

BAREFOOT RUNNING

**Barefoot Running:
Feeling the World Through Your Feet**

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Abstract

This thesis paper explores barefoot and minimalist running in Ottawa, Ontario and Boulder, Colorado. The objective has been to answer the following questions: how can we understand barefoot and minimalist style running as cultures, how are barefoot and minimalist style running being done in different ways, how do the senses play out and create nuances between barefoot and minimalist style runners. I argue barefoot and minimalist running are distinct cultural forms. I applied an Ingoldian notion of culture that contends cultures are generative, relational, temporal and improvisational. I conducted a multi-site study and I interviewed participants, as well as conducted participant observation. My findings reveal that the different sensations experienced by the two styles of running make them meaningful in different ways. These different sensations and ways of meaning create nuances between barefoot and minimalist running and differentiate them and as a result, there are found to become different cultural forms.

Acknowledgements

And forget not that the earth delights to feel your bare feet and the winds long to play with your hair. - Kahlil Gibran

This project has allowed me to shake off some of the rigid shackles of academia and give myself to another practice that is more wild and free. Running by myself and with my participants, speaking about running, researching running, speaking to those who practice what they preach and love doing so, has allowed me to feel alive; I have come alive through my research. The barefoot and minimalist style runners that I have been fortunate enough to meet with and learn from, in both Ottawa and Boulder, have helped me a great deal in both my academic research and my desire to heal myself through practice. Kahlil Gibran, in *The Prophet*, writes of clothes and how they can constrain us from feeling free, from experiencing the sun, the wind, or the earth on our skin, and that this constraint keeps us from life, and experiencing the breath of life. Barefoot running and minimalist style running has breathed life into my injured limbs and my overshod feet, and encouraged me to go light and go bare, to experience new sensations and to throw my fears aside.

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have become what it has: a deeply personal extension of my relationship with running and injury in a compassionate and academic fashion, which enters into your own. This project is a 'co-telling' of our stories.

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edited my articles, let me talk endlessly about my research and what I was doing, spent time helping me plan my outline and encourage (threaten is more like) me to write articles and to get started writing right NOW. Your work ethic has been inspiring to me and your level of dedication to your research and ability to do what you need to do for yourself without worrying about what everyone else is doing is, again, inspiring! You have taken me on as if I'm a project, expecting nothing in return; instead just helping me to succeed because you want to help other female academics and you understand how hard it was to start out on your own, how little instructions there are in structuring an academic career.

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Chapter 1: Introduction

Preamble

Before beginning an explanation of my research, I would like to take this opportunity to explain the title of this work, *Barefoot Running: Feeling the World Through Your Feet*. This title emerged out of a back-and-forth between my supervisor, Julie Laplante and myself. The idea for this project came out of my fascination with barefoot running and the book, *Born to Run* by Chris McDougall (2009), as well as an interest in sensory perception and becoming engaged in our environment in a different way. This interest in sensory anthropology and the feet led in an obvious direction; to Tim Ingold's research, particularly his 2004 work *Culture on the Ground: The World Perceived Through the Feet*. The idea of perceiving the world through your feet, as Ingold (2004) explains it, has stuck with me throughout my research and interviews and become the backbone of what I believe to be the barefoot running culture; wanting to experience our environment and the world around us fully, without the barrier of material between ourselves and our feet. This title, then, is part my own brainchild and is part Tim Ingold's, so I would like to extend my thanks for his work and words.

Why Barefoot Running?

Chris McDougall, much like myself, was an injured athlete and a poor runner, hampered by 'bad knees' and a lumbering gait (2009). *Born to Run* posited that the body could heal, prevent injury, and learn to run much more efficiently through a barefoot running technique. This book inspired me to run again and I began to train in minimalist style running shoes beginning in March 2012, changing my gait to a

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more relaxed and angled forward upper body and my style of running, midfoot¹ with the occasional slip up of heel-toe². As I explored barefoot running I soon discovered an entire world made up of barefoot runners through chapters of The Barefoot Running Society, in my own running community in Ottawa.

My research in barefoot running soon translated into an academic interest and I decided to study barefoot running from an anthropological perspective, looking to see if there is a culture (or cultures) of barefoot running and who is involved in making up these skills of barefoot and minimalist running. When I refer to barefoot running in this thesis, I include both barefoot and minimalist runners. I interviewed both those who run completely unshod, as well as those who run in minimalist style shoes, meant to mimic the sensation and effects of barefoot running. I say supposed because the goal of this research project was not to focus strictly on the negatives or positives of barefoot running as so much fringe literature tends to do, but rather to explore the practice as a whole, the motivations of the runners, their history, and their technology. I believe that what this project has done is to have moved past the overexploited narrative of the benefits versus the detriments of barefoot running, past the fixation on the evolutionary approach to barefoot running and the 'naturalness'³ of the practice that others have undertaken

¹ Landing on the ball of the foot or the midfoot when striding forward while running. This is a relatively new form of running that is being advocated over the former style of running where landing on the heel was encouraged

² Landing on the heel of the foot and rocking forward to the toe to push off. This was formerly how athletes and runners were taught to run, until the recent midfoot and forefoot striking began to be advocated as lower impact on the lower extremities

³ Many advocates of barefoot running such as Lieberman use the term 'natural' to describe barefoot running to explain it as a practice that humans have evolved

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such as Daniel Lieberman (2010), and has instead focused on simply what barefoot running has become and what it continues to mean to its practitioners. Importantly, this is the first study that focuses on the cultural aspects of barefoot and minimalist style running, giving runners a voice and allowing them to share their experiences and what is important to them in their practice.

My thesis project examined whether there is a culture(s) of barefoot running and how that culture has emerged and continues to be made and remade in an exploratory study. Research on barefoot running provides a vast amount of information on running, how culture is created, how that culture develops, the senses of the body and of the feet, Westernized athletic practices, as well as the contrast of nature and technology. This study explores the cultural aspect of barefoot and minimalist style running through an Ingoldian concept of culture. It contributes to an understanding and interpretation of the desire and the draw to experience what has been termed a 'more natural form of running' by examining the relationship of runners and the environment and challenging the duality that is traditionally placed upon them.

A Brief History of the Westernized Practice of Barefoot Running

Barefoot running, as a modern Westernized practice, has only existed since the latter half of the 20th century, arguably beginning when Abebe Bikila removed his shoes and ran a marathon barefoot at the 1960 Olympics in Rome (Rambali,

specifically to perform, biologically, because of their bipedal gait, loss of hair, foot structure and sweating capabilities. In this case, naturally is referring to evolutionary conditioning to run.

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2006). Humans have worn shoes while racing since the early 1900s when Plimsolls, or thin-soled canvas shoes, were introduced and originally used primarily for the beach and for sporting activities (Cavanagh, 1980). Prior to this humans ran barefoot or in thin leather sandals or moccasins for most of history (Krentz, 2010). The first example of a marathon being run barefoot comes from the ancient Greeks. Phillipides, the first marathoner and a professional runner, ran from Athens to Sparta in less than 36 hours to plead for military aid, a distance of roughly 150 miles (Krentz, 2010). After the Battle of Marathon, from which we derive the title for the modern race of 26.2 miles, Phillipides ran straight from the battlefield to Athens to inform the Greeks of their victory over the Persians (Krentz, 2010). Barefoot running, or running in thin sandals and moccasins, continued to be a popular recreational sport and cultural practice in antiquity and has continued to be practiced today amongst Indigenous populations such as the Tarahumara of Northern Mexico and Kenyan long distance runners. Modern barefoot running in the Western world does not refer to these practices, but rather the fringe practice that began with Abebe Bikila and that has continued to gain momentum in the professional and amateur running community.

After Abebe Bikila competed in the Olympics barefoot, a slew of professional racers were also noted for their lack of shoes during races. Bruce Tulloh, a British runner, competed in several races throughout the 1960s barefoot and won the gold medal in the 1962 European Games 5000 metre race event (Robillard, 2010). In the 1970s, Shivnath Singh, one of the best-known Indian long distance runners, competed barefoot in every race he ran, simply taping up his feet (Robillard, 2010).

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Zola Budd, a South African runner who rose to prominence in the 1980s, was known for her habit of barefoot racing and training. She won the 1985 and 1986 IAAF World Cross Country Championships and competed in the 1984 Olympic Games in Los Angeles. Tegla Loroupe, a Kenyan runner, was trained barefoot from a young age and competed in international races both barefoot and shod. She won the Goodwill Games 10,000 meter race barefoot and won the Boston Marathon (in shoes) in both 1994 and again in 1998. There have been several prominent athletes since the 1990s that have run barefoot, including marathons and ultra-marathons such as Chris McDougall, Micah True, Jason Robillard, Michael Sandler, Ken Bob Saxton, Rick Roeber and others. They have helped form the fringe practice of barefoot running as it is known today. The practice saw a particular surge of popularity in the aforementioned book, *Born to Run*, by McDougall when it was released in 2009. This also coincides with a higher rate of marathon racers running barefoot, as seen in the 2010 New York City Marathon (New York Times, 2010).

During 2009 and 2010, minimal style shoes began to be developed by major running shoes companies such as Nike, New Balance and Saucony. Vibram developed the FiveFingers several years earlier in 2005 but their original use was meant to be for sailors to grip slippery decks; it was not until later that the shoes became targeted to runners and outdoor enthusiasts (vibram.com). Minimal style running shoes have helped to popularize barefoot running and make the practice more visible, they are more accessible to runners looking to 'try out' barefoot running without the full consequences of being barefoot. Minimal style running shoes are not a new concept, however, they harken back to the early running shoes

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and thin-soled Plimsolls that runners first wore. Running shoe companies have faced criticism that they are simply taking advantage of the interest in barefoot running. Companies are advertising both heavily padded and thin-soled running shoes and this is misleading for consumers as they are unsure which are meant to be best to exercise in and protect their feet. This backlash has begun to extend to the entire barefoot and minimalist style movement and the 'benefit versus detriment' style rhetoric that accompanies it is currently the only aspect focused upon in fringe media and news (see Buchburger, 2012; Lee, 2012, Robinson, 2010). The Westernized practice of barefoot and minimalist style running is now perceived by the wider running and exercise community in this bad versus good lens and that is distracting from the practice itself (Buchburger, 2012). Potential participants may reject the practice based on this shallow estimation, rather than what the practice may provide them beyond the physical improvement or detriment as they are unable to see the cultural or spiritual aspects of the cultural as they have largely been ignored and unstudied.

Asking Fresh Questions

These thoughts lead me to my next area of concern: how to explore barefoot running as it has not been previously examined, how to forego the concern with the benefits/detriments debate or the narrative that barefoot running is natural and evolutionary and that we have evolved to be the perfect runners. These areas of concern are valid and I do not dispute them or refute them. I am focusing on another aspect of barefoot running that I believe will be more valuable to the barefoot

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running community, which moves past the validation of their practice and instead gives them a voice. I believe this deeper level of analysis will allow a wealth of topics to be explored and will move beyond the dichotomy of technology and nature.

Barefoot running touches upon a vast array of interests, as well as disciplines. I believe this study will be of value to sport psychologists, human kinematics, sensory anthropology, anthropology of sport, anthropology of technology, medical anthropology, as well as cultural and physical anthropologists in general. Barefoot running provides information on running, the reason to run, how to run, the sensation of running, the nuances of running, the difficulties runners face, the structure of the body and feet, culture, Westernized athletic practices and fads, as well as the rethinking of the nature-culture dichotomy.

The question that begins this study is how can we understand barefoot and minimalist style running as cultures? Before being able to begin to answer this question, I have to ask myself, what is culture? This study rests on my definition of culture and how I define barefoot and minimalist runners. It is also central to my data analysis, so I will briefly address it here in my introduction and will speak to it in more detail in my literature review. I am applying an Ingoldian (2004) notion of culture in this study, focusing on the idea of paths of knowing, wayfaring your way through the world finding knowledge, which exists in a meshwork of meaning. Ingold refers to this notion of culture as 'skills' or attuned attention-in-the-world, which applies to barefoot running, which is a way, to know the world through your feet by experiencing it through sensation. Knowing or feeling the world through

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your feet is a way of making a skill, it is creating knowledge and thereby a culture. I will apply Ingold's notion of culture, or skill as he terms it, throughout this study and I will continue to refer to it as culture rather than a skill because that is how I myself perceive it.

The second question we must address, in line with above, is, how are barefoot running and minimalist running cultures being done in different ways? Using the Ingoldian (2007) notion of culture, there are four conditions that define cultural life: generative, relational, temporal, and improvisation. I will apply these conditions to barefoot and minimalist style running in order to define how I interpret them as cultures. I am not taking for granted that this culture or skill pre-exists, but rather I want to coherently outline how this culture represents these four outlined conditions in Ingold's notion of culture. These conditions of culture will be further explained and defined in my literature review and explored in my results chapter.

The third and final question this study will address is how do the senses play out and create nuances between barefoot and minimalist style running cultures. Prior to conducting my field work, and in fact, prior to any work I had done on the topic of barefoot and minimalist style running, I had pre-conceived notions of barefoot and minimalist style running. These notions led me to formulate a thesis proposal that lumped both barefoot and minimalist style running into one category. I proposed to study them both, understanding them as though both were forms of barefoot running. During my fieldwork, I began to rethink this since they did not

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appear as such, although they share commonalities and emerged together from traditional Westernized running forms. Barefoot and minimalist style running are different forms of knowledge and different forms of skills. The deeply embroiled sensory experiences each form takes and the excerpts from the interviews I conducted, demonstrate how the senses have played out in participant's experiences running in these nuanced forms.

Chapter 2: Literature Review

An Overview

My literature reviews consists of primarily three topics that are central to my understanding of the culture of barefoot and minimalist style running. First, the definition of culture is examined and reinforced by examining several definitions of culture and how these definitions are employed in my study. Secondly, a review of the literature that is available, both on barefoot and minimalist style running, as it pertains to a cultural understanding is examined, rather than the literature that has a biomechanical focus which is often the basis of barefoot and minimalist style research. The final topic I explore in this literature review is how to understand the senses from an anthropological perspective. The senses are decisive factors in how I interpret the culture of barefoot and minimalist running and a further explanation of how our feet specifically experience our environment is necessary to understand the knowledge barefoot and minimalist style runners may come to possess.

Formulating a definition of culture that explains the practice of barefoot and minimalist style running has been difficult. I have gone back and forth from the classical perceptions of culture (Dobzhansky, 1973) to genealogical models of culture (Geertz, 1979), to sporting anthropologists' view of running culture (Sands, 2010), to sensory anthropology's definition of culture (Ingold). Fleshing out the concept of culture and how I perceive it has been a major undertaking in this project. My understanding of how barefoot and minimalist style running differ from both traditional running and each other is based upon my understanding and application of my definition of culture. In order to define my understanding of

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culture, I have outlined below the process of thought that led to the construction of my definition of culture, as well as my final thoughts on culture and a definition of culture.

A Brief Review of Barefoot and Minimalist Style Running Academia

Currently, there is no academic, peer-reviewed literature on barefoot running as a culture. Rather, there is a wealth of recent articles (published 2009 onward) on the topic of barefoot running mechanics, kinematics⁴, kinetics⁵, loading rates⁶, and impact on the lower limbs of barefoot and minimalist style running, as well as the benefits and detriments of barefoot running from a biomedical perspective (Nigg, 2009; Lieberman, 2010; D'Aout, 2009). However, there is a large amount of fringe literature in popular culture, published in books, blogs, personal websites and magazines, that discusses barefoot running and minimalist style running as a lifestyle or fad and whether barefoot running can be considered safe or healthy (McDougall, 2009; Robinson, 2010; Buchburger, 2012; Lee, 2012). Because of the lack of academic literature regarding the cultural aspect of barefoot and

⁴ The branch of mechanics that studies the motion of a body or a system of bodies without consideration given to its mass or the forces acting on it.

⁵ The branch of mechanics that studies the actions of forces in producing or changing the motion of masses.

⁶ **Vertical loading rate** is essentially the slope of the line from initial contact to the impact peak (in practice, it is usually measured in the region from 20-80% between these points). The loading rate simply represents how quickly the impact force is applied – a steeper slope means a more rapid collision. A more gentle slope would indicate that force application during impact is being spread out over a longer period of time. The vertical loading rate is best illustrated on a graph depicting the impact of the footfall of a runner.

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minimalist style running, this exploratory study will add another piece to the ongoing discussion on barefoot and minimalist style running. This study will serve as a voice for barefoot and minimalist style runners who possess this skill and will serve as a marker of their knowledge, without attempting to validate the technique through external forms of measurements.

Current literature on barefoot and minimalist style running focuses on the idea of what is 'natural', rather than what is cultural for humans to do when running or walking shod or unshod. These studies are representative of the exhaustive literature that is currently being published regarding the kinematics of barefoot running and they provide a comparison to my work. I believe a review of this literature will showcase the dire need for more social science based studies that are sensory and culturally focused, rather than the hard science approach of biology, on the topic of barefoot running and the desire to run barefoot, about which we understand very little.

The currently emerging practice of running barefoot and in minimalist style shoes in North America involves a specific training schedule to transition the feet from thick-soled traditional running shoes to no shoes or minimalist style shoes without injury, specifically oriented and standardized according to biomedical expertise developed by running professionals. The technique of barefoot running differs from running in regular padded shoes mainly in the foot strike pattern.⁷ Daniel Lieberman explores this difference in his 2010 study on barefoot running

⁷ How the foot contacts the ground, specifically which part of the foot first contacts the ground.

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entitled, *Foot Strike Patterns and Collision Forces in Habitually Barefoot Versus Shod Runners*. He compares 'naturally' shod runners who run both barefoot and shod, with runners who run 'naturally' barefoot. In this case, naturally refers to the way participants are culturally conditioned to behave: to wear shoes or to go unshod. Lieberman (2010) takes a behaviourist approach to culture, supposing it is something pre-existing and preceding us rather than learned throughout one's life. Lieberman found that these habitually shod runners tend to rear-foot strike⁸ due to the padded heels in modern running shoes and the extra cushioning the shoes provide to absorb the hard strike (2010, p. 531). Fore-foot or mid-foot striking was more common amongst runners who ran barefoot or in minimal shoes such as sandals, the reason for this, Lieberman hypothesizes, is the mid- or fore-foot strike "... may protect the feet and the lower limbs from some of the impact-related injuries now experienced by a higher percentage of runners" who are rear-foot striking in padded shoes (2010, p. 531). Lieberman is a barefoot runner himself and a vocal proponent of barefoot running.

In the article *Biomechanical Considerations on Barefoot Movement and Barefoot Shoe Concepts*, Nigg (2009) explores the differences between barefoot and shod running by examining the biomechanics of the body. He explores changes such as external force loading rate⁹, tibial acceleration¹⁰, foot placement, and ankle joint

⁸ During a rear foot strike the ankle is dorsiflexed (toes pointing up), the runner lands on the middle to outside of the heel just below the ankle joint, the ankle begins to plantarflex as the runner lands (toes move towards the ground), and the arch of the foot is not loaded. There is a spike in the hardness of the strike compared to other stride styles and this spike has been perceived as being harmful to the lower limbs.

⁹ External loading rate is the ground reaction force (GRF) over a shorter time. In barefoot running the GRF will be increased under the forefoot due to FF striking position, but it will occur over a reduced

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stiffness¹¹ and documents how these differ between barefoot, shod, and minimal runners (Nigg 2009). It is interesting to note that Nigg (2009) contends that minimal running shoes are not comparable to running barefoot and that 'barefoot shoes' are a marketing gimmick. Nigg (2009) concludes the biomechanics of the body are different between barefoot running and shod runners but does not argue for one technique over the other.

D'Août and colleagues (2009) present findings on habitual footwear use, foot shape and function in native barefoot walkers and habitually shod populations. Their comparative study suggests that barefoot walking is the biologically natural option and that footwear alters foot behaviours and shape negatively (D'Août, 2009). They do not discuss running, but these findings can also be applied to running shod or unshod because whether walking or running the shoe is altering the foot when it is being worn for long periods of time over an individuals' life (D'Août, 2009).

Lieberman (2010), Nigg (2009) and D'Août (2009) provide a snapshot of the current literature in barefoot running published by physical anthropologists that focuses on the biological aspects and kinematics of barefoot and shod running. To go beyond this and to address the literature focused on sensation and how we perceive

time and the mechanical work on the Achilles tendon is significantly increased, more in the eccentric contraction of the muscle/tendon.

¹⁰ Defined as the highest positive acceleration measured during the stance phase after the signal had been rectified and a 60Hz 1st order low pass filter had been implemented.

¹¹ The ankle stiffness of a runner is indicative of running style, whether heel-toe or midfoot or forefoot. The ankle is dorsiflexed in a heel-striker; the ankle is plantarflexed in a fore-foot striker.

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the environment, as applicable to when we are barefoot and shod in minimal shoes, I turn to Kuchler (2008), Ingold (2004), and Pink (2012).

This study explored from a sensory aspect whether barefoot runners reject the behaviourist approach and rather follows a theory that goes beyond the dualist paradigm, not making the mind first and the one that informs the body. Rather, it is *in the movement itself*, involving the mind and body simultaneously, that things happen. This view follows that of Tim Ingold (2004) and takes a different approach to human movement. Tim Ingold's 2004 work *Culture on the Ground: The World Perceived Through Our Feet* takes a more grounded approach to human movement, examining how the tactile sensations we experience through our feet are fundamental forces in shaping our interactions with the world.

Notion of Culture

Dobzhansky perceived culture as “the primary mechanism by which humans adapt to their environment” (Dobzhansky, 1973, p.422; See also Sutton & Anderson, 2004, p.89). This definition of culture is particularly applicable to barefoot and minimalist runners who have adapted their running technique to the environment and their own physical responses to this environment. However, the definition is also inherently problematic because in using it, we are using culture to explain culture. Cultures interact with the environment, but can cultures exist as closed containers, interacting with each other and causing one to change and the other to remain the same? How can the biological needs of one group differ from another enough to warrant a new cultural form? If a culture meets the biological needs of its

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members, then what explains different ways of meeting these needs? This definition of culture, though helpful in explaining a difference of technique in barefoot and minimalist style running, is unsuited to this study because I do not perceive culture as being able to be explained by itself, culture cannot explain culture and this definition gives rise to a closed view in which you must, for example, possess traits A and B to belong to 'this' culture. Culture as a closed system is not applicable my study of barefoot and minimalist style running practices because I perceive these practices as continually evolving and made up of varying individuals who do not all possess the same traits or practice a skill in one particular fashion.

Here, I turn to anthropology of sport, as some will ask, are sports and sports practices cultures? Here I turn to Robert Sands, who argues, "sports are a cultural and universal expression to humankind, its importance to human interaction and its reflection of human culture" (Sands, 2010, p.8). Sands also refers to Geertz's understanding of culture, which seeks to undo the separation of biology and culture that early classical anthropologists like Tylor and Boas proposed. Geertz allows that "culture is based on symbols and the information they carry, both simple and compelling, and domains of culture, language, beliefs, knowledge, and more visible manifestations such as art and music, ritual and movement are all generated in response to and expressed through the control mechanism that is culture" (Geertz, 1993, p. 93). This biocultural approach is suited to the anthropology of sport and this study. As Sands explains, "sport is a pan-human behaviour in recent and contemporary society, but more than a cultural behaviour, sport is also a human movement that features a kinesthetic biology" (Sands, 2010, p. 10). Defining sport is

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difficult. “The definitions of sports are many, much like the array of definitions to the concept of culture”, but it is generally agreed that sport is a form of physical movement with an element of competition (Sands, 2010, p. 6). Agreeing upon a definition of sports, or culture, or sport culture is difficult and requires a meshing together of ideas for this project, both from the field of sport anthropology and sensory anthropology. These two perspectives are suited to the description of barefoot and minimalist style running, which is undertaken as a sport, as well as a sensory experience.

Running is a sport that is both cultural and biological, made possible by our evolution, and its biology of movements carry a legacy of our adaptation and biology (Sands, 2010). It is its processual development into a culturally relevant practice that allows sport, and running in particular, to transcend cultural specificity. Sands explains “the global prevalence of sport [...] both the recent movement to the return of indigenous sport, as well as the huge growth of global ‘western’ sport, does indicate a universality that transcends cultural specificity” (Sands, 2010, p.6). The biological basis of our ability to run is ever present. Running developed into a cultural form of play during Greek culture and the proliferation of Olympic sports. From this point on, running has been a popular sport and has seen resurgence through the 1970s onward (Sands 2010), that began with jogging and has now become a modern, Western running culture made up of both amateur and professional racing, high tech and low tech running shoes, stores devoted to running and running specific language, for example, ‘jock-talk’.

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This idea of transcending cultural specificity leads me to my last definition of culture: Tim Ingold's notion of culture as 'skills'. He contends that culture is not about "cultural reproduction information ... encoded in words and symbols" (Ingold, 2011, p.157) that is innate, and passed down from our ancestors, but a movement along a path or paths, a kind of 'wayfaring' or trail following. The act of wayfaring is to negotiate a path through the world, and it is through following this path, in their movement along the way of life, that knowledge comes into being (Ingold, 2011, p.162). The process itself, or the movement forward, is the significant act, we learn through action, not by automatically arriving at the end result of the action.

The skills that we develop through our wayfaring and this idea of following the path of life is particularly applicable to this study and to my working notion of culture. Rather than thinking of barefoot running as a culture or a practice, it can be thought of as a skill that has come out of a path followed by some, through their experiences down the path of running. It is not a closed system of culture, but rather a skill experienced by those runners who chose to go down a different path as they grew into knowledge. This path is open to all who grow into this knowledge and who feel the need for 'creative improvisation' on their current path (Ingold, 2011, p.162). Ingold explains, "knowledge is integrated not by fitting isolated particulars encountered here and there into categorical frameworks of ever wider generality, but by going around in an environment" (Ingold, 2011, p. 160). The culture, or to use Ingold's terminology, the skill of barefoot or minimalist style running, is not comprised of isolated characteristics that must be possessed in order to be a

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barefoot runner or a member of any particular culture. Instead, the skill of barefoot running and those who possess this knowledge and skill have had similar relations with their environment and their paths of being and knowledge. A barefoot runner need not be a pure and staunch barefooter who rejects all shoes, rather, barefoot runners are alike in their *knowledge of their skill* and the paths of knowledge that brought them to this practice.

From Ingold's definition of culture I have formed my approach to understanding barefoot and minimalist style running: to follow what is going on I begin with how feeling the world through the feet plays a role in making the barefoot skill. By using several definitions of culture, I have fleshed out the concept in order to explain how I perceive barefoot running and minimalist style running culture have been divided by sensation. As previously stated, I believe that different sensations regroup different people. Ingold and Hallam, in the introduction to *Creativity and Cultural Improvisation*, discuss how there is no script for cultural life; rather people have to improvise as they go along. They define four characteristics of cultural life, which I apply to my data collected from barefoot and minimalist running participants. Following Ingold (2007, p. 1-14), these improvisational characteristics of cultural life are:

1. Generative, as it gives rise to the phenomenal forms of culture as experienced by those who live by them or in accord with them.
2. Relational, in that it is continually attuned and responsive to the performance

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of others.

3. Temporal, as it embodies a certain duration. I, it cannot be collapsed into an instant, or even a series of instants.

3. Improvisation, is the way we work, not only in the ordinary conduct of our everyday lives, but also in our studied reflections on these lives in the fields of art, literature and science (and sport). To go back to Ingold's (2011) definition of culture as skill, he explains (2007, p.12) "... life does not pick its way across the surface of the world where everything is fixed and in its proper place, but is a movement through a world that is a crescent... it has to be open and responsive to continually changing environmental conditions".

Sensory Perception

As humans, we are distinct from other animals in three ways. The first distinction is our enlarged brain, the second is the ability to touch our thumbs with the tip of all fingers, and the third is our ability to walk on two feet while standing upright (Ingold, 2004, p.316). Despite humans ability to stand up straight on two feet, Ingold argues these feet were never a focal point on how we adapted to become the so called "rulers of the animal kingdom", but rather, the most important feature on the human body became the hands (Ingold 2004: 317). The hands and the brain working collectively allowed for creation and endless possibilities, while the feet were regarded as nothing more than a pedestal that held up the rest of the body

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(Ingold, 2004, p.317), presenting human evolution as Ingold cleverly coins it, “...the rise, and eventual triumph, of head over heels” (Ingold, 2004, p. 318).

Walking, Ingold contends, is a way to connect with the environment and our surroundings. One way in which we distance ourselves from this environment and our relationship with it is through the use of shoes on our feet. By using our creative minds and agile hands, we have created a protective layer for our feet in which we constrict the freedom and remove the sense of being able to touch the environment (Ingold, 2004, p.319). On considering the feet, they become a means of taking steps, a “stepping machine”, and ultimately become useless (Ingold, 2004, p.319). In other cultures, with the naked foot “... the savage Australian picks up his spear, and the Hindu tailor holds his cloth as he squats sewing”, bare feet are a constant part of life and they interact with the environment, they are free and unconstructed, dextral and capable (Ingold, 2004, p.319). Our connection to the environment through our feet no longer becomes apparent when they are hidden and constrained by our footwear. Social and cultural perceptions of what the purpose of feet is have become unclear. They have become a body part that are slipped into footwear.

In today’s modern society, our urban spaces and urban streets are paved in order for individuals to use their feet as “stepping machines” (Ingold, 2004, p.326). These paved roads and paved sidewalks leave no trace of footprints, of anyone ever occupying that space and this ultimately disconnects individuals from the world in which they are living, and arguably increases their disconnect with their own feet (Ingold, 2004). By using a sidewalk, one is skimming the surface of the world

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instead of making ones mark and adding to the world's surface's continuous development (Ingold, 2004). In the rare case that feet do leave a mark on the world, it is usually going against societal norms, such as trampling over a green space (Ingold, 2004). Green spaces are for admiration, not for exploration and the "surfaces you can walk on are those that remain untouched and unmarked by your presence" (Ingold, 2004, p.329). Even hiking trails and paths are groomed: you are meant to enjoy and explore nature but leave no trace and not go beyond the beaten path. To perceive their surrounding environment, humans have to learn to engage in a relationship with the natural world.

Ingold explains that traditionally, western society perceives vision and hearing over the sense of touch (Ingold, 2004). However, even if one cannot see or cannot hear, one can always feel and touch and therefore the sense of touch should be valued and explored (Ingold, 2004). I argue that all senses are valuable and should not be broken down into five complete, separate categories of smell, taste, touch, hearing and sight, as they are interlinked in complicated ways. I would argue that we not only smell with our nose, but smell with our eyes. We cannot compartmentalize our senses so drastically. The sense of touch and connection with the earth should thus enhance the way we connect with the environment at large, connecting with smell and sight to work together, as the brain and the body perceive together. We must move past biological conceptualizations of senses as distinct and separate entities and embrace the notions of senses being cross-pollinating – informing each other. Seeing something enhances the smell, enhances the taste, enhances our perception of it and barefoot running is an example of this.

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Barefoot running culture embodies this sentiment and is an excellent example of connecting with the environment through our sense of touch and sight, literally feeling the world through our feet (and eyes). "...The enskilment of vision goes along with the enskilment of the other sense, and in particular of bodily movement and dexterity, as part of a progressive process of joining a particular 'community of practice' - a process that Jean Lave calls 'legitimate peripheral participation. In many ways, being able to see means, in local discourses, more than just using one's eyesight (Grasseni 2009, pp. 85).

The variety of techniques people use to walk can be attributed to both human nature as well as culture (Ingold, 2004). Historically, the human connection with nature was much more dominant: Human nature and survival depended on a connection with nature and culture was intertwined with it. Through time, this connection has decreased, attributable to the overreliance of the head over heels mentality (Ingold, 2004). Also, through the use of shoes and protection of the feet, humans have lost this connection with nature that was once so natural and easily achievable on an everyday basis. However, there has been an attempt to further reconnect with nature through the feet, particularly among those runners who are reconnecting to human history by running barefoot. Barefoot running becomes one of the ways through which the (re) connection between humans and the environment is taking place.

Ingold explains that we have changed landscapes into unnatural ones, creating a world of pavement and manicured grasses that are meant to be aesthetic

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and not for the pedestrian, therefore losing our connection with the earth. We leave no footprints, no trace of our movements, almost as if we have never been there (Ingold, 2004, p.329). We have created shoes so our feet need never touch the ground and have become accustomed to chairs and couches, another way to avoid our feet touching the ground. Ingold explains, "... the boot deprives wearers of the possibility of thinking with their feet, and the chair enables sitters to think without involving the feet at all" (Ingold, 2004, p. 323). The boot and the chair together create this idea of groundlessness, the separation of thought and action from the mind and body (Ingold, 2004, p. 323).

The environment is not simply something we act in or on, but something barefoot runners believe, as organisms, are part of (Ingold, 2000), a zone of entanglement in which places, our environment, is produced through movement (Pink, 2012). Culture and environment that are not considered to be separate entities, but are instead conceptualized as intertwined, as part of one another. Culture is being produced as we wayfare along paths and this movement produces our environments, which are bound in culture. There would thus be "no places were it not for the comings and goings of human beings and other organisms to and from them, from and to places elsewhere" (Ingold, 2011, p.16).

Barefoot runners perceive the environment outside of the dualist paradigm of mind and body, experiencing the ground and the environment with their eyes and feet collaboratively, without the divisive 'five senses' model or brain and body divide to interfere with the way they feel they are experiencing the world. The

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senses are central to the analysis of practice and place. I applied an Ingoldian approach to understand how barefoot runners experience sensation, which is also used by Pink (2009), which reunites an understanding of the multisensoriality of methodological process with an understanding of empirical contexts. This approach involves departing from a modern Western understanding of the five-sense sensorium whereby our common sense tells us we simply smell through our noses, hear through our ears, and see through our eyes. Pink (2012) builds on the phenomenology of perception and neurological studies, understanding the senses as interconnected, and at the level of perception, inseparable. It is through the process of perceiving, just as in the process of wayfaring, that we create knowledge, and in turn, create culture. This is similar to the way in which Ingold has brought together the philosophy of Merleau-Ponty and the psychology of Gibson to emphasize the inseparability of these sensory categories in processes of perception. Ingold emphasizes that we know and that we perceive with our whole body, rather than elevate the hands above the feet, or the eyes above the hands, each sensation is an integral part of a whole system of sensation. The world is not dominated by one sense but involves a much less clearly defined mixture of sense experience that is classified into cultural categories (Ingold, 2000). Barefoot runners perceive sensations in this way, with less emphasis on the five-sense sensorium, perceiving with their whole body, practicing a kinesthetic style of learning to run and experience the landscape all at once.

Outside of modern Western contexts, it has been noted that the five-sense sensorium is culturally constructed and not a universal classificatory system (Pink

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2012). Neurologists have also recently noted this, suggesting that understandings based on the idea of differentially sensing modalities attached to specific sense organs should be replaced by understandings of the senses as interconnected in human perception, “... in that the five senses do not travel along separate channels, but interact to a degree few scientists would have believed only a decade ago” (Cytowic, 2010, p.46). These discoveries invite researchers to “attend to the multisensory and embodied ways in which environments are experienced and unspoken, the tacit and the ways of knowing and communicating... that are not verbalized” (Pink, 2012, p. 4). The way that runners describe their relationship with the environment and multisensory experience can be limited when articulated verbally. It is the intimacy of the bodily contact through all the senses, rarely put into words, or even thought about that can be readily observed when you participate in barefoot running as a participant observer.

Tim Ingold (2004) argues that we are a groundless culture and this affects our way of life, our way of learning and the way we perceive the environment. Barefoot runners are attempting to undo this groundless phenomenon by taking their shoes off and opening themselves up to sensory experience. They are feeling the world through their feet in order to reunite the mind and the body through their skill. They are actively practicing what Ingold refers to as ‘scanning’, part visual activity and part tactical experience as barefoot running incorporates both (Ingold, 2004).

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In this chapter I have outlined the definition of culture I have employed in this study in order to demonstrate the nuances that exist in the cultural forms of traditional Westernized running, barefoot running, and minimalist running. I utilize an Ingoldian notion of culture, which stipulates that cultural life is generative, relational, temporal, and improvisational. Ingold (2011) stipulates that cultural life does not follow a script, rather, it is a forming of skills as we wayfare along paths. What we are, or who we can be, does not come readily made; instead, the paths of being lead us to cultural life. I built upon this definition of culture by examining Ingold (2007, 2011) and Pink's (2012) work on anthropology of the senses in order to interpret and differentiate between cultural forms of barefoot and minimalist running. I have argued that the difference between the two cultural forms lies in the desire for different sensory experience amongst the practitioners of these forms. Describing the sensory aspect from an anthropological point of view is important as articulating sensory experience is difficult. Running, particularly barefoot running, consists of a multitude of sensations which are often experienced unknowingly or unthinkingly or in a way that is beyond the basic description offered in a typical five sense Westernized classificatory system.

In this chapter I have also reviewed the work previously completed on barefoot and minimalist style running, of which there is little to focus upon, particularly that is relevant to the culture of barefoot running. Rather, the existing literature focuses upon the biomechanical aspects of barefoot and minimalist running and has largely ignored those who practice the discipline and their enskilment. Beyond this, I examined literature that discussed the perception of the

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environment and how this may relate to the way barefoot and minimalist runners experience the environment and sensory perception. I argue barefoot and minimalist runners will move beyond the dualist paradigm of mind-body and will experience the environment as a whole all at once, mind and body working seamlessly in harmony as the feet, the mind and the eyes are engaged all at once in a consuming and physically exhausting sport. To understand how barefoot and minimalist style runners conceive of their environment and their enskilment, I designed a multi-methods study, capable of following a richly detailed practice. I explain these methods in the next chapter and describe how I designed the study to explore the sensory aspect of barefoot and minimalist running.

Chapter 3: Methodology

My Approach

This chapter outlines the methodological approach that I employed for this research project, as well the way I collected data. This project has followed practices ethnographically. Ingold does not agree with the term ethnography, or the gathering of 'data' to analyze, he argues that this is not anthropology, that 'anthropology is not ethnography'. Rather, he believes the task of anthropology, and therefore for anthropologists, is to "seek a generous, comparative but nevertheless critical understanding of human being and knowing in the one world we all inhabit" (Ingold, 2011, p.229). Ethnography on the other hand he contends is "describing the lives of people other than ourselves, with an accuracy and sensitivity honed by detailed observation and prolonged first-hand experience" (Ingold 2011, p. 229). Despite this, I have conducted this study in an ethnographic manner through participant observation and interviews, as well as detailed observations and first hand-experience.

In this chapter, I also reflect on my positionality and the chance for bias, with particular considerations to the methods I adopted to obtain the enskilment of the runners. My methods are entirely qualitative and I chose my approach, and these particular methods, to gather the richest source material possible and also to remain within the framework of my theoretical influences, namely an Ingoldian view of culture. In undertaking this project I sought to explore barefoot and minimalist style running and understand these skills through my definition of culture. In the reverse, by applying my definition of culture, I am trying to flesh out

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how barefoot and minimalist style running are cultures and whether they constitute differing cultural forms.

To grasp the culture of barefoot and minimalist style running, I employed a multi-sited study and applied a number of strategies to gain as many perspectives as possible for this project including online research, participant observation, and informal and formal interviews. Each methodology allowed me to gain another perspective of barefoot running and minimalist style running. By weaving them together, I was able to understand the lived experience of barefoot running and minimalist style running in a more robust way than participant observation or interviews alone could have provided me. A methodological justification for this range of methodologies is simply that this is an exploratory study, conducted in an open-ended fashion. I also believe the social science of anthropology must be more inventive and must go beyond a typical ethnography. Tim Ingold suggests bypassing ethnography entirely because it is not anthropology; rather it is reduced to a method that does not serve the purpose of anthropology. Instead, we must respond creatively with the topics we engage in as anthropologists, which are creative and inventive themselves. This chapter presents an account of methods used in this study, in part as an effort to stimulate more discussion of this kind and to document how I went about tracking these 'trails of becoming' created by the culture of barefoot running between Boulder, CO and Ottawa, ON.

A Multi-sited Study

As George Marcus notes in his oft-cited discussion of “multi-sited ethnography” (1995), a common starting point is to “follow the object.” In this study, the object refers to “tracking” barefoot and minimalist style running across two different sites in order to gain a better understanding of the culture. The benefit of using multiple contexts is the ability to generate an interpretation of barefoot running and minimalist style running that acknowledges their embeddedness in several different layers of social meaning and practice. This multi-sited ethnographic study was the ideal model of observation to study culture, or rather, to put it into question.

A multi-sited study also fit into my life, both financially and temporally. Hannerz’s (2003) article on multi-sited ethnography demonstrates the difference between classic single-site studies in anthropology and the gradual popularity of multi-sited studies that has taken hold in modern anthropology. Multi-sited ethnographies are the new reality for anthropologists, which Hannerz (2003) attributes in part to financial restrictions that do not allow for long blocks of participant observation but rather fieldwork over many shorter periods. This is an issue I had to resolve within my own research: how to adequately study and participate in barefoot running culture in Boulder, CO, while remaining within the budget I was allotted from various travel bursaries and savings. By conducting research online prior to visiting the barefoot and minimalist style running community in Boulder, I was able to gain a perspective into their practices. Through

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my online research into the barefoot and minimalist style running culture in Boulder and a short research trip of two weeks on site, I was able to interact with barefoot runners, participate in discussions, conduct interviews, attend running classes and events, and network with runners in Boulder. Conducting research online is a simple solution for a limited budget and timeframe, engaging in Hannerz's conceptualization of ethnography as "the art of the possible, fitting field work into lives" (2003, p. 212). By doing so, I was able to gain a grasp of where barefoot runners run and where they outfit themselves and who makes up the group that identifies as barefoot and minimalist style runners in Boulder, CO.

I chose to conduct my multi-sited study in Ottawa and Boulder for several reasons. I reside in Ottawa and attend the University of Ottawa. Ottawa was chosen for its reputation as an outdoor recreational sport paradise, where bikers and runners are ever present, running along the Rideau Canal and in the Gatineau Hills. Prior to choosing Ottawa as a fieldwork site I observed runners and their footwear, both at the gym and along the trails and within the community. I noted a large amount of minimalist footwear but no barefoot runners. However, through research online I discovered a small barefoot running community that is active in the Ottawa area. Minimalist style runners were more visible than the barefoot runners, however, but I was confident I would be able to find participants for the study in Ottawa.

Boulder was chosen as the second site because of its reputation as one of the fittest city in the U.S.A., as well as a running Mecca (American Fitness Index, 2012).

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Professional runners and other athletes often train in Boulder because of the high elevation; exercising vigorously at high elevation is exhausting for those unaccustomed to it, but when the athlete returns to a regular elevation their cardiovascular endurance is higher for a few weeks following and their performance is typically improved (Beck, 2013). Boulder also has a reputation for being a very spiritual city, and this spirituality combined with its athletic reputation has produced a high number of practitioners of new and relatively unknown sport practices that go beyond physical exercise, and I believed this would also apply to barefoot running. After exploring barefoot running in Boulder online I found a barefoot running group on the website meetup.com with 366 members, as well as several groups for minimal style trail runners, and barefoot hikers. The presence of such a strong community of runners, as well as barefoot and minimalist style runners, in Boulder is why I included Boulder as my second research site. The high proportion of runners and Boulder's international reputation as a running mecca indicated that it would likely produce a large sample size, and provide the opportunity to interview several barefoot runners during my fieldwork in Boulder.

Online Research

Conducting online research provided useful insights on the habits, as well as the people, who run barefoot and minimalist style in both Ottawa, ON and Boulder, ON. Online research acts as a complement to ethnography, it is fast, simple, and inexpensive, as well as being less obtrusive than focus groups (Kozinets, 2010). As well, online research was a viable option for beginning my study on the running

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population in Boulder without physically being there and was highly relevant to informing my study and the development of interview questions prior to arriving in Boulder. Although being in Boulder for a greater length of time overall would have been ideal, conducting online research allowed me to overcome some of the challenges inherent in fieldwork, such as trying to find potential participants once in the field and finding out where participants run. Financially it was also very suited to this study as it could be conducted from anywhere that I could gain access to a computer and the Internet. Online research complemented all of my methods, particularly my interviews in Boulder, where I spent less time in the field than I did in Ottawa. Researching runners and running groups online in Boulder provided information on the barefoot and minimalist style runners in Boulder: where they run, who makes up the barefoot running groups, how often they participate in group activities, the type of shoes or footwear they use, and what race events they commonly run.

To add perspective to my research topic I joined the online group [meetup.com](#) and introduced myself as a researcher who would be travelling to Boulder, CO in the fall of 2012 to conduct research on the barefoot and minimalist style running community. I chose to represent myself exactly as I was rather than lurk (reading but not posting on a site that the research frequents). I believed it would draw attention to my study and thereby create greater interest among potential participants. I did not ask for consent specifically from the online posters, rather, I stated that if any participants of the message board, or the creator of the meet up group, objected, then I would cease my activities and not use any of the data

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I had collected. I joined several groups within the Boulder online community including, “The Barefoot Running Club”, “Boulder Trail Running Breakfast Club”, and “The Frontrange Barefoot Hiking Group”. By joining these groups I could view events, message board posts, and message members. I joined events, messaged members to arrange interviews, and obtained information about where barefoot and minimalist style runners in the Boulder area like to run. I also became familiar with several ideas that barefoot practitioners were proponents of through these events, as there would be promotions of events held specific purposes, such as healing or grounding.¹² I participated in these online communities from September 4th to December 15th 2012, marking the period when I began and ended the fieldwork for my project. My collection methods were to note events, attendees, the locations where they were held, the comments regarding these events on the message board, and use these notes for future analysis, as well as participant recruitment. I interpreted these postings and comments as ‘truths’, whether they were in actual fact truthful in their constructions of barefoot and minimalist style running I can never definitively know, but I can only present my understandings as just that, my understandings of barefoot and minimalist style runners ‘truths’ and beliefs.

¹² Sometimes referred to as ‘earthing’ or ‘earth-bonding’, grounding proponents believe walking or lying on the earth barefoot or with bare skin creates a direct bond with earth’s electro-magnetic energy, and helps us feel connected to nature. This connection with the earth’s electro-magnetic energy is regarded as healing and an anti-inflammatory treatment.

Participant Observation

Personal experience has always played a central role in ethnography, and this can take two distinct forms –one concerning the experiences of the people the participant observer is working with and the other concerning his or her own experiences. Since ethnographic encounters are highly personal, their “scientific” status has long been debated. I believe that by conducting an participant observation as part of my ethnography, I make my personal bias clear in my research; I am as much a participant as I am an observer and I have experienced and become a part of what I study. Ethnographers cannot rely on a distinction between a personal encounter and an encounter with a neutral instrument, because they *are their own instruments* when they are conducting interviews, participant observation, or fieldwork. I believe that by making myself clearly a part of the study through the method of participant observation, I address this possibility of influence directly.

I view my methodology as routes both to and from ethnographic knowledge. Pink elaborates on the ethnographic method, describing her ethnographic method as:

“...routes to ethnographic knowing in that they are being used to make ethnographic findings meaningful and coherent, yet simultaneously they are routes from ethnographic knowing in that the theoretical approach I take was developed in response to the ethnographic findings in this study. Practice theory is not ‘true’, nor is the ethnographic findings, either from auto-ethnography or from informal interviews, both are versions of the truth but they are not necessarily false. They are routes that allow us to enter social and environmental realities and imaginings and are thus a basis from which to understand our encounters in them” (Pink, 2012, p.15).

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Knowledge or enskilment, and whether this knowledge is 'true' or 'false', is not a concern in an ethnographic study, the information gleaned provides a path to knowing and understanding. As an anthropologist, the discourse that is created by participant observation is a version of the truth, there may not be one truth but many and this study incorporates these differing ways of knowing.

I entered this study as an injured athlete and runner who was looking for an avenue of healing as much as I was an anthropologist who was interested in a culture and a people. Participant observation is the method that allowed me to become part of the study, and this idea of being 'part of' has allowed me to experience new ways of learning while bringing in my own experiences and nuances to the practice. By being part of the practice I felt a sense of belonging, and this added to my depth of understanding barefoot and minimalist style running.

I injured my knee approximately 10 years ago while figure skating competitively. My sense of belonging as a runner was transformed and my world of running and sports that involved running ended. I was advised to stop playing sports that involved any jumping or impact on my knees and began to wear a knee brace. I left the world of figure skating, track, and basketball, but continued to play baseball at a highly competitive level and the toll on my knee from pitching was severe. I briefly returned to playing varsity basketball but after a year full of frustrations, I soon gave it up and continued to play baseball only, until 5 years ago when I gave up sports almost entirely and resigned myself to a lifetime of knee pain. This hiatus from sport transformed me, I was no longer in pain but I was also

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miserable and missing the exercise that running and team sports had always provided me.

Several years later I decided to play floor hockey on a whim and the knee pain resurfaced. I decided to address the problem head on by consulting a physiotherapist. I was told my quads were overdeveloped and my hamstring underdeveloped and this was causing a torsion in my knee, creating the cause of the pain. I began to weight train with a trainer to develop my leg muscles and it was around this time that I began to run again, giving in to my desire to return to a sport I once loved. I purchased a pair of minimal style running shoes, the New Balance Minimus Zero, which have a 0mm heel drop, meaning that they are essentially flat with no heel to alter running style. I ran in these shoes several times a week, starting in March 2012, running in the neighbourhoods of New Edinburgh and Rockcliffe and also along the Rideau River, a popular spot for runners in the Ottawa area. I continued running when I travelled to Boulder in the fall and while there I switched to trail running. For two weeks I would run 5 kilometers every morning in the Wonderland Hills neighbourhood, on the trails around the lake and up into the hills which was a popular spot for runners and cyclists in the community. In the afternoons I would hike at Chautauqua Park and try to run the trails up the mountain into Boulder's Flatirons, however, this was exhausting for me as I was unaccustomed to the altitude so I would generally hike instead. I continued running until November 2012 when I returned home from my research trip in Boulder, CO.

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When I began running at the beginning of the study I started with a small distance, running a few hundred meters the first few weeks and mainly walking in my new minimalist style shoes to adjust my feet slowly to the thinner soles. I gradually built up my distance and I was running intervals of 3km and 5 km by the end of November. I also embraced wearing moccasins and sandals as much as possible, as well as trying to be barefoot whenever it was warm and socially acceptable (in my house, in my yard, in my parents' yard, at the cottage and beach, walks along the Rideau River). I also experimented with another type of running shoe besides the New Balance Minimus, Newton's Distance U shoe, a 2mm drop shoe, when I was running in Boulder. Newton allows you to borrow shoes for a week and test them out before you purchase them to get a feel for the running style they provide and how they will work for your exercise needs. Many of the local minimal style runners in Boulder who embrace a 'natural' running style sport Newton shoes. Newton is a running shoe company that is known for its emphasis on natural running and energy return¹³ and is also headquartered in Boulder. They have a large presence in the Boulder running and outdoor community and are present at races and events locally and nationally. They offer running classes hosted by employees at their downtown location, which I participated in whilst in Boulder. The class I attended was conducted by Danny Abshire, the co-founder of the company, as well as another employee, on a Saturday morning. I participated in a

¹³ Most running shoes utilize passive cushioning like EVA foam, gel or air that lose energy as they are engaged. Like a mattress, these materials flatten under your body weight over time. With Action/Reaction™ technology from Newton, they argue you will immediately experience a highly responsive and engaging cushioning that protects and loses less energy with every step you take. The cushioning is described as 'trampoline-like'.

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short run to and from the practice site, as well as several drills meant to alter strike patterns and cadence of runners. Participants were encouraged to wear shoes from Newton and these were loaned to them at the beginning of class so they could experience a 'natural' style of running in a 'natural shoe'.



Figure 1. A side-by-side comparison of the two minimalist style running shoes I wore, the Newton Distance U shoe (pictured left) and the New Balance Minimus Zero shoe (right). Images courtesy of newtonrunning.com & newbalance.com.

I chose not to keep a journal during the study. This choice is unusual amongst anthropologists but I have never been able to keep a journal, I forget to write things down and was often unable to take notes when on a hike or a run with a participant. Instead, I note point form notes during interviews and I recorded all my sit down interviews. , When I interviewed participants, I related my experiences to theirs and because of this I have recorded audio accounts of my experiences running in minimalist style shoes, as well as transcriptions. By conducting participant

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observation, I was able to experience a sense of the lifestyle that barefoot and minimalist style runners themselves experience. This experience helped me to formulate my research question and provided a different perspective from that of the traditional participant observer which I believe is particularly relevant for this study as there is such a large focus on sensation, which is both hard to describe and hard to understand if you have not experienced it yourself. How could you describe or understand the feeling of the sun shining down upon you if you had not been touched by its rays yourself? In order to bring a voice and to represent barefoot and minimalist style running culture, I had to immerse myself fully in that culture. It allowed me to formulate better interview questions and relate to the subjects' experiences, as well as to relate these experiences in my thesis.

Interviews were a suitable choice for my research project because in this particular circumstance, the processes through which the practices were learned and the contexts in which they are experienced was anti-social, sometimes solitary or embedded in intimate forms of sociality that does not invite research presence. This was not true of all my participants, some who run in a group and who invite the presence of others, but it is representative of runners I encountered and interviewed. Participants ran alone and viewed running as their alone time during which they could unwind from their daily interactions with others. Rather than intrude on this solitary activity, I used a combination of interviews and participant observation to explore running practices. I took a cue from Allen-Collinson and Hockey's 2001 study, *Runners Tales: Autoethnography, Injury and Narrative* which examines the importance of narrative activity in the construction of the injured and

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rehabilitated sporting body and reconstructing a sense of belonging. Collinson and Hockey themselves are both middle to long distance runners who were both formerly injured and have experienced gradual rehabilitation and have used this experience to inform auto-ethnographic research. By running themselves, Allen-Collinson and Hockey situate themselves as 'co-tellers', exchanging narratives with their participants, which they believed to be crucial to achieving a high level of intersubjectivity, allowing them to form a more whole understand of the sense of belonging runner's feel and to reclaim their own belonging as runners and athletes.

Participant observation has enabled me to understand the embodied learning I had accrued in the past, the poor running techniques and my struggle to become a runner and try to reconcile this with a new running technique and a thirst for knowledge of a new practice. Through this method I am both a 'part of' the practice of minimal running, as well as an observer learning about the practice from others. By actually practicing barefoot running myself, I am able to understand more closely the sensory and affective dimensions of practice and from this the role they play in the constitution of place and environment, which I argue are decisive factors in understanding the differences amongst barefoot and minimalist style runners.

Before beginning this study, when I began to run in minimalist style shoes, I found myself recounting my story and my experiences running to others, who often asked for advice or were curious what the experience was like. My own running story and experiences were shared and recounted to friends and in return they told me of their running triumphs and woes. I was drawn to others beyond my friend

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group, connecting with them through my own running stories and my desire to connect with other runners similar to myself. This desire particularly applied to barefoot and minimalist style runners; I wanted to hear their experiences and their own stories of running. This study has allowed me to explore others' stories in exactly this way, sharing my own experiences and connecting with other runners by listening to their stories. Interviewing participants for this study was a natural continuation on my path as a runner and an anthropologist and has allowed me to connect with the running community in a meaningful way.

Participant Recruitment

Barefoot and minimalist style runners, despite their current trendy reputation, are difficult to find because they do not comprise a large part of the running population. I conducted 18 interviews, nine with barefoot runners and nine with minimalist style runners, over the duration of three months, from September 2012 to December 2012. I conducted six interviews in Ottawa and 12 interviews in Boulder, with an even division of nine men and nine women. Participants for this study were primarily recruited through word of mouth and social networking sites for barefoot and minimalist style runners. I was fortunate enough to garner media attention during this study and through a series of interviews on CBC Radio 1 several interested participants contacted me via the producer of the Morning Show. These participants were all from the Ottawa area. Several runners from outside the Ottawa area also contacted me but they were not included in this study because they resided outside the local region.

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I communicated with participants via email and sent them a letter of information (Appendix D) about the study. If they were still interested in the study after receiving the letter of information I would forward them a consent form (Appendix B) and we would arrange to meet in a public place, often a coffee shop.

I also used online resources to find participants. I posted an ad on the Ottawa Kijiji site calling for participants to volunteer for my study and participate in interviews. Kijiji is a free online classified ad website where people can buy and sell items, find community events, and reach out to others in their community. I stipulated that participants must be over the age of 18, could speak either French or English, and must run barefoot or in minimal style shoes. Participants also needed to live in the Ottawa area and be available for a 30-60 minute interview, either in person or by telephone. My ad on Kijiji generated a fair amount of interest but much of it was from participants who were not qualified or they lived outside of the Ottawa area.

I used a snowball sampling method to find participants. I was able to recruit several minimalist style runners through this Kijiji ad and they put me in to contact with others minimalist style runners. The participants in Ottawa I contacted through my CBC interviews also provided me with contact information for their acquaintances and co-workers who ran barefoot or in minimalist style shoes. Through their generosity and by word of mouth, I was able to find more participants for my study. Snowball sampling was an extremely effective method to recruit participants in a hard to find population.

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In order to recruit barefoot and minimalist style runners for my sample in Boulder, I used the social networking site 'meetup.com'. This website allows groups of likeminded and activity orientated individuals to form clubs, such as reading groups, running clubs, or friendship clubs. The group "Barefoot Running Club" based in Boulder on meetup.com has 366 members and I messaged close to 100 runners in this group based on the activity levels of their profiles. Participants who had been active on the site within the last six months were messaged. I deemed them the most likely to check their account regularly and still be practicing barefoot running. Responses slowly trickled in and I arranged several interviews in the month prior to arriving in Boulder. I conducted six interviews my first week in Boulder and I was put into contact with more participants, again through word of mouth. The barefoot running community in Boulder was large but tight knit, with many participants who had they put me into contact with.

Conducting Interviews: Gathering Qualitative Data

All interviewees were asked to sign a consent form (Appendix B) agreeing that the interview could be tape-recorded and transcribed and extracts could be used in publication. Interviewees were given a copy of this consent form in accordance with the University of Ottawa's research ethics board policies. Interviewees were also emailed a letter of information about the study's aims and a sample script of the type of interview questions to be asked. The interviews themselves were open-ended and semi structured, meaning that a rough set of questions was used as a guide through the experience of barefoot and minimalist

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style running (How long have you been running barefoot or in minimalist style shoes? What was your first experience like? How often do you run? etc.) Depending on the circumstances, these interviews lasted between 30 minutes and two hours. Some interviews were much shorter than others. If participants were pressed for time or if they expressed a desire to be brief, the interview would be a question and answer format over coffee. I met most of my interviewees in cafes and coffee shops and I subscribed to a strict public places only policy as the setting for these meetings. This was for my own safety as a young woman, as well as to put my participants at ease about their own safety. However, a few of my participants expressed a desire to go for a run or hike together and I was only too happy to oblige. These interviews were unique and presented a challenge in terms of audio-recording and transcribing them as this proved to be impossible, however I wrote out field notes shortly after these outings and managed to recollect most of the conversations, although I did not have the transcript of these interviews written out verbatim.

Participants were asked for their basic demographic information (name, age, profession, education, sex and ethnicity). Participants were asked whether they ran barefoot or in minimalist style shoes and if they ran prior to this in regular padded shoes, in addition to documenting where they run, how frequently they run, and what gait and striking style they use, and if they race or train competitively and what distances or races they run (5k, 10k, half, marathon, triathlon or iron man). I was interested in learning about the importance of where they run, how they perceive the environment in which they run, and whether they listen to music when

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they run or the sound of their running (feet striking the ground, breathing, heartbeat, etc.) and about their running goals and whether they run for a specific reason or for general exercise. I also asked them to tell me about what aspect of their running they enjoy the most and about their sensory perception and whether it played an important role in their commitment to barefoot or minimalist style running. Participants were encouraged to tell stories and share experiences of their runs. Running is can be characterized as a solitary activity; we conjure up the picture the lone runner, but through interviews runners have the chance to share their personal experiences. Many of the conversations were highly personal in nature and touched upon the medical history or sexual history of the interviewees. This presented challenges in terms of timing and direction of questions, as well as knowing when to pull back from an area that seemed to raise ethical and emotional issues and was beyond the scope of the study. A bond formed very quickly between myself as the interviewer with those I interviewed I had to prepare myself for this connection and try to remain professional throughout. This also presented a challenge trying to steer my participants towards appropriate topics while following my goal of maintaining an open-ended conversation. I tried to manage this through questions that were phrased and timed to provide continuity, allowing interviewees to follow their own thoughts with myself often just prompting or repeating what the interviewee has just said. Participant observation allowed me to commiserate and relate through stories and experiences to my interviewees. This was very helpful in steering conversations or placing interviewees back on track to more appropriate topics (i.e. the realm of barefoot or minimalist style running).

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My informal interviews were designed to pick up stories by being informal and relaxed, I encouraged an exchange of stories and I was always willing to share my own running experiences and mistakes to put others at ease. Participants recounted events or series of events, and I responded by asking: what happened? How did it happen? What was the result? The object was to discover themes and recurring structures, to 'follow what is going on' (Ingold, 2011).

Transcription and Citation

I took notes during interviews by hand, mainly in point form, but not all interviews were transcribed, as the process was not always convenient or possible because the interviews were not always conducted sitting down but instead running or hiking. Interviews were recorded when appropriate using the Voice Memos application on my iPhone and uploaded to iTunes where I could replay the interviews on my computer. Having these interviews uploaded to my computer was particularly advantageous because the portability of my laptop allowed me to work through the transcribing process at home and while travelling. Playing the audio through iTunes was also very practical as I could control the volume and pause and play the interviews through shortcuts on my keyboard. When I was typing it was easy to pause the interviews to write out thoughts or replay the audio for particularly complicated parts of the interview. I transcribed all the interviews into Word verbatim. As I transcribed the interviews, I wrote out the specific locale where I had conducted the interview. Remembering the location where the interviews were conducted transported me back to those moments and I recalled the

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atmosphere and the overall tone. Listening to these interviews a second or third time brought further details to my attention and statements that I had previously missed or misheard so I comprehended much more of the interview than I initially had. However, this was accompanied by a sense of remorse, as I heard myself continuously interrupting the interviewee as he or she had been on the verge of saying something that could have been particularly interesting and the disappointment at their never bringing it up again. Extracts used from these transcribed interviews, both Ottawa and Boulder, have been 'cleaned', that is to say I removed ums and ahs and fragmented statements and repeated words. My intention in doing this cleaning was to present the statements in the most clear and straightforward manner as possible. I also have added linking words in brackets; for example, [so], to make sense of sentence fragments and put them into the context that was intended by the speaker, in addition to make statements comprehensible to readers. Transcribing the 18 interviews was a time consuming process some were as brief as 30 minutes, others as lengthy as two hours. As a result, I spent most of December and January transcribing my interviews, 'cleaning' them, and carefully going over them, editing for mistakes such as spelling and accidental repetition of words by myself as I transcribed them.

Data Analysis

I organized the text from transcribed interviews and used a combination of thematic organization and chronological organization. The interviews were organized in Word and listed first by date, secondly by location. Basic demographic

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information was extracted from the interviews and this information was charted into Excel (Figure 2). This chart allowed for a simple breakdown of age, race, education, profession, years running, location, gender and style of running. This chart was a useful analytic memo for myself and I used it and other jotted notes of patterns and repeated phrases or wordings that became apparent to me through the research and interview process.

Participant	Age	Race	Education	Profession	Years Running	Location	Gender	Style
1	45-60	White	P.S.	IBM	>10	Ottawa	Male	Barefoot
2	30-45	White	P.S.	IBM	>5	Ottawa	Male	Barefoot
3	30-45	White	P.S.	Grad student	<5	Ottawa	Female	Barefoot
4	18-30	White	P.S.	Therapy	<5	Ottawa	Female	Minimalist
5	18-30	White	P.S.	Grad student	<5	Ottawa	Male	Minimalist
6	45-60	White	P.S.	Therapy	>5	Boulder	Female	Barefoot
7	30-45	White	P.S.	Therapy	>5	Boulder	Female	Barefoot
8	30-45	White	P.S.	High level Management	>5	Boulder	Male	Minimalist
9	18-30	White	P.S.	Unemployed	<1	Boulder	Male	Barefoot
10	30-45	White	P.S.	Therapy	<5	Boulder	Female	Barefoot
11	30-45	White	P.S.	Hospital	<5	Boulder	Female	Minimalist
12	45-60	White	No P.S.	Co-founder of company	>10	Boulder	Male	Minimalist
13	30-45	White	P.S.	Podiatrist	>10	Boulder	Male	Minimalist
14	18-30	White	P.S.	Retail	>5	Boulder	Female	Minimalist
15	18-30	White	P.S.	Grad student	<5	Ottawa	Male	Minimalist
16	18-30	White	P.S.	Grad student	<5	Boulder	Male	Barefoot
17	18-30	White	P.S.	Office job	<5	Boulder	Female	Barefoot
18	30-45	White	P.S.	Nurse	>5	Boulder	Female	Minimalist

Figure 2. List of participants in the study.

Legend

P.S. Post-secondary

<1, less than 1 year

<5, less than 5 years, greater than 1 year

>5, greater than 5 years, less than 10 years

>10, great than 10 years

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Thematic analysis is a process for encoding qualitative information. The encoding requires an “explicit code”; this study utilizes a list of themes as the explicit code. A theme is a pattern found in the information that at the minimum describes and organizes possible observations, or at maximum, interprets aspects of the phenomenon (Boyatzis, 1998, p. 4). A theme may be identified at the manifest level, which is directly observable in the information. Themes may be initially generated inductively from raw data, as they often are in cultural anthropology, or generated deductively from theory and prior research. In this study, themes were originally generated deductively from research and fringe literature at the manifest level, as well through contact with minimalist style runners prior to beginning the study. As research progressed, themes were dismissed or confirmed through inductive generation from raw data that was produced through interviews and participant observation. I chose themes based upon their prevalence in the data, as well as their importance to the subjects, the themes needed to portray the “big picture”, rather than a small nuance in one participants practice.

In addition to using thematic and chronological organization to understand and find patterns within the enskilment that was created from stories, I organized learning at the manifest level through online research, participant observation and interviews. I was able to learn about the skills while participating in them and coming to an understanding of the culture. Thematic and chronological organization was applied in order to organize the data I collected, as well as a method to systematically observe cultural groups. I was able assess these themes and what I have grasped from participant observation and interviews, in both Boulder and

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Ottawa, and I applied a multi-sited approach to draw out the nuances in these two cultural forms. My approach to understanding the culture of barefoot and minimalist style running is to examine how people engage in these subcultures through lived, skilled practices that emerge through themes. Themes emerged through running and stories so I have made this the enskilment I am focusing upon, the stories that have emerged through my research and various collection techniques.

Thematic organization is useful for understanding major events in the narrative and the effect those events have on the individual constructing the narrative. This approach organizes the enskilment into an abstract (what happened), an orientation (details of who, when, where, what), a complication (then what happened), an evaluation (so what), a result (what finally happened) and a coda (the finished narrative) (Bernard, 2011). These elements may not occur in order and may not always be clearly defined, there may be parts from certain stories in the beginning of an interview, or a thought broken up and brought up again at the end.

Thematic analysis is also related to phenomenology. It focuses on the human experience subjectively. This approach emphasizes the participants' perceptions, feelings and experiences as the paramount object of study. Phenomenology notes giving voice to the "other" as a key component in qualitative research in general. This allows the respondents to discuss the topic in their own words, free of constraints from fixed-response questions found in quantitative studies.

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I also employed chronological organization to my data, which focuses on the way the narratives are constructed. Chronological organization is important for understanding the motivations and events leading up to runners beginning to run in barefoot and minimalist styles. Chronological organization helped to distinguish themes, I would organize the data chronologically as I read through and became familiar with the data set and similarities began to emerge between narratives when compared. Similar events, such as injuries, speed, and improvement to running mechanics often began runners' stories. A chronological approach attends to the 'embodied' nature' of the person telling the narrative, the context from which the narrative is created, the relationships between the narrative teller and others within the narrative, historical continuity, and the chronological organization of events (Polkinghorne, 1995). Using chronological organization, I have found where the themes within stories fit in, with a clear beginning, middle and end narrative that the interviewees tend to follow, with little to no prompting by the interviewer to have them follow this pattern. Ingold puts it, "... it is in the art of storytelling, not in the power of classification, that the key to human knowledgeability – and therefore to culture – ultimately resides" (Ingold, 2011, p. 164). Therefore, I attempt to categorize these runners less and rather let the themes draw connections and demonstrate nuances between the runners. My results will explore these themes and how barefoot and minimalist style running are being done in different ways.

In this chapter, I reviewed my methodological approach to this project, outlining the problems I encountered reconciling my methodology with that of an Ingoldian notion of culture and the terms I used to describe data, or as I have

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termed it, enskilment. I also examined the differentiation between anthropology and ethnography, and how I proposed to use the term ethnography in this project. By explaining how I perceive anthropology I have attempted to justify the mix of methods used in this project, which included online research, participant observation, and informal and formal interviews. This range of methods were employed as anthropology is an explorative, generous and comparative and barefoot and minimalist style running needs to be explored in this open-ended manner if it is to be accurately reflected and represented as a cultural form. The next chapter will examine the results produced from this open-ended inquiry and how these nuances in barefoot and minimalist style play out when explored by a runner and an anthropologist.

Chapter 4: Results

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This section describes the results of my study and answers the three questions first posed in chapter 1, which were: how can we understand barefoot and minimalist style running as cultures; how are barefoot and minimalist style running being done in different ways; and how do the senses play out and create nuances between barefoot and minimalist style running cultures. I answer these questions by describing my research sites and my findings within them. Out of the data analysis I conducted emerged themes. I examine these themes to demonstrate how barefoot and minimalist running are cultures, how they are made, and how they differentiate from one another.

Ottawa

Ottawa¹⁴ is located along the south bank of the Ottawa River and is in the National Capital Region (NCR), which comprises Ottawa and Gatineau and boasts a population of nearly 1.8 million people. The NCR is an area rich with forest, farmland and marshes and popular spots for recreational activities such as hiking, biking, running, canoeing, and rowing in places such as the Gatineau Hills. There is a large running culture present in Ottawa and annually the Ottawa Race Weekend in May hosts over 42,000 runners, local, national and international. In the fall, the Army Run hosts around 22,000 runners, largely from the local running community.

I interviewed six barefoot and minimalist style runners in Ottawa, three of whom classify themselves as barefoot runners and three of whom classify

¹⁴ Ottawa is the capital city of Canada, with a population of approximately 883,391 (Statistics Canada, 2012)

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themselves as minimalist style runners for a total of four men and two women. My participants ranged in age from early twenties to mid-sixties and were all employed professionals who had attended some form of post-secondary education, either college or university. The three barefoot runners I interviewed had all been running barefoot for several years, varying between 4 years and 10 plus years, running barefoot, sometimes in minimal style shoes. Prior to running barefoot, they had run in traditionally padded shoes for several years and had all suffered different forms of injuries, some more severe than others.

Ottawa is a city that is neighbourhood-oriented and feels like it is comprised of small, little hamlets at times, as people will often shop, work and exercise within their respective neighbourhood. Therefore, the participants I interviewed from Ottawa all tended to run in different parts of the city. I myself ran in my own neighbourhood of Lowertown and along the Rideau River, located a block from my home. Other popular spots to run as stated by my participants included along the Rideau Canal, up Parliament Hill and along the Sir John A Macdonald Parkway, in the Gattineaus, along the Rideau River, down by Dow's Lake, or in their own neighbourhoods such as Blackburn Hamlet or Centretown. One barefoot runner from Ottawa describes where she runs in Ottawa,

I run in the Glebe, the Golden Triangle, along the canal, basically on any paved surface. I've done the Gattineau trail running once, I will run on the grass if it's really miserable weather, but I prefer not to. That's what I did in Israel; I would run the trails barefoot out there. The problem with the grass is you can't see what's in it that might harm you.

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Ottawa is very pedestrian and cyclist friendly, biking and running paths crisscross the city and run along the waterways of the Canal and the Rideau River.



Figure 3. Parliament Hill and the Centennial Flame in downtown Ottawa. Photo credit Carly Warnock, 2011.

The runners interviewed in Ottawa began by telling me where they were from; their hometown and the area of Ottawa they are located in now. After recounting this detail, they launched into what brought them to barefoot running and the stories were similar in this respect and followed a pattern, beginning with a medical problem or injury that inspired them to begin barefoot or minimalist style

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running. The barefoot runners I interviewed in Ottawa had originally began the transition to barefoot running by running in minimalist style running shoes, often the Vibram Five-fingers and later switching to barefoot running out of a need for something different (sensation, movement, freedom). A participant in Ottawa explains how barefoot running satisfies her need for “freedom”,

I started running for the sensory perception, not just the feel of the ground but also the feel of having nothing surrounding my foot. I would go around without shoes all the time if I could! I just feel constricted you know, [gestures to foot] this is tight, restrictive for me. In San Diego and Israel, I was barefoot all the time but in Ottawa I’m restricted.

One barefoot runner from Ottawa, however, has never used minimalist style running shoes. She began barefoot running suddenly,

I was in the middle of a race, I took off my shoes, I went barefoot and I never put my shoes on again. By mid-2006, I transitioned from race shoes to all my races without shoes except for triathlons during the biking component. No biking barefoot but I run barefoot. I’m okay on a bike going barefoot from here to there but not during a race.

Sometimes barefoot runners switch back into minimal shoes to run on ice or in snow in the winter. Barefoot runners in Ottawa owned several pairs of barefoot and minimal style shoes, ranging from shoes, to sport sandals and even water shoes. One interviewee in Ottawa owns more than ten different pairs of running shoes and sandals; he has even crafted his own running socks (by dipping socks in a plastic coating in order to run slip-free on ice) and has also created huaraches¹⁵ out of

¹⁵Type of Mexican sandal. Huaraches are pre-Columbian in origin, and are made from woven leather. The leather is traditionally hand-woven. Recently making huaraches from old car tires has become popular in Mexico and these are now commonplace over leather sandals.

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leather. When socks, shoes and sandals have failed to give him the experience that he desires, he has removed them and simply run unshod.



Figure 4. Photos of participants varied shoes and water socks that they use to run in a minimal style. From left to right these include Newton, Innov8, Newton, Vibram Five fingers and two pairs of water shoes. The shoes on the left belong to a participant in Boulder; the shoes on the right belong to a participant in Ottawa. Photo credit Carly Warnock, 2012.

Sutton and Anderson explain, “the specific problems must mesh with the institutions and organizations. If the solutions are valid, the culture survives... there may be multiple valid solutions. One culture may choose one and another culture may choose a different, but also valid, solution” (Sutton & Anderson, 2004, p.92). This also applies to the needs of individuals within cultures, which makes the term ‘enskilment’ more useful in our attempt to understand this difference in physical necessities. This relates to an Ingoldian notion of culture (see p. 14-16): different knowledge comes from paths, and paths are a variation of a solution to a problem,

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this idea of 'keeping going' involving a good measure of creative improvisation (Ingold, 2011). Going unshod may work for some and be a valid solution to interact with the environment and provide an enjoyable running experience, but it may not be a valid solution for others who run, and, as a result, they will explore other paths like minimalist style shoes or water socks. Both solutions are equally valid but they are practicing two different skills with two different desires resulting from a similar script of life.

The minimalist style runners I interviewed in Ottawa had not been running in minimal shoes for as long as the barefoot running had, averaging somewhere in between a few months to two years. I myself have been running in minimalist style shoes for approximately a year, since March of 2012. The minimalist style runners I interviewed in Ottawa tended to only own one or two pairs of minimalist style running shoes, several were on their first pair, as they were relatively new to this skill. Several of the runners I spoke to had taken courses in chi-running¹⁶ and minimalist running techniques to ensure proper technique rather than perfecting their style through trial and error or simply trying to "figure things out" as one participant explained. This provides a contrast to the barefoot runners who often learned to run barefoot through practice, adjusting their technique through little

¹⁶ ChiRunning is based on movement principles of T'ai Chi, and requires you to use your core to transform your running. Chi (pronounced "chee") is the vital energy that unites body, mind, and spirit. It posits that energy moves from your core (also known as your "center" or "dantien") into the limbs to create movement. Engaging your core and relaxing your limbs allows your legs to simply support your body weight instead of pushing or pulling it forward with each step. When your structure is aligned and your muscles and joints are relaxed, chi can flow freely through the body, making running feel effortless.

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cues such as blisters or calf pain. A barefoot runner explains the difference she believes exist between barefoot and minimalist style runners,

The mindset of a barefoot runner versus a minimalist runner: a barefooter might be more focused on having a more holistic experience and the shod runner might have different goals. For me, it's not just strictly getting my five miles; it's about the enjoyment the running brings me. . I think shod runners enjoy the run too but they don't have all the feelings. For me, sensory and maybe even spiritual, it's a flowing consciousness that is outside of your immediate environment. You access a different dimension of freedom or something.

The minimalist style runners conduct themselves in a more regimented training schedule and running style. Minimalist style runners conducted more research about how to run in a midfoot striking pattern, reading books written by well-known barefoot and minimalist advocates such as Jason Robillard or Barefoot Ted, as well as enrolling in classes to learn to run the 'correct' way, such as chi classes or participating in running clinics.

I myself participated in a running class in Boulder that was sponsored by and run by Newton Running. Newton Shoes are made to feel 'natural' and the company advocates a 'natural' running style that is midfoot, promotes a rigid upper body, encourages the head to stay on a level plane with little up and down, with a cadence of approximately 180 steps a minute. During the class a metronome was employed to set a standard stride pace, it created a feeling of tension and panic as participants aimed to keep pace with the unfamiliar pace. Using a metronome to 'learn how to run properly' was encouraged by the instructors, running was not something you could feel, but rather it was something learned and regulated. In addition to

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metronomes, technology such as training watches¹⁷ are utilized by many minimalist style runners to prepare for racing events and make sure their time is competitive.

This urge to race and participate in racing events is present in the barefoot runners I interviewed but they shy away from using racing technology or discussing race times. Instead they are excited to run barefoot and to participate in a race by running in a way that is comfortable for them. Both minimalist and barefoot runners view racing as a personal achievement, but for different reasons. Minimalist runners are happy they have achieved the end result of their training and hard work, they discuss and critique their times and compare it to other races. Before the race is even over, sometimes before it even begins, runners are pondering how they can improve for the next race, one minimalist runner recounts,

I'm always looking for a new shoe, some new technology that is the latest and greatest. I want to go further faster. I have a graveyard of shoes, some I have only worn on race days, others, I've clocked 100 of miles in easily. When all those crazy padded shoes came out, I went nuts for those. Seems only natural I try all these unpadded shoes to try to make myself faster.

Barefoot runners see their achievement as the simple (or very difficult) act of running barefoot. Runners delight in being able to complete this act uninjured while enjoying the sensory experience. One barefoot runner in Ottawa recounts,

... [Barefoot running] always seemed like something I was capable of doing, you know when I was young some people were barefoot the whole time and they

¹⁷ Running training watches have become extremely sophisticated, possessing GPS and the ability to plan and track your run geographically and temporally. Many do not even have to be connected to a computer via a USB cord but upload statistics wirelessly. Runners use them to plot courses, keep track of their minutes per mile or kilometer and to race against their own previous times. They give feedback on altitude, speed, and heart rate and cadence.

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adapted and I was also always in shoes I had very sensitive feet so I wanted to see if I could do it I wanted to prove to myself I could do it.

Therefore, minimalist running can be seen as a technique a runner uses to improve their racing time or form, whereas barefoot runners see themselves as master of a technique but also as achieving a state of running that few others can also do, running barefoot without injuring themselves.

Boulder

Boulder¹⁸ is a city in the U.S. state of Colorado, located at the base of the foothills of the Rocky Mountains and sits at an elevation of 5,430 feet (1,655m). The city of Boulder is in Boulder Valley where the Rocky Mountains meet the Great Plains. The Flatirons loom large over the city, imposing slabs of sedimentary stone tilted up on the foothills. The Flatirons are commonly associated with Boulder and are a symbol of what Boulder stands for: love of exercise and outdoor activities, especially in the mountains. Boulder is well known for its top rankings in health, well-being, quality of life, education, and art. The University of Colorado is located in Boulder and is the largest university in the state of Colorado.

¹⁸ The United States Census Bureau reported that in 2010 the population of Boulder was 97,385, while the population of the greatest Boulder Metropolitan area was 294,567.

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Figure 5. The Flatirons seen from the Chautauqua Park hiking trail. Photo credit Carly Warnock 2012.

Boulder is an ideal city for sport enthusiasts, especially runners who come to train at the high elevation to improve their lung capacity. Boulder is surrounded by thousands of acres of open recreation space, nature preserves, and conservation easements. There are almost 36,000 acres of open space available to the public, which include world class hiking trails and rock climbing, the most popular being Chautauqua Park in the west end of the city. The trails vary in difficulty in this area and are often used by runners, hikers, bikers, and rock climbers. Boulder is also home to the U.S.A. Ultimate organization, as well as the headquarters of U.S.A. Rugby and U.S.A. Climbing.

I interviewed twelve barefoot and minimalist style runners in Boulder, six who identify as barefoot runners and six who identify as minimalist style runners.

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There was an even division of men and women runners in the sample, six of each. The participants ranged in age from early twenties to mid-fifties and all were very physically fit and active athletes. Several ran competitively in triathlons and IronMan races, including the Hawaiian IronMan. A Hawaiian IronMan comprises of a 2.4-mile swim in open rough water, a 112-mile bike ride and a full 26.2-mile marathon (Ironman, 2012). There were a few older individuals who participated in the study who were not as physically active as the rest of the group. They ran in shorter intervals and often hiked barefoot, rather than running competitively or for long periods on trails.

The participants in Boulder were similar to those in Ottawa in their preference to run within their neighbourhood or area of town. They stated that they often run or hike at Chautauqua or in the mountains and hills of the Rocky Mountains because of the convenience of the trails and the easy access (at most a ten minute drive from the participants' homes to the Flatirons). Oftentimes participants would train at Chautauqua or in the hills at an even higher elevation and to push their physical limits further. Many of the minimalist style runners expressed a preference for dirt trails rather than roads or treadmills they liked the uneven surfaces the trails provide them with, challenging them technically and to move lightly and quickly from rocks to open nooks and spaces. Navigating these uneven trails is itself a workout; learning to run downhill on these complicated paths takes time and experience, and often a few near escapes from injury.

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Regarding the surfaces the barefoot runners would use, I was surprised by the reaction of barefoot runners in Boulder to paved and manmade surfaces — many of them did not mind running or walking on sidewalks or paved roads, except in the high heat of the summer, which makes the pavement too hot for direct contact with the feet. A female participant from Boulder explains,

Pavement is great because you can see it all, and because it's flat, it doesn't mold into you, whereas with sand it goes around your foot. I loved running in deep sand, unpacked, great workout all the way up to your knees.

I had expected the runners to abhor man made surfaces and stick only to natural surfaces, but many made use of both spaces. The barefoot runners preferred areas outside of urban environments such as Chautauqua but did not express distress or dislike over running on paved surfaces. Many of the barefoot runners I interviewed tended to live their lives outside of running barefoot unshod, walking their children to school, driving their cars, doing the groceries and going to restaurants all without shoes. Some of them even explained that they work barefoot and that their office allows it and that their co-workers are supportive and non-judgmental of their lifestyle. The barefoot runners in Ottawa expressed a desire to live their lives outside of shoes as well, but only one barefoot runner in Ottawa had really managed to successfully to do, partially because of the climate and partially because of the formality of the culture in Ottawa.

Many of the barefoot runners in Boulder transitioned to barefoot running through minimalist shoes, much like the barefoot runners in Ottawa. The difference I have found between the barefoot runners in Ottawa and Boulder is that the

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barefoot runners in Boulder still often run or walk in their minimalist shoes, often bringing them along on runs in case their feet become sore or they encounter a sensation or a surface that is uncomfortable to run on. One participant explains why she brings her shoes along,

I prefer to be barefoot but if I run into an area where there is glass or gravel, I will slip my shoes on. Even just for the parking lot I like to wear my shoes to the path and then back again from the path to the car. I don't feel the need to conquer every surface with my barefeet. I need to be comfortable and happy.

The barefoot runners in Boulder are less concerned with being strictly barefoot runners and rather allow for more intermix of barefoot running and minimalist running in order to achieve their running or hiking goals, be it distance or time or terrain and they are willing to use a variety of footwear to achieve this without fear of stigma or losing their 'barefooter' status. However, they still identify as barefoot runners and they also value the enskilment that is associated with being a barefoot runner. They would never term themselves as 'minimalist runners'. The theme of fear is prevalent in barefoot and minimalist style running and crops up in different ways in these cultural forms. I will explore this narrative in my next section and how it contributes to the discipline and changes the outlook of runners practice.

Themes

Three themes emerged from the interviews and participant observation I conducted: sensation, nature and the body. These themes demonstrate the nuances between barefoot and minimalist style running and show how they are being made and remade in differing ways. These themes also answer the question of how the senses play out and create nuances, first by describing the senses, and then

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describing how the other two themes, nature and the body, are an extension of the senses and created are by them. In this section I discuss a few themes that became apparent throughout my research, as well as themes I had predicted would emerge. I experienced many of these patterns in my own minimalist running style practice and I explore the impact and the range of emotion these themes had upon my own experience running.

Barefoot and minimalist style running differ from traditional running in one key way, practitioners would never run in a regular padded shoe. Because of their rejection of padded running shoes, barefoot and minimalist style runners have developed different running techniques to adapt to their environment. These techniques include wearing minimalist shoes for protection of the foot, wearing sandals or huaraches, or harnessing their 'natural' ability to run barefoot. The barefoot and minimalist style running culture I explored in my study also ran using a mid- or forefoot stride to prevent heel striking and, by extension, are trying to absorb shock through their running style. They also reported using a higher cadence (around 180 strides per minute) to avoid overextending the leg and causing heel striking.

Barefoot and minimalist runners who participated in my study shared the goal of preventing injury during running and agreed that they had turned to this style of running because traditional padded shoes had left them injured or unable to run. This narrative is distinctive of both barefoot and minimalist style runners and is the reason why I had originally classified them as one culture. This skill of running

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in a mid- or forefoot strike with a higher cadence and little to no padding is shared amongst barefoot and minimalist style runners alike. However, I believe I had oversimplified my categorization of barefoot and minimalist style runners when I first began my research by labeling runners who rejected traditional running techniques and shoes as the same culture. Nuances, as well as predicted similarities, between the two practices began to show early on in my research, so I had to reevaluate the way I regarded the two skills and that they were cultures being made in different ways.

The Body

In narratives about the body, the nuances between barefoot and minimalist style running begin to show. The body becomes apparent in stories in several different ways. The most often scenario was through the sharing of an injury or illness that began the runner's practice of barefoot or minimalist style running. The stories of the barefoot and minimalist runners ranged from short, chronological sequences such as 'this is when I began running, this is where I run, I train for races this time of year, I take the winter off, etc.', to long, complex stories often about their own illnesses, injuries, or phenomenological experience. Despite these differences in length, strong structural regularities exist in the narratives of barefoot and minimalist runners, that revolve around, and often begin with, what I term a 'medical problem' or injury.

I'm taking iron, I tried, but I just couldn't do the raw food movement. I've been recovering from being sick, I would be in bed during the middle of the day, and I had to start eating liver after trying the raw food thing just to get my iron back up. Before falling ill, last fall, I was running 8 miles barefoot on

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gravel, I had worked up to it pretty good. I wouldn't say I'm a fast runner, barefoot running slows you down, and that's the benefit of it. Even triathletes, they may be triathletes but they even have to go slower. And these triathletes, they're wearing the latest and the greatest in running shoes but they're suffering injuries. A lot of them have had three or four surgeries by now and I don't want to be like that. Your motive in doing anything is pretty important; if it's just to beat other people it's not going to help you spiritually or in any other way.

Most participants medicalized their story. Even if they had never suffered an injury or a medical problem, they justified their practice by the threat or injury or in the interest of preventing this unavoidable-any-other-way injury. Most interviewees, both barefoot and minimalist style runners, mention this desire to remain injury free. A female participant in Boulder shared her experience,

The worst thing I've done is stubbing my toe, nothing too bad barefoot. Aren't you afraid of hurting yourself people always ask me? Me, I'm more afraid of getting like 5 surgeries down the road and so I would say, like anything, if you make a change, you have to do it slowly. You can't just get into these shoes and just start running 5 to 10 miles, or even barefoot. I've got really big blood blisters from going barefoot on the concrete. You just really have to work up to it. A lot of people who run are just impatient types.

After establishing their entry into barefoot or minimalist style running through an injury or a medical problem, interviewees turned to their own experiences and how they practice barefoot or minimalist style running, specifying their running history, their preferred shoes or no shoes, their running environment and their running habits. A young female barefoot running in Boulder spoke of how she navigates the terrain with and without shoes,

I always bring my shoes on a hike and at the point when I feel pain, well... I wouldn't say pain; at the point when I feel tender, it's like a gut feeling, and it's time to put my shoes on. It could be 15 minutes into a barefoot hike, it could be three hours, 4 miles in or whole mile, it could be due to a lot of factors, where I am that day. [For example] if I'm emotional, maybe my feet

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will be more tender. Or I feel so sensitive and sad or stressed that I need to ground my feet but when I hit that point it's so respecting and my body and not pushing it beyond the edge. I will always put my shoes on, and when I put my shoes on, it's amazing how incredible my feet feel inside my shoes, they're like that prickly alive, it's a totally different dimension of pleasure and sensation and aliveness when the shoes go on and I keep running. You know, the first couple times I did it, I was sad that I actually had to put my shoes on, I felt like a deep sadness, a disconnection from the earth.

Despite the fact that some barefoot runners will put on shoes when they can 'barefoot no longer', many of them do not believe in running technology or wearing minimalist style shoes. My interviews with barefoot runners have confirmed their rejection of smart materials or hi-tech minimalist running shoes. A barefoot runner from Ottawa expresses his frustration,

The burden of proof seems to be backwards to me, that natural running has to prove it is safer, even though it's 100 percent free! Whereas if they tell you you've got to spend 100 dollars on a pair of shoes every year and then they tell you, you have to replace them after so many kilometers, well then the burden should be on them to actually prove the shoes prevent injuries but instead it's always on us, the barefooters being attacked.

Barefoot runners insist the only 'smart materials'¹⁹ needed are the soles of their feet, which should inform the way you run. When asked about conventional running shoes, the same barefoot runner had this to say,

Me, for sure my whole life there's always been shoes. I've learned to run in shoes and when I started running I got excited about buying shoes. There are these shoes that you're supposed to pump air in, there was an air bubble in there and it was so cool at the time. I thought you were supposed to heel

¹⁹ Kuchler's (2008) *Technological Materiality: Beyond the Dualist Paradigm* explores 'smart materials' and how they interact with the body and the mind, moving beyond the dualist paradigm. Smart materials are designed materials that have one or more properties that can be significantly changed in a controlled fashion by external stimuli, such as stress, temperature, moisture, pH, electric or magnetic fields.

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strike too so it's like it was an unnatural way but it's what I was accustomed to.

Running barefoot creates a shift in the way footwear is perceived, it is viewed in a negative light, whereas being barefoot is termed natural, which has positive association and meaning.

Barefoot runners report that blisters, sores, muscle strains, and pains in the feet are all feedback the body provides to alert you of poor running form so that you might adjust your stride to prevent injury.

My skin is thick and stays thick. At first it was all blisters and calluses but that went away pretty quick and now my skin is just thick and very soft and smooth. Except for the problems areas where my skin scuffs up like my big toe, it's scuffed underneath from me pushing off instead of lifting up. I just need to keep improving my form and getting out there.

Another runner echoes these sentiments:

Barefooting teaches correct form and doesn't hide any of your mistakes. If you're hitting in the wrong spot you will know. There were specific places I was getting blisters so it was poor form. You adjust your form and it gets easier, not faster, but easier. Usually for me it's just blistering or scuffing or the muscle pain, sore calves after, that type of thing.

The same barefoot runner argues that minimalist runners are missing this feedback,

I don't like that people call minimalist style running barefoot running because minimalist takes away all the protection and provides none of the feedback that barefoot does so you get almost the worst of both worlds. You take all the protection, plus you get no feedback. If you get injured it does the barefoot running movement harm because it makes the injuries look more so like it's the fault of barefoot running.

Minimalist runners argue, however, that they use their feet to provide feedback on their form, citing blisters and irritation as indications of a need to change their running style. The thesis argues that barefoot and minimalist runners

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both are letting their bodies guide them by following what is comfortable for them. However, minimalist runners can run without experiencing feedback and do not have the need for feedback the same way that barefoot runners do. Barefoot runners rely on feedback to adjust their form and to prevent injuries. Barefoot runners use their body as the instrument and rely on their own senses to change their footing and stride, to soften their steps or to run slowly on an uneven surface.

For a barefoot runner, the mind and the body move together as one; there is no separation and therefore no need for a smart material on the foot - the foot is the 'smart material' providing feedback to the brain. The barefoot runner relies only on his or herself and has already moved beyond the dualist paradigm without the technological materiality. A female barefoot runner in Ottawa perceives her skill and her body in this way,

The experience of running is healing, you are engaged with you and you need to rely on you, external forces you can't really depend on them as your motivating source because they change and they are out of your control. It's just you running and you feel what you feel and when you get a hold of where your muscle control is you adjust to the discovery. The shoes impose something on you but when it's just you... my general approach to the whole sport is that you need to revive what comes from within. It's kind of like a little microcausism looking at the foot and the shoe; it's the same philosophy, like feedback. We are always looking for improvement when we run but you can only find it from within your body.

Another element of the body that comes into the dialogues through injury is fear. There is a concern of fear negatively or positively impacting how participants treat their bodies and whether fear imposes limitations on participant's bodies. One question I kept repeatedly asking participants, without any ideas to the consequences or inference it made, was "aren't you afraid you are going to..." and

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here I inserted anything from step on glass, to cut to your foot, to step on a cactus, to get frostbite until finally a participant, a woman from Boulder, commented upon this and said that people always begin by asking her “aren’t you afraid?” She elaborates,

When I [first] started barefoot running and I told people, the first thing is “aren’t you afraid?” the first three words, some form of it, fill in the blank. The medical establishment, the trade selling shoes, Prozac, all that stuff, it’s all based on that fear so for me going out barefoot running is all facing that fear. Then you find once you jump over that fear you are in heaven [and] there you are running barefoot in the mountains and it is the most beautiful thing. All because you didn’t let those three words scare you down. So that’s my sage wisdom. It’s been a wonderful thing for me. It’s funny too, there’s a place in Psalms where it says, “Lord I know you will not let a stone strike my foot.” To me... going out barefoot running is about trusting, being as naked and as raw and honest as you can be as a person and authentic as you can be and just trusting your surroundings. You can’t go through life always being afraid or you’ll cut yourself off from all the abundance and wisdom and everything in the world.

Fear was also mentioned by another participant, a male in Ottawa, who worries about the stigma attached to barefoot running and that if he is injured while barefoot running he will be letting himself or the culture down because of the association with injury.

Earlier this year I got injured and everyone I know immediately assumed it was because I was running barefoot, even though I wasn’t at the time, I was wearing my minimalist shoes. Anything that goes wrong people are really eager to point out what’s wrong with what I’m doing. My greatest fear is I’ll be out barefooting and injure myself and people will blame the barefooting. Like the wolves waiting at the door they want to be, like, I told you so.

Runners both overcome fear and are faced with fear through their bodily practices. It is at once both freeing and liberating to take off your shoes and ‘be free’, but it is also seen as a responsibility, that one must ‘uphold’ the reputation of barefoot running and treat the body as a temple, to remain uninjured or recovered.

Participants feel a responsibility not bring barefoot running under any ill repute; the

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practitioners of barefoot running are both stewards and defenders of their values. I have experienced this myself and I feel as though it has tied me to barefoot and minimalist runners to a greater degree, as I have researched and practiced both skills, beyond what simply researching barefoot and minimalist running could have instilled in me. I identify as a minimalist style runner and I have placed myself inside the practice as a result of my methodology. I relate to my participants because I have a similar story of injury and love of running.

I am often asked questions about my research or my practice in a less than complimentary fashion and I am occasionally 'attacked' over my research and my running style. In these moments I am expected to defend not only myself, but also barefoot and minimalist runners. This has made it difficult for me to remain objective and not 'believe' or 'endorse' the claims made by barefoot and minimalist runners, because I am a minimalist runner and I live those experiences, so I naturally both defend and believe in them and I feel as though my body is an extension of my responsibility to them. This brings me to my final word on fear and the body: my fear that my own story within the sport, one that continues to evolve as I move along in my research, has made me lose the objective perspective that a researcher is expected to possess. I also am afraid that my reputation and my body are lost in this allegiance to barefoot and minimalist style running and if I do not train enough or run as much as is expected of a minimalist style runner, that I will somehow be considered outside the practice I study and love. I counter this fear with the reassurance that I have gained a different insight into my research, that of a

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runner and a researcher, which enables me to appreciate the nuances and dilemmas barefoot and minimalist style runners possess in a more complete way.

Sensation and Nature

From the body, the crux of the two disciplines is exposed, the sensation created by running in barefoot or minimalist shoes. This is where the narratives began to differ and the barefoot runners separate themselves from the minimalist style runners, who are largely missing in this narrative of connection to the feeling of the earth. It is difficult to separate sensation and nature, the two themes complement one another and do not exist independently; a desire for sensation is only satisfied through a connection with nature or the ground.

I was wearing my Vibrams in the fall, I had been wearing them for almost 3 years, it was wet, they got wet and my feet got cold, it was like wearing a wet sock. I was with a friend and I was probably three miles away from the car and I had to take my shoes off. And I walked out those 3 miles barefoot. My feet warmed up, it was amazing, and it felt like my feet were waterproof although they absorb things. I felt so connected and stimulated; alive in my body. The sensation of the hike was heightened with textures and temperatures and acupressure and acupuncture and pleasure and pain, it was a metaphor for life. Just [like] being naked, just, it's... like being so vulnerable and open to all sensation whether it's prickly or warming or soft and sandy, I could just walk into the creek without having to take my shoes off because of the water, so you just feel so many different elements and sensations and especially out in nature. I'm a wimp when it comes to asphalt and crushed stone. It's really weird because it's the hardest surface for me to walk on, the pebbles, those tiny little stones poured down on roads. It's weird now in the past four months I can say I can actually walk on that but I don't like that though I will actually put my shoes on. I almost like the pain though, like acupuncture needles, my feet have just learned to raise and lower, like microscopically, the feedback, they raise when they need to, they lower when they need support, they are so flexible and sensitive, it's really amazing.

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The topic of sensation sometimes also turns into talk about the sensual and sexual aspects of barefoot and minimalist running with interviewees.

[On how being barefoot feels different and creates different sensations] My friend Paul is trying it, he's at that stage where I was where I was like everything is ow, small rocks are ow, I would avoid all the small rocks but now the small rocks are more sensation, but only so much of it. I asked him, he puts his shoes on and off a lot more, he may get to that point where it never feels the same, just like sex feels different for all of us, and foods and temperatures, we all like different things. Nobody talks about barefooting being like sex. I went on two long hikes this week barefoot and I always run into somebody whose like whoa, this is crazy, like ow and I'm like hey to me, honestly, it feels better to me, it feels better than sex sometimes. If you like think about how long it lasts and how alive is makes you feel and how it makes you aware and deepens the connection of the breathing, it deepens on so many levels, it's so many levels, it's not a temporary fleeting moment that will pass real quick, you can always go back to it, you're not dependent on someone else to pleasure you.

Another participant recounted this sexual connection between being barefoot and the sensation of the earth, describing it a bit more explicitly.

[Well] there's this book out about it [earth bonding] and this guy who says if you have cancer or any illnesses [or] even if you don't, one of the best things you can do is go out and lay down on the earth and let the earth heal you. There's magnetism and all kinds of things that can heal you, positively charged ions. When you hike barefoot it's almost as good as sex. It's just really, all the nerves in your feet, it shoots right to your genitals, oh damn, you know it feels good, stimulating you there. **It's kind of like having sex with the earth.** It's fantastic and since I've been single for so many years, [so] it's a wonderful thing.

Other participants echoed this as well, a man in his fifties and woman in her early forties. The male participant explained to me that the feet 'contain many nerve endings' and he asked me if I knew where our other nerve endings were concentrated. I replied our hands and he also added, "our genitals". The foot is a very sensitive organ and for every square inch of sole, there are no fewer than 1300

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nerve endings (Tenner, 2003). This high concentration of nerve endings enables barefoot runners to derive an immense amount of pleasure and sensory perception from barefoot running. Sensations of particular enjoyment to barefoot runners are mud, cool water, smooth stone, river rock, and pine needles.

As predicted, the overarching theme that emerged out of my thesis on barefoot and minimalist running is nature. A natural running environment is described by barefoot participants as being always outside, oftentimes along a river, in a forest or on a mountain trail. Barefoot runners need to feel connected and stimulated by the ground and by nature. Many of the participants, both barefoot and minimalist style runners I interviewed in both Boulder and Ottawa would classify themselves as environmentalists. The participants considered themselves stewards of the earth who both want to protect and enjoy nature as much as possible. Many of them used public transport, walked, or bicycled regularly. They consumed organic, vegan, raw, vegetarian or paleolithic²⁰ foods and tried to eat locally, in addition to buying sustainably grown products and gardening or foraging for plants. Many of the participants said they would like to leave nothing but footprints, to give back to the earth instead of taking from it. One participant shared this goal:

[I've] been trying to eat a more raw-paleo diet. I would like to learn about edibles in nature and how to hunt to get my own wild food. Even if you just limit your diet to meat and produce, it's still grown agriculturally, it's a business and we have no concept of what's going on. If you were going to eat

²⁰ The Paleo diet is a modern nutritional plan based on the presumed ancient diet of wild plants and animals that various hominid species habitually consumed during the Paleolithic era.

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a carrot grown in a row of carrots I think that's less healthy than eating one that was naturally produced or grown sporadically and unplanned. I think it's more nutritious being grown in that symbiotic environment. Mushrooms and mushroom hunting is something I'm into, mushrooms are so integral to the forest habitat, they grow off the trees out of mulch, they give back to the trees, there's something to that.

Runners are trying to connect to nature by being outdoors. This is true of any sporting activity that takes place outside in nature, whether in an urban or 'natural' setting but barefoot runners are specifically seeking out this closeness to the earth. An example of how a few interviewees are making this connection is through the practice of 'earth bonding' or 'earthing', a Native American practice which has been adapted by modern users (often barefoot running proponents or yoga practitioners) that posits that the earth has healing properties and that by touching the earth with our bare skin we can take in an electrical charge and heal ourselves deeply. A participant in Boulder first made me aware of this practice:

Have you heard of earth bonding? Michael Sandler is really into that as well if you talk to him and his wife Jessica, there's this book out about it and this guy who says if you have cancer or any illnesses or even if you don't, one of the best things you can do is go out and lay down on the earth and let the earth heal you, there's magnetism and all kinds of things that can heal you, positively charged ions.

Another participant spoke to me of her experience grounding while out hiking with a friend during a lightning storm. She recounted two separate occasions to me where she practiced earth bonding and the results of grounding and the circumstances they occurred in, each with a different friend, one shod and one unshod.

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[Well] there was a storm coming in behind us and I had to take my shoes off, because it started raining and the ground was wet and when I was walking out those three or four miles, at least three, I was doing it very slowly, it was my first time (barefooting) but I was excited you know, woo, and the one thing I noticed was I was drinking my water and it tasted metallic, it was really weird and I had my friend taste my water and he said I don't taste a thing it tastes fine and I tasted his water and it tasted metallic to me and he tasted it and it was nothing to him, and I just couldn't get that taste, it felt like aluminum foil was in my mouth. The ground was wet and my feet; they say your feet are 80%, the most porous thing on your body.

The experience she described turned out not to be an isolated incident and she recounted a similar experience to me that happened months later and the effect it had on her and her companion's body,

So about four months ago I was out hiking in the same area, same conditions, my friend was trying barefoot, her third time, she was really new to barefooting and it rained on us, there was an electrical storm, just like before. It was thunder and lightning and we were trying to get out, weird it was such similar circumstances but she was barefoot with me and both of us tasted the metallic and it dawned on me. I connected it to that time when I was out barefoot in the storm and there was a charge in the air, the rain water [was] electrically charged I'm sure and my feet are... there's no ground, there's no rubber between me and my feet and the storm water and I'm absorbing the rain water, the minerals, the elements and the dirt through the rain water because its wet now.

[My friend] she got sick, when we finished the walk, immediately when we got back to the car, like diarrhea, severe diarrhea. We were tasting that metallic taste for like hours and she said that whole night after like 3 or 4 hours she was sick and after she said her body felt like it purged out, it was cleansed, it was her longest time out there barefoot and she felt incredible that night, she was exhausted and she just woke up feeling like she did a week long cleanse. For me, I had already acclimated but I did taste that metallic for a second time, the second time ever and I connected it. I absorbed much more minerals and electric current through the water and the air and earth was alive with electrical activity that I'm sure I was a conduit of. I tasted metallic electricity in my mouth and she did too but she got more of a physical reaction out of it than me but I mean, I felt fine, I felt great, I felt amazing. You know, I always feel great, but I felt extra amazing that night after our hike.

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After hearing this story from the participant I decided to research this phenomenon to see if others had had similar experiences, shod or unshod, during a lightning storm. I came across the following information, “a metallic taste in the mouth might be a sign that you are about to be struck by lightning or that you were exposed to radiation, or were struck by lightning” as the lightning strike can move across wet earth (Foucart, Andrew G. Gordon Inc. Insurance). Perhaps this sense was magnified by the fact the participants were barefoot as the shod participant did not taste metallic, nor was he sick, whereas the friend of the participant who was sick may have dangerously absorbed some electricity from the lightning strike that caused her to be ill.

The same participant I interviewed in Boulder who experienced the electrical storm spoke to me of her experience and her connection to nature when she runs barefoot. When running barefoot and in the mountains she is able to both drink the river water (using a water bottle filter) and stand in it at the same time. The sensation of the cold water submerging her feet and that same water relieving her thirst during a run made her feel extremely connected and grounded to nature. She described it as being one with the environment, she was submerged in the environment and she was drinking the environment.

So I get in the water and its cold and I'm looking at this incredible view and standing in this little creek and I'm realizing the same water I'm drinking is the same water my feet are absorbing and it was the neatest sensation and awareness and I felt like something happened, like this vortex of connection, like above me and below me, because I felt the water going in and getting absorbed in my feet and I, it was just incredible, it was so integrating and purifying and connecting, it was for me a beautiful moment of being out there and feeling completely connected to everything, not just external but

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internal, it's so great to like come to a stream to water and my feet get cold but that's cold water, your feet get a little thobby and that cold water is lie an ice pack and its rejuvenating on the feet.

We are actively creating and are a part of our environments. Places occur along the "life paths of beings, as part of a meshwork of paths" (Ingold, 2008, p.1808). Human perception and movement are central to this idea and process of place; the participant has created her environment through her skill and her lived experience. Barefoot runners argue they are attempting to undo the increased urbanization and the separation of self it creates from the environment by taking a barefooted approach to the environment. Barefoot runners are attempting to make a connection to the environment with any surface, natural or man-made, through the sensation created on the bottom of their foot.

Barefoot culture emerges through the feet; this sensation differentiates barefoot running as a culture. It is for this reason that barefoot running culture is divided from a minimalist running style — the way the two cultures perceive and interact with the environment through their bodies appears to differ. Barefoot runners are deriving pleasure from the sensation of the ground and safety from scanning the ground visually, and again using this combined sense of vision and touch to comb their way over sharp rocks and undesirable parts of the landscape, creating a 'path of observation' (Gibson, 1979, p. 195-7). Barefoot runners are experiencing the landscape simultaneously in a variety of ways. A female participant from Boulder demonstrated this act of scanning while we were running together along a trail. She steps confidently from spot to spot barefoot, always looking down,

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her feet naturally raising and lowering when they encounter different sensations, her mind and her feet working in unison to navigate the terrain. She says of her skill,

I look up at the trail and take moments I look where I want to step, I don't look where I want to avoid too long, your feet automatically will be looking for the right directions so I'll be scanning the ground for a cacti and but then I look really quick where I want to take my next step, and they say mountain biking is the same thing you look and your tire follows, in life you want to look at the direction where you want to head, not where you want to avoid.

In this way Ingold explains we are "... perceiving not just with the eyes, the ears, or the surface of the skin but with our whole body" (Ingold, 2004, p. 330).

Barefoot runners feel the world through their feet but minimalist runners, although they do feel, they arguably do not do so in the same way. Minimalist runners are not motivated by sensation as barefoot runners are. Not a single one of the minimalist runners interviewed cited sensation as an aim of their running. They use minimalist style shoes to help change their running gait and striking style by eliminating the heel of their shoe. It is through our feet, in contact with the ground, albeit mediated by footwear, that we are most fundamentally and continually 'in touch' with our surroundings (Ingold, 2004). It is through our feet, more so than our hands, that we are in touch with our surroundings, but those who are unshod are fully experiencing their environment. Those who run shod do not experience or desire a full range of sensory experience and therefore do not experience their environment in the same way as barefoot runners. Footwear alters our perception of the environment and does not allow us to fully experience sensation because there is a plastic barrier between our body and the ground. Shod runners experience little more sensation than the inside of their shoe because they do not

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desire to feel more than that. Minimalist runners, like their traditionally padded running shoe counterparts, are a groundless culture, unable to feel the world through their feet, despite a thin and flexible sole. As this does not appear to be the primary aim of minimalist runners, this does not create a problem. Their concern lies with injury and form are met through minimalist style running shoes, therefore providing practitioners with what they seek.

In this chapter I have detailed how my data analysis has created themes and I have returned back to the questions I asked at the beginning of my thesis. In following an Ingoldian approach, I have moved away from treating the stories and the enskilment as 'raw data'. I have allowed excerpts from the interviews and the skills I learned to speak to the knowledgeability of barefoot and minimalist runners. I have demonstrated the nuances that the cultural forms of barefoot and minimalist running exhibit, as well as their overlapping ideas and knowledge. I have also differentiated the running environments in Ottawa and Boulder, as well as described barefoot and minimalist style runners from Ottawa, ON and Boulder, CO as well as their practices and beliefs to further draw out the nuances and similarities between the two cultures. The themes that emerged from these nuances were discussed: the body, nature and sensation, as well as the way their themes are not distinct, but overlap and inform one another.

Chapter 5: Conclusions

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Concluding a project like this is difficult, especially one that has been academically rigorous but also deeply personal and autobiographical. In this chapter I will try to accomplish the following: (a) to revisit what I have done in this project and the importance of this work, both for myself and for the field of anthropological sport studies, (b) to raise some of the limitations of this project, (c) and lastly, to expand upon future avenues of research this thesis has opened up.

What This Project Has Accomplished

In this project I proposed to study an aspect of barefoot and minimalist style running that had all but been ignored, the cultural aspect. No study or literature has focused upon the motivations, the runners, or the skills that were possessed by barefoot and minimalist runners and I was intensely interested to learn more about how barefoot and minimalist runners operate, how they run and how they think about running. This project has examined the unknown side of barefoot and minimalist style running, beyond the mechanics of the running and beyond the technology to the crux of the discipline, to what the runners are creating themselves through their knowledge and practice. I have applied an Ingoldian definition of culture, which understands culture as enskilment, to interpret barefoot and minimalist style runners in a multi-sited study. Using the Ingoldian (2007) notions of culture, there are four conditions that define cultural life: generative, relational, temporal and improvisation. I have argued that barefoot and minimalist style running are both cultural forms and within themselves demonstrate nuances and differences

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that make them culturally divided, although they have evolved from a similar physiological need.

This work has been important because it has given another voice to the barefoot and minimalist style running communities. I dispute this perceived legitimacy. A study of a practice or a culture does not validate a culture and cultures do not require validation. I perceive my methodology as processual. In many ways I started this research before it was research by engaging myself in the running methods, and in reading, and my 'research' has continued long after my official period of fieldwork was completed. My methodology has provided another way of considering sports, of studying movement, both complicated means of recording and understanding not only 'movement', but also the sensorial aspects that accompany it.

For myself, this study has provided an outlet to continue my love affair with running and it has fed a selfish need to let running consume my life, academically, theoretically, in research and in my own day-to-day athletic practices. I spent a year and a half working on this project and I have come away from it with some valuable lessons learned about how to formulate and conduct an academic research project that is both original and extensive. I have learned to write grant proposals, travel bursary applications, how to present my research at scholarly conferences, and how to interact with other anthropologists and sociologists using my research as a vehicle to create personal and professional connections.

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This project has pushed me to create my own definition of anthropology and simultaneously question whether I am an anthropologist, how do I define myself and at what point in my academic career do I become an anthropologist? Here I must bring up the contrite line made famous by Bruno Latour's 1991 work and say, "... we have never been modern", but instead repeat what a professor in my department recently said at an academic conference, that "... we have never been anthropologists" (Ari Gandsman, Ingold Roundtable Discussion, 2013). This line resonated with me and I felt as though the feeling of belonging had passed me by until I traveled to Boulder and I conducted fieldwork. When you become a representative of your discipline in a strange place, however inexperienced you might be, the flight or fight impulse kicks in and you suddenly decide I must be an anthropologist so I will just fake it until I make it and no one will know the wiser. Since my return from fieldwork I have felt a certain legitimacy as an anthropologist that before conducting fieldwork I would not have thought possible. I have escaped the 'imposter syndrome' and have come out the other side as an anthropologist. I believe this was the most valuable experience my research has provided me. Traveling alone to a foreign place as an anthropologist granted me the experience of meeting myself for the first time as an academic and that experience has made this project a valuable lesson. This project has been a transformative process for me not only as an anthropologist but also as a runner who has become a minimalist style runner from the undertaking of this project.

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I believe this study explores the complexity of the study of sports by anthropologists and also reinforces how important it is to involve yourself as a researcher in the sporting practice you study to situate yourself and communicate with others. I have tried as much as possible to prevent myself from reducing barefoot and minimalist style running solely to a list of benefits and detriments but rather to allow the nuances to emerge through narratives and to not impose any bias on which I prefer or which I think is more beneficial. Finally, this project makes some important political, methodological, empirical, and theoretical contributions to my field, the sociocultural study of sport, which I believe can provide others with new insights. Overall, the point is that barefoot and minimalist style runners are creating a new cultural form and have their own agenda about contesting the image that has been created for them by their fellow runners and also by the media focusing on this detriment versus benefit tangent. Barefoot and minimalist runners quietly do this, in person and online, and are changing their self-representation through dialogue and storytelling and redefining what it means to be a minimalist runner or what it means to be a barefooter. Whether that means living a barefoot lifestyle or training for a race in minimalist style shoes, I believe barefoot and minimalist style runners are shaking off the labels and are continuing to use whichever technique allows them to achieve ultimate happiness or efficiency or speed or connection to the environment.

The Limitations of This Work

This project had limits, partly attributable to limited finances and time, but they did not make the project any less valuable or informative. If time constraints and financial constraints had not been so rigid, I would have liked to carry my fieldwork out over the period of a year, spending six months in Boulder and becoming a fixture in the community and on the running trails. I believe this could have provided me with a greater insight into the general running culture of Boulder, but also with the barefoot and minimal style community, who often participate in races around Boulder, which I was unfortunate enough to miss attending because I was in Boulder during the latter half of the fall season. As a Masters student I also had a shorter time to work with to finishing my degree. There was the expectation was that I would finish in approximately two years and then begin my Ph.D. in the fall. Dedicating six months to field work, after taking eight months to finish my course work then taking the summer off, would have pushed my degree completion date back another year and I was unwilling to hold off on finishing my degree in order to conduct field work for a lengthier period. To spend six months in Boulder would have also required a larger budget, which I did not possess, so financially I was restricted to spending only a few weeks in Boulder. However, I feel as though I operated well within my budget and my timeframe, as I outlined in my methods chapter. My fieldwork was a positive experience and it was a pleasure also being able to conduct fieldwork in my resident city of Ottawa.

In regards to the content of the project, I would have enjoyed teasing out the healing aspect of barefoot and minimalist runner's enskilment. I interested in using

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illness and healing as a starting point to understanding culture and finding meaning in practices. My primary interests lie in medical anthropology and ethnomedicine, although, over time I have realized that my fixation with sport and athletic activities has become my primary interest and research focus, and I have begun to focus upon the anthropology of sport. Exploring the healing aspect of barefoot running would have generated fascinating stories and helped to validate the practices ability to act as an alternative healing method to traditionally prescribed running injury wisdom such as physiotherapy or to cease running entirely. I had original considered conducting a study that measured healing in a controlled way, such as in a double blind study, but I reconsidered this. I did not want to reduce personal experiences and healing to a form of measurement. If I had done this, I feel as though the study would not serve the purpose of its practitioners, who did not need their healing method validated by a study, rather their personal narratives are not to be measured or criticized, instead regarded as their own truths.

Where Will I Go From Here?

As this project comes to a close, I realize that it is really never ending, particularly because I am interested in reviewing the stories gathered and gaining more information and narratives from barefoot and minimalist runners and applying this in a new, complementary study to this one. What I proposed to do in my doctoral work is to continue on with my interest in barefoot runners exclusively and discontinue my work with minimal style runners, as I am interested in teasing out some of the dialogue and topics that have emerged as a result of my

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conversations with barefoot runners specifically. My thesis project proposes to examine barefoot running culture and the sensory experience that is involved in this practice. Specifically I want to examine how the sensory experience may be healing for the practitioner, physically or mentally, or even spiritually. This study will be more focused specifically on the sensory aspect of barefoot running and how this may be involved in the belief in “earth-bonding” or “earthing”. The study will move beyond the social concern of whether barefoot running or running shoes are beneficial or detrimental, and focus instead on the sensory experience and if this sensory experience is healing and relaxing. A lab study will be used to measure biofeedback of participants: monitoring their body's physical level of stress or relaxation both before and after their barefoot run at resting heart rate. Biofeedback is the process of getting feedback from the body to measure how tense or how relaxed the body is. I propose that the more relaxed and less tense the runner is, the more healing and relaxing the exercise of barefoot running is for the runner. There are a variety of ways biofeedback is used to evaluate stress levels. A number of body responses can be measured, including body temperature, breathing rate, heart rate, brain waves, galvanic skin response, blood pressure, and muscle tension. In this study I believe body temperature, breathing rate, heart rate, blood pressure and muscle tension will be the most indicative of whether the participant is relaxed or stressed.

Barefoot running is defined simply as ‘running unshod’. Barefoot running in my thesis project will only include running unshod, it will not include minimalist running shoes that are meant to mimic barefoot running. The main difference

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between the two is sensory experience; running in a shoe can dull the feeling of the ground and the environment as the foot is protected from mud, water, grass, rocks and different textures. Sensory experience is key to this study, therefore, minimal style running shoes are not suitable to this research.

Central to my thesis on the sensory experience of barefoot running is asking, “what do barefoot runners experience”? This refers to how their running experience differs from that of a shod runner both physically and emotionally. Through an ethnographic study, detailing narratives of experiences related to the sensation of barefoot running, I want to understand how this experience alters participants' perception of running and whether the experience moves beyond exercise and becomes therapeutic, similar to meditation.

Through further study and critical examination of barefoot running and the sensorial aspects that accompany the sport and cultural form, improvement in sensorial methodologies can be developed, both in recording and expressing a practice grounded in movement and phenomenology. As an anthropologist, my concern is not to judge the truth of the proposition, or of any enskilment or cultural form, but to understand what it means, given in the context of the world and the environment. I refer again to the notion of '*embodiment*' to indicate the fact that a professional 'role' is carried out *in*, and *through*, a physical body, in effect refuting claims that a professional 'role' is one that is played, rather than one that is lived (Grasseni, 2009, p.37). Embodiment here can also serve to represent the embodiment of the professional habitus in the Bourdieuan sense that instills

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practitioners with a system of dispositions and a *sens pratique* (Grasseni, 2009, p.32). This project has been a lived embodiment of barefoot and minimalist style running through my own practice and the description of others' enskilment and I contend that this is the only way to engage as an anthropologist with a cultural form.

References

Allen-Collinson, J. & Hockey, J. (2001). Runners' Tales: Auto-ethnography, Injury and Narrative. *Auto/Biography, IX*(1&2), 95-106.

American Fitness Index. (2012, May). American Fitness Index Final Report 2012. Retrieved from <http://www.americanfitnessindex.org/report.htm>

Beck, K. (2013 June 17). What's The Real Story With Altitude Training? *Competitor: Your Source for Online Running*. Retrieved from http://running.competitor.com/2013/06/training/whats-the-real-story-with-altitude-training_30368

Bernard, H. R. (2011). *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Plymouth, UK: AltaMira Press.

Buchburger, D. (2012 September 4). The Good and the Bad of Barefoot Running and Minimalist Footwear. *The Citizen*. Retrieved from http://auburnpub.com/columnists/dale_buchberger/the-good-and-bad-of-barefoot-running-and-minimalist-footwear/article_8ff74449-988d-53458eb0-d8c80e563a93.html

Cavanagh, P. (1980). *The Running Shoe Book*. Pennsylvania: Anderson World.

Cytowic, R. (2010) *The Man Who Tasted Shapes*. Boston, MA: MIT Press.

D'Août K., & Pataky T.C., & De Clercq D., & Aerts P. (2009). The Effects of Habitual Footwear Use: Foot Shape and Function in Native Barefoot Walkers. *Footwear Science, 1*(2), 81-94

BAREFOOT RUNNING

Dobzhansky, Th. (1973). *Genetic Diversity and Human Equality*. New York, NY: Basic Books.

Foucart, C. (2011). Lightning Safety: An Overview. *Andrew G. Gordon Insurance Inc.*
Retrieved from <http://www.agordon.com/blog/bid/87260/Lightning-Safety-An-Overview>

Franklin, S. (1997). *Embodied Progress: A Cultural Account of Assisted Conception*. London, UK: Routledge.

Franklin, S. & Roberts, C. (2006). *Born and Made: An Ethnography of Preimplantation Genetic Diagnosis*, Princeton, NJ: Princeton University Press.

Hannerz, U. (2003). Being there... and there... and there! Reflections on multi-site *Ethnography*. 4(2), 201-216.

Ingold, T. (2000). *Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. London, UK: Routledge.

Ingold, T. (2004). Culture On the Ground: The World Perceived Through the Feet. *Journal of Material Culture*. 9(3), 315-340.

Ingold, T. & Hallam, E. (2007). Creativity and Cultural Improvisation Introduction. In T. Ingold & E. Hallam (eds), *Creativity and Cultural Improvisation* (pp. 1-24). New York, NY: Berg.

Ingold, T. & Vergunst, J. L. (2008). *Ways of Walking: Ethnography and Practice on Foot*. Hampshire, UK: Ashgate.

BAREFOOT RUNNING

Ingold, T. (2011). *Being Alive: Essays on Movement, Knowledge and Description*,
New York, NY: Routledge.

Ironman World Championship. (2013). Ironman World Championship by
Qualification Only. Retrieved from
[http://www.ironman.com/triathlon/events/ironman/world-
championship.aspx#axzz2TThphWoq](http://www.ironman.com/triathlon/events/ironman/world-championship.aspx#axzz2TThphWoq)

Geertz, C. (1993) Religion as a Cultural System. In C. Geertz (ed) *The interpretation
of cultures: selected essays*, (pp. 87-125). Fontana Press.

Geertz, C., & Geertz, H., & Rosen, L. (1979). *Meaning and Order in Moroccan Society:
Three Essays in Cultural Analysis*. Cambridge, UK: Cambridge University Press

Gibson, J. (1979). *The Ecological Approach to Visual Perception*. New York City, NY,
Lawrence Erlbaum Associates.

Grasseni, C. (2009). *Developing Skill, Developing Vision: Practices of Locality at the
Foot of the Alps*. Oxford, UK: Berghahn.

Kozinets, R. (2010). *Netnography: Doing Ethnographic Research Online*. London,
UK: Sage Publications.

Krentz, P. (2010). *The Battle of Marathon*. New Haven, CT: Yale University Press.

Kuchler, S. (2008). Technological Materiality: Beyond the Dualist Paradigm.
Theory, Culture & Society. 25(1), 101-120.

Latour, B. (1993). *We Have Never Been Modern*. (C. Porter, Trans). Cambridge, MA,;

BAREFOOT RUNNING

- Harvard University Press. (Original work published 1991).
- Lee, J. (2012, September). Should You Try These Fitness Trends? *Real Simple Magazine: Life Made Easier*. 115-120.
- Lieberman, D., & Venkadesan M., & Warble W.A., & Daoud A.I., & D'Andrea S., & Davis I.S., & Mang'eni R.O., & Pitsiladis Y. (2010). Foot strike patterns and collision forces in habitually barefoot versus shod runners. *Nature*. 46(3), 531-515.
- Marcus, M. (1995). Ethnography in/of the World System: the Emergence of the Multi-sited Ethnography. *Annual Review of Anthropology*. 24, 95-117
- McDougall, C. (2009). *Born to Run: A Hidden Tribe, Superathletes, and the Greatest Race the World has Never Seen*. New York, NY: Random House.
- New York Times (2010). Marathon Results, *New York Times*. Retrieved from <http://www.marathonguide.com/results/browse.cfm?MIDD=472101107>
- Nigg, B. (2009). Biomechanical Considerations on Barefoot Movement and Barefoot Shoe Concepts. *Footwear Science* 1(2), 73-79.
- Pink, S. (2009). *Doing Sensory Ethnography*. London, UK: Sage Publications Limited.
- Pink, S. (2012). *Situating Everyday Life: Practices and Places*. London, UK: Sage Publications Limited.
- Polkinghorne, D. (1995). Narrative Configuration in Qualitative Analysis. *Qualitative Studies in Education*: 8(2).

BAREFOOT RUNNING

Rammbali, P. (2006). *Barefoot Runner: The Life of Marathon Champion Abebe Bikila*.

Detroit, MI: Serpents Tale Limited.

Robillard, J. (2010). *The Barefoot Running Book: A Practical Guide to the Art and*

Science of Barefoot and Minimalist Shoe Running, Allendale, MI:

Barefoot Running Press.

Robinson, L. (2010). *The Culture of Barefoot Running*. Retrieved from

<http://blendedpeopleamerica.com/chameleon/may/103-the-culture-of-barefoot-running.html>

Sands, L. & Sands, R. (2010). *The Anthropology of Sport and Human Movement: A*

Biocultural Perspective. Lanham, MD: Lexington Books.

Statistics Canada (2012 October 24). *Focus on Geography Series, 2011 Census- Census*

Subdivision of Ottawa, CV. Statistics Canada Catalogue no. 98-310-

XWE2011004. Retrieved from

<https://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-csd-eng.cfm?LANG=Eng&GK=CSD&GC=3506008>

Sutton, M. & Anderson, E. M. (2004). *Introduction to Cultural Ecology*. Plymouth,

UK: UltraMira Press.

Tenner, E. (2003). *Our Own Devices: The Past and Future of Body Techniques*. New

York, NY: Alfred A. Knopf.

Vibram (2012) Vibram: Over 75 Years of History, Retrieved from

<http://www.vibram.com/index.php/us/VIBRAM/About-Us/The-History>

Appendix A: Letter of Ethics Approval

File Number: 05-12-15

Date (mm/dd/yyyy): 09/04/2012



Université d'Ottawa **University of Ottawa**
Bureau d'éthique et d'intégrité de la recherche Office of Research Ethics and Integrity

Ethics Approval Notice Social Science and Humanities REB

Principal Investigator / Supervisor / Co-investigator(s) / Student(s)

<u>First Name</u>	<u>Last Name</u>	<u>Affiliation</u>	<u>Role</u>
Julie	Laplante	Social Sciences / Sociology	Supervisor
Carly	Warnock	Social Sciences / Sociology	Student Researcher

File Number: 05-12-15

Type of Project: Master's Thesis

Title: Barefoot Running: Feeling the World Through Our Feet

Approval Date (mm/dd/yyyy)	Expiry Date (mm/dd/yyyy)	Approval Type
09/04/2012	09/03/2013	Ia

(Ia: Approval, Ib: Approval for initial stage only)

Special Conditions / Comments:

N/A

Appendix B: Consent Forms



Université d'Ottawa | University of Ottawa

Department de Sociologie & Anthropologie | Department of Sociology & Anthropology

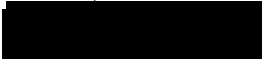
Consent Form

Title of the study: Barefoot Running: Feeling the World Through our Feet

Name of Researcher: Carly Warnock, Masters Thesis Candidate
Anthropology
University of Ottawa
Ottawa, ON



Supervisor: Julie Laplante, Assistant Professor
Anthropology and Sociology
University of Ottawa
Ottawa, ON



Invitation to Participate: You are invited to participate in the abovementioned research study conducted by Carly Warnock and supervisor Julie Laplante.

Purpose of the Study: The researcher is studying the culture of barefoot running and how the culture of barefoot running is produced and co-produced. The researcher is particularly interested in who is running, why they are running, where they are running, and the technology they are incorporating in their practice. The researcher would like to ask you a series of questions about your experiences running barefoot.

The information you share with the researcher will be used to understand how barefoot running culture is produced and will be of great value in her research. The results of this study could help better understand what barefoot running can do for those who practice it, such as healing and injury prevention.

Participation: Your participation will consist of discussing your running history, answering questions about your running technique or style, and sitting down for a maximum of two formal interviews that will last no longer than two hours. The sessions will be recorded on an audio device. The sessions will be scheduled at the your convenience. You will also be asked to discuss your participation in the barefoot running community, where you run, how often you run, what equipment you use, and your stride and running posture.

Risks: Your participation in this study will entail no potential risks.

Benefits: This research will help the researcher understand barefoot running, the culture of

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barefoot running and how it is produced by those who practice it. The study will provide an introduction on barefoot running to those interested in the subject and those wishing to practice barefoot running.

Confidentiality and anonymity: Your information will remain strictly confidential. Your information will be used only for the researcher's thesis publication and your confidentiality will be protected by keeping the electronic documents guarded in password protected files, as well as keeping any hard copies and audio files locked in Julie Laplante, the supervisor's, office.

Anonymity: Anonymity will be protected in the following manner: names will not be used in any publication. Pseudonyms will be used in the publications. Organizations will be identified in the study.

Conservation of Data: The data collected and hard copies will be kept in Julie Laplante, the supervisor's office, locked, in a locked filing cabinet. Recordings will be uploaded to the computer and electronic copies of data, interviews and recordings will be password protected on the researcher's computer.

Voluntary Participation: You are under no obligation to participate and if you choose to participate, you can withdraw from the study at any time and/or refuse to answer any questions, without suffering any negative consequences. If you choose to withdraw, all data gathered until the time of withdrawal will be destroyed and not used in the study or any further publications.

Acceptance: I, _____, agree to participate in the above research study conducted by Carly Warnock of the University of Ottawa, Faculty of Social Science, Department of Anthropology which research is under the supervision of Julie Laplante of the University of Ottawa, Faculty of Social Science, Department of Anthropology.

If you have any questions about the study, you may contact the researcher or her supervisor.

If I have any questions regarding the ethical conduct of this study, I may contact the Protocol Officer for Ethics in Research, University of Ottawa, Tabaret Hall, 550 Cumberland Street, Room 154, Ottawa, ON K1N 6N5

Tel.: (613) 562-5387

Email: ethics@uottawa.ca

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There are two copies of the consent form, one of which is mine to keep.

Participant's signature: _____

Date: _____

Researcher's signature: _____

Date: _____

Appendix C: Interview Guides

Interview Guide –Barefoot Runners

1. Introduction, overview of purpose of research, go through consent form with conversational partner, (answer any questions partner has), sign consent form or get verbal consent (for running/hiking interviews)

HOW YOU BECAME A RUNNER (orient myself with their background and self-declared status)

2. Name and age
3. How long have you run barefoot?
 - a. When did you begin?
 - b. What were your reasons for beginning to run barefoot or minimalist?
4. Do you always run barefoot or minimalist?
5. What running style do you use, heel toe, mid foot strike or forefoot strike?

RELATIONSHIP WITH INJURY

6. Have you suffered running injuries? When? What running style were you using? Were you running barefoot, minimalist, or in padded shoes?
7. Have you received treatment for running injuries?

ROLE RUNNING PLAYS IN YOUR LIFE

8. How far do you run? How often?
9. Do you compete in competitive races?

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10. Who do you run with?

11. Do you participate in barefoot/minimalist style running community events?

HOW TECHNIQUE OR ENSKILLMENT HAS BEEN DEVELOPED

12. Have you taken a workshop on barefoot/minimalist running or a related workshop such as chi running?

13. Do you research running techniques?

14. Do you research barefoot running technology if you have purchased minimalist shoes?

15. What running gear or brands do you use?

SENSE OF BAREFOOT CULTURE AND COMMUNITY

16. How do you participate in the running community?

17. Do you know other barefoot or minimalist style runners?

18. Do you feel barefoot running have improved your form, speed, or stride?

19. What do you picture when you think of barefoot running? Is there a stereotype?

CONNECTIONS TO NATURE AND THE EARTH, OUR ENVIRONMENT

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20. Do you run barefoot for holistic or natural reasons? For healing reasons? For sensation and sensorial experience?

21. Where do you run barefoot?

Appendix D: Letter of Information

Letter of Information

Title of the study: Barefoot Running: Feeling the World Through Our Feet

Principal Investigator: Carly Warnock

Anthropology

Master's Thesis Candidate

University of Ottawa

Ottawa, ON

Supervisor: Julie Laplante

Assistant Professor

Anthropology and Sociology

University of Ottawa

Ottawa, ON

Invitation to Participate: You are invited to participate in the abovementioned research study conducted by Carly Warnock, who is being supervised by Julie Laplante.

Participation: If you wish to participate in this study, please complete the attached consent form. Your decision to complete and return the attached consent form will be interpreted as an indication of your consent to participate. The consent form should take you approximately 5 minutes to complete. You do not have to answer

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any questions that you do not want to answer. Once you have completed the form, please return it to the principal investigator, Carly Warnock.

Purpose of the Study: From this research we wish to learn about the culture of barefoot running. I am studying the culture of barefoot running and how the culture of barefoot running is produced and co-produced. I am particularly interested in who is running, why they are running, where they are running, and the technology they are incorporating in their practice. I would like to ask you a series of questions about your experiences running barefoot.

The information you share with me will be used to understand how barefoot running culture is produced and will be of great value in my research. The results of this study could help better understand what barefoot running can do for those who practice it, such as healing and injury prevention.

Benefits: This research will help me understand barefoot running, the culture of barefoot running and how it is produced by those who practice it. The study will provide an introduction on barefoot running to those interested in the subject and those wishing to practice barefoot running.

Risks: I do not foresee any risks or discomfort from your participation in the research. Participants do not have to answer any questions that they do not want to.

Confidentiality and Anonymity: The information that you will share will remain strictly confidential and will be used solely for the purposes of this research. The only people who will have access to the research data are Carly Warnock and Julie Laplante. Your answers to open-ended questions may be used verbatim in presentations and publications but you will not be identified. Results will be published in pooled (aggregate) format.

Conservation of Data: The information collected from interviews and participant observation will be kept in a locked filing cabinet in the office of the supervisor Julie Laplante at the University of Ottawa for a period of 5 years at which time they will be destroyed.

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Voluntary Participation: You are under no obligation to participate and if you choose to participate, you may refuse to answer questions that you do not want to answer. Completion and return of the attached consent form by you implies consent.

Information about the Study Results: The findings of the study will be made available to participants if requested by email or telephone. The findings will be emailed to participants who request such in password protected documents.

If you have any questions or require more information about the study itself, you may contact the researcher or her supervisor at the numbers mentioned herein.

If you have any questions with regards to the ethical conduct of this study, you may contact the Protocol Officer for Ethics in Research, University of Ottawa, Tabaret Hall, 550 Cumberland Street, Room 154, Ottawa, ON K1N 6N5, tel.: (613) 562-5387 or ethics@uottawa.ca.

Please keep this form for your records.

Thank you for your time and consideration.

Carly Warnock, August 1, 2012