's and Amanda's conceptualisations of their bodies is intriguing for two reasons. One, the biomedical model features prominently in their ideas about their own bodies and bodies in general (both fleshed and skeletal). The illustrations in the anatomy textbook mirror their own bodies—or their concept of how those bodies are 'composed', so to speak. And, two, the sectioning of bodies in anatomy textbooks into its various systems *also* features in their own ideas about how bodies can be effectively separated into parts that can be 'addressed' independently from the 'rest' of the body. This anatomical separation is reflected when Amanda adds:

> I would say [I'm] less aware of organs […] because they don't really, I mean, I know they're there but I can't really visualise them specifically or know which one's which. Like I know there's kidney, I know there's liver, I know there's spleen, I know there's small and large intestine but I don't really know where they are in. They seem more like just a big blob in there except for the kidney, […] That, I would say is more mysterious, maybe not knowledge of them, but more mysterious in how they actually work. […]. And I the other limbs just seem more [pause] simple. More simple. Like a simplified understanding of them. Like, quite simplified and maybe more almost two dimensional, that is less complicated. (53, F)

The idea of 'knowing' and "understanding" the body comes through in various ways, both visually (as in the textbook illustrations that April and Amanda speak of) but also in Amanda's idea that about bodies being *knowable* through their study (visually or otherwise). This is discussed in Good's description of the medical school as a place where one comes to both 'know' the body and construct it through a medical scientific lens (1994:66-7, 70-1). As Good suggests: "Medical education begins by entry into the human body. [...] The body is the object of attending and skilled manipulating" (1994:72). In the context of my research, some people "entered the body" through medical textbooks and images seen in offices, etc., coming to 'learn' (either through formal or informal knowledge) their bodily-ness.

Knowing the body (both within and outside the medical lens) is done by 'revealing' bodies in particular ways. Good writes that

> [s]tudents describe a variety of changes in their perception that occur within this demarcated space [of the anatomy laboratory]. In normal reality, the body surfaces – the skin, the hands, the eyes, the face, the clothing – convey personhood. The interior of a person is his or her thoughts, experiences, personality. In the laboratory, the hands, the feet, the head remain bound, and the torso and limbs are the object of sustained attention. As the skin is drawn back, a different "interior" emerges. (1994:72)

Good's description of the anatomy lab, of the changes that the body undergoes from living to 'on the slab', is reminiscentl of both Taylor's notion of surfacing (2005), and Sofaer's notion of the changing characteristics of the body (2006). Further, what Good describes can be applied to the spaces that people occupied: the chiropractor's office, the yoga studios, etc. Participants' bodily-ness changed as they engaged with these spaces and the people within them. The separation between the 'body interior' and the 'body exterior' is conflated in those spaces because the person is alive and engaged in the examination of their own embodiment (in this case interoceptively and further through the interview process that recalls those particular experiences). For example, my body in a yoga class is both "object" (material) and "person" (to use Good's terminology). However, my body interior—"thoughts, experiences, personality"—and my body exterior—"the skin, the hands, the eyes, the face, the clothing"—are superimposed together (Good 1994:72).

The surfacing of the body interior is still present—as I've presented here and in previous chapters—but this surfacing is only possible through participants' *knowing* of/in/as bodies who go through particular experiences and engage with yoga and chiropractic care for specific reasons. For example, just as Good explains that the body in the anatomy lab is a "significant contribution to the reconstruction of the person appropriate to the medical gaze, identified as a body, a case, a patient, or a cadaver. The person is a cultural construct, a complex and culturally shaped way of experiencing self and other and cultural "work" is required to reconstitute the person who is the object of medical attention" (1994:73). The medical gaze creates a material body whose personhood must be

reconstructed through the lens and the cultural knowledge of the medical practitioner. However, the person isn't *only* "cultural construct" (despite the desires of the medical academies) and the body isn't *only* "object", but a complex interactions of both, creating both experiences and knowledges (Good 1994; Sofaer 2006).

Something that is also worth noting, especially when considering not only the medical knowledge Good presents but also the 'health care' approach in general, is the many reasons why participants sought yoga as a practice in the first place—as a *health* practice, a means to keep a healthy body (cf. Chapter 4 and 5 for more on this). For example, Amanda (53, F) says, "Um, yeah, I guess. Yeah. I guess in terms of strength and potential for osteoporosis. Or osteoarthritis. So, you know, just concern for keeping a strong—strong bones". Amanda's practice is for her body—to keep it healthy and active, to ward off potential osteological/bodily deficiencies that may develop as a result of ageing or lack of movement (cf. John's story).

This knowledge, though, also comes with a disconnect between one's own body and "the body over there" or the "body in the illustration". As April explains:

> I couldn't, I couldn't look at it [the skeleton]. Just, because it's—scared me. And I didn't want to be thinking of it and then I would just have these scary thoughts, scary thoughts would lead me not to be able to fall asleep. [we laugh] I'm kind of a wimp that way. Still am actually. I can't watch horror movies or stuff like that. Like, gory stuff. I can't look at stuff like that. Like. I probably couldn't, um, like watch an operation, like, like when I was doing my last practicum—well my teachers had said you know, when you're working in acute care see if you can request to go for, like, hip surgery, knee surgery and see what it's like. And I requested it but then they don't do that anymore, they don't allow students to go and sit in and watch this. Part of me was like, "Oh, thank goodness I didn't have to because…". I mean I was curious, but at the same time I was also scared because it would be too gory and the blood and the bones, because they, they would have to like break the hip—I think for hip surgery, they break the hip. And, some of my classmates got to see that and they thought it was *fascinating*. So I don't know how I would react because I didn't actually get a chan—but I can always go online. (53, F)

Here, April's aversion to seeing another body (in the operating room) is clear, but it also speaks to greater ideas about bodies in general when she says:

> [laughs] But we—we all have skeletons, we're all made up of this. If we didn't—what did I learn in biology or anatomy, if we didn't have a skeleton. We wouldn't have, like, a shape. Yeah, because you know, all the guts and the blood and the fluids and everything kind of fills that, but then like, like my hand for instance, when I do this [folds fingers/makes fist], like if I didn't have the skeleton, my bones, it would just be all [makes liquefaction noise] you know? [laughs; CCB laughs] It wouldn't be any, I don't know what you would call it, but. Any shape? Shape or form, I guess.

April's connection between the ideas of "we all have a skeleton" and her fascination with her own skeletal structure differs from seeing "the gory stuff"—seeing another person's body opened up (through surgery).

The 'systematic' sectioning of bodies is salient in April's experiences with chiropractic care treatment for the chronic neck pain she's had since an accident when she was twenty.

> [H]e's [the chiropractor] like, 'Oh, your lower back is a little bit out, [April], I'll adjust that for you. How's your back feeling?' Usually it's fine. He goes, 'But it's a bit out, any, any tightness there?' I'm like, 'No, I didn't notice.' Maybe because I think everything's been focused on this part of my body [points to neck], that I don't notice, you know, something that's maybe a little more minor. I don't know. Yeah. Because sometimes if you have excruciating pain in one area that you don't notice the pai— you might have pain in another area that's minor so you don't even focus on it. (53, F)

April experiences her body as varying sites of pain, and complex systems that work together to form the 'whole' body. The chronic pain in her neck is the part through which she experiences her body, in a sense, and everything else is part of the systems that she identifies. She explains how, "[w]hen [she] was learning, it was like, 'Oh my god, this is so complex, there's so many systems in our body.' […] Like, it just naturally knows what to do." Without 'maintenance', for example, the body 'knows' how to function; yet, deterioration, in April's experience, is inevitable.

The notion of knowing bodies and bodies being knowable through their study also comes through in terms of bodily practice. Amanda speaks of bodies being knowable in a distanced sense: that bodies can be studied and examined through a particular lens (scientific, medical, etc.), something that April also echoed earlier. However, bodies, for April are also knowing: "Maybe because I think everything's been focused on this part of my body [points to neck], that I don't notice, you know, something that's maybe a little more minor. I don't know. Yeah. Because sometimes if you have excruciating pain in one area that you don't notice" (53, F). April's body calls attention to itself, through interoceptive signals indicating pain—sometimes intense, sometimes "minor". April assesses the signals her body sends as worthy of attention or something that can be ignored, but also as situated inside her body in a way that is noticeable by her chiropractor.

Taking back the example of the Caesarean section from above: recovering from a c-section, I may experience varying levels of pain in various parts of my body, choosing which areas to call attention to—to listen to—and which areas to 'ignore'. Leg pain from fluid build-up, back pain from poor sleeping, pain at the site of the incision, etc. will call my attention (something I return to below), but, just as April may not be aware of the 'minor' pains, so I may not be aware of all of these signals at once, or may deem some 'less important to call attention to as opposed to others'.

Gerald (34, M), who has "worked on […] over 30,000 individual interactions" in his practice, pays particular attention to the brain and the nervous system:

> So, certainly, you know, the spine being locked up in a certain position, it's, it's—when that happens you're not getting that, uh, that joint information, that movement information to the brain, and then you're getting what you call 'dysafferentation'[41], so improper signals back down to that area which tell muscles to tighten up, which tell, uh, maybe the digestive system to stop, uh, stop its motility and not contract properly and that kind of thing. On top of that, your body gets this subconscious stress response while blood pressure goes up. Uh, stress hormones start

41 "dysafferentation" is a term used in chiropractic care to refer to the dysfunction of nervous input through a subluxation of the spine (Seaman & Winterstein 1998:268; Henderson 2012:636). In other words, a maladjusted spine pinches a nerve, preventing it from firing properly.

> going and then you start develop—and if that lasts *long enough*, you get these long-term health effects.

For Gerald, the brain and the nervous system are the centre of the body—the "most important part", in his words—and their (proper) function can be affected by other systems in the body (namely the spine). Here, we see how Gerald's notion of "dysafferentation" refers directly to the interoceptive qualities of bodies. "Afferent sensory signals" (Farb *et al.* 2015:2) can be defined as "the transmission of afferent nerve impulses", meaning that the body sends signals to the central nervous system via the spinal cord. Dysafferentation, comparatively, "refers to an imbalance in afferent input such that there is an increase in nociceptor [pain receptor] input and a reduction in mechanoceptor ['sensory' receptor] input" (Seaman & Winterstein 1998:268). The miscommunication, the "imbalance" Seaman and Winterstein speak of is referenced directly by Gerald when he refers to "improper signals [...] which tell muscles to tighten up, which tell maybe the digestive system to stop its motility and not contract properly and that kind of thing" (34, M). Interoception, in this context, becomes a more 'mechanistic' response system that chiropractors like Gerald work with to restore balance his patients' bodies.

When drawing a body map, Gerald began with the brain, explaining that:

> Gerald – Hmm, okay, so from my perspective this is most important. Or I guess [laughing], [silence while drawing] and then we'll draw some of the sulci…there's the…and then [drawing]. So, obviously very rough, but… […] more conceptual, we'll go with that a little more conceptual than, man. There's lots of it here [drawing the nerves[42]]. Goodness, yeah [drawing].
> CCB – So, when you're drawing this and you said the most important part being the brain, [Gerald – Yes.] and the nervous system—
> Gerald – That's, that's certainly my belief, yeah. [laughs] Because it controls all other function, right? […] Because the whole premise behind how chiropractic works is the influence that the spine and the joints of the body *have* on the nervous system. […] And so, it's kind of hard for me to draw the spinal vertebrae, but they're really just the—they're the housing system for it, right? They're encased within so, to me, I deem this would be the most essential part—I probably won't even draw the spine.

42 An interesting thing to note in relation to Gerald's drawing is that he drew the nervous system—the nerves coming out of the base of the skull—in yellow, which is the traditional colour for the nervous system in medical textbooks (again, nodding to the medical representations of bodies) (cf. Swanson 2019:22).

CCB – Okay.
Gerald – I'll just—I know it's there but this is, this is the most important part, so and on top of that you've got all your—which way does the heart face, I can't remember. This way? This way? Something like that [drawing]. You're going to have innervation to that [drawing] and then there's nodes that go all over the place. [beat] There. Hmm, what else can we draw? Stomach down here, I think it goes something like—actually kind of similar to that. [drawing]

Gerald's focus on the nervous system takes precedence over the other parts of the body—the spine, which houses the nerves (acting as a protective casing as well as outlets), and the organs that they are connected to fall to the background as parts that are acted upon. The skeletal body holds little importance for him other than its function as a "housing system" for the nervous system—but this system can only be affected by manipulation of the "housing system" (since one cannot touch nerves directly). The skeletal body acts as a channel—an extension of the nervous system that allows the manipulation of the 'invisible' nerves.

The concept of protective 'casing' for the nerves is echoed in Colleen's experiences, a chiropractor who focuses on musculoskeletal adjustments:

> The human skeletal system? Uh, well, it's huge in shock absorption. Uh, it's our fulcrums; it's our levers, um, it's very variable patient to patient. So, I think that would be one of the things we often think about is, you know, we have this Da Vinci's Vitruvian man, like, this ideal body, but that's not true, right? You know, I'm six foot, my legs are 30 inseam. I have a *much* longer upper torso and skeleton above, than I do below. Um, I think we think about, uh, the vertebral column as a chiropractor more than anything else. Um, and, with regards to the skeleton, we're always, um, looking for, uh, history of injury to indicate if there's been any fracture, anything that would cause a hypermobility, because the vertebral column *is* so important for protecting the spinal cord. Um, and I think we think of, um, the—cranial vault, uh, ribs, everything is—our skeleton is very *protective*, so. [pause] You know, the ribs are protecting the vital organs, protecting your lungs, the spinal cord, and the head is protecting your—the primary basis of your nervous system, and then your pelvis, your big pelvis, like, our, our, uh, reproductive organs sit inside it. Like, you don't hear of someone getting punctured in their ovary right? Because it is so deep and protected so our skeleton is, is—I would. That's how I would think about it—it is our primary protector. (37, F)

The idea of the skeleton as a "protective" system is important in Gerald and Colleen's conceptualisations of skeletal embodiment: the skeleton is a "primary protector" that keeps all the other systems of the body 'safe' from injury. This idea of 'protection' may perhaps be related to April's aversion to the "gore" of the body in the operating room—the body opened up, the "breaking of the hip" reflects a breakage of the protective barrier between the body and injury (also cf. Chapter 4 for more on pain and injury). Similarly, Amanda's awareness of her musculoskeletal body also erases the other systems: the skeletal system is present, but the other systems such are "more almost two dimensional, that is less complicated." Skeletal awareness is important in the '*system*atic' conceptualisation of bodies in participants' narratives. In their stories and experiences, systems can simultaneously be viewed together as part of the whole or 'peeled' back to 'surface'—as it were—the interior. In the same way that anatomy textbooks often feature body system acetate overlay sheets[43] to allow one to view particular 'parts' or systems of the body, people I spoke with also explained how their bodies could be partitioned into various workable areas.

Participants also spoke about bodies through fragments or workable 'parts'[44]—where bodies can be taken apart, worked on, and put back together again. In the same way that one can work on a bicycle by fixing various parts of it without need for replacement of the whole—as in the notion of getting one's bicycle 'tuned up', so do participants explain how they 'maintain' their bodies.

Ivy (27, F) is a yoga instructor who teaches privately and works in marketing (both inside and outside yoga studios). She explains how the *lower parts* of individuals' bodies are more important in postural yoga: "I definitely pay a lot of attention to peoples' feet and making sure that their foundation is set. So, usually I will cue people to really engage […] with the bottom of their body, […] and how they're standing […], and where their toes are, and 'are they turning in a bit'? Is their knee properly

43 cf. *The Anatomy Student's Self-test Coloring Book* (Albertine 2007).

44 Here, Mol's 'body multiple' can be a helpful point of reference: 'parts' in this sense, can refer to the multiplicities that compose the participants' bodies, but also refer to their literal body parts (2002:151).

aligned with their toes? And stuff like that". In Ivy's responses, as well as in my observations of instructors at studios, attention to the 'foundation'—usually, the feet and the bones of the feet—was an important aspect of embodied practice. Instructors often called students to 'draw attention to' their feet and their knees (FN). These cues were often given in sequence—individually—rather than as an overall prompt to call attention to one's body. The idea behind this is perhaps that one can be present in a singular area of the body—called to tend to it, to 'breathe into it', to 'create space' (FN).

Ivy further explains how her musculoskeletal system—that is, the bones and muscles together—hold her body together. When talking about how she thinks about her skeleton as part of her body, she says:

> I think about my alignment and how bones are, like, holding up my body for sure. Especially when I'm sitting, because it's—in yoga for sure because you kind of are really engaging with your skeletal system, like how you're like—how you're twisting your back and how you are standing and how you're placing your spine and all that stuff. But more so like when I'm sitting at work or just in general. […A]m I crossing my legs all the time, and what's that doing to my hips? So I definitely think about it. Probably not as much as I should but there are moments when I'm like, 'Okay, I've been crossing my legs for twenty minutes,' [Ivy grimaces; CCB laughs] 'this *can't* be good.' (27, F)

The focus on alignment and the spine recalls Gerald's and Colleen's ideas surrounding the spine as an important facet of how bodies are composed—the skeleton being the 'protective barrier' between the inner body and the world. But here, for Ivy, the spine and lower limbs can cause problems for the "good" functioning of the body (as Ivy explains when she talks about sitting and crossing her legs). Thus, the skeletal part of the spine is seen by participants as both an area that protects in certain instances, but also as a vulnerable area that requires one "to be aware".

The interaction between muscles and bones comes through further when Ivy talks about explaining how to move "strongly and safely" in classes:

> I find that when you kind of tell people to *engage* their muscles *around* their bones, it's really helpful for people because—I mean, it's hard to

> like think about your bones, I think people are like, 'they're there,' but it's hard to, like, feel. Like, how am I supporting them? So I think for me if you're, like, really telling people to engage their muscular system around their bones and, like, *support* their skeleton in a way that allows them to *move strongly and safely* into poses. (27, F, emphases added)

For Ivy, an effective way to engage with the skeletal structure is by engaging with the muscles that hold it together. Calling attention to the muscles both helps to move and restrict some of the movements of the skeleton. For example, when Ivy says: "engaging your thigh so you can bend your knee instead of just fully extending it", she points to some of the weak points in the skeletal system—weak points that can be mitigated by engaging a specific set (or sets) of muscles to 'secure' those weak points. These points, though are target areas—parts, in other words—that are dealt with individually as parts of a whole (body), that can move "strongly and safely". The sectioning of the body comes through in the way the musculoskeletal system as a whole is called to independently: to "move one's muscles around the bones" both calls attention to the skeletal system and the muscular interactions that one has with it. The separation Ivy makes between the 'musculo' and the 'skeletal' recalls the dynamism of musculature and the static 'nature' of the skeletal system. In Ivy's narrative, the skeleton functions as a hanger around which muscles move—not as an integral part of that movement. Hence, "how you're placing your spine" and "crossing [her] legs all the time, and what's that doing to [her] hips" calls attention to the disconnect within the musculoskeleton where bones can be a source of problem and muscles allow one to "move strongly and safely" by "[supporting the] skeleton".

Similarly, Nora (56, F), who has been practising yoga for "approximately 14 years" explains that in yoga and other activities,

> if there's any kind of pain, um, you know you do a quick assessment even if it's subconscious of, is that muscle, is that tendon, is that bone, you know? And so, feeling aware of you know what, whatever that twinge is and being okay with understanding *how my body works*. I think yoga's brought that *awareness* more to me, and the various activities that I do. (emphases added)

Knowing how the body works requires locating particular areas and making an assessment (or diagnosis) of what the problem is and whether it should be addressed or ignored. The material and biomedical conceptualisations of the body are highlighted as Nora explains the links between the anatomical aspects of her body and her own understandings of how her body effectively 'works'. The bodies displayed in anatomy textbooks and the parts worked on individually both within yoga studios, in general representations of bodies, chiropractic care clinics, and both within and outside of medical science (cf. *Bodyworlds* and other exhibits of human cadavers)[45] come together to create a notion of bodies that can be understood through study and attention. 'Calling attention to the body'—"feeling aware"—"even if it's subconscious" is a reminder that interoception is something that one can 'train' to do. Little suggests that "through guided exercises, meditations, and reflections, [he aims] to give readers an experience of the subtle body" (2016:2). Interoception can be, in this case, perceived as a 'skill' that can be 'honed' by the individual, perhaps at first by calling active attention to the body (as Ivy does when teaching her classes), and over time done more 'subconsciously', to borrow Nora's term.

The body from the cadaver lab is laid out on display for 'knowledge' under the pretense of saying 'this is your body' when, in fact, it can't be 'my body' because, as Percy, a newly trained yoga instructor, explains (22, M): "there's books full of different pelvises from hundreds of people right? And they look completely different from each other. It's like, you'd think, 'are they even the same thing?' So, kind of telling people that and helping them to realise that, yeah, their bodies are extremely different from each other's." However, the idea behind the generic 'scripts' followed by yoga instructors suggest a contradiction between the uniqueness of the body and a practice that is 'good for everyone'. 'Understanding' one's body, in this case, is a way of reconciling the contradictions created by both individualising the body and conflating its treatment in current yoga classes as a universal. In this way, interoception requires knowledge of the body—which many participants attributed to

45 Effectively, exhibits like *Bodyworlds* seek to 'educate' people on how bodies 'work' by peeling back the layers and 'revealing' their interior (van Dijck 2007).

textbooks, classes, and medical images—but also knowledge in the body: in the awareness of it, be it conscious or subconscious, which comes from the body knowing (as Little points out) through practice.

The relationship between living/dead bodies can also be noted in Sophie's responses. Working as a nurse, she says:

> I think skeletons and bones are cool. I think they can definitely be kind of creepy at some times. Because [pause] like a rea—like a—like the idea of a skeleton in my body right now is quite cool. But like I've also seen quite a few skeletons when the like—when they're the *real* thing and honestly I've got to say it always kind of—you're—make—I find them a little bit eerie that it was inside a being and now it's not. (28, F, emphasis added)

When I asked her to expand on what she meant by "the real thing", we shared this exchange:

> Sophie – Like a skeleton just alone with nothing on it. Just like if someone had—if someone had died and their body had [short pause] their skin and flesh had been taken off and it was just their skeleton that was left. It's cool but it's also—I find it just a—I find it kind of a—I find it a little bit eerie. Which is interesting because I—but also within nursing, like, obviously I'm experienced with the whole body, but I 'm not—I don't work in the OR [operating room], I don't normally in any places where I am one to one with skeletons. We also never did any cadaver labs which I'm okay with.
>
> [silence]
>
> CCB – And so when you say, when it's "alone", does that mean that it's real and when it's inside of you it's not as real, or?
>
> Sophie – I would say that, maybe just, maybe just like—I think it's still, yeah, your skeleton, and obviously it's—I am—I would almost feel like I would use the words maybe *living and not living*, because I feel like when your, when your skeleton is inside you it's like—you have, like, the, the bones, there's, there's the *living bone marrow* and you have all the capillary *support* and you have all the things that are kind of like keeping it ar—*keeping it alive*. And then when it's by itself after the person has died *it's just bone*. (emphases added)

The distinction between the "living bone marrow" body and the dead "just bone" body is important for Sophie. The skeleton needs the 'rest of the body'—so to speak—to be considered "alive", otherwise, the skeleton "alone" cannot be a living entity, for it has been separated from the 'rest of the body'. This idea forms part of the intertwining of fleshed bodies and skeletal bodies in participants' narratives and,

though not all participants explain this concept in the same way that Sophie does above, the idea behind the 'living' skeleton remains. The ways in which participants' responses fluctuate between the bony body and the fleshed body illustrate the links between the two 'bodies' in their ideas of embodiment. This idea itself can be reflected in notions such as 'fleshed' and 'skeletal'. If we consider how, for example, muscle can be considered, in part and in particular definitions, as 'flesh', we must also consider how 'skeletal' can itself be bound up in definitions: skeletal bodies are first and foremost musculoskeletal in the sense that the two are bound up and cannot be taken apart. Muscle can be part of flesh, but it is also skeletal; skeletons are not flesh, but they are a tissue (albeit a specific kind of tissue) forming part of the body. Muscle, then, is the binding between the skeletal and the fleshed—the tether between the "living and not living" (Sophie, 28, F).

These various entanglements are reflected in Nora's experiences of her body as a runner and someone who is involved in various physical activities. Her awareness of her body, in this case, can be sectioned off into which *part* needs to be addressed, often individually. She goes on, "I'm more aware of form and, and more aware of, um, what kinds of exercises I need to do to *build* certain areas, certain muscles so that I have the ability to run for longer distances, for example. Or do certain moves in yoga" (56, F, emphasis added). In the same way that systems are specific sections through which one can study, examine, and *know* the body, parts become smaller 'systems' or fulcrums that can be further studied, examined, and known (e.g. the hip, or the back, etc.). As she points out above, though, the body can also be made known through "twinge[s]" that require attention, identification, and 'treatment'. Whether this attention is called consciously or subconsciously *may* require practice in identifying the subtle body. Participants speak of two aspects of knowledge in their stories and experiences: knowledge *of* the body through exteriorised diagnosis and knowledge *in* the body, where the body is felt and the body *knows*. These two aspects aren't at odds with each other, but rather come together in participants' embodied lives.

Object Bodies and Machine Bodies:

Bodies are not only experienced as 'parts' of their whole, or as tangled systems that make up the body, but participants also spoke of their bodies in terms of objects and machines. The distinction between objects and machines is important here because, though it's possible to think of machines as objects, the inherent movement of a machine distinguishes it from the 'inanimate' quality of objects. For example, a potter's wheel can require human intervention (the movement of a foot or a flick of a switch), but it will keep moving, whereas the clay pot remains a static object—it has no switch. On the other hand, it stands that both the potter's wheel and the clay pot require human intervention in order to 'surface'. There is agency involved in the process of activating the potter's wheel; agency is also involved in the creation of a clay pot. What transpires is that these two conceptualisations existed simultaneously in participants' narratives, sometimes in conjunction with each other. Participants didn't necessarily make a clear distinction between the two; where an object made sense for them, further they may use a machine as an example and vice versa.

As noted in Chapter 4, John equated the impact of aging on his body to a rubber band getting brittle in the sun. John's experiences are not so much the sense of parts, as he explains how age affects his body as a whole. Rather, his bodily experiences are likened to that of an inanimate object. By calling attention to the 'object' (or material) quality of his experiences with his body and yoga, John brings forth the rubber band as something that can stand in for his own body or the body of others. An object that must be taken care of, lest it becomes brittle and breaks.

Nora's narrative reflects how the body is not only fragmented, but is objectified (in the sense of being an object) in her yoga classes:

> Um, yeah, like, you know—put—put, you know, a block under your sacrum or um, you know—about your pelvis, like tip it, tip your *bowl*. So I picture that, *that bowl in there, of bone,* you know [laughs]. Or when

> we're doing things with our hips—I have a friend who has had both her hips replaced in her early 40s, so. Um, and she's quite active and it's really good. But I think about that and think about what's going on inside of her bones that she has other, you know, *pretend parts*, or—*additional parts that are man–made* inside of her, so. Um. Yeah. I do think about that. (56, F, emphases added)

"[P]retend parts" brings back the notion of the 'man-made' human parts which calls forth the image of the object-body, but more specifically of the cyborg (Haraway 1991). In Haraway's words, a cyborg is "a cybernetic organism, a hybrid of machine and organism" (1991:149) and, though her idea extends beyond this particular definition, it applies itself clearly here where Nora's friend has 'man-made' parts inside her body—effectively blending mechanical and organic material to form a functional whole. The analogy of the bicycle from the previous section is useful here, where the parts that must be replaced do not mean a forsaking of the entire, whole body. Nora's attention to her musculoskeletal body here points to the general attention called to the pelvis and the sacrum that can be observed in yoga classes, but also to the blended language of skeletal parts and identifiable, knowable objects like the 'bowl' that can create a particular image in the participant's mind—though this image is ever changing and will vary, the idea of "that bowl in there, of bone" recalls the variability of the skeletal shape (though this may be done unconsciously).

Kate, who's been practising yoga for over ten years and is a mother of two young children, says as she completes her body map:

> What I notice, maybe only, like, in feet and the hands, like I guess that's when I think about bones. […M]y first yoga teacher was like, you know, lay your spine down, like one vertebrae at a time, like you're laying down a pearl necklace, so I guess I think about my bones then.

Kate here references the language that her instructors used to describe her skeletal body (39, F). The 'pearl necklace' image mentioned 'objectifies' the skeleton for Kate, both figuratively—as something that makes her "think about [her] bones"—and literally, in the sense that pearls, stacked together, recall a spine being laid down.

Similarly, the textbook sectioning of bodies into systems or parts also ‘transforms’ bodies into parts or material that can be ‘worked on’—much like the example of the bicycle being in need of a ‘tune up’. In this case, participants sometimes referred to their bodies in association with mechanistic tendencies. Black explains how “[b]odies are often described as being like machines, but machines are regularly, sometimes implicitly and sometimes explicitly, understood to be like bodies. Furthermore, and increasingly over time, description of likeness have been considered unnecessary: bodies are not *like* machines, but simply *are* machines” (2014:17). Following Black, machines and bodies can be taken as the sum of various parts; these parts can therefore be considered separately from the whole: one can single out areas of the body to work on ‘independently’ from the rest. For example, when April’s chiropractor says that her “‘[back] is out a bit’”, they’re implying that there is a singularity—a point where one’s back *should* be and that requires attention. Participants describe bodies mechanistically, through the attention paid to particular areas of the body or to its general composition.

A clear distinction is necessary here. The idea of using the term ‘mechanistic’ doesn’t preclude the ‘object’ aspect of participants’ experiences,. Rather, the distinction serves to bring bodies to the surface in yet another way. Bodies are material in the figurative and theoretical sense, but also in the very sense that we are a tangible, fleshed body that we interact with on a day-to-day basis. Moreover, recalling the material quality of bodies, effectively turning them either partially or entirely into objects or machines may allow participants to conceptualise their interiority—their interoceptive bodies. The invisible body (the skeleton) surfaces but is also never really visible to the eye as something other than the object for which it stands—for example, a bowl, a pearl necklace, or a rubber band. Interoception, in this case, allows participants to feel skeletal bodies through these objects; whether consciously or unconsciously, the skeletal body surfaces through the images that are conjured through the objects and machines recalled in participants’ stories.

Colleen (37, F), who has been practising chiropractic care for over ten years, references these mechanistic tendencies in two ways: describing the movement of her own body when she is practising, and when she envisions bodies in general:

> I'll always go neutral spine [places her hands on her back and stomach], like, arms—so, one of the things you have to do as a manual practitioner is shorten the lever, right? Long levers create lots of strain on joints; short leavers don't. So, my hands and my elbows are always really tight to my body [moves arms close to body], so whatever I'm doing I'm able to use my core more [hand over stomach area]. In everything I try to make happen through my hips and knees. So, again, not rotating, flexing, loading the spine; keeping everything tight, in tight, close to my body is always on my mind with that stuff.

In her own body and practice, Colleen goes through a series or sequence of movements; each one located in a particular area of her body and activated in sequence (e.g. elbows, core, hips and knees, etc.). This approach comes from "[her] background, the musculoskeletal strength and conditioning specialty" (37, F) in which she is trained.

When she speaks of her clients' bodies, Colleen says:

> In my experience the two things that most people bring to me are: lack of function. So there's a movement because I work a lot with an athletic population—with a lot of crossfitters, a lot of basketball players, a lot of runners. It's usually a limit in their motion, so if something is happening in their run gate or if something is happening in a lift that is really highlighting some sort of *mechanical* dysfunction and then, secondarily, I would say my patients come with pain. So you have the patient population that they sleep funny and they wake up with a wry neck and they just need the pain relief and the motion to get moving. (37, F, emphasis added)

Here, bodies are literally mechanical and relief through chiropractic adjustment is a way for Colleen's clients to regain 'function' (as opposed to dysfunction). Athletically-speaking, for Colleen, bodies must function in a particular way in order to reach the desired range of motion—what she calls 'abundance' (also cf. Chapter 5 in relation to energy). "I have what I would call an *abundance* philosophy. Your body is *infinitely* capable. So, what we talk about is *qualifying* for movement. So if you've *lost* a range

of motion let's find out why". Colleen's concepts of 'abundance' and 'infinite capability' reminded me of her workshop in which I participated where she referred multiple times to 'levers' in the body. When I asked her about this analogy, she said: "It's not an analogy. Our, our—we have levers, like [demonstrates, bending her arm a few times]". Bodies, for Colleen, are made up of levers that qualify or disqualify us for movement. Movement, or rather, the *capacity* for movement, is an important part of bodily-ness. This is echoed when Thomas says:

> Well, I mean, you know, I guess we focus on the spine so, we're looking at the spine more. Um, it, it certainly depends on the chiropractor but, you know, I would like the spine to have a nice shape to it, a normal, natural curvatures and hopefully be relatively in alignment and, you know, hopefully moving properly. And, ideally having healthy joints, you know. Ideally. Um, but essentially, yeah, I guess we are looking for health, like, good move—good motion, um, motion and feel to the spine. Yeah, normal curves, normal muscle tone [...]. (44, M)

Here, "proper" motion, "alignment" and the "shape" of the spine are another object(ive) participants use to describe bodily-ness.

The concept of levers recalls Black's point that the body is not simply referred to as mechanistic or machine-like, but is quite literally interpreted *as* a machine (2014:17). The concept of machine is interesting, but it doesn't quite capture what Colleen is saying. In the sense that bodies are composed of levers and that they (can) "lack [...] function" in a 'mechanistic way', participants like Colleen are also calling attention to the material quality of the body—its malleability, its elasticity, and its plasticity, and to the ways in which bodies function as units. For example: bones are often referred to as levers, but these levers without the presence of muscles cannot move or 'be moved'—they function together to allow us to go about our day to day. In the same way that Colleen explained in her workshop that, if a movement was straining or painful, one needed to "shorten the lever", she was pointing to the material, elastic quality of the body; muscles are *built*. They don't exist outside of the contexts within which we find ourselves, outside of the loads (figurative and literal) we place on our bodies. This "shortening" of

the lever is another example of participants calling attention to the interoceptive qualities of the body: one can only shorten the lever by listening to the body—by bringing attention to the load being placed on the muscles, joints, and mind of the person performing the movement, and their reaction to this particular movement.

In the same sense that Black discerns bodies as machines or that machines are bodies, the reason why we identify machines as bodies is because, like us, they are material (though this is obviously an oversimplification, it merits mention). When Black says "bodies are not *like* machines, but simply *are* machines", he ignores the previous part of his idea that machines are also referred to as bodies (2014:x, 17). In many ways, machines aren't just *like* bodies but are also increasingly *becoming bodies* (for example, customisable sex dolls are quite literally machines that are made to *be* bodies, but without human agency, those machines wouldn't exist). Another example of this 'machination' is convalescence: when one must rest after a surgery (to take back my previous example), there is a liminal period where the body can't "*do* what [we would] like [our bodies] to do" as Thomas explained in the previous chapter (44, M). In this sense, the body can be likened to a machine in disrepair, that must be tended to before it can 'perform', so to speak. We also engage with machines in a very embodied way (like exercise machines, for example, which require our bodies moving with or about them) without necessarily being actively conscious of this engagement—unless the machine breaks down, some parts of it are missing or our own bodily-ness prevents us from engaging with it (cf. Tarr & Thomas 2011). Emily Martin similarly explains how language (in her text, gendered language) speaks to the "stereotypes hidden within the scientific language of biology" (2007:417). This attention to language in biology can also be applied to how language influences how we think about bodies in general; bodies that can be disassembled into various parts, systems, bodies that are objects, bodies that are machines, etc. Hence, the concepts of objects and machines are not independent from each other,

but rather bound up in *how* participants express their bodily-ness. When she speaks about her own musculoskeletal embodiment through her body map, Colleen says:

> Yeah, um, so this is with me lying on my stomach, but I'm gonna flip it over just for a—so my left knee, which looks mangled here [laughs], um, knee—femur comes down and it starts in there, in the tibial plateau comes there and then there's my fibular head. So, I get severe irritation along this outside of my left, it's called left posterior corner.
>
> CCB – Mmhmm.
>
> Colleen – Um, and I get some irritation there because I tore my ACL[46]. [CCB – Okay.]. So ACL runs like your hand in your pocket, from back to front [CCB – Mmhmm.]. Um, so I get *tight* in, in there along the muscles there on both sides.
>
> CCB – Okay, and so when you get tight there, how do you address that tightness?
>
> Colleen – Quad stretch and hamstring stretch are my two best and then, also, *because*—this is fun! I like drawing on this! So, because your, uh, tibia comes down and then makes this ankle mortis so, your fibular head comes in and inserts on the other side there, and you've got that. So, I also mobilize here. Both those, like, 'cause it's the all muscle along that outside *chain*. If I get that moving, I'll feel way better. (37, F)

In the same way that Colleen uses the concept of "levers" to speak about bodily capacity, she refers to other aspects of her embodied experiences in a mechanical way—the "chain" of muscles that run "outside" the leg from the thigh to the ankle, a "chain" of muscles that can be worked on separately. "Chains" and "levers" are bodily machinery that needs to be tended to, that needs to move in order to keep itself from breaking down—like a rubber band left out in the sun for too long (John, 55, M). "Tight[ness]" also recalls the notion of "shorten[ing] the lever" that Colleen brings up earlier: tightness is a sensation that Colleen addresses in *response* to bodily signals. Her body *knows* and 'communicates' through sensation that she then responds to by doing particular movements that relieve that particular "tight[ness]" (also cf. Chapter 4 for more on this).

46 ACL refers to the Anterior Cruciate Ligament, which runs from the lateral portion of the intercondylar fossa and attaches to the anterior portion of the tibial plateau to help secure the knee joint.

Similar to Martin's examination of language in biology, it's worth calling attention to Colleen's use of language in this response. Because she knew of my knowledge of the musculoskeletal system, she didn't shy away from using the scientific terminology for the parts of her body she was calling attention to. However, she also used that language in the workshops that I attended, meaning that a situation which may have been linguistically-charged because of my background wasn't in fact particularly different from how Colleen would have responded were I not familiar with osteological terms. This particular kind of interaction is important to mention in relation to how other participants with particular knowledge of the musculoskeletal system responded during the interviews and the body maps. Her use of 'musculoskeletal language' (for lack of a better way to put it) is echoed in Eva's and Olivia's experiences as well.

For example, Eva, who works as an X-ray technician and volunteers at a yoga studio, says:

> I've seen bones that look healthy and young and how they have, like, really crisp lines like, it's, it's really incredible the way nature has created our bones, like, it is like a mathematical straight crazy, even line that our bones look like on a picture and when you see, like, a degenerative bone, it's just like, irregular and you can't see the trabeculations very well in their bones or it's really translucent and that means the X-rays passed really easily, because it's just brittle and it can break easily so, that's one thing that I really notice when I look at X-rays, but another thing is like, because an X-ray, like, you pass right through. (24, F)

When speaking about her work, Eva uses scientific or biomedical terminology—without hesitation. Further, she says, "so for example, like when you're taking a picture of your knee, your medial condyle is *way* bigger than your lateral one" when referring to the distal femur's morphology on the inside of the knee. Her knowledge of skeletal anatomy helps her work:

> So, you often have to internally rotate someone's knee, you'll also have to put a beam angle. So, like, you wouldn't shoot this way, because your medial condyle's gonna be like way down and we're trying to look at the joint space so you're gonna, like, angle it to go through the joint space 'cause the medial condyle's so big and then you're rotating it to make sure, like, the posterior aspect is lined up so, it's kind of this weird, like,

> 3D dimensional photography brain that I have when I look at X-rays and people's bones now.

The notion of the medial condyle (the one inside the knee) being bigger than the lateral one (the one outside the knee) is informative in the context of X-ray photography for Eva and recalls Colleen's use of the "tibial plateau" and the "ankle mortis" to refer back to the same portion of the body. The ways Eva and Colleen use skeletal terminology flows seamlessly in their responses—this terminology is not a conscious effort that they are making in order to assert authority over or on bodies, but rather is an integral part of *how* they understand and *know* bodies, including their own.

Olivia's responses show similar musings, but differ when she describes viewing her own X-rays:

> Yeah, it still feels disconnected, you know? Like it's—especially since I did osteology classes in my undergrad, part of my thesis and stuff. I'm familiar with bones, so it's not [short pause] new and exciting in that way, and they're telling me what's wrong and I can see it. And, so it's more just like, 'Ooh I didn't know what *my* bones looked like,' you know? Yeah. [pause] 'Cause you're really curious to see how different, like, you know, how different actions, activities—whatever—print on your bones and I just—I wanna look at more of them, I guess. (25, F)

Olivia's experiences as a professional ballerina and as a student of osteology gives her a different perspective on the concept of familiarity. For example, I can *know* bones in a laboratory, but I can't necessarily know my *own* skeleton (exactly) because it's impossible for me to see it outside of a medical, diagnostic context. Later, Olivia explains how she experienced a diagnostic for a problem she had in her hip: "The physician *there* ordered some X-rays and got me to see a different physiotherapist who did *weird things*. I didn't like him. He [chuckles], he would stretch out the front of my hip and my quad because my femur would get jammed in the front of my hip". Further, she says: "That [yoga instructor] talked about alignment from the bone perspective. Like, align your femur this way and think about the bones stacking in this way and so that was really cool and I think that kind of has kept on. Um, so when I think about, like, when I'm trying to stand on one leg, I'm thinking about aligning the

joints and, and the bones that way." In both instances, the femur features differently in terms of context, but distinctively from the other parts of the bony body. The idea of "stacking" and "jamming" both recall the notion of machine and objects that can stand in for the body or, at least, parts of the body. In this sense, Colleen's, Eva's, and Olivia's use of scientific terminology—or skeletal terminology—isn't exactly the same, but the similarities call attention to a particular area of the body (the leg), effectively serving to both partition it (in the sense of a *part* of the lower limb), but also to 'dissect' it as a problematic area of the body that requires attention. The leg and the words used to describe it can help to objectify it (in both the sense of making it into an object, but also in the sense of making it stand apart from the rest of the body) so that it can be 'diagnosed'—or *known*—for a particular purpose.

Using scientific terminology may offer a particular hold over one's body—in the same way that separating into systems that make it more 'knowable', easier to 'diagnose', knowing the language of the body (in this instance, the musculoskeletal body) is not only a way to talk about one's body but also a way to take ownership of one's own embodied self. To know one's body is also a way to control it, to know where and what needs 'fixing', what needs to 'get worked on', what gets "jammed", how to "stack" the bones properly, etc.. Similarly, as I already explained above, participants bodies also know—their bodies are knowledgeable in the sense that they are aware of their capacities and limitations: to "shorten the lever", to 'push further', or to 'take a step back' to avoid injury (though injury is, in some participants' cases, unavoidable despite being interoceptively aware). The knowledgeable body—or the interoceptive body, as I've referred to it, doesn't stand apart from knowledge of/on the body, but rather works in tandem with participants notions of their embodiment to situate them withing their immersive worlds (Grieder 2015; Ingold 2007). 1.90 cm

The object/machine terminology is also present in John's narrative through "the *load* on [his] joints, [his] skeleton" (emphasis added, 55, M). The notion of "loading" the skeleton and "loading" the joints comes across to illustrate the strain on his body, meaning that John must find a way to 'lessen the

load' on his skeleton (in this case, through yoga). In other words, he must 'shorten the lever' (to borrow Colleen's expression) by doing activities like yoga "[b]ecause it doesn't put the strain on the joints the same way. And you can modify your poses so that you can do the activity" (John, 55, M). Yoga, for John, is a way to 'keep working on his body', to "lessen the load" on his skeleton and on is joints. The 'load' that he mentions is both a term that is used in the medical sense of 'load-bearing joints' (like the spine, the hip, the knee, etc.) but also recalls Colleen's language of bodily machinery (levers, chains). This is not to discount the idea that joints are 'load-bearing'—that they carry us from place to place, supporting our weight, helping balance us, etc.—but rather a way to call attention to the words participants use when speaking about their bodies: a language that reflects the relationships I have between my bodily knowledge and my knowing body—bringing my embodiment, skeletal and fleshed, to the surface (as it were).

Yoga and chiropractic care, as practices, allow participants to engage with the object/mechanistic aspects of their bodily-ness without forsaking the complexity that they voice in their experiences. Colleen's notion of levers differs from John's notion of a rubber band, but both conceptualisations help them to explain their bodies—to describe them in a way that makes sense *to them*. By 'objectifying' or 'mechanising' the body—or parts of that body—participants effectively 'make it' into 'something' that can be worked on and worked with: a *material* that one can 'work with', in the same sense that one can work with clay or dough. The elasticity of the body recalls its material quality, something that combines the discursive and experiential body—the known body and the interoceptive body—that participants engage with in the research.

It's important to note that participants, and individuals in general, don't experience their bodies through linguistic representation. For example, John doesn't experience his body literally as a rubber band, but the analogy helps him articulate his bodily-ness. In the same way that people are not their body only through representation, people also don't *live* their bodies through representation. I can say

that the images in offices make me think about my body, but I don't live my day-to-day life through these representations. Interoception, thus, allows the knowledge of the body to submerge—to efface itself into the background—bringing the knowing, sensing body to the surface. Knowledge and sensation meld together into embodied experiences that we go through in our day-to-day. For example, my knowledge of how and what a Caesarean section is doesn't account for the experience of it "in the flesh": in other words, the manual accompanies the machine (to come back to the analogy) cannot dictate the *experience* of the machine itself. What comes through in participants' negotiations between the representations/discursive conceptualisations of their embodied selves and their felt experiences of their bodies is the very matter of the body itself: its materiality, its malleability—the material body both in the figurative/discursive sense and in the very concrete sense that I 'have' and *am* a body.

Conclusion:

Bodies were described by participants as things that were knowable, understandable, and this knowledge and understanding provided—for some participants such as Nora—a mastery over one's bodily-ness. They knew their bodies in various ways. Many described their bodies through anatomical systems and parts with systems functioning with the others to form a cohesive 'whole' that participants could then separate and understand. They also described their bodies in terms of objects and machines, using both interchangeably and sometimes simultaneously. Bodies were a 'source' of knowledge through learning and experiences, as well as a knowledgeable source of the intimate, inner goings-on of participants' embodied lives (through interoception). Interoception takes into account the physical, emotional, and mental sensations that surface in participants' narratives—a space for the 'resurfacing' (so to speak) of the sensations that participants experienced as bodies in the context of chiropractic care and yoga.

In the next chapter, I analyse participants' experiences and stories through the theoretical framework presented in Chapter 2.

Chapter 7: Skeletal Subjectivities and *Se Prendre en Main*

Introduction:

In the previous chapters, I examined participants' narratives through their experiences of pain, time, energy, and interoceptive and proprioceptive conceptualisations of bodies and bodily-ness.

In Chapter 6, I explored how different knowledge(s) of systems and parts, and objects and describe their embodied lives. Bodies existed and 'surfaced' through systems and parts that could be separated or taken apart from their embodied whole and worked on or diagnosed for problems such as injuries, tightness, etc. People also spoke of machines and objects as lenses through which to 'surface' their bodies. Machines stood in for bodies—either as a whole or in parts—and bodies were likened to objects that could be modified or broken. Some individuals spoke of an underlying, more 'subtle' body that knows (cf. Farb *et* al. 2015; Little 2016)—the sensation of the communication between the body and the mind, and the ways in which bodies make themselves known through sensations (pain or through attention) (Farb *et al.* 2015). These concepts and sensations were woven into a complex embodiment, just as skeletal bodies were interwoven with fleshed bodies: one was inextricable from the other. The boundaries between bodies and knowledge was blurred in participants' stories and narratives of their embodied lives, just as boundaries between bodies, culture, and nature are complicated and arbitrary in their articulation (Sofaer 2006:62).

In Chapter 5, I examined how "energy" was used by participants to understand and situate their embodied selves through materiality and learning. Energy was a means to surface particular embodiments, to surface the interior sensations—the interoceptive aspects of bodily-ness that were less

tangible and, in some ways, more ‘subtle’ (Taylor 2005; Farb *et al.* 2015, Little 2016). Energy was something that could be possessed but not held (as one holds an object—a material), something that one had or lacked, and that could be diminished or regained as one went about the world and the day-to-day. Sensation, both tangible and intangible, was a means through which participants engaged with their own energies and the energies of others (cf. Colleen’s example of touching her patients’ bodies and sensing their tension—both physical and emotional).

In Chapter 4, I described how participants spoke of their sensations of pain and their embodiment(s) of ageing. Pain was one of the focal points of participants’ stories and experiences, though its experience was varied and situation-dependent. Release was an important aspect of how people talked about pain and the kind of pain they experienced (sometimes described as good, sometimes bad). Flexibility and strength often accompanied pain and negotiations of the fine lines between injury and increased ability. Here, the interoceptive signals of the body were ignored or pushed through, though still present in participants’ considerations of their bodily-ness. Pain, as an interoceptive signal, could be submerged or come to the surface as a warning of participants’ “edge”—the point of balance that could lead to injury (as Kate’s story shows). Time, in conjunction with pain, was another ‘edge’, so to speak, that participants negotiated: the apprehension of deterioration or reduced capacity of the body was a concern for participants. Knowledge of the body’s ageing was both a means to ‘keep time at bay’, while simultaneously being reminded of its inevitability. Serge Bouchard explains how one can’t ‘be young in their heart’ or ‘can’t feel young forever’, because that would be a complete denial of the “fact” (his word—translated) that bodies age and get older (Bouchard & Pleau 2016). “Feeling” a particular way—young, old, sore, capable, etc.—gave participants a certain sense of knowledgeability about and of their bodies, but also a sense of apprehension of when time would ‘catch up to them’.

The ways these themes are woven together in participants' stories highlights the complexity and richness of their experiences, and the ways that participants negotiated their experiencing/sensed and sensing bodily-ness with their ideas *about* bodily-ness. Lived bodies, sensed bodies and concepts about bodies enabled participants to communicate what it meant for them to have a skeletally-fleshed body.

In this chapter, I answer my final research question: *What does skeletal embodiment look like? How is skeletal embodiment and subjectivity negotiated by participants in Victoria, BC?* Specifically, I suggest how, skeletally, bodily-ness is experienced by participants as a means to *se prendre en main*. I argue that skeletal embodiment and subjectivity is navigated through materiality—both as concept and as 'object'—and that *se prendre en main* describes how participants navigate their bodies through particular spaces, and how they create and recreate their own subjectivities through this materiality.

Se prendre en main (also sometimes *prendre en main*) can be defined as how participants 'take hold' of their bodies. However, 'take hold' itself doesn't fully capture *prendre en main* which can mean various things all at once. *Prendre en main* can be translated as 'taking hold', 'to hold in one's hands', 'pulling oneself up by the bootstraps', 'taking charge', etc. It can also mean 'self care' (though this term is itself loaded, I include it here since participants referred to 'caring for the self'), to hold oneself gently, with awareness, and compassion. In other words, *se prendre en main* is malleable and multiple, similar to the skeletal body. *Se prendre en main* is not an antidote to neoliberal enterprises, but rather a bridge that situates the individual in a particular discursive frame (in this case, chiropractic care and yoga) to understand how individuals are their bodies. Importantly, *se prendre en main* goes beyond Foucauldian ideas about (self-)regulation and the monitoring of bodies "par et pour l'autorité sociale" (Mauss 2002[1936]:21, Foucault 1990). *Se prendre en main* includes bodies who strive to become neoliberal subjects and those who strive against it—both bodies *se prennent en mains* albeit in different ways.

I begin with a discussion of the literature in relation to participants' experiences of their skeletal subjectivities. How participants choose to *se prendre en main* skeletally involves complex negotiations of embodiment, subjectivity (in both senses of the term), and experience(s). These negotiations take place as "surfacings" (Taylor 2005) that allow participants to grapple with their material(ity), and to be simultaneously novice and expert in their embodied subjectivities (Ingold 2007, 2011). I first draw upon Mol's notion of "the body multiple" and then Taylor's notion of "surfacing the body interior" (2005) alongside other theories of subjectivity and methods of apprehending the slippery skeletal body to argue that, as participants *se prennent en main*, their skeletal subjectivities 'blossom' into kaleidoscopic perspectives that inform and help them further negotiate their embodied experiences and sensations.

Skeletal Subjectivities:

Subjectivity, in the context of my research, refers directly back to bodies: the bodies people I experienced in and through chiropractic care and yoga, and in their day to day lives. Bodies that ached and got older, that could be defined and described clearly at times but seemed more ambiguous at others. In this sense, bodies can be understood in the words of Grosz: "The body is a most peculiar 'thing,' for it is never quite reducible to being merely a thing; nor does it ever quite manage to rise above the status of thing. Thus it is both a thing and a nonthing, an object, but an object which somehow contains or coexists with an interiority, an object able to take itself and others as subjects, a unique kind of object not reducible to other objects" (1994:xi). For example, as a body, I can—through my materiality, through my 'thingness'—recognise others as bodies without reducing them to an object but still contending with the presence of the space that the body occupies.

Skeletal subjectivity can be defined as bodies lived through a skeletal lens: it suggests that bodies can be apprehended through their material(ity) in a particular frame. These subjectivities are not all encompassing; however, they are not fixed in frames as pieces in a museum. Rather, skeletal subjectivity functions as a snapshot; it's the skeleton coming to the surface of the film through emulsification but never in any sort of permanence. Alternatively, skeletal subjectivity is the skeleton coming to the surface, but never fully emerging from the 'waters'. I can be skeletally subjective in various 'frames': for example, in a yoga class where specific aspects of my skeletal self are 'brought to the surface' either by the instructor's commands or through my own volition (as a form of *se prendre en main*). Skeletal subjectivity is impermanent in various ways: it can be through its materiality (in the sense of material, but also in the sense of 'materiality'), it can be through language used to interpellate it—to surface it—(more on this below), and it can be through the material/skeletal subjectivity of another (in the sense that my own body, in the hands of another, can become skeletally subjective—cf. chiropractic care or osteology for examples). Skeletal subjectivity is the ways in which skeletons/skeletal bodies 'surface' and submerge through particular practices.

The physicality and tactile quality of *se prendre en main* recalls Sofaer's claim that "[o]steoarchaeology is an embodied practice in which learning about the bodies of others is a haptic experience" (2012:143). The notion that one can learn from remains the lives of others can be applied in my research as a way in which participants come to learn about *themselves*. Sofaer further says that "each human body is unique. [...] Students [of osteoarchaeology—and, I propose, anyone who has the chance to interact with human skeletal remains in a sterile setting[47]] are encouraged to visualize and palpate *their own bones* in order to understand the way that individual skeletal elements might 'plug

47 The reason for the addition of the phrase "sterile setting" is also related to a classroom environment in the context of learning (in the context of Canadian institutions who have access to such materials). This notion is also echoed by Good (1994), when he relates how medical students examine bodies in the dissection laboratory (1994:65-78). It isn't advised to disturb human remains in a natural environment as these could be the result of a crime scene and handling could cause contamination.

into' their own body" (143). In the same way that osteoarchaeologists (and osteologists) touch their own bodies and the bodies of others, where "[t]he personal sensory perception of the material qualities of the skeletal body" is also present in the participants' own continued, tactile experience of their skeletons (143).

Discussing various works of art involving the human body, Sofaer discusses how the bodies of the artists and those of the deceased who form part of their work (whether it be visual, sculptural, or performance art) "transforms the skeleton as object into skeleton as subject through inter-corporeality generated by touching the body" (2012:145). Further, "[t]he porous character of the body means that it is difficult to identify clean boundaries between the body and the world. [...] [T]he divide between the living body as cultural and the skeletal body as natural cannot be sustained as bodies will always be both, albeit in different and changing configurations" (Sofaer 2006:62). I argue that this "porosity", this blurring of boundaries also applies to living skeletal bodies/subjects.

Touching and Multiplying Bodies:

Skeletal subjectivity stands across a boundary; a fleshed skeleton that is both object—or, as Ingold suggests, material (2007)—and subject simultaneously. Material subjectivity—and skeletal subjectivity (in the flesh)—goes against preconceived notions that bodies can be material (or objects) *or* they can be subjects at different times, but never both simultaneously. Mol explores this troubling notion when she says:

> In talk about meaning and interpretation the physical body stays *untouched*. All interpretations, whatever their number, are interpretations of. Of what? Of some matter that is projected somewhere. Of some nature that allows culture to attribute all these shapes to it. This is built into the very metaphor of ''perspectives'' itself. This multiplies the observers—but leaves the object observed alone. All alone. Untouched. It is only looked at. As if it were in the middle of a circle. A crowd of silent faces assembles around it. They seem to get to know the object by their eyes only. Maybe they have ears that listen. But no one ever touches the

> object. In a strange way that doesn't make it recede and fade away, but makes it very solid. Intangibly strong. (2002:12)

Mol suggests how, in the social sciences (though, she argues, also in medical sciences), the physical body fades to the background of interpretation and perspectivism (2002:11-12). But more than that: that bodies can be made to stand as objects to be observed and 'separated' from the individual that they are —furthering the subject-object dichotomy through various methods. Bodies are made to stand apart from themselves—to observe themselves outside of...themselves. In other words, this practice involves a separation of my body-self from my 'body-body' (i.e. my material, tangible body). However, this separation can't stand, because I *am* a body.

Participants' stories and experiences don't reflect this level of distancing described by Mol where bodies are "untouched" and "only looked at". In chiropractic care and yoga practices in Victoria, bodies are *meant to be touched*. Individuals continuously attend to, adjust, feel, touch their bodies and the bodies of others as a result of and in deciding to engage with chiropractic care and yoga practices (of course, bodily touch happens continually through the daily minutia of having and being a body).

The "perspectivism" exists, certainly, as can be observed in people's notions of their own bodies. For example, when Kate tore her hamstring, she couldn't keep up with her two young children and was limping "quite badly" (39, F), her perspective influenced her practices as a runner, as a practitioner of yoga, as a mother, etc.. However, if, for example, I tore my hamstring in a similar situation to Kate's, my own perspective would influence my practices in a markedly different way: I don't have (living) children, I don't run, etc. But bodies are never truly "alone", because they're always in the presence of other bodies that they interact with. When Nora speaks about her friend's "pretend parts" (cf. Chapter 5), she underlines both her interaction with her friend's body, her interaction with her own body, and her friend's interaction with her body. As Sofaer points out: "Merleau-Ponty (1968) refers to touch as the sense that defies subject/object distinctions, an ontological argument that is

premised on the metaphor of one hand reaching out to touch another that touches back, imbricating the body in the midst of the thing perceived, not independent of it (Springgay 2003)" (*in* Sofaer 2012:142). The skeleton—the living skeleton inside the individual—touches the body, while simultaneously being part of it. Though Sofaer argues that the skeletal body examined and touched by the osteoarchaeologist can't touch back in the same way as a living body can,

> because the deceased body neither actively touches the living body back nor senses being touched. Yet, at the same time, touch necessarily requires two meeting surfaces and is therefore reciprocal; if I touch you then the very fact that I feel you implies that you (even involuntarily) touch me back. The skeleton must therefore also be understood as touching the living body because it is a body with a material presence. (2012:142)

The living skeleton is constantly in contact with the body—touching it. My skeletal body is in contact with my flesh and, by extension, the world I live in, and—further—other individual's skeletal bodies. Participants' narratives didn't place their bodies in a theatre of sorts[48], as if placed on a stage to be examined externally by some analytical eye. Mol (2002) presents perspective and bodies as a performance or as *objet-d'arts*: meant to be seen (and, in her words, possibly heard), but never handled, never touched (2002:12). Yet skeletal bodies are always 'handled' in some way (Sofaer 2012:142)—the people I interviewed touched their bodies (skeletally-speaking and also in a tactile manner of touching flesh) and their bodies were also touched by other bodies and materials around them (cf. Ingold 2007). To relegate the body to the status of a thing observed only from a distance discounts the notion of the body as material subject which is always in contact with its environment, and its own skeletal-ness. For, simply put, everyone has a skeleton, but that skeleton is your own and unlike any other.

This simultaneous multiplicity is described by Mol when she suggests "the body multiple": "a body may be multiple without shifting into pluralism. […] In its turn, coexistence comes in varieties

48 I think here of the old medical and operation theatres, which is the image conjured up for me when I read Mol's description of the body alone and observed, but never touched other than as an object.

and takes different shapes" (2002:151). In the same way "no object, no body, no disease is singular. If it is not removed from the practices that sustain it, reality is multiple […;] each event, however pragmatically inspired, turns some 'body' (some disease, some patient) into a lived reality" (2002:6). For example, when participants refer back to their bodies as 'parts', the term 'parts' can refer to the multiplicities that compose the participants' bodies, but also refer to their literal body parts (2002:151). Just as Mol's idea of the body multiple does not call the body into a plural version of itself—i.e. a concrete sectioning of each aspects of an individual's life—so are participants' experiences tangled up in a variety of iterations of their bodily-ness (2002:151). Objects, parts, and systems are just *some* of the ways in which participants speak of their experiences simultaneously, effectively calling attention to these 'tangles' without the need to draw them back or disentangle them.

However, there is a clear separation in Mol's notion of "practice" between the bodies she observes and speaks with at the hospital and their experiences outside of it. In the hospital, individuals become "patients" who talk "[a]bout the trials and tribulations of dealing *with* an impaired body in daily life" (Mol 2002:16, emphasis added). The person—or subject—here is living *with* a problematic body rather than *being* a body. When my participants talk about having energy, being made of energy, and being connected to 'everything' (cf. Chapter 5), they don't make the separation between their bodies and themselves. When a mother weeps and wails at the loss of her child, the body speaks where the self may not be able to or may not want to. Participants' bodies carry their experiences with them and this influences the ways in which they embody those experiences—further ways in which they *se prennent en main*. For example, if I know that I have muscular dystrophy, it will impact my (inter)actions, my perceptions of being a muscularly dystrophic body, etc. in a way that is "multiple", as Mol says, but this "multiplicity" isn't something that I live *with*, it's something that I *am*—in conjunction with all my other 'multiplicities'.

I don't disagree with Mol's claim that "[w]hat people say in an interview doesn't only reveal their perspective, but also tell about events they have lived through" (2002:15). However, I want to add to this notion by adding another layer of meaning to these 'events'/practices: these experiences, these *events* are trigger points where individuals *se prennent en main*. What this means is the crux of the ways skeletal subjects manifests (in the case of the research), but it may look different from individual to individual. For example, I may choose to go see a chiropractor for something whereas someone else might choose to see a massage therapist—both decisions are contingent on various factors (availability, level of comfort, economics, cultural, historical, etc.), but both are ways of *se prendre en main* and tend to the skeletal subject.

To this point, I have argued that skeletal bodies are both subject and object—situated at the intersection of material and meaning. I have argued that, through their materiality (effectively, their material quality), skeletal subjects are fluid and changing because their perspectives and practices are also evanescent and shifting. I now turn to additional ways in which individuals *se prennent en main* through skeletal embodiment.

Se prendre par son squelette:

How I *me prends en main* is intimately linked to how I am embodied in particular 'frames of practice' (yogic, chiropractic, medical, social, etc.). Skeletal subjectivity outlines the ways in which participants *live* their materiality: their ideas, (perceived) capabilities, (perceived) limitations, etc.. Ortner says: "subjectivity as the basis of 'agency' [...is] a necessary part of understanding how people (try to) act on the world even as they are acted upon. Agency is not some natural or originary will; it takes shape as specific desires and intentions within a matrix of subjectivity – of (culturally constituted) feelings, thoughts, and meanings" (2005:34). Thus, Ortner suggests that subjectivity requires a modicum of agency which is "culturally constituted" but is also, to some extent, moulded by individuals and their

interactions with their environment(s) (including other individuals). In other words, we *prend en main* our subjectivity and our world through our culturally-charged interactions. That is to say, that subjectivity is "existentially complex"; a subject is "a being who feels and thinks and reflects, who makes and seeks meaning" (Ortner 2005:33). If subjectivity makes meaning and is '*meaningfull*', then *se prendre en main* involves making meaning out of experiences and sensations: to navigate how one is embodied in particular contexts and at particular times (though these are not always within our control).

Skeletal bodies are diffuse, their subjectivities are less visible, apprehended by participants through sensations and surfacings. I can't hold my skeleton outside of myself, but I can touch it—through skin, through a barrier. I'm not saying that skeletal subjectivity can be reduced to simply talking *about* the body 'over there', but rather that participants' bodies "partake in the very processes of the world's ongoing generation and regeneration, of which things such as manuscripts or house fronts are impermanent by-products" (Ingold 2007:9). For example, April's (53, F) bodily experiences as a series of systems don't preclude her experiences of chronic pain as part of the embodiment she shares through her stories. 'Sectioning' bodies into parts or systems is useful in 'speak' but isn't April's 'lived reality'. Similarly, when Eva says that she thinks about her bodily-ness in relation to her skeleton:

> now that I know the anatomy of my skeleton more. But I only started to kind of recognise my own unique skeleton was after I learned what the f —hell—was in my body first off. When I started learning about anatomy I was like, 'Oh my god, I didn't even know I had all these organs and bones and whatever'. But I have like a rib that pokes way out. So, it's kind of like this weird deformity, like party trick that I'll show people. [laughs] So, once I noticed that, like, I started to notice my own quirks and like all the different bones that are in there. (24, F)

Eva's "rib that pokes way out" is part of her skeletal subjectivity but it doesn't encompass her whole skeletal subjectivity. Her "weird deformity" provides a tangent, something else that constitutes her bodily-ness. Furthermore, Colleen's concepts of 'abundance' and 'infinite capability' don't discount her conceptualisation of the skeleton as "our fulcrums; [...] our levers, um, it's very variable patient to

patient" (37, F). The idea of variability also influences how she is embodied with "a *much* longer upper torso and skeleton above, than [she does] below". This variability can be understood, to some extent, as the focal point that initiates experience. Participants make meaning out of their experiences and form their practices around those experiences, the two can't be seen as separate, and one can't be seen as 'cheapening' the other. Skeletal subjectivity doesn't posit to transcend or erase bodily-ness overall, but rather to add to it—another facet, or, as Taylor would say: another surface/surfacing (2005).

Skeletal surface(s):

Mol suggests that "[i]f practices are foregrounded there is no longer a single passive object in the middle, waiting to be seen from the point of view of seemingly endless series of perspectives. Instead, objects come into being—and disappear—with the practices in which they are manipulated" (2002:5). This interplay between practices and objects coming into focus recalls Taylor's concept of surfacing and bodies. She says,

> Specifically, I propose the notion of surfacing the body interior as a way of framing explorations into bodies as made and unmade in and through practice. The term surfacing can mean *giving something a surface* (as in surfacing a road), but it can also mean *coming to the surface* (as when a submarine surfaces) or *bringing something to the surface* (as in mining when one brings gold to the surface by washing away soil deposits) embracing all these meanings, surfacing the body interior points toward the range of practices and processes that both materialize bodily surfaces as significant sites within broader orders and surface that which lies hidden beneath them. (Taylor 2005:742, emphases added)

Taking Taylor's notion of surfacing in conjunction with Mol's (dis)appearances, skeletal subjectivity can be understood through participants' narratives as something that is both surfaced and effaced through bodily practice(s) (be they yoga, chiropractic care, or others participants mentioned in their stories). All three forms of surfacing that Taylor describes are present in participant narratives. First, *skeletal bodies were given a surface* by participants through their tactility—touching their bodies and

through their bodies being in contact with other bodies and other materials (something I return to below, cf. Chapter 5 for examples from participants). That is to say that the materiality of bodies came to the forefront through their stories and experiences, touching the skeleton through the skin, recounting the stories recorded within it.

Second, *skeletal bodies came to the surface* mainly through the experiences of interoception that participants spoke of, like having energy, being energy, feeling sore or feeling pain, feeling their age, feeling like objects, being like objects, etc.. Skeletal bodies came to the surface and faded back —"submerged", to use Taylor's example of the submarine. 'Effacing', more clearly, refers back to the subtle body, to this moment of 'submersion': interoception allows skeletal bodies to submerge—to efface themselves into the background—bringing subtle, skeletal subjectivities to the surface. Third, participants' *skeletal bodies were brought to the surface* through their stories and experiences in the research interaction as they responded to my questions during the interview and body mapping process. Recalling experiences and sensations would, in turn, bring other 'deeper' stories to the surface for participants.

That isn't to say that surfacing can only be present in the absence of submersion, but rather that both function in tandem like the musical notations of {*p*} (*piano*) and {*f*} (*forte*). This musical analogy can help to further understand how skeletal subjectivities come to the surface and efface: participants' stories and experiences can be read as a music score, where particular segments are 'louder' (*forte*) while others are more subtle or quiet (*piano*). However, those two form the whole, because the piece can't be only *forte* or only *piano*, otherwise the sense and the richness of 'the piece' is lost. Each participant's stories and experiences are their own pieces—individual and unique—but some of the tempos translate and join together, like different instruments in an orchestra join together to form a larger, richer melody. Skeletal subjectivity becomes a *symphony*. For bodies to "[be given] a surface", to "[come] to the surface", or to "[be brought] to the surface" (Taylor 2005:742), there needs to be a

convergent effacement, or "disappearance" of those same bodies (to borrow Mol's term, 2002:5). One can't always be surfaced or always be effaced. Both work together to form and reform skeletal subjectivity, for body is subject and subject is body, in all its complex iterations.

Participants didn't experience their skeletal (and embodied) subjectivities as singular; rather they experienced and sensed they skeletal bodily-ness as a plurality and something that changed over the passage of time. Skeletal subjectivity surfaces in multiple ways, but no singular form supersedes the others, rather they work together to form and reform the materiality of the individual's bodily-ness. For example, Nora's experiences as a yoga practitioner, a runner, a mother, an educator, etc. (in)form her embodied life, her subjectivity. Neither aspect supersedes all others in a form of hierarchy of meaning of embodiment, rather all aspects function together to identify 'that which is Nora'. This brings me back to the circular quality of participants' narratives, which became important in how the people I spoke to *embodied* their lives in all its pluralities. Whether this change was within the individual's control or outside of it was something participants paid attention to in terms of pain, time, energy, and making the body 'look' a particular way, either through material malleability or through a sense of oneself. *Se prendre en main* offers people a way to be skeletally embodied while simultaneously being embodied in other ways as well; skeletal subjectivity accounts for and is integrated in participants' narratives that go beyond the flesh, whether that be in their roles as health care practitioners, patients, parents, or yogis.

Skeletal Material(ity):

Skeletal subjectivity doesn't only situate itself only at the intersection of object and subject (cf. Sofaer 2006) in the theoretical sense, but also in the very tangible form that the skeleton occupies in bodies' composition. As stated before, bone is a tissue, but unlike any other tissues in the body, it is a *hard* tissue with flexibility. It's minerality gives it strength and its ability to 'bend' is given through collagen.

It is first and foremost *material*, in the sense that Ingold uses the word. From his perspective, materiality is 'good to think with', so to speak, but is not reducible to a tangible quality (Ingold 2007).

> Consider, for a moment, what is left out. Starting with landscape, does this include the sky? Where do we put the sun, the moon and the stars? We can reach for the stars, but cannot touch them; are they, then, material realities with which humans can make contact, or do they exist for us only in the mind? Is the moon part of the material world for terrestrial travellers, or only for cosmonauts who touch down on the lunar landscape? How about sunlight? Life depends on it. But if sunlight were a constituent of the material world, then we would have to admit not only that the diurnal landscape differs materially from the nocturnal one, but also that the shadow of a landscape feature, such as a rock or tree, is as much a part of the material world as the feature itself. For creatures that live in the shade, it does indeed make a difference. What, then, of the air? When you breathe, or feel the wind on your face, are you engaging with the material world? When the fog descends, and everything around you looks dim and mysterious, has the material world changed, or are you just seeing the same world differently? Does rain belong to the material world, or only the puddles that it leaves in ditches and potholes? Does falling snow join the material world only once it settles on the ground? As engineers and builders know all too well, rain and frost can break up roads and buildings. How then can we claim that roads and buildings are part of the material world, if rain and frost are not? And where would we place fire and smoke, not to mention liquids of all kinds from ink to volcanic lava? (Ingold 2007:3-4)

Thus, the material one engages with—be that, frost, or rock, or bone —has an impact on other materials and this relationship complicates the concept of materiality as something that can be talked about but can't be experienced. As Ingold says further: "I can touch the rock, whether of a cave wall or of the ground underfoot, and can thereby gain a feel for what rock is like as a material. But I cannot touch the materiality of the rock. The surface of materiality, in short, is an illusion. We cannot touch it because it is not there. Like all other creatures, human beings do not exist on the 'other side' of materiality but swim in an ocean of materials" (2007:7).

Se prendre en main also implies a certain tangibility and tactility. Being able to point to particular areas of the body or show certain movements made the interviews 'embodied'—so to speak. Skeletal bodies permeated participants' stories and experiences as not separate from, but a part of their

general sense of embodiment. For example, I can speak of the materiality of bodies and of skeletons, and yet the words themselves do not account for the experiences and the stories of my bodily self (skeletally fleshed) as it "[swims] in an ocean of materials" (2007:7). This immersion recalls Merleau-Ponty's notion of living-in-the-world (2007). I am 'immersed' in my environment, as Ingold (2007) and Grieder (2015) explain: "chacun d'entre nous est la *chair du monde*, immergé au sein d'un environnement dont il fait intégralement partie, comme une goutte d'eau dans l'océan" (Grieder 2015:20). To "exist on the 'other side' of materiality" would imply that there is such a thing as a space that is *'hors-contexte'*, meaning a space that lies beyond the material 'ocean' in which we live. Materiality, in the way that Ingold explains it, is a form of 'duck blind' implying that one can stand outside and observe, which isn't possible because we are first and foremost material.

Therefore, to be a skeletal subject is also to engage with materials in this ocean of our world, surrounded by materials—including other skeletal subjects. This interplay between the individual and the environment recalls Ingold's notion of the ethnographer as novice and the participant as expert (2011), and the idea that

> [o]nce we acknowledge our immersion, what this ocean reveals to us is not the bland homogeneity of different shades of matter but a flux in which materials of the most diverse kinds – through processes of admixture and distillation, of coagulation and dispersal, and of evaporation and precipitation – undergo continual generation and transformation. The forms of things, far from having been imposed from without upon an inert substrate, arise and are borne along – as indeed we are too – within this current of materials. (2007:7)

Ingold's "evaporation and precipitation" speaks to two concepts that come through in my research: the surfacing and effacing of bodies (and skeletal subjectivities that are those bodies, after all), and the ways in which participants *se prennent en main* in a multiplicity of ways that aren't tied down and themselves are changing as participants go through their "ocean of materials". Not to say that each has an individual ocean, but that the ways in which participants encounter materials may have similarities,

but also will always be charged with their own skeletal subjectivities. Ingold also refers to (material) surfaces through “haptic vision” (2017) in the ways in which we, as bodies, interact with the world and its various ‘surfaces’—from landscapes to individual faces. He explains, “A haptic vision seeks [...] to join with the currents and with the wind. It is to feel the waves, the ripples and the swish of the field as movements” (2017:103).

How do we make sense of this ocean, then, from an anthropological point? How does one apprehend the skeletal subject in the ocean of materials? One can’t remain submerged in the ocean eternally—sometimes it’s important to remember to come up for air, even as we are adrift and even as we feel the waves around us.

One of the ways in which skeletal subjectivity can be ‘captured’ in relation to materiality is “framing” (Butler 2010) and “the ethnographic moment” (Taylor 2005). Just as skeletal subjectivities disturb categories and slip from view in their surfacing and effacement, their construction and reconstruction, “[t]he frame that seeks to contain, convey, and determine what is seen (and sometimes, for a stretch, succeeds in doing precisely that) depends upon the conditions of reproducibility in order to succeed. [...] As frames break from themselves in order to install themselves, other possibilities for apprehension emerge” (Butler 2010:10,12). Framing, in this way, isn’t something that is static, but that changes and breaks before being reconstructed, much in the same way that participants construct, deconstruct, and reconstruct their skeletal materialities in various ways through pain, energy, sectioning their bodies into manageable parts, etc. Framing skeletal subjectivity, even as it’s slipping from view, makes the surfacing more ‘graspable’, allows for its surfacing to last if but a moment longer. I argue that what allows the frame to ‘hold’—even for a brief moment—is the context of the ethnographic moment. As Taylor explains, the “ethnographic moment”:

> will entail seeking out ways to frame anthropology less as the “anthropology of” any particular object that preexists ethnography and more as the work of exploring ethnographically how objects—objects of

> study, as well as objects of other sorts [(including bodies and skeletal subjectivities)]—precipitate out of practices and process that are at once social, material, and representational. What is needed, then, are more labile and refractory framing devices that can help guide ethnographic explorations. (2005:742)

For Taylor, "surfacing" is this particular device—something that also came through in my own research. In conjunction with Butler's notion of the frame that refuses to remain stable for an extended amount of time (2010), the surfacing and effacing of skeletal subjectivities allowed their material(ities) to be 'concretise' through participants' narratives.

I want to stress, however, that the ethnographic moment, in my research, isn't always in the context of the ethnography, but rather as moments where participants (either with or without my presence) noticed, 'framed', or materialised their skeletal subjectivities. The ethnographic moment, if we follow Ingold's notion of ethnographer as apprentice and participants as expert (2011:314), can happen outside of the context of the interview where the participants, as 'auto-ethnographers', enter their own ethnographic moments in the temporary frames of—in the context of my research—chiropractic care and yoga.

These two practices, as frames that are in their own understandings, temporary, have the purpose of bringing forth—of bringing to the surface, as it were—individuals' skeletal subjectivities (including their bodies). Chiropractic care tangibly engages with clients'/patients' skeletal subjectivities by tending to their skeletons in a specific manner and a specific time frame of 'the appointment' (cf. Chapter 4 and Chapter 5 examples of appointments). Yoga, similarly, calls for individuals to focus on or pay attention to their bodily subjectivities—often via the means of skeletal elements such as the spine, the 'sits bones' , the pelvis, etc. (cf. Chapter 5 for examples)—by materialising bodily subjectivities in clients/students for the duration of the class.

Participants subsequently recounted these ethnographic moments through interviews, sometimes speaking about them, something enacting them—enacting their skeletal subjectivities—and

sometimes speaking about them as they coloured their body maps. This recounting creates a sort of ripple effect where the 'auto-ethnographer' being the apprentice of chiropractic care and/or yoga (or other forms of physical activities) tells the subsequent apprentice (me, in this case) about their skeletal subjectivities through stories and experiences, which are then materialised in this text once more. These materialisations are never the same and always changing—my role, as an ethnographer, is to remain as faithful as possible to their retelling, being aware that my own stories and experiences affect my own practices as a skeletal subject and as an anthropologist.

Using the framed ethnographic moment and counting on its destabilising nature—it's inability to remain whole for extended periods of time—allows for a deconstruction of Foucault's medical gaze, where "[t]his gaze, then, which refrains from all possible intervention and from all experimental decision, and which does not modify, shows that its reserve is bound up with the strength of its armature" (1994:108). If frames' instability is refractory, the gaze (medical or otherwise) can't fully capture it. In the sense that what is observable can't be captured as a whole, in the way that Foucault's notion of the medical gaze can function as an all-encompassing 'eye' that makes visible all aspects of the body without ever engaging directly with it (1994:115). As Foucault says, "clinical experience represents a moment of balance between speech and spectacle. A precarious balance, for it rests on a formidable postulate: that all that is *visible* is *expressible*, and that it is *wholly visible* because it is *wholly expressible*" (1994:115). However, participants bodily experiences could be fractured and partial in their stories to physicians, resisting the 'medical gaze', the overarching, invisible hand that supposedly seeks to control, to make bodies only understandable as slates upon which disease, health, etc. are laid out. Participants' notions of their bodies were at times whole, at times partial. Their *invisibility*, their skeletal subjectivity, surfaced and submerged as participants framed their bodies through particular sensations that they experienced.

When participants' attentions are called to their bodies, through instructions or through tactile engagement (which is present in both chiropractic care and yoga practices), their materiality is called to the forefront. Their skeletal subjectivities are materialised through these particular frames which only form for a specific period of time before the participants are 'propelled' back into the 'real world'. The frame breaks apart to reform as a different one, bringing up another form of skeletal subjectivity, perhaps more muted, more effaced[49].

Skeletal subjectivities are moments of slippage, where skeletons 'come through' the skin, reminding us of their presence through 'surfacing' and effacement, in contexts that encourage this materialisation to take place, as well as unexpected contexts that may force it out (e.g. when something is broken, torn, painful, etc., in the operating room).

Though it's important to examine skeletal subjectivities through theory and to 'come up for air', as mentioned above, skeletal subjectivities are best understood in the concrete—in the tangibility of their various materialisations. Skeletons are first and foremost material. Despite our inability to reach in and touch it, the skeleton is a constant reminder of our own tangible bodies.

To this point, I have argued that skeletal subjectivities are created through particular frames—in this case, chiropractic care and yoga—and, though these frames are temporary and shifting, participants negotiated their skeletal subjectivities in these frames. Their 'skeletalness' materialised through these frames (the chiropractic office, the yoga studio, the interview, the movement of their bodies during the interview, the drawing of the body maps, etc.). The people I spoke to lived their bodies, their subjectivities, through meaningful sensations and experiences, influencing how they thought about their own material bodies—as material bodies—and the actions they took in subsequent experiences.

Participants explored their skeletal subjectivities through their experiences and sensations. As (material) bodies, people were constantly in contact with the material world they inhabited (that world

49 This is dependent on the participant's experiences and the feelings that they describe as part of their stories and experiences with the contexts of yoga and chiropractic care.

being Victoria, BC, in the very narrow context of this research). In this 'sea' of materials in which they were immersed (Grieder 2015; Ingold 2007), participants *se prenaient en main* through their experiences. *Se prendre en main* became those framed moments where participants' subjectivities came to the 'surface' or effaced (like the musical notations on a score)—where participants' bodies materialised.

Skeletal Material(ities) *in situ*:

To illustrate how skeletal embodiment and subjectivity is negotiated through materiality and how participants *prennent en main* their embodied selves, I return to their narratives.

Ideas and conceptualisations of one's body aren't always (and shouldn't be thought of as) separable from experienced sensation. Thinking about the body was intimately related to personal experiences (past or recent) that individuals associated with their ideas about yoga and chiropractic carae. For example, Kate practiced yoga *because* she saw it as "taking time for [herself]" (39, F), and Amanda said that yoga "suit[ed her] temperament—[herself]. It suit[ed her]" (53, F). They both *se prennent en main* through yoga, but their reasons are different.

Ingold suggests, bodies, as material can't stand outside of their context(s); rather, bodies are continuously made and remade through their 'worldliness', their material(ity), and their interactions with other materials—including other bodies (2007:7). For example, Nora says that she wants to "keep [running and being fit] until [she is] dead", and "If I get to be 125, I'm going to keep running—or walking. Whatever. Shuffling. I'm going to keep doing that" (56, F). These desires are grounded in Nora's experiences of her mother's difficulties and reduced mobility as she aged. Nora's relationship to her mother's 'material'—her body in the complex circumstances of osteoarthritis (OA)—informs her

own notions of how she wants her own material to become (to use Ingold's term) over time. Nora says her mother

> was a very tall woman, six feet tall almost, just under six feet tall. However, as she got older, she got shorter, she had problems with her spine and, um, like the, degenerative disc. Which I also have, but *I became very aware of her—funnily enough—her skeleton* when she was dying in 2010. She couldn't physically get out of her chair without a lot of effort and she got very thin and—but she has a really big frame so her —I mean *you could see her skeleton*. And with the arthritis, it was just painful to watch and really hard to look after her and help her. (56, F, emphases added)

Nora's mother's material body—her skeletal material—'surfaced' as she "was dying". The skeleton of her mother initiated a frame of reference, in Butler's and Taylor's sense of the term (2010; 2005) for Nora's own construction/creation of her embodiment, of her material body and her skeleton. Though Nora's mother's skeleton experienced many "problems" these experiences may not translate directly to Nora's own skeleton. However, it affects Nora's skeletal embodiment, how she interacts with her own material body and how she *se prend en main*. In the same way that Reventlow, Hvas, and Malterud's work (2006) on women in Denmark situates their bodies within a particular frame of risk perception, Nora's perception of her own risk with regards to her mother's skeletal experiences shapes how she acts: the activities in which she engages, how she keeps her body moving, etc. (2006:2729-30). This experience that Nora has and her *reaction* to it is an example of how she *se prend en main*: to mitigate her potential for osteoarthritis, she makes a conscious decision to "keep running—or walking. Whatever. Shuffling" (56, F). The way Nora *se prend en main* is based on her experiences of her mother's body, which in turn affects her own ways of *se prendre en main*.

In the same vein of 'risk assessment', Nora explains how she 'diagnoses' her own body during particular activities such as running and yoga. She says that

> if there's any kind of pain, um, you know you do a quick assessment even if it's *subconscious* of, is that muscle, is that tendon, is that bone, you know? And so, feeling aware of you know what, whatever that twinge is

> and being okay with understanding *how my body works*. I think yoga's brought that *awareness* more to me, and the various activities that I do. (56, F, emphases added)

Skeletal embodiment, thus, for Nora, takes on various forms that are linked to particular depictions of bodily-ness—her mother's 'wasting' body in the face of osteoporosis and wanting to keep this bodily-ness at bay through movement, and the assessment of areas of pain. Bodily knowledge emerges at the intersection of surfacing and interoception: where the body communicates (interoceptively) via "pain" and surfaces through this communication, but must be examined 'from the inside' (from underneath) to identify "whatever that twinge is". Nora's skeletal body surfaces through the interoceptive sensation of pain, and through the attention she brings to it to "do a quick assessment". The "awareness" Nora speaks of is another more subtle form of interoceptive bodily knowledge-- an effacement. For example, if I rub at a sore muscle, I surface my body in a particular way, whereas if I take a deep breath and focus on relaxing the muscle, the action is more 'subtle'. Both are forms of surfacing and attending to the (musculo)skeletal, interoceptive body. These forms of interactions and assessments are based, for Nora, on 'knowing' and "understanding how [her] body works". This (proprioceptive and interoceptive) bodily knowledge and assessment is guided by particular depictions of bodies.

Nora's conceptualisation of her bodily assessment aligns itself with the systematic sectioning of bodies examined in the previous chapter. She can examine aspects of her body independently from the whole to 'diagnose' the problem/issue that she senses within her body. These sections can be worked independently from the whole, to fine-tune the body's functioning, its movement (or its capacity for movement), and its ability to 'keep moving' through "awareness". For instance, she says: "I'm more aware of form, and more aware of what kinds of exercises I need to do to build certain areas, certain muscles, so that I have the ability to run for longer distances, for example. Or do certain moves in yoga" (56, F). Again, this idea that the body can be worked in parts emphasises that the body is

perceived as selectively malleable (such as when a yoga class focuses on shoulders or hips, or the chiropractor's focus on the spine and/or nervous system).

Nora's understanding of her body through sections is reminiscent of how osteoarchaeologists 'put the skeletal body together' when examining human remains (Sofaer 2012). Sofaer notes how,

> [i]n order to assess the skeleton, bones may be positioned anatomically. This process involves the literal reassembly of the body through the (re)organization of an anatomized body (cf. Wegenstein 2006, Hallam 2010), where body parts come to represent a single whole person (Krmpotich et al. 2010). Since the skeleton is what gives the body its shape, even when fragmented it is clearly recognizable as a body [...]. (2012:138)

What Sofaer outlines brings me back to the previous chapter, to Nora and other participants who describe their body (whether skeletal or fleshed or a combination of both—as was often the case) as a multiplicity (not in Mol's sense of the term, cf. Mol 2002) of parts or objects. For example, Nora's notion of the bowl of the pelvis: "I picture that, *that bowl in there, of bone*" (56, F, emphasis added) references the bony body directly, but Colleen's notion of the body being separable into levers (cf. Chapter 5) doesn't reference any part of the body that "is clearly recognizable *as a body*" (Sofaer 2012:138, emphasis added). This (un)recognisability becomes a matter of context: in this case, chiropractic care and yoga allow particular embodiments to "surface" (Taylor 2005), both skeletal and fleshed. Chiropractic care and yoga are spaces that encourage the surfacing(s) of skeletal bodies, sometimes whole and sometimes in parts or as parts. Nora partitions her body in order to "build" it simultaneously deconstructing and reconstructing herself. This process is in a constant state of flux as Nora's body is both how she understands herself as subject, but also as material which she uses to navigate the world around her (cf. Ingold 2007; Sofaer 2006, 2012).

Yoga is a space where Nora experiences her skeletal body and her whole body. She says,

> I do [think about my skeleton]. When I'm doing yoga, I certainly think about how my form is and how my skeleton and my muscles are all moving and how do they change position [...]. Hold myself the way I

> need to so I don't injure myself. Yeah. So I do think about what's going on inside of me and how—'oh, my pelvis needs to tip,' or—I know one hip is a little more twisted than the other. So I picture that when I'm doing certain things and I can, I can tell, when you move from one side of the body to the other if it's a little different on one side to the other. (56, F)

Yoga is then a space, a frame (to borrow from Butler), and an ethnographic moment (to borrow from Taylor) for the disruption of the perceived wholeness of embodiment, and for the surfacing of skeletal bodily-ness for Nora. As evident in her response, 'skeletalness' doesn't appear by itself. It's accompanied by musculature. In this sense, as with other participants' stories and experiences, skeletal bodily-ness is evanescent—it comes in and out of focus—often in conjunction with other bodily aspects (muscles, blood, etc.). I argue that its accompaniment isn't a reduction of skeletal embodiment, but rather a way to enhance it, to make it more visible or more tangible—to make it sensed. Yoga is then a space of "more labile and refractory framing devices that can help guide ethnographic explorations" of skeletal embodiment (Taylor 2005:742).

Amanda speaks of the interiority of the body as "pretty similar […pause] to the illustration. [laughter] The textbook illustration where it's kind of like, you know, pink with veins and arteries and organs. [...] So it's kind of like blood and bones. Which you probably can't really see your bones, because they're covered in blood" (53, F). Again, the skeletal body surfaces, but it's never 'alone', it comes forth with other bodily elements, not as a standalone *body* (as one would expect in either archaeological or laboratory settings), but rather as a intricate part of the *whole* body. This is further illustrated when she says, "I would say [I'm] less aware of organs […] because [...] I can't really visualise them specifically or know which one's which. [...] They seem more like just a big blob in there […]. That, I would say is more mysterious […]. And I the other limbs just seem more [pause] simple. More simple". In Amanda's view of the body, there is a kind of wave—or a veil—where the body comes through, but is also masked, receding—conferring a certain "mystery" to the "big blob" of

"organs". The flesh and the skeleton are part and parcel of Amanda's embodied self, coming to the surface in various ways.

Just as yoga is becomes a space for people to hone in on their embodied skeletal selves, chiropractic care for April (cf. Chapter 5), and chiropractic care *practice* focus on particular aspects of the skeleton. It becomes a space for the 'surfacing' of (at least part of) the skeletal body. Chiropractic care brings to the foreground specific aspects of the skeleton for adjustment. But it also doesn't hold up these aspects independently from other systems/other aspects of bodily-ness. As Gerald explains: the vertebrae is important, but it's always accompanied by the nervous system (34, M). The interoceptive quality of the body is apprehended through the vertebrae (cf. Gerald's explanation in Ch. 5) in conjunction *with* the nervous system. Through the manipulation of the gross anatomy of the vertebrae, (good/appropriate) communication between the body and the central nervous system is restored (cf. Seaman & Winterstein 1998; Farb *et al.* 2015). Thus, both chiropractic care and yoga offer participants a space for their skeletal bodies to 'surface', albeit in conjunction with other aspects of their bodies which help enhance their skeletal-ness by making it more tangible (both metaphorically/interoceptively and literally/proprioceptively). For example, if I press my fingers on the knuckle of my last digit (the auricular/little finger), I can feel the proximal phalanx and the head of the fifth metacarpal, but that feeling is both internal/interoceptive in the sense that I *know* that it's there—internally—but it's *also* proprioceptive in the way that I am sensing it with the fingers of my other hand, which is comprised of bone, muscles (albeit small ones), nerves, and flesh. Attending to these sensations gives me tools through which I can *me prendre en main* through particular frames that address these bodily (skeletal or otherwise) sensations, though these frames change and are never static.

Nora *se prend en main* in various ways: through her decision to "keep running—or walking. Whatever. Shuffling", by tending to the "twinge[s]" in her body, and by picturing her skeleton and "[holding herself] the way [she] need[s] to so [she doesn't injure herself]" (56, F). *Se prendre en main*

for Nora, means ‘taking care of oneself’ and being ‘attentive’ to her bodily-ness (whether skeletal or fleshed) and involves a sense of awareness—a form of interoceptive ear that listens to her body as a way to care for it and to carry on (to borrow Ingold’s term). Arguably, this awareness is based on Nora’s experiences not only of herself, but also those of others around her (e.g. her mother and her friend—cf. Chapter 6).

Se prendre en main is also reflected in the ways that Kate “push[es] past [the] limits” of her embodiment—and of her body (sometimes to the point of injury). Kate then negotiates “surprising [herself]” with “becoming strong and active and fit and agile, but not getting injuries” so that she can still participate in physical activities and ‘keep up’ with her children. She doesn’t only embody her skeletal self, but also other aspects of her being as she *se prend en main*. As embodied, Kate “[takes] time for [herself]” to “relax and just focus on stretching and meditation and like that it's—you can do whatever your body needs for that time” in a space that allows/encourages her to “[listen] to your body and [hold] out [...], so it's very different [from running]” (39, F). *Se prendre en main*, for Kate, involves understanding more than just the ‘skeletal’ or musculoskeletal aspects of herself; it is also knowing when and where to negotiate how these will be apprehended in her practice(s). Embodied practices such as yoga become a very concrete form of *se prendre en main* as “self-care” (also self care) for her. She ‘takes care of herself’ by engaging in active interoceptive “listening to [the] body” (39, F).

When speaking about her musculoskeletal body, Nora says:

> I can picture my bones and then tissue around it. Just based on, you know, seeing drawings or whatever in offices, and then you start to visualize that inside—what's going on inside of *you*. It takes *the mystery out, the fear out of it, right*? […] when I'm doing yoga, I certainly think about how, like how my form is and how my, how my skeleton and my muscles are all moving and how do they change position to make it look nicer, look more *the way it's supposed to be*. (emphases added)

Knowledge of the composition of the body—its materiality and its component parts enables Nora to “visualize that inside—what’s going on inside of *you”* based on “seeing drawings or whatever in

offices". This visualisation becomes important not only in terms of its reference to the anatomical body of medicine (Chapters 5 and 6), but also to the greater idea behind the visualisation of a skeletal body that is external to oneself—i.e. the body that supposedly can stand outside the body. For example, I can hold another's skeleton, but I can't hold my own skeleton, The body in the office, in the drawings, doesn't refer to any particular, material body—it doesn't exist because it's a representation (artistically-speaking, and linguistically-speaking) of something that has no referent in 'the material world'. A photograph of a skeleton refers back to a tangible, material, bony body that exists *somewhere*. Though it may never be encountered and its material quality may change (pieces may be lost or broken), the skeleton in the picture represents an individual. Comparatively, the drawing of a skeletal body (as in the office or elsewhere) has no reference point because it is a generalisation that both allows the viewer to identify with it, and to distance themselves from it. The drawing in the medical office *is* Nora because she also has a skeletal body, but it's also *not* her, because her skeleton will never look like the one in the drawing.

Calling attention to the representation allows Nora to 'see' her own skeletal body and visualise its movements and positions—its component parts, but also highlights a disconnect where "my skeleton and my muscles are all moving and how do they change position to make it look nicer, look more the way it's supposed to be" (56, F). Nora's idea that the body must "look the way it's supposed to be" and Colleen's reference to the Vitruvian Man (37, F, cf. Chapter 6) evoke an idealistic representation of a body (skeletal or otherwise) that doesn't exist (eg. Da Vinci's proportions of the human body.

Ivy, similarly, recalls how she "pay[s] a lot of attention to peoples' feet and making sure that their foundation is set. So, [...] cue people to really engage […] with the bottom of their body, […] and how they're standing […], and where their toes are, and 'are they turning in a bit'? Is their knee properly aligned with their toes?" (27, F). 'Proper alignment' of the body is a foundational aspect of how Ivy instructs and engages with embodied yoga practice. For example, when she says "I think about

my alignment and how bones are, like, holding up my body for sure. Especially when I'm sitting, because it's—in yoga for sure because you kind of are really engaging with your skeletal system, like how you're like—how you're twisting your back and how you are standing and how you're placing your spine and all that stuff". In conjunction with Nora's notion of the body "look[ing] the way it's supposed to be", Ivy puts forth a particular, skeletal *body* for her students/clients to ascribe to. But, again, this body is never *only* skeletal, because, as she notes:

> I find that when you kind of tell people to engage their muscles around their bones, it's really helpful for people because—I mean, it's hard to like think about your bones, I think people are like, 'they're there,' but it's hard to, like, feel. Like, how am I supporting them? So I think for me if you're, like, really telling people to engage their muscular system around their bones and, like, support their skeleton in a way that allows them to move strongly and safely into poses. (27, F)

The combination of hard (skeletal) and soft (in Nora's case, muscular) tissues underlies Nora's notion of herself as an individual. This combination is also important in Ivy's construction of embodied yoga practice. The experiences that Nora and Ivy have are not limited to the surface (as it were), but are effectively skin deep, and bone deep. Sofaer explains this when she outlines some of the processes of osteoarchaeological analysis:

> osteological practice typically involves investigation of the sex and age of the individual, metric studies, examination of pathology (disease and trauma) and identification of skeletal modifications, the latter two providing insights into past lifeways (Larsen 1997, Sofaer 2006). Once these have been explored, bone chemistry may be investigated in order to examine diet and human migration. (2012:138)

People's experiences are inscribed[50] in their bodies, though they may not always be conscious of it when they recount their stories or may use different words than those used in osteoarchaeology. For example, Olivia (25, F) says: "I think of bones kind of like a book. Like—it records your life in a way that soft tissue kind of can't because it changes and is replaced so much faster than bones are. [Than]

50 as in the skeleton effectively 'records' a person's lived experiences (to a certain extent) in terms of lifeways, cultural and pathological modifications, etc. (cf. White & Folkens 2005).

[o]ur bone material is [replaced].” Olivia illustrates how bones keep a record of ourselves over time, before the event of death, and before flesh is ‘removed’. What becomes important to notice is that this record is also present during an individual’s lifetime, the fleshed skeleton doesn’t suddenly become ‘readable’ *after* death, it’s always there, as a reference point inside the body. We just can’t ‘see’ it.

Exteriorising the Interior:

The question then becomes how do we ‘exteriorise’ the interior? As I discussed above, particular spaces such as chiropractic care and yoga practices allow for the ‘surfacing’ of the skeletal body. Medical imaging, such as radiographs, ultrasounds, and MRIs can ‘exteriorise’ the skeletal body, but also soft tissues of the interior (cf. Lammer 2009, 2012 for an example).

‘Making sense’ of bodily sensations doesn’t necessarily preclude the inclusion of the person performing the operation in the ‘creative’ process; the context of the images’ presentation is what disrupts the relationships of patient, researcher, medical professional, and gallery visitor (recalling Bourdieu’s notion of the habitus, cf. Chapter 2). For example, Kate and I shared this exchange:

> Kate - That it's amazing that that's inside, 'cause it's not something that I picture very often, thinking about like the chest x-rays that we got before we moved to new-Zealand to make sure we didn't have TB. Um, [pause] yeah, I guess I think, like I think about my bones in breathing, like your ribs but that's probably the only time, I think, because I'm not super slim. There's a lot in the way of, in between the outer part of me and my bones. [chuckles] So...[...] I think sometimes about framing our chest x-rays and putting them up in the living room, but when I really look at them I'm like, eh I don't know if I really want to look at that every day. But maybe I might revisit that idea.
>
> CCB - And so, when you look at those and you have those thoughts about those X-rays, like you go between, oh I want to frame them and maybe not. What are those thoughts or like the feelings that you get when you look at those?
>
> Kate - Um, I guess just the—you can also see some of the flesh in the like. So, that, the bones are pretty neat—the flesh that surrounds it, I don't know if I'd advertise that in my living room. [laughs] So, um, I [beat] yeah, yeah, it's just that interesting to, um, contemplate how we're composed and how our kids are composed. And that, that feels inside your like, my

> daughters' skeletons were built inside me is pretty amazing so, and the way that they grew up.

The images exteriorise Kate's (and her family's) interior, their skeletal bodies, but not fully as one would 'pull out the skeleton' from the fleshed body. Rather, as Kate points out, the "flesh that surrounds" her bones is a reminder that the skeleton is interior, that "[t]here's a lot in the way of, in between the outer part of [her] and [her] bones" (39, F). In the same way that participants *se prennent en main* by placing themselves (their bodies) in various contexts where they can/may act upon their embodiment and engage with their skeletal selves, Kate reflects on the mutliple contexts through which her skeletal images can find themselves: in the medical setting for moving to another country, or perhaps in her living room. In this way, the exteriorisation of the skeletal body is done through medical imaging, but takes on a proprietary quality where it can become something else. Context of exteriorisation matters. For Kate, the x-rays were "routine", a qualification method, which differs from a context of pain. As Eva points out how, in her work as an x-ray technician, "[she's] seen so many degenerative patients because a lot of reasons why people get x-rays is because their joints are, like, going pretty much. So, they're almost bone on bone and they're in this incredible pain that [she has] no way of understanding because [she doesn't] have arthritis of any sort" (24, F).

This contextual exteriorisation is reflected in April's experiences of her chronic neck pain, which 'takes over' other, possible musculoskeletal issues. She recounts an encounter with her chiropractor (Gerald, who, as I've shown, makes use of medical images to show his patients where the 'issue' is) where:

> he's like, "Oh, your lower back is a little bit out [April]. I'll adjust that for you. How's your back feeling?" Usually it's fine. He's goes, "But it's a bit out, any, any tightness there?" I'm like, "No, I didn't notice." Maybe because I think everything's been focused on this part of my body [points to neck], that I don't notice you know something that's maybe a little more minor. (53, F)

Embodied pains that are “a little more minor” don’t surface in the same way (or at all) for April, because of the permanence of her chronic neck pain. However, she doesn’t only embody her neck or describes herself ‘as a neck’.

I would argue that images of bodies and bodies in interviews carry different ethnographic weight: just as the body map fostered more dialogue between myself and participants, pointing and holding one’s bodily aches was a different, more performative act on the part of participants (cf. Sofaer 2012). Performance that is temporary and, unless recorded, is ‘of the moment’.

This exteriorisation through medical imaging is also evoked when Nora speaks about her own medical images while she was pregnant: “I've watched an ultrasound, you know, and you can see the baby and stuff” (56, F). Many other participants spoke of x-rays, or other forms of medical images they had done in a medical context. For example, Kate’s radiographic images of her family’s chest as part of a routine check for tuberculosis before a move to another country (39,F), and John showed me the kinds of radiographs he sometimes worked with as part of his profession. The relationship, however, isn’t the same, since I am neither the ‘imaged’ or the ‘imager’ in this case. But the relationship doesn’t break because, as Ingold says:

> participant observation [...] allows the ethnographer to access other people’s ways of perceiving by joining with them in the same currents of practical activity, and by learning to attend to things—as would any novice practitioner—in terms of what they afford in the contexts of what has to be done. This communion of experience establishes a baseline of sociality on which all attempts at verbal communication subsequently build. (2011:314)

As Ingold illustrates, though I may not be part of Nora’s, Kate’s or John’s experiences in the moment that they experience them, I am, through my *own* experiences of medical imaging, able to draw parallels between all of our stories. Being a participant observer where bodies (fleshed and skeletal) are concerned doesn’t end when the ‘session’ or the interview is over—because I am a body (cf. Chapter 6), I am always already (to borrow Derrida’s term) participating observing through my own bodily-

ness, and I'm always already immersed in a world of materials and sensations (Ingold 2007; Grieder 2015). Moreover, as an anthropologist, it follows that I also 'carry' my participants' narratives with me as I go about my day, recalling bits and pieces of conversation, going through particular experiences and sensations, etc. For example, when doing a bind[51] in yoga, I vividly recall Kate's description of her experience of tearing her hamstring.

In this section, I discussed how the interior of the body comes to be exteriorised by participants through language or through experiences of medical imaging. Bodily interiors were also 'pulled out' or surfaced through the body maps I asked participants to draw and for some they *experienced* being embodied in different ways—recalling further stories or sensations. Skeletal subjectivity was a tactile, sensed embodiment that could surface and sink back, making itself loud or silenced.

Plasticity:

Plasticity, as Sofaer explains, is "[a] key material quality of the skeleton, and the human body [...] It affects both the soft tissues and the bony structures of the body and refers to a process of functional adaptation to the environment, where the notion of environment is understood as comprising both so-called natural and cultural phenomena (Roberts 1995)" (2006:70-1). Bodies overall are plastic, or malleable. Their change is constant and their malleability is what 'surfaces' through participants' stories and experiences. For example, "how my skeleton and my muscles are all moving and how do they change position to make it look nicer, look more the way it's supposed to be" (Nora, 56, F) is part of the malleability of the body—whether participants express it through notions of changing 'their own' bodies or through changes that happen(ed) to those bodies (through time, injuries, etc.).

51 A 'bind' is an action usually done during a twist of the upper body, where the arms reach behind the back and the hands are clasped. Sometimes tools such as straps, towels, or rings are used to cover the distance between the hands, which serves to 'deepen' the asana.

Another example of the ways in which individuals approach malleability (and, by extension, the malleability of their skeletal selves) is John's suggestion that

> when you get to be my age, when you get out of bed in the morning, everything is stiff, and sore, and you move slowly, whereas after I think only two or three sessions of yoga *I felt like a teenager again getting out of bed. It was remarkable*. [...I]t's calming [yoga]. Gives you a sense of *well-being*. [...] *Enhanced energy, and fewer aches and pains*. [silence] It should be *mandatory* for anybody over 40. [Yoga is] an activity or [...] an *experience*. I would say, [pause] *it's a workout*, yeah, it's a type of workout. (55, M, emphases added)

John notes that yoga is, in essence, *transformative* for him as "an experience" or as a "workout". Though he doesn't use the terms malleability to the same extent that Sofaer does or the phrase "[y]our body is *infinitely* capable" and "*qualifying* for movement" as Colleen does (37, F), he still points to the ways in which his embodiment is marked by the experience of yoga and how his embodied self (including his skeletal self) is changed through this practice. Malleability can be done through the skeletal body but also through energy (cf. Chapter 5 for examples), and through the ideas people use to illustrate (both figuratively and literally) their skeletal subjectivities (and their whole bodies). When Gerald says that:

> the spine being locked up in a certain position, it's, it's—when that happens you're not getting that, that joint information, that movement information to the brain, and then you're getting what you call '*dysafferentation*', so improper signals back down to that area which tell muscles to tighten up, which tell maybe the digestive system to stop, stop its motility and not contract properly and that kind of thing. (34, M, emphasis added)

Gerard's chiropractic care practice—effectively moving people's skeletal bodies with his hands—becomes a literal manipulation (i.e. tactile) of his clients/patients skeletal selves to restore interoceptive capacity in them. The skeletal body that walks into Gerald's office is surfaced because of a "dysafferentation", and submerged when it leaves—the connection having been transformed and restored.

Further, Sofaer demonstrates that “plasticity begins in utero. Thus it is increasingly understood that effects of the mother’s environment in relation to the class and health status of pregnant women influence the child’s intrauterine experience and the body of the foetus” (2006:71). Therefore, plasticity and *se prendre en main* are both intimately linked, but, as I’ve said above, *se prendre en main* is not limitless—skeletal subjectivity is not an antithesis to the neoliberal project, for it also contends that there are certain aspects of our skeletal selves that are, quite literally, ‘out of our hands’. A lack of control over *se prendre en main* can engender particular ‘insecurities’ and apprehensions towards the skeletal body.

Surfacing Through and Beyond Fear:

Fear is another way in which people I spoke with *se prennent en main*. Fear is reflected in participants’ stories as both an interoceptive signal—usually through pain—and also as a ‘residue’ from experiences that they have had (though not always as a result of pain). For example, when Kate explained and demonstrated the yoga pose she was performing when she tore her hamstring, she said: “It made me *cautious, cause I didn't feel like I was overdoing it*, I was just like, ‘well, we'll just see what happens’” (39, F). She clarified: “I'm a bit scared to know that you can so easily damage yourself”, illustrating that fear is an aspect of how Kate negotiates her bodily self (cf. Chapter 4). Fear manifests not only as a sensation experienced in/as the body, but also fear of one’s body.

Amanda says: “They [organs] seem more like just a big blob in there except for the kidney, […] That, I would say is *more mysterious*, maybe not knowledge of them, but more mysterious in how they actually work. […]” (53, F, emphasis added; also cf. Chapter 6). Nora speaks of the mystery, of mystification, of embodiment, specifically with regards to medical context in which bodies sometimes find themselves (see below). Later on in the interview, she said “mostly *my skeleton has never let me*

down, but my uterus has [laughs]. So, I think the tissue parts are more fragile than the bone. For me" (56, F, emphases added).

Further, Nora recounts how she "made friends with [herself] inside after that [her pregnancy loss] because it worked out [laughs] and so it was like, 'Okay, I'm not dead inside'. Because that was a big piece of [her] depression—was figuring out if [she] was able to actually have a baby or not. So, mostly [her] skeleton has never let [her] down, but [her] uterus has" (56, F). Thus, Nora's *se prendre en main* also involved her subsequent pregnancies 'working out' since beforehand her experience of her body was being "dead inside", mysterious, and—to an extent—dangerous. Through experiencing pregnancy, Nora effectively *a pris en main* her material body's plasticity. As explained above, Nora's selective malleability of her body here allows her to separate her uterus, to single it out as a (potential) problem area, but through her experiences, she "made friends with [her] inside after [her loss] because it worked out".

Just as the ethnographer participates and observes, so do individuals participate in and observe their own embodied lives; this lived experience affects their conceptualisations of their bodies and how they *se prennent en main*. Hence, *se prendre en main* for the people I spoke with is twofold: it can be a way to 'take charge' of one's body—that is, in some way, to 'reclaim' one's embodiment—as Nora does by "walking" and "shuffling". But it can also involve giving one's self—body—over to another (yoga instructor, chiropractor, doctor, surgeon, etc.). Giving over also involves trust, something that Nora explains well when she speaks of the 'mysteries' of medicine. She says:

> I think the medical field, *they keep everything pretty mysterious and kind of hide things from people*, or—I mean it's probably just cumbersome to try and explain things and it might freak people out too—not everybody's as curious about those things. Or as open to really *knowing*. Because it might frighten people, depending on their temperament I guess. (56, F, emphasis added)

Knowledge of and about the body, for Nora, becomes a way to quell fears, to create an understanding of what's happening inside her body and the sensations that she feels in that body (as she explains above when she identifies her bodily "twinges"). In the same manner that her "skeleton has never let [her] down, but [her] uterus has [laughs]…. [she thinks] the tissue parts are more fragile than the bone" (56, F), and therefore need more attention and more work. They are—in her experience—more vulnerable than the 'structure' that supports them. The fear and uncertainty she feels derive from her experiences and her perceptions of the mystification associated to the medical field, the ways in which bodily-ness is "hidden" or "cumbersome to try and explain". In this way, the body may be blurred and obfuscated for the sake of not "freaking people out" or "frightening [them]", and, perhaps, for the sake of simplicity.

This notion of fearing one's bodily-ness recalls Reventlow, Hvas, and Malterud's study of women's reactions and relationships to bone scans, and how the use of medical technology to potentially diagnose osteoporosis should be examined in relation to women's embodied experiences (2006). As the authors explain, "As a consequence of the bone scan results, women tended to be more cautious and/or take preventive action to safeguard the body" (2006:2726). Caution is also displayed in participants' narratives in my research, where Nora and Kate both feel an anxiety in relation to their bodily-ness—bodies, skeletal and fleshed, that they can safeguard through particular action/activities that help them 'understand' their bodies in various ways.

In the context of Reventlow, Hvas, and Malterud's research, "[w]omen's efforts to control their bodies by being more cautious and careful can be seen as an example of Foucault's (1977) disciplining of the individual body" (2006:2728). The authors call for a phenomenology that consists of "re-establishing the roots of the mind in its body and in its world" (2723) to dismantle the medical gaze in which "[m]odern medicine works by making the body's invisible parts visible, and the culturally

established confirmation of the primacy of the visual also extends to medical technology" (2721). However, this posits that the individual, the subject body, in this case, has no capacity to (de)medicalise themselves through experience—that what is made visible in anthropological work is determined by both the anthropologist *and* the participant. *Se prendre en main* through one's skeletal self involves negotiating what surfaces and what is submerged in a particular setting/frame/ethnographic moment. Caution becomes a way that the authors' participants *se prennent en main*. The bone scans create a particular environment, but it's not entirely subjective, because the interpretation and the actions participants take *in relation* to that interpretation are not dictated by the scans or the medical system. If, as the authors say: "There is no possible way to determine exactly who will have fractures later in life and who will not" (2721), then the presumption of disease or health is detrimental to the individual's ability to make their *own* decisions about what they consider to be good/bad for their own embodied sense of self. Rather it presupposes a descending fog aimed at participants' notions of their embodied selves and their own ability to interpret the sensations that they experience *as* bodies—as material that is malleable and influences and is influenced by other materials in the world (Ingold 2007:7). In other words, if the ethnographer is the novice, then the participant is, by extension, the expert, and this includes being expert of the sensations they experience as bodies (Ingold 2011:314).

Being *in* the body (Merleau-Ponty 2007), then, means that we must contend with both the sensations and ideas we experience with(in) ourselves and the ideas and perceptions generated by those experiences which seek to detach bodies from their sensations, to objectify (both in the sense of making a body into an object and in the sense of making a body 'objective') and 'sanitise' them (Merleau-Ponty 2007:149). 'Gaining knowledge' about bodies "based on, you know, seeing drawings or whatever in offices, and then you start to visualize that inside—what's going on inside of *you*. It takes the mystery out, the fear out of it, right?" (Nora, 56, F).

Skeletal embodiment as material, is experienced differently in these medical contexts—skeletal bodies become less tangible, more "mysterious" and, supposedly, only those with the appropriate "knowledge" or "understanding" can effectively 'reach' these bodies. However, being skeletally embodied doesn't mean fully 'relinquishing' oneself over to 'experts'. As participants like Nora show, *se prendre en main* is a way through which to *know* the body and to be effectively *embodied*—reclaiming the malleability of the body. 'Knowledge' of the body becomes a way for Nora to *se prendre en main*, to make her body plastic—malleable—and knowledge becomes a tool to demystify her embodiment.

Individuals I interviewed negotiate their embodied subjectivities by using their experiences to create moments of care and caution. The malleability of the body—it's plasticity, to borrow Sofaer's term—isn't infinite, but its iterations are complex and contingent on people's experiences as bodies in the world. Skeletal subjectivity surfaces in participants' narratives as moments of *se prendre en main* through their material bodies in the contexts of chiropractic care and yoga (as well as other physical activities—for example, walking, running, or shuffling in Nora's and Kate's narratives). The skeletal body also surfaces in interoceptive moments during those contexts (and outside of them as well), where attention is called to the sensations within the body, effectively turning the body inside out by calling attention to it, 'bringing it to the surface', but also inviting it 'to surface' (Taylor 2005:742).

Conclusion:

In this chapter, I argued that skeletal embodiment and subjectivity is lived and navigated through the shifting and surfacing materiality—both as concept and as 'object'—of one's body.

Skeletal embodiment is deeply material, personal, and critical in the formation of what constitutes the skeletal subjectivity of an individual. Skeletal subjectivity can't be understood simply as an *aspect* of the body; it's also as a means for people to negotiate what and how they want their bodies to be. Participants want their bodies to be strong, 'ageless', mobile, energetic, and capable, or to be functional mechanisms that can be 'submerged' in the day to day. The push and pull of the 'waves' allows these bodies to surface and submerge in various contexts and through their stories and experiences. People's narratives helped 'flesh out' (as it were) how skeletal bodies are, first and foremost, material, and how skeletal subjectivity comes through in the context of *se prendre en main*. Embodied experience isn't something that participants experienced only through language and stories, but something that they lived and sensed through their bodies in complex and contingent ways. Interoception allowed the skeletal body to come through in particular moments throughout the interviews, giving participants an opportunity to 'surface' or 'bring to the surface' their skeletal experiences (Taylor 2005).

Chapter 8: Conclusion

Introduction:

In this chapter, I summarise the key findings of my research, speak to its contributions to the field of anthropology and beyond, and give some recommendations for future research on skeletal bodies.

Overview and Key Findings:

The research questions asked at the onset of the research were: how do bodies figure in the narratives and practices of people who practice/engage with yoga and chiropractic care in Victoria, BC; how does their skeleton figure in their narratives and practices, and; what does skeletal embodiment look like? How is skeletal embodiment and subjectivity negotiated by participants in Victoria, BC?

I answered these questions by looking to participants' narratives, their stories and experiences as bodies who were simultaneously fleshed and skeletal—a theme that came through as we talked and moved about the interview space. People I spoke to didn't always make clear distinctions between what was 'body' and what was 'skeletal' (or fleshed and unfleshed, as it were), but rather experienced their 'skeletalness' as multiple sensorial and sensory aspects of themselves, imbricated in their daily lives. Skeletal subjectivity and embodiment was negotiated as participants looked to different ways of *se prendre en main* through their materiality.

Skeletal bodies surfaced through participants' experiences in various ways. They surfaced as sensations within the body—a form of interoceptive signalling that followed an ebb and flow: bodies surfaced through pain and submerged in their release (though that's also intimately tied to surfacing

and not a separate event). Sometimes pain was interpreted as the body signalling the need for release; sometimes discomfort and aches were taken as signs of the body getting stronger or more pliable. Pains were often addressed by participants through stretches or seeking particular forms of attention to tend to their bodies (like a chiropractor).

Skeletalness also surfaced in apprehension and sensations of ageing—of 'feeling the age in the body' or 'feeling one's age'. Ageing was linked to the (perceived) limitations of participants' bodies—when would they become "old" and when would their bodies "stop" being "able to do what they need them to". However, participants didn't always identify ageing as an inevitability; yoga could serve as a rejuvenating practice—a transformative bodily experience that reversed the effects of time and made one "feel like a teenager again" (John).

Surfacing was also present through sensations of energy—of having or lacking 'it'—as a form of possession that one could hold up, or as something that 'came through and out' of one's embodiment (as when someone felt energised or filled with energy because of good health, eating and sleeping well, etc.). Some people also identified their selves and their environment as energy (an idea echoed in many yogic texts and foundational works on chiropractic care[52]).

Skeletal bodies surfaced through the sensory attention given to them, participants being *shown* their bodies on images, or diagrams, etc. but surfacing was also made possible by the creation of spaces (chiropractors offices, yoga studios) where skeletal bodies (and bodies in general) were tended to—through touch. Touching one's body, touching the bodies of others brought skeletons to the surface. Through touch bodies were not only surfaced by both clients (yoga students, chiropractic care patients) and practitioners (yoga instructors and chiropractors)[53], their surfaces became sites for the proliferation and the production of particular knowledges of and about those bodies.

52 cf. Senzon 2011c, Stephens 2010, and Tardan Masquelier 2021.
53 Please note that these distinctions aren't clear-cut, as I explained in Chapter 1.

Finally, skeletalness surfaced in how participants explained and knew their bodies—in the ways they described their interior, effectively exteriorising themselves—as well as the ways their bodies 'knew', were knowledgeable and made themselves heard (i.e. surfaced) through particular situations (poses, manipulations, movements, etc.). These knowledges were gleaned from particular spaces like medical offices, (text)books, chiropractors' offices, yoga classes, experiences, etc. that gave participants a sense of how they came to *know* their bodies (and those of others). Simultaneously, people also spoke of the body as a source of knowledge in and of itself—a *knowing* source which could indicate, communicate what was happening within the body. The knowing body became a manifestation of the interoceptive force of the body, which could make itself heard or could be tended to through particular practices.

In this dissertation, I showed how *se prendre en main* can be used as a tool to describe how people navigate their bodies through particular spaces, and create and recreate their own subjectivities through their skeletal materiality, in the context of chiropractic care and yoga in Victoria, BC. *Se prendre en main* was a way for participants to both engage with their skeletal sensory experiences and their overall embodied experiences. People negotiated their skeletal subjectivities through the materiality of the body, which they sought to modify through bodily practices such as chiropractic care and yoga. 'Framing' and reframing the ways in which skeletal bodies are lived required an alternative concept which I called *'se prendre en main'*: this concept helps to examine how skeletal bodies are malleable and multiple, and come through in particular spaces. It can mean, literally, 'to hold in one's hands', or if used in a particular sentence: "I hold myself in my hands" (*je me prends en main*). It can also be translated to 'pulling yourself up by your bootstraps', 'taking hold of oneself', etc.. *Se prendre en main* can be forceful or soft—or a combination of both. I can 'take care of myself' and 'push my limits' at the same time. *Se prendre en main* is an effective and 'pliable' concept that can help reconcile the seeming contradictions of bodies that both seek to break from particular frames while

simultaneously permeating those particular spaces (such as yoga studios or chiropractors' offices, in this case). This concept serves to complicate our understandings of what 'the body' is and can be(come) in anthropological fields where the body is involved.

Skeletal bodies 'surfaced' in participants' narratives and experiences in various ways, both proprioceptively and interoceptively: stories of pain, fears and apprehensions about ageing, tales of energies, learning about bodies through the senses, and how knowledge of the body (skeletal and fleshed) gave participants a sense of 'ownership' over their own materiality (something that came through as *se prendre en main*). People's skeletal bodies were felt and experienced, part of participants' experiences of their chiropractic care and yoga practices as well as their day to day lives.

Contributions and Further Research:

At the beginning of this dissertation, I examined how bodies have been theorised and re-theorised in anthropology for the better part of the last century, from being understood as symbolic tools that help subjects function in the world (Bourdieu 1972; Mauss 2002[1936]), a form of hanger upon which one hangs particular practices—cultural, social, (self-)regulatory, etc.—to integral parts of our embodied experiences (Csordas 1990, 1994; Foucault 1990, 1994; Merleau-Ponty 2007). Skeletons, however, as foundational aspects of our embodied lives, have been excluded from ethnographies of bodies.

My research offers a novel approach by presenting an ethnography of skeletal lives—an original contribution to the field of anthropology. Where other disciplines and branches of anthropology have mined the skeletal body for what it can tell us about the lives of past individuals (and victims of crimes), I offer a way of thinking about skeletal bodies as living in the present and in our biographical future.

Skeletal subjects—or skeletal subjectivity—surface through "ethnographic moment[s]" (Taylor 2005:741). Skeletal subjects are effectively "made and unmade in and through practice" (2005:741) in this research where chiropractic care and yoga offer particular frames (of practice) through which skeletal subjects come to the surface. Examining skeletal subjects, as I've said in the previous chapter, doesn't discount bodies as a whole to uphold skeletons as some form of truth. In other words, I don't propose to discard previous theories of bodies and embodiment. Rather, I propose that skeletal bodies and skeletal subjects suggest that there are aspects of embodiment that remain unexamined and call attention to the skeletal body as 'taken for granted'. For example, how do skeletal bodies feature in the lives of elderly individuals, individuals with arthritis, individuals whose skeletons, bodies, and abilities don't fit dominant ideas of 'normalcy' or 'health'?

Moreover, this research contributes to foregrounding how bodies are addressed and constructed in chiropractic care and yoga spaces. How do these constructions further particular narratives about bodies—bodies that conform and bodies that deviate and must be corrected? What becomes salient through this research is that people don't come into frames as 'blank bodies'—individuals come into these ethnographic moments with bodily notions that can complicate the ways in which bodies are understood in practices such as chiropractic care and yoga. Further examination of chiropractic care is needed since I was unable to observe chiropractors at work.

Exploring different avenues can give insights into individuals and communities in their respective historical, social, and economic contexts. How do people tend to their bodies and *se prennent en main* in situations of precarity? How does navigating particular spaces where skeletal bodies surface serve to perpetuate or attenuate bodily disparities? What bodies are surfaced and which ones are effaced? What constitutes *se prendre en main* for diverse bodies (e.g. pregnant bodies, addicted bodies) and how do these bodies negotiate their shifting and surfacing materiality? Restricting criteria by examining skeletal bodies through age, sex, gender, social and economic standing, abilities

could offer a further avenue for research. How did male participants differ from female participants in their responses (something which wasn't explored in the current study but could be in the future)? How are disabled bodies tended to in spaces such as chiropractic care and yoga? For example, Nora's friend have "pretend parts"—prosthetics—'on the inside'. Her friend's mechanical parts are made invisible save for the surgical scars that they have on their bodies (which may be hidden). How do people with prosthetic limbs (interior and exterior) tend to their skeletal bodies in, for example, yoga space?

Se prendre en main offers openings into how populations with diverse bodies, practices, abilities, resources, and different understandings approach and tend to their own sense of embodiment, skeletally and otherwise. Noting that most of the participants were white females in their forties (cf. Chapter 3 for a more detailed profile)—the question remains, who is left out? What are the ways in which individuals who can't afford to attend yoga classes in studios and/or who don't have access to chiropractic care services *se prennent en main*? How do individuals *prennent en main* their skeletal bodies in spaces that would 'exclude' them?

Overall, this dissertation helps to bring into view what is (predominantly) invisible. However, I can't propose an 'anthropology of skeletal bodies' or an addition to the 'anthropology of the body' because skeletal bodies (like bodies in general) are part of "ethnographic moment[s]" (Taylor 2005:741-2). Skeletal bodies resist solidification despite their materiality by being at once "subject, object, and medium" (Sofaer 2012:135) through which individuals *se prennent en main*.

Epilogue:

In writing this dissertation, I focused on the skeletal body and how *se prendre en main* can be applied to this specific embodiment—how it can make the skeleton surface. Though my focus wasn't on the fleshed body, during the writing of this dissertation I experienced my own bodily surfacings.

On November 21st of 2021, at thirty weeks and one day of pregnancy, I gave birth to my daughter, Luna, via emergency caesarean section. It took eight minutes for Luna to take her first breath after she was born. She weighed 1.5 kilograms, had a full head of hair, and was intubated for the remainder of the time that my husband and I spent with her. She had a feeding tube down her throat and wires attached to her small body that monitored her breathing and her heartbeat.

We saw four different Neonatal Intensive Care Unit (NICU) doctors over the course of the first week, two geneticists, and various specialists. Luna was very hypotonic—meaning that she didn't react like normal babies; she didn't pull her arms away when you held them, didn't push back. But the doctors didn't understand why this was happening. The consensus was that what was happening to Luna was genetic and her condition—whatever it was—would not improve. All three of us had to be tested.

I shuffled from the maternity ward to the NICU, my internal organs stitched and tied, my abdomen held together by staples and 3M tape. Everything had to be done deliberately and slowly, even as I held her. Tubes had to be moved around us, taped to chairs or clothing so they wouldn't fall off or be pulled out. Her chest rattled when I held her against mine; she was aspirating fluid and had to receive suction every hour or she would not get enough oxygen. After ten days of life, Luna was placed in palliative care and passed away thirteen days after she was born.

I remember giving her a bath the day before she passed, the softness of her hair, the feeling of her small body against my skin. How much she looked like her father. And how much I wanted her to be okay. Somehow, my body had failed and betrayed me.

It wasn't until a few weeks after Luna had passed that I recalled Nora's story of loss vividly. The words she had spoken resonated with me and I understood her narrative on a deeper level. Reflexively, my own embodiment carried on beyond my experiences of pregnancy and loss. The

mystification of the medical system that Nora explained lingered as we waited for the genetic test results.

The answer was that Luna had Congenital Myotonia. This condition is caused by Myotonic Dystrophy (DM1), a genetic anomaly present in the long arm of chromosome 19 which causes gene expansion, affecting both voluntary and involuntary muscles (respiration, swallowing, etc.). As a form of degenerative muscular dystrophy, DM1 develops over the course of an individual's life, wasting away at muscles, causing tension, discomfort, and loss of mobility. The condition is passed down through the maternal line, since males who are affected by the condition are usually infertile.

Females affected by DM1 have a 50% chance of passing on DM1 to their offspring, though the severity of the condition varies as each ovum contains a different number of replications. Luna's number of replications were in the thousands—an extreme case, and what the geneticist would later say was a case of 'bad luck'.

Further tests had to be done to determine the severity of my own condition. The sense of guilt and the feeling of responsibility that I had in the face of the results made me reevaluate my relationship with my body. As I awaited my results, I still hoped, somehow, that the results were wrong. That what the geneticist said wasn't true. That a mistake had been made. Unlike Nora, it wasn't some part of my body that had betrayed me, but the matrix of my being.

As I awaited the test results, I researched as a way to quell my fears and to cope with the apprehension of what part of myself refused to acknowledge. My body was evanescent in the examination room—both surfacing through sensations and effacing itself at the same time. As the geneticist handed me a piece of paper, she explained that my diagnosis was confirmed. She answered all my questions and strongly recommended that I take a leave of absence.

Unlike my participants, I couldn't rely on caution as a sign for the future; I had to reconsider my entire embodiment. How I *me prend en main* wouldn't change my embodied self—not really. But I

understood how seeking knowledge was important both for myself and my participants as a way to *understand* what was happening inside my body—what were the implications of DM1 in every aspect of my life. How would I go about having children in the future? How fast would/could the condition progress? What could I do to mitigate the symptoms? etc.

Knowledge, experience, and sensation combine in my experiences, and in the experiences of my participants. As Lammer explains, "[p]hysiology colours our perception of the world and enables people to be interactive" (2021:171). My bodily surfacings differ from those of Nora's, but they are similar enough that my own story with Luna enabled me to understand Nora's narrative on a deeper level, to understand her own search for understanding how her body works.

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