

Barefooting:

A Tool for Environmental Consciousness

Author: Camille-Fleur Moraux-Pizano
Supervisor: Eric Clark
Term: Spring 2023

Degree of Master of Science in Human Ecology: Culture, Power, and Sustainability
Master's thesis, 30 ECTS
CPS: International Master's Program in Human Ecology (two years)
Lund University, Faculty of Social Sciences
Department of Human Geography, Human Ecology Division

Title: 'Barefooting: A Tool for Environmental Consciousness'

Author: Camille-Fleur Moraux-Pizano

Supervisor: Eric Clark

Master's Thesis at Lund University, Spring 2023

Faculty of Social Sciences, Department of Human Geography

ABSTRACT

Modern human animals' relationship with Nature is damaged and damaging. An emotional and physical separation is at play in this broken bond, with footwear literally and metaphorically embodying the disunion between spirit and body. This research explores how North Atlantic populations can use barefooting to support the healing of human animal connection with Nature, leading to pro-environmental behavior. Such an attitude change can contribute to a more caring and balanced world. Five adult barefooters were interviewed about the link between barefooting and environmental consciousness. Results suggest that the practice of barefooting is associated with a strong sense of nature connectedness.

KEY CONCEPTS

Barefooting

Critical Animal Studies

Environmental Consciousness

Nature Connectedness

This work is in reverence for Nature.

TABLE OF CONTENTS

<i>ABSTRACT</i>	<u>1</u>
<i>KEY CONCEPTS</i>	<u>1</u>
1. <i>INTRODUCTION</i>	<u>3</u>
2. <i>WE ARE ANIMALS</i>	<u>7</u>
Critical Animal Studies	<u>7</u>
Deep Ecology	<u>8</u>
3. <i>THE ROAD TO SHOES AND THEIR NORMALIZATION</i>	<u>8</u>
How did we become shoe-bearers?	<u>8</u>
Health, the economy, and social norms as misleading justifications	<u>10</u>
Ab-normal?	<u>21</u>
4. <i>ALIENATED FROM NATURE WE ARE</i>	<u>24</u>
Capitalism is Ecocidal	<u>24</u>
The war between Spirit and Nature	<u>25</u>
5. <i>METHOD</i>	<u>28</u>
6. <i>WHAT DO WE WANT? NATURE CONNECTEDNESS!</i>	<u>31</u>
When do we want it? Now!	<u>31</u>
Harmonious living in the Ecozoic Era	<u>34</u>
"Awaken the foot!"	<u>37</u>
8. <i>APPENDICES</i>	<u>43</u>
Interviews	<u>43</u>
The Connectedness to Nature Scale	<u>44</u>
"Spread the word, spread the toes"	<u>45</u>
9. <i>ACKNOWLEDGEMENTS</i>	<u>46</u>
10. <i>REFERENCES</i>	<u>47</u>

1. INTRODUCTION

“Walk as if you are kissing the Earth with your feet” (Thich Nhat Hanh 1993).

What if the soles of our feet were where our souls lay?¹

Every single animal on our planet using its feet, paws, or hooves to move around, walks in direct contact with the Earth. We are also animals, a species amongst others, and yet have created and normalized tiny foot-prisons made of plastic, caoutchouc, fabric, sometimes from the skin of another animal, most times from fossil fuel derivatives. We have made them with heels, we have made them bouncy, colorful, squared, triangular, trendy, fashionable. We have also made them practical, protective, non-slippery, warming, cooling, gripping. We have welcomed them into our daily lives without blinking an eye. What if you were walking down the street and crossed someone without shoes on? What would you think then? Is this person homeless? Drugged out and forgot to put on shoes? A rebellious hippy maybe? Deranged, or crazy not to conform? How come they do not have shoes? Do they need money? Are they underprivileged? Their feet must be so dirty! This is risky, they could get harmed, walk on a nail, on sharp glass, in dog poop! How unhygienic, how unsafe. Why are they not wearing any shoes?

Can you remember the first time you wore footwear? You came into this world like mammals do: naked and barefoot. You took your first breath and air rushed into your lungs. At some point, you were able to wiggle your fingers, your toes maybe. And then, they got covered. When was that? Or are you maybe able to recall times when you were not wearing any shoes? At the beach in the sand? When you go to bed? When you shower, you swim, you nap? When you enter your house or are on holiday? When it is warm outside, when you are in a garden or in a park? How does it feel to be without shoes? Relaxing? Risky? Natural? Uncomfortable? What do you like about your shoes? The comfort, the looks, the utility maybe? How fast you can run, how tall they make you, or how it complements a stylish outfit?

¹ Greenfoot 2021

In North Atlantic societies (Canada, the USA, Europe²), wearing shoes is the norm. Simultaneously we have become more distanced from Nature (Kesebir 2017). Could there be a link? There is a barrier, something between our soles and the ground, a cushion. We can isolate ourselves from the cold, from sharp objects, we can walk on any surface without inconvenience, go everywhere. We can walk and run on rocks, sand, concrete, turf, grass, soil, tree roots, in mountains or in cities, in Canada or in Egypt, in the insect-filled jungle and at the top of Mount Everest. This invention allows us to go faster, not obliged to keep our eyes on the terrain. We are protected from danger, from germs, from the world, from Nature. We are disunited from her. And the downsides are incommensurable, damaging the living world at a vertiginous speed. What if by taking our shoes off, we could (re)connect ourselves to Nature?

That is what barefooting is: simply the process of being with the feet bare. For some, wearing socks is being barefoot, for others, wearing barefoot shoes is being barefoot, and for this thesis, being barefoot is not wearing any type of footwear nor foot cover, being completely "foot-naked" on any surface or terrain.

I have been dabbling into barefooting for more than 10 years from the heart of Phoenix (Arizona) to the Ecuadorian Amazonian Jungle. I am a 25 year old French cis-gender woman identifying as an ecofeminist and vegan Critical Animal Studies (CAS) scholar. The research reported here uses a terminology and orthography reflecting these views. As a result, the term Human Animals (HA) is used to talk about "human beings" (people), and Non-Human Animals (NHA) to talk about "animals" (ex: panther, frog, bear...). I also do not use "zero plurals" when talking about NHAs (ex: "two fishes" instead of "two fish"; "three sheeps" instead of "three sheep" etc...). My barefooting experiences have allowed me to foster and deepen my connection with Nature, and I believe it is one of the causes that led me to develop and heighten my care for the environment, driving me to study Human Ecology.

Also called Political Ecology, Human Ecology is an interdisciplinary field studying the "interactions between human and non-human nature in different cultures" (Lund University 2022) focusing on culture, power, and sustainability with the aim to

² Every time North Atlantic is mentioned, it is to talk about Canada, the USA and Europe

understand the factors at play in human-environment interactions. Our current system pushes us further away from the nature within and outside ourselves. This is reflected in the way we treat each other, fellow animals, the planet we live on and ourselves. The natural-alienation phenomena might be a strong factor in the way we (do not) care about our surroundings, resulting in or correlated to environmental destruction, climate change, species extinction, ecocides, (non-human) NHA cruelty, obsessive commodification, money fetishism, racism, sexism, and more.

This thesis argues that exists a toolbox full of applicable concepts to help us, especially citizens of the Atlantic North, (re)connect with Nature, for her benefit. The box contains tools able to lead us in a different direction that would rely on sane, sustainable, caring, and authentic relationships between HAs, NHAs and the environment. Depending on historical, socio-cultural, and geographical contexts, each actor can pick one or numerous tool(s) to help them (re)kindle their bond with the Nature within and outside themselves. Actors can be individuals, which is what I focus on here, but also communities, companies, governments, and associations. The box includes various instruments such as mindfulness, cold exposure, forest bathing, meditation (which has been and is currently being researched by academics such as fellow student Romane Yang in her 2023 thesis 'How does it Feel to be Connected with Nature') so that any actor can find at least one that applies to them. All the tools are linked to another with a rope, so that when you pick one up another comes out for you to utilize. That way you open yourself up for a myriad of possibilities that may or may not suit your own situation but expand your horizon. In my view, barefooting belongs in this box as a free, widely accessible, and quite inclusive tool to reunite HAs with the Earth in the physical, emotional, intellectual, and spiritual realms.

How can these tools help us better connect with Nature? The field of Ecopsychology relies on the belief that "we too are nature" (Lertzman 2004 p.397) and argues for HAs to "experience themselves as part of this larger biotic community" (p.398).

Manuel Jiménez Sánchez and Regina Lafuente similarly elaborate on the idea of environmental consciousness as a multi-dimensional and behavior-oriented concept encompassing pro-environmental behavior and psychological constructs (2010). An ecologically conscious person is "someone who engages in a wide range of pro-

environmental behaviors as well as holding certain values & attitudes that different theories have associated to this type of conduct" (p.732).

Both share the belief that the "current environmental crises require[s] that the personal and the planetary must connect" (Lertzman 2004 p.396), which can be done through recollective practices. Barefooting fits their description as "activities that aim more directly at recalling how our human psyche are embedded in and nurtured by the larger psyche of nature and at relearning the essential human art of revering, giving back to, and maintain[ing] reciprocal relations with an animate natural world" (2004 p.398).

Developing and treasuring our individual environmental consciousness (EC) could support a shift from us as mere exploiters of nature to biophilic animals behaving as such. EC is made of four dimensions: affective (the feelings), dispositional (the attitude), cognitive (the level of information and knowledge) and active (environmental activism and low/high costs behaviors). In other words, being environmentally conscious is a spectrum on which an individual exists depending on their level of care for the environment, feelings of responsibility and capability of taking action, understanding and knowledge about the environment, and ecological behavior (Sánchez and al 2010).

Barefooting, Earthing and Grounding are often mistaken as synonyms, but they differ. Earthing and Grounding encompass the idea of connection to Nature through the feet resulting in an energetic exchange with the Earth, bioelectrical and/or spiritual. In this study, Barefooting is maintained as a practice that excludes this idea.

My purpose here is to *contribute to a paradigm shift towards individual environmental consciousness for emotional behavior-based ecologism*. Within this overall goal, my work specifically aims to *explore how barefooting can be an important tool in the environmentalism toolbox*. The question guiding this research is: *How and in what way is barefooting a tool for environmental consciousness?*

The study is delimited in time and space by looking at North Atlantic populations in the 21st century, and in theory by Deep Ecology and Critical Animal Studies. The research explores how footwear became the norm, and the underlying health, economic and social reasons why it is still the case. It investigates the relationship between barefooting and nature connection through an empirical study, concluding that direct

physical contact with the Earth allows for a restoration of inner oneness, both leading to eco-friendly behaviors and a more caring relationship between HAs and Nature.

2. WE ARE ANIMALS

Critical Animal Studies

Critical Animal Studies (CAS) is a growing academic field developed in 2001 by authors, professors and activists Dr. Steve Best and Dr. Anthony J. Nocella II. This paradigm rooted in animal liberation is engaged in an “intersectional, theory-to-action politics, in solidarity with movements to abolish all systems of domination” (Nocella et al 2014 p.26). With a biocentric approach, it fights against hierarchical power systems such as racism, sexism, classism, speciesism, and “explores the systemic destructive effects of capitalism on all life and the earth, and views animal liberation and human liberation as inseparably interrelated projects” (p.26). CAS aims for total liberation, for the destruction of all types of abuse, violence, and unethical behavior such as “the reproductive and sexual enslavement of female animal bodies anywhere” (Gaard 2012 p.18), since it considers all lives precious and worthy on their own, outside of any utilitarian perception. Because HAs have created fictional hierarchies on which our societies are built, using criteria that conveniently place them at the top of the supposed pyramid, HAs and NHAs are suffering. CAS argues against an anthropocentric vision of the world where not only are HAs not at the top of the pyramid, but there is also no pyramid at all. All animals are equal in value: a lion’s life is equal to an ant’s life, equal to a dog’s life, equal to mine, equal to the one of a queer black man born in Kenya, equal to the one of a blind lower-class child in Poland, etc.

We are the only animals wearing shoes, and that is where CAS and barefooting meet (not including our intervention on domesticated animals, namely horseshoes, as actual footwear). Just like fellow living beings, we started off directly connected to the Earth, through our soles. But unlike them, we became physically separated from the ground through the creation and normalization of the shoe. We evolved into distancing ourselves from Nature, literally and metaphorically, and have stepped out of the natural cycle of the Earth by successfully attempting to control it and dominate it. We have massively gathered in specific areas, developed ways to live longer, distanced ourselves

from the elements, the weather, the environment, and our behavior dysregulates the natural balance of the living world.³

Deep Ecology

The idea that the modernization and spread of capitalism in our societies have separated us physically, intellectually, emotionally, and spiritually from nature, is present in another theory: Deep Ecology. Defined as an “environmental philosophy and social movement based in the belief that humans must radically change their relationship to nature from one that values nature solely for its usefulness to human beings to one that recognizes that nature has an inherent value” (Encyclopedia Britannica 2023), it is also an “activist philosophy that advocates radical personal and political change to protect wild nature” (Cafaro et al 2013 p.267). This theory sees Nature “independent of the usefulness of the nonhuman world for human purposes” (p.275), with its own inherent value, in opposition to humanism, the current way we relate to Nature, an extractive, utilitarian and anthropocentric view of the relationship.

Both theoretical frameworks are relevant for the exploration of the intersection between barefooting and environmental consciousness. Many, if not most aspects of our current North Atlantic communities such as our capitalist economic system or the patriarchal organization of our society, have led us to abuse (targeted) HAs, NHAs, and the environment, because we see in them an instrumental value and not an intrinsic one (Cafaro et al 2013).

I voluntarily do not provide a strict definition of nature, but a distinction is made between Nature (including the one within ourselves) and nature (the one strictly outside ourselves).

3. THE ROAD TO SHOES AND THEIR NORMALIZATION

How did we become shoe-bearers?

“For most of human existence, everyone was barefoot” (Carter 2021). So how, when, and why did we start to wear shoes? According to the BBC, we started wearing footwear with

³ “Our” or “we” refers to the North Atlantic capitalistic and modernized population.

substantial soles about 40,000 years ago, while “climatic evidence suggests that people were probably protecting their feet from frigid conditions” (Encyclopedia Britannica 2023) 10,000 years before that. “The earliest examples of actual footwear, a pair of sandals found in California (US), date to about 9,000 years ago (Encyclopedia Britannica 2023)”, and the first known shoe, Areni 1, found in a Southern Armenian cave in 2008, supposedly dates to 3500 BC. Because shoes were initially sandals made of natural materials that would quickly decompose, like sagebrush bark, we do not have much information on the pre-leather footwear era.

We know that in Mesopotamia, between 1600 BC and 1200 BC, mountain people near Iran introduced soft shoes that resembled moccasins, made of leather (Encyclopedia Britannica 2023). Depending on the civilization, footwear had different designs, materials, purposes, and significance. Egyptians, Chinese, Greeks wore straight shoes made of local materials. Romans are believed to be the first ones who developed shaped shoes for left and right (Bellis 2019), while King of England Edward 1st supposedly created shoe sizing, ordering that “1 inch (2.5cm) should be the measure of three dried barleycorns” (Encyclopedia Britannica 2023). Cultures influenced one another, and so was shoe design. It rapidly became no longer about wearing shoes or not, but about what type of shoe and what it said about the individual. From the Middle Ages to now, the evolution of footwear has been more about the evolution of fashion than its practical aspects.

The seventies witnessed a major shoe revolution. A running-obsessed fitness craze was spreading and when Nike invented a new way of running, longer strides where all force goes into the heel, the cushioned shoe became a must-have. This technique hurts when barefoot, but with a cushion, it is painless. That changed the shape of footwear forever.

While we were jumping from one shoe trend to the next, some cultures stayed loyal to their practices. In 2009, Christopher McDougall wrote a book that shook the running world. In his work, he argued that “humans were born to run [and] evolved to be able to run extremely long distances without getting all that tired, as a way to hunt down [NHAs] until they collapsed and died from heat exhaustion” (Greenfoot 2021 p.42). Called persistence hunting, it has been instrumental in the human body form’s evolution. HAs can sweat, cooling their bodies while running, and they would hunt during the

hottest time of the day to tire down the prey (Liebenberg 2006). In this book called *Born to Run*, Christopher goes to Mexico to meet and document the Tarahumara, a tribe of modern hunter gatherers. He finds that they run daily marathon-like distances in sandals. Their techniques allow them to “run hundreds of miles without rest and chase down anything from a deer to an Olympic marathoner while enjoying every mile of it. Their superhuman talent is matched by uncanny health and serenity, leaving the Tarahumara immune to the diseases and strife that plague modern existence” (McDougall 2019a). By sharing the story of this ultramarathoner tribe, the book became a New York Times best seller and reached far beyond the running world.

Running is the point of departure for barefoot practice in the Atlantic North. Wearing cushioned shoes when running could be the first still existing harmful footwear norm that has stuck in our societies though not based on scientific ground.

Health, the economy, and social norms as misleading justifications

The barefoot community challenges the common assumption that shoes are essential. I explore three potential arguments as to why we keep on wearing them: for health, economic, and social reasons.

At the time of this research (2023), most barefooting studies found are anthropocentric, where Connectedness to Nature is rarely mentioned, and if so, for HA’ health benefits. What are the main health arguments in favor of wearing shoes?

One, shoes preserve and support our feet functions and movements. For runners, non-runners and podiatrists the bell rings the same: “our feet are our foundation” (Roberts 2022) and their health is crucial to our overall well-being, as they play an immense role in our ability to move. Yet, fashion seems to take precedence on function in the footwear industry, even for sports shoes which should above all be the ones function focused (Greenfoot 2021). There is “no scientific evidence that more cushion means less injuries” (Hanna 2022) and still our shoes evolved that way.

Our feet are wonders of biology. Each foot comprises 26 bones, 33 joints, 19 muscles, over 7,000 nerve endings linked to the sciatic nerve (PMC Foot & Ankle Clinic), “a network of more than 100 tendons” (NHS Foundation, 2012) and ligaments, with an arch “ideal for its function supporting the weight of the body and spreading the forces

experienced during the gait” (Franklin et al 2015 p.230). The bottom of our feet has a thicker skin than the rest of our bodies, just like our hands, do not have hair nor secret sebum and are home to over 250,000 sweat glands for perspiration (Greenfoot 2021, NHS 2012). An average day of walking (between 8,000 and 10,000 steps) brings a force equal to several hundred tons to bear on the feet, covering on average 185,000 km in a lifetime, more than four times the circumference of the globe (NHS Foundation 2012).

Two, shoes protect our feet against unfavorable weather conditions and terrains. Their initial purpose was to protect our toes from extreme temperatures or terrains. This intention still exists nowadays, with shoes for cold weather, hot weather, rainy weather, wet terrain, hard terrain etc....Some shoes like safety shoes and combat boots can even protect us from fire, from heavy things breaking our toes, from stepping on harmful substances. We have specialized the function of the shoe to allow us to go everywhere without making our feet suffer. We can climb glaciers thanks to mountaineering spiked boots, we can go skiing thanks to ski boots, we can climb cliffs thanks to climbing shoes, swim in cold water with diving sleepers, faster thanks to scuba fins. Inventing the shoe and adapting it to activities has allowed our specie to explore higher, deeper, colder, warmer, harsher terrains without risking losing our toes, breaking our feet bones, or developing some type of foot injury. We have not eradicated the risks but greatly reduced them, allowing us to push the limits of our physical abilities. Shoes have become a tool in the exploration of our planet.

The third main health argument in favor of wearing shoes is that they keep our feet clean by creating a barrier between us and the dirty and dangerous. From a North Atlantic perspective, dirty can be what is unclean, mud, soil, rocks, puddles, and such. But the most important factor shoes protect us from, is the dangerous: bacteria, viruses, NHA bites, and other threats on the ground like nails, glass.

Samaritan’s Feet International, an NGO focused on giving shoes to those in need, warns against soil-transmitted illnesses, such as Helminths (intestinal worms) and Podoconiosis, a swelling and stiffness of the foot and lower leg (2023). They arise when people walk barefoot on contaminated or red clay soil (Deribe et al 2017). Present mostly in Africa, South America and Southeast Asia they are classified as environment-

related diseases, with a vulnerability aggravated by “poverty and insufficient access to water for foot hygiene” (Deribe et al 2017 p.477).

Footwear would preserve our feet functions and movements, protect our feet against unfavorable weather conditions and terrains, and act as protective shields against threats to our health. What can challenge the belief that in the North Atlantic, wearing shoes in the is the best option?

Feet are treasures of complexity and are not treated as such in our societies. For Dr. Mercer Rang, considered by McDougall a legendary orthopedic surgeon and researcher in pediatric development, “shoes do no more for the foot than a hat does for the brain” (McDougall 2019b).

Against the idea that shoes preserve our feet mobility is the claim that on the contrary modern shoes restrict our movement capabilities and diminish foot health by underutilizing its natural functions. Two branches of this anti-modern shoe belief exist: one in favor of wearing barefoot shoes, for whom it is equal to barefooting, and the other in favor of being strictly barefoot. Because these are two sides of the same coin, I will present the arguments together.

What is wrong with our shoes, health-wise? While the claims hold for almost every type of footwear, they are more pronounced in the running community. There, foot health is the primary focus, as it is tightly connected to the kinetic chain’s health (Roberts 2022). This chain links ankle joints to knee joints, hip joints, lumbar spine, thoracic spine, and cervical spine, so a misalignment of one will impact the others that will compensate. Wearing shoes is a constant tip forward, the most visible and drastic ones being tall heels, but all the way to athletic shoes that have a cushion. Over the years, it puts an (unnatural) strain on our ankles, hips, spine etc. It is often so slight that it does not feel damaging enough to stop doing it, and can contribute to many health issues, including wide-spread ones like bad posture.

“Modern shoes often have thick, inflexible soles, raised heels and a constricting design with a narrow toe box” (Roberts 2022). Befall many podiatric issues: plantar fasciitis (inflammation of the tissue at the bottom of the foot), ankle sprains, bunions and hammer toes (deformities), blisters, fungus, warts and consequences of having more

shock through the kinetic chain (Hanna 2022). These issues are most often seen in runners but undesirable corn and calluses due to friction, increased in badly fitting shoes, can form for any shod individual. Shoe structure is detrimental to our feet, locking them in a static position. They are scrunching our toes together and lifting them up, impacting our natural dynamic movement and abilities. They can also create smells, as they impair our feet from breathing. In short, the shoe is a foot prison (Greenfoot 2021).

Modern footwear is not only detrimental to our foot mobility, but to our bones and muscles too. Through an evolutionary approach to health, anthropologist Erik Trinkaus was able to identify the historical moment when people started wearing shoes when he noticed “a point in human history where the size of toe bones began to shrink”. He also noticed that people who “spend a lot of time in high heels wind up with smaller calf muscles” (Koerth-Baker 2008 p.1). While modern footwear is overall damaging to our health, “cushioned-engineered structured running shoes are the worst thing which have ever made contact with the human foot” (THNKR 2012).

So how can we better our footwear? According to the NHS Foundation, “shoes should be long enough to avoid squashing the toes, wide enough to avoid sideways squashing, and deep enough in the toe area to prevent the shoe rubbing against the toes” (2012). Do they exist? Yes: barefoot shoes. Also called zero-drop or minimalist shoes (similar but with singular toe spaces), barefoot shoes “are flexible, allow toes to spread through a wide toe gap, have no drop, no heel, are lightweight and maintain sensory awareness” (Hanna 2022). In other words, they allow you to move your feet freely, the way they were designed to (Roberts 2022).

Wearing less protection on our feet does not necessarily translate into more injuries. Most cushion-shoe runners heel strike, having a higher impact force with a double peak (when the heel touches the ground and when the toes touch the ground). On the contrary, barefoot runners fore or midfoot strike, experiencing a single peak and lower ground impact force (Lieberman 2010). Where barefoot running will stimulate the Achilles tendon, calves, and foot arch for them to absorb most of the initial impact force, a heel-striker will depend on the cushion for shock absorption, leading to the need for footwear even more cushioned. When barefoot, ankle injuries can still occur. They may be less severe and likely to happen, but even if that is not the case, at least you are

barefoot (Greenfoot 2021). Our feet are our natural shoes, born to run and made to support us. Modern footwear either weakens them or does not stimulate and reinforce their abilities, keeping us buying more supportive shoes (Roberts 2022). In the words of barefoot marathon runner Bill Rodgers, “a shoe shouldn’t be a La-Z-Boy recliner” (McDougall 2019b).

Barefooters explore and enhance their feet abilities, often discovering new faculties such as improved balance, increased foot mobility, flexibility, and strength. Many sports are already practiced barefoot, such as swimming, gymnastics, slacklining, many martial arts, scuba diving, surfing, wrestling etc. some due to the water-environment they are practiced in. Some shod sports also have shoeless variations that can bring different skills to the table. Barefoot water skiing, barefoot climbing, barefoot walking and hiking and barefoot bowling are all alternatives available shoe-less.

Whom has ever tried to climb a tree barefoot can probably certify that it is easier than when shod. Climbing, just like crawling, walking, running, jumping, hanging, squatting or rolling is a natural movement that we instinctively know how to perform for survival, just like our ancestors hunter-gatherers. Also called Human Movement or Natural Movement, Primal Movement is a physical activity that honors the natural designs of our bodies (Watts 2021). It is a dynamic and animalistic form a fitness linked to mobility and functional training where the goal is not to achieve a particular body shape, but to develop a range of motion, strengthen the muscles, reinforce the joints and ligaments, and increase the capabilities and resilience of bodies through a holistic approach. It is often practiced barefoot and can help HAs reconnect with the animal inside themselves, making it an anti-speciesism sport.

Challenging the second belief that shoes protect our feet against unfavorable conditions and terrains, is our skin’s biological ability to develop natural protection. Being shoeless allows our feet to build thick calluses without diminishing sensory perception (Harvard University 2019). Our feet do not become bulletproof but less prone to wounds (Greenfoot 2021). With slow exposure to the outside, our feet adapt to almost all types of weather and terrains. Wim Hoff and Barefoot Sue can be barefoot in the snow without losing toes thanks to gradual exposure, and a more attune understanding of

their sensations. Our feet are weak because underexposed but can regain their full capacities with careful and informed practice. Regardless, maybe having eradicated geographical barriers, stomped everywhere and conquered all terrains thanks to shoes is not the most glorious part of humanity.

Lastly, in front of the belief that shoes are keeping our feet “clean”, we can challenge its very meaning. Clean can be something “free from dirt, marks, stains or unwanted matter”, something “not dirty” or “free from harmful or unpleasant substances” (Oxford Dictionary 2023). Clean is subjective. Is a fallen leaf dirty? Is used bath water clean? Is an alpine stream dirty? Is wild dung clean? Is it cleaner to touch a subway pole with our bare hands than it is to walk in the woods barefoot? Some places might be unanimously considered dirtier than others, such as public bathrooms, transportation, city ground, landfills etc.... but are they not considered dirty because of all the body fluids and potential bacteria and illnesses potentially roaming on such surfaces, in opposition to the surfaces themselves? After touching something dirty with our hands, we wash them. After touching something dirty with our feet, we can also wash them.

With shoes we avoid contact between our feet and unhygienic, unsanitary substances that can make us ill, as mentioned earlier with diseases transmitted by contaminated grounds. While Podoconiosis is not present in North Atlantic countries, 45% of European residents are exposed to helminths and other intestinal parasites through their carnivore pets (Otranto et al 2013). We are more at risk petting our dogs than walking barefoot outside. In cities one could potentially step on broken glass, rusty nails, syringes, and doing so barefoot would be more dangerous than shod. But barefooters are less likely to step on trash because they pay more attention to where they are about to put their feet (Greenfoot 2021).

Generally, shoeless injuries occur most often when people go barefoot too fast and too intensely. It takes time to relearn how to walk, run, and move. The transition must be controlled for it to be injury-free (Hanna 2022). Everybody can go barefoot, but not overnight (THNKR 2012). The safest way is to tip toe into it. With time, skin will thicken,

tendons, joints and muscles will integrate this new way of moving, and there are chances that old shoes will not fit anymore.

But barefooting is not for everyone. Depending on the person and the context, being shod can be the most appropriate option. One needs to take into consideration their physical circumstances and surrounding environment before consciously and voluntarily deciding to go barefoot, otherwise it could be worse for foot health. Similarly, while being barefoot is quite an inclusive tool, the Nature Gap (the unequal access to nature because of income, age or race factors) makes barefooting in nature a privilege (Rowland-Shea et al 2020). Everyone should have the opportunity to do so, listen to their body with patience and carefulness, and get grounded.

One of the main claims about the relationship between barefooting and improved health is the Earthing hypothesis. Supported by the Earthing Institute, the theory argues that by being barefoot on the Earth, our bioelectrical bodies interact with the planet's electromagnetic waves and receive a healing energy that reduces inflammation, pain, stress and fatigue (Oschman et al 2015). Developed in an eponymous documentary, earthing and grounding are under-researched practices that so far have not been validated by the scientific community. Even if there is no proven yet energy exchange between the earth and our feet, barefooting stimulates feet nerve endings, which according to reflexology, are connected to different parts of the body (Bodner 2022). Earthing could feel relaxing also because pressure points are being massaged when unshod. Either way, the approach seems biocentric and utilitarian, encouraging barefooting to connect with nature for our welfare. Similarly, earthing products have been emerging as tools to ground us. Are they based on actual benefits or are they purely a market-induced trend?

North Atlantic societies are capitalism-based which plays a central role in the barefooting argument. As a profit-driven mode of production where private property rules, this economic system tends to generate waste by relying on accumulation, commodification, unsustainable resource management, usage of toxic substances and an energy-guzzling production process, harmful for nature. It can be difficult to move

away from the ubiquitous structure, as we live in the Capitalocene, exemplified in McDougall's experience at the podiatrist: "I was never told what to do; I was only told what to buy" (2019b).

In 2021 the global footwear market was estimated at USD 373.19 billion. Around 20 billion pairs of footwear are created annually (Grand View Research 2021), 86.2% coming from Asia. The US alone is the third largest consumer of all footwear produced in the world where on average an individual "consumes almost eight pairs of shoes annually" (Sands 2020).

The footwear industry is damaging for the environment. First, through plain simple waste. According to Sands, "approximately 2.8 billion pairs of shoes are directly discarded around the world each year, 300 million pairs in the US alone" (2020). Because a typical pair of shoes is approximately made of 65 separate parts (Chu 2013) with up to 40 different materials, they are incredibly difficult to recycle. They end up in "landfills and will eventually end up contaminating the soil, oceans and drinking water" (Sands 2020).

Second, the production process is an ecological disaster. Shoes' components and assembling procedures (more than 360 steps for running shoes) are energy and carbon intensive (Chu 2013). "Because of cheap labor and lack of strong environmental regulations" (Sands 2020), profit-maximizing companies are often located in Asian countries "where coal is the dominant source of electricity" (Chu 2013). Like any globalized process, transportation is needed to bring the products to consumers on other continents, making "a typical pair of running shoes [generating] 30 pounds of carbon dioxide emissions" (Chu 2013). Overall, footwear manufacturing poses a concerning threat to the "well-being of our planet as many toxins, chemicals and fossil fuels are used and leaked into the environment" (Sands 2020). Can we reduce the carbon footprint of footwear? A more immediate and accessible option might be to plainly ditch shoes.

Parallely, a wide range of products, from barefoot shoes to earthing mats is offered by ever-flourishing companies. Has barefooting been contaminated by capitalist goals? For Mark Cucuzella, owner of a minimalist shoe store, "if you're a shoe company and you're not addressing this, I think you're crazy. [...] Every major manufacturer, whether it's Nike, Saucony, Adidas, New Balance, or Brooks, now offers minimalist

running shoes” (McGinn 2012). The choice of barefoot footwear is no longer limited to the five-fingers ones. Vivobarefoot, Earthrunners, Luna, Skinners, Xero, Feelgrounds Scandal, and Vibram, who even got sued for advertising that their footwear could “reduce foot injuries and strengthen foot muscles without basing those assertions on any scientific merit” (McCue 2014), all offer a wide range of options, at a not so wide-ranged price-tag. At Vivobarefoot, buyers have the option to pay \$50 for a course on how to wear barefoot shoes, on top of their initial purchase (Reysu 2022). Barefoot shoes’ drawbacks include their price, often hovering around \$100, which could be more accessible when trading it for quality and style. Because their soles are thinner, they wear down faster (Roberts 2022). While the research on barefoot footwear’s sustainability practices is not sufficient, minimalist shoes are lighter, smaller, and overall do not use as many components as their ‘regular’ counterparts.

More than shoes, earthing products are also available. The Earthing shop proposes an Earthing Sleeping System (\$369), Grounded Sock Kit (\$79) or Grounders (\$29) to get grounded at home. Since our bodies are bioelectrical (self-produced electromagnetic current from chemical reactions allows our hearts to beat), electric current can go through us, and at a certain intensity create damage. To avoid that, every home electrical system is grounded as a safety measure. Current always wants to reach the soil through the path with the lowest resistance, so a specific wire is directly connected to the ground, allowing electricity to easily flow through it and return to the Earth without passing through people’s bodies. Earthing products rely on the idea that by plugging them into an outlet, they will remove the electromagnetic current in our bodies that is not self-produced, the ‘extra charge’ due to our surroundings, radio waves, etc. Putting aside their supposed benefits, a lot of them are made of polyurethane resin: plastic. Is their production not utilizing resources? Are they not producing any waste?

Leather shoes can take up to 40 years to decompose in landfills, their rubber soles almost 80 years and the chemicals used to bind it all together could “take up to 1,000 years to decompose” (Sands 2020). When diving to the Titanic, we do not find bodies, they take a few years to dissolve at that depth. But in the wreck, we find pairs of shoes. The ones “treated with tannic acid, [marine NHAs] won’t eat them” (National Geographic 2017), and that is still the case more than 100 years after the sinking. Earthing

products might also take a long time to decompose if they decompose at all. No research could be found on the topic.

“Bare feet are part of the natural ecosystem of the earth” (Sands 2020) because they are never discarded like worn out shoes are. And when we die, “they will naturally and harmlessly decompose along with the other parts of the body into the earth, equilibrating your bodily matter with its surroundings, and recycling it so that other living things can put it to use” (Sands 2020). Not only is living without shoes reducing waste and pollution, but it is also safeguarding the soil we walk on. While shoes tramp the ground, damage its ecosystem and vegetation, can contribute to soil erosion and intoxicates it with the sole’s chemicals gradual wearing off, bare feet “do not beat down a path and do not even maintain an existing beaten path” (Sands 2020).

Could wearing shoes be no more than an internalized consumption habit?

While the diversification and specialization of footwear could be a good thing, it also might have increased the number of pair owned. By having a specific type of shoe per activity, consumption is encouraged. Sneakers for each sport, shoes to “chill in”, shoes for all types of weather (rain boots, flip flops...), shoes for different events (a classy event, a dance class, a cocktail party, a funeral, a job interview, a workplace...). According to Grand View Research, “footwear remains one of the most popular items [US] Americans purchase” (2021), facilitated by e-commerce. Firms such as Nike rely more on branding than on scientific research to sell their shoes (Ahmed 2020). Could it be because our shoes are more about our image than about our health? Footwear is a great money-making market for the producers; and for the consumers, an opportunity to tell the story they want about themselves.

From a historical perspective, shoes are a class indicator. During the Renaissance shoes’ toe shape was squared, and “the more extreme and broad the squared toe became, [...] the richer and more powerful the wearer” (Victoria and Albert Museum 2015). Under the Chinese Song Dynasty (1000AD) foot binding was popular. Achieving “tiny golden lotus feet by repeatedly breaking girls’ toes and arches and binding them to the sole of the foot with cloth” (Hunt 2017), was one of the most attractive qualities deemed in a prospective bride” (Malchik 2020). The excruciating pain they endured while

their bodies were misshapen to “conform to a prevailing social expectation” (Malchik 2020) also had a clear economic rationale: it ensured they stayed home, “sat still and helped make goods like yarn, cloth, mats, shoes and fishing nets that families depended upon for income” (Hunt 2017) by making it difficult for them to move around. Foot binding only declined when “cheaper factory-made alternatives” (Hunt 2017) arrived in these regions.

Across the shoe-wearing world, designs changed over time, and so did their significance, expressing class, sex, but also beauty standards, serving economic interests etc. In the 1400s London, pattens were “worn over shoes to protect them from wet and dirty city streets” (Victoria and Albert Museum 2015). Shoes themselves were so important that shoe-protections were worn.

Nowadays, shoes are part of a person’s image. More than useful objects, they are fashion statements. Some are even disadvantageous, difficult to walk in, or impossible to run in. If social norms are the “rules and standards understood by members of a group that guide/constrain social behavior without the force of the law, formed, shaped and reinforced through observation and interpersonal and mediated communication among a collective” (Liu et al 2021); wearing shoes is a social norm. There sometimes are push backs against social norms that seem unfair for some individuals. In Japan many offices require women to wear high heels. In 2019, almost 20,000 people signed a petition to ban the requirement, questioning the norm’s validity (Wakatsuki 2019). At the Cannes Film Festival in France, all women are required to wear high heels to red-carpet screenings. In 2016, actress Julia Roberts arrived at the ceremony barefoot, interpreted by some as a “blatant act of fashion rebellion” (Vine 2016) as multiple guests (some older or with medical conditions) had priorly been denied access for wearing flats.

Are there situations in which being barefoot is more than socially frowned upon but plainly illegal? In the US barefooting is allowed in all public spaces but on private property the owners and employees decide (Greenfoot 2021).

It is federally illegal to discriminate against race, gender, sexual orientation but private businesses can deny someone for not wearing shoes, a loophole to exclude lower-income classes, people of color, people experiencing homelessness, hippies and such (Greenfoot 2021). Forbidding barefooters in certain stores can be a question of liability,

yet sometimes it is for 'cleanliness' purposes. Why would being barefoot outside and then entering a store be considered dirtier than with shoes? Walking in mud with shoes on and then on a carpet brings as much mud on the carpet as if one was mud walking barefoot, if not more. While I doubt that many people wash the soles of their shoes, most North Atlantic people probably wash their feet.

Ab-normal?

The combination of health, economic and social reasons make wearing shoes in the Atlantic North a widespread cultural norm. "We are used to the world as it is where we think it's normal to wear shoes and we think it's abnormal to go barefoot" (THNKR 2012). If wearing shoes equals being wealthy enough to buy a pair, rich enough to own an expensive pair, with the time and resources for leisure requiring specific footwear, in an environment where running away for safety is not a priority etc., fashionable enough to be cool, serious enough to get the job etc....then what is being barefoot commonly associated with?

It can be socially acceptable in some contexts: you have shoes in your hands so you are perceived as someone with material wealth for whom being barefoot is a choice, and in the contrary you do not so you might not have the financial means to own a pair, you are seen as poor and that is unacceptable. If you are at the beach or a park barefoot, you could be on a holiday, it is clean, so it is fine. But if you are barefoot in the city streets, then you are dirty and clearly not part of the productive machine... unacceptable.

If you are barefoot all the time and not occasionally, you could be either perceived as spiritually free, a new-age hippy (unusual but passable), or you could be a drug-addict for whom footwear is not a priority. Unacceptable.

Not wearing shoes has meanings associated with it, some stigmatizing, some excusing. But it seems to stem from decision making: are you voluntarily and consciously barefoot, and can you avoid shoelessness? If you can, it could be socially acceptable, but that might also depend on what you look like, what you are wearing, and where you are. If not, then you are deemed lesser than and marginalized. In a way, being voluntarily barefoot can keep you out of places that do not fit your values (Greenfoot 2021).

On another level, physical restriction is not seen just with our shoe-bearing feet but also in our tight outfits. "The clothing we wear, including footwear, dictates how we move, which dictates how we feel and how we exist in the world. [...] Stripping away the shoes is not unlike stripping away the ego, the false self, the illusion trying to keep us safe and protected, but that in reality is only closing us off to something far greater" (Greenfoot 2021 p.59). Could the physical restriction be a mental restriction too?

Other cultures have a relationship to barefooting different than in the North Atlantic. Australia is considered the home of the barefoot lifestyle (Carter 2021). To attract immigrants from the UK, the government attempted to show how better the life was there. "The culture evolved in removing your shoes as a sign that you've left the northern hemisphere behind [...] where you can cast off footwear and embrace the land" (Carter 2021). Very different from Britain's colonial culture, going barefoot was associated with "being closer to nature", (Carter 2021) freer. It symbolized, and maybe still does, that one is having fun, showcasing Australia as a leisure culture where no one has to fit into tight shoes or uncomfortable societal standards.

There also are instances where footwear is not socially welcomed. In Japanese culture, one must remove their shoes when entering a home. 'Soto' (outside) is soiled, whereas Uchi (inside) is sacred and needs to be protected. In some religious places, shoes are also forbidden. In Myanmar, recent years coined "the shoe question": a tourist was jailed for wearing shoes on temple grounds. For cultural or religious reasons, there are some contexts around the world in which being barefoot (or sock-footed) is the only acceptable way to be.

Feet trends change and are influenced by various factors. According to the Foot and Ankle Clinic, there are nine feet shapes and forms: Egyptian, Greek, Roman, Celtic, Germanic, Peasant, Square, Stretched and Simian (2022). One could be rarer, more popular, depending on the times. In their paper "Sexualization of the Female Foot as a Response to Sexually Transmitted Epidemics: A Preliminary Study", Giannini and their co-authors link sexually transmitted diseases to an "increased sexual focus on the female foot" (Foottalk 2023). The promotion of foot sex, or the reference to feet as erotic, can be historically seen through art. At some point, "painters specialized in the female foot with toe cleavage, [and] partially covered feet became the voyeuristic mark of the time"

(Foottalk 2023) enjoyed by all genders. "Clothed prostitutes paraded before customers unshod", until the 19th century where "brothels began to specialize in foot eroticism on a large scale" (2023) to the point where in portrayals, men's boots were exposed but women's footwear were either covered by their dresses, shawls, or cropped out of the painting (2023). These new ways of idealizing the foot were supposedly driven by syphilis or gonorrhoea epidemics. In the 21st century, foot fetishism seems to be more socially accepted. Author Nicholson writes in detail in 'Footsucker' about their likes and desires when it comes to feet. The ideal shape, the color, how visible specific tendons must be, the power of his idealization of women's feet, and the central role feet play in their sexual life. For them, "the perfect foot is not bare. It is shod" (Nicholson 1995 p.184).

Such fascination is not uncommon. "1 in 7 people have reported having [had] a foot-related sexual fantasy before" says US social psychologist and author Justin Lehmiller (Bell 2022). Foot pornography is rising. According to controversial pornography platform Pornhub's 'Year in Review', the "foot [was] the most popular fetish related term in 2022. The Feet category was viewed +38% more than the previous year" (2022). Called Podophilia, this popular attraction is playing out on the capitalist foot fetish and shoe fetish markets. Indeed, pictures can be sold for an average of \$25, making (some) feet not only sexualized body parts but also commodified body parts. For researcher Wilder Penfield, "the sensory perception for our feet is located directly adjacent to the sensory perception area for our genitalia" in our brains, which could explain foot kink (Bell 2022).

On the opposite side of the spectrum lies podophobia. People with this condition suffer from "an intense fear of feet and may experience severe anxiety when they see or think about their own feet or other people's feet" (Cleveland Clinic 2022) bare, socked or shod. They may avoid places such as beaches or pools to not be surrounded by bare feet.

One can also be disgusted by feet, find them ugly, unpleasant to look at, unimportant. But it does not change their inherent value: they are part of us, support our bodies, and are great locomotion tools. In addition to that, they can also be vessels to connection with Nature, a needed function in North Atlantic societies.

4. ALIENATED FROM NATURE WE ARE

Capitalism is Ecocidal

According to the fifth IPCC report, HAs' "emissions and activities have caused around 100% of the warming observed since 1950" (Hausfather 2017), and it is established that the current environmental crisis has its roots in our capitalist system (Moore 2000). North Atlantic societies are industrialized, hyperconnected, urbanized, optimized, maximized, productivists, utilitarian, individualistic, materialistic, money fetishists, hyperspecialized, overconsuming, with areas where populations are overconcentrated, yet still dependent on nature to nourish them. Our lifestyles are unsustainable for ourselves and for our planet, whose life expectancy is superior to ours. While we rely on her to survive, we also expect her to fulfill the silliest of our desires. Everything is commodified and money has power over the most intimate parts of our lives such as our emotional worlds. A scarcity mindset for example, can provoke strong, long-lasting negative emotions (Ravishankar 2021). We can feel manipulated, isolated, estranged from ourselves, in internal crisis during the current climate crisis. We can behave in ways that are more dictated by societal standards and cultural expectations than by our own preferences and values. And sometimes, it is difficult to know what our beliefs are. We are supposedly civilized, not "animals" anymore. But is it a good thing, all in all? Are there not parts of ourselves that need to feel connected with our natural instincts, desires, views? Are we born Ecophilics?

"Only since the industrialization and urbanization of the Enlightenment have we moved away from close contact with nature. One consequence is that we characteristically spend increasing amounts of time indoors" (Mayer et al 2004 p.505). With growing and spreading industrialization spreading came more alienation from Nature, and with more alienation from Nature came more capitalistic and utilitarian tendencies and behaviors. In 'Capital' Marx criticizes that "capitalist production collects the population together in great centers and causes the urban population to achieve an ever-growing preponderance. It disturbs the metabolic interaction between man and the earth" (Cooper 2021) leading to a metabolic rift. It seems that now, alienation from Nature and Capitalism feed off each other, meaning the influence is bi-directional. Taking another direction in one of these two factors could impact the other. Changing our

relation to Nature could modify our social and economic systems and barefooting could be a tool to support that. "We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect" (Mayer et al 2004 p.504).

We are currently physically, emotionally, intellectually, and spiritually estranged from the Nature within and outside ourselves, and our ecophobic behaviors demonstrate that. Precisely, "the rift is that separation. [...] People are part of nature but have become separated from it" (Cooper 2021). We are wrongly putting ourselves at the top of an abstract species pyramid, abusing all categories that we place under us, disrespecting fellow HAs, and increasingly losing ourselves. Physical separation can be seen everywhere in our societies: with fashion by wearing shoes that are extra cushioned or elevated, with city planning and architecture, with cement, paved roads, high buildings in which the higher the place, the fancier. It is as if we purposefully distanced ourselves from the Earth, the soil. We are civilized because we have sidewalks, avoid dirty roads, and our gardens, when we have one, are tidy and clean. We control nature and decide the interactions we want with it. Why would that be the right or best way to live? Why is this called progress? How come it is socially desirable to buy \$50 stylish shoes for a baby who does not yet walk?

The war between Spirit and Nature

As a species, we are used to living embedded in the natural environment. According to Mayer, "in geological time, it is only a tick of the clock that we have spent in highly urban settings, working in concrete buildings, driving in climate controlled cars and living in relatively populated areas, shut off from nature" (2004 p.635). Yet in this short period of time, we have managed to drastically change our relationship with the Earth, generally for the worse.

Christianity is historically and still the most represented religion in North Atlantic countries (Pew Research Center 2022). Its view on nature contributed to shaping our relationship with the environment. In Protestantism, a branch of Christianity, HAs must "overcome [their] 'lower' animal instincts and passions, to conquer the body, in order to be spiritual and attain 'heaven'" (Metzner 1993 p.6). The soul has "to be purified of the

body and everything else in nature, which [is] corrupt and evil" (Hughes 1991 p.5). At some point, Nature became gendered and perceived as a chaotic female entity, a "fickle woman who cannot be trusted" (Hughes 1991 p.5), linking the demonization and control over nature with the one over females. Both could only be appreciated when clean, accessible, subdued; fertile lands to be conquered and taken advantage of, with no inherent value out of their reproductive abilities... hence ecofeminism. HAs perceive themselves as a superior species due to religious and scientific rationalizations (Metzner 1993). Such attitude also characterizes sexism, racism, speciesism, and nationalism amongst other "forms of collective psychopathology, [where] one group of [HAs] assumes superiority to another and therefore the right to control, dominate and use the other" (p.3), contributing to a "well-known story of war, aggression, colonialism and neglect in inter-human relationships" (p.3). Even if not necessarily on a cognitive level, our psyche, influenced by centuries of Christian culture, might be infused by religious perception of Nature.

Ecopsychology and Deep Ecology also weave together environmental and psychological dimensions. The idea that "environmental degradation increasingly threatens the wholeness of every psyche" (Hughes 1991 p.6) looks into the mental consequences of "radioactive pollution, the diminishment of the ozone layer, increasing acidity of precipitation, global warming, [...] and the extinction of thousands of species, that have made it impossible to take a stable, supportive world for granted" (p.6); concrete threats disturbing the nervous system. This links the environmental crisis with a psychological crisis at the individual and global level (Hughes 1991), in which "the loss of a mutually supportive ecological relationship [equates] to psychological illness" (p.4), exemplified through the rise of eco-anxiety. Since "human sanity is grounded in the natural world" (Lertzman 2004 p.396 are we not being suicidal and eco-cidal (Metzner 1993)?

Nature Deficit Disorder (NDD), coined by journalist and author Richard Louv as the "description of human costs of alienation from nature" (2019) is not (yet) a medical diagnosis. The pandemic "tragically increased public awareness of the deep human need for nature connection" (Mckivigan 2020). It took being isolated from what Louv calls the 'Vitamin N' (2019) to realize we need Nature. Research suggests that NDD "contributes

to a diminished use of the senses, attention difficulties, conditions of obesity, and higher rates of emotional and physical illnesses; [and] weakens ecological literacy and stewardship of the natural world" (Louv 2019). For Oschman, "when the connection is broken you suffer. It affects your physical health. Your emotions. Your ability to fight off disease, your sense of well-being! When the connection is restored, so are you" (2016 p.14). In conjunction with the arrival of the insulated shoe was rampant urbanization, the race to innovation, HAs moving indoors, and other factors which "in the past three decades have accelerated the human disconnect from the natural world" (Louv 2019), culminating in a succession of health crises seemingly unstoppable. Not only have we "gradually made ourselves an increasingly irregular part of the world's ecosystems" (Murphy 2014 p.144) but we have also "become blind to the psychic presence of the living planet and dead to its voices and stories" (Metzner 1993 p.2).

Being through a religious, cultural or scientific lens, our perceived separation between us and nature creates rippling damage. Ironically, the Earth, "the magna mater, the Great Mother Goddess of ancient times, has become the dead matter of modern materialism" (Metzner 1993 p.7). We de-sacralized her to the point where we do not see her as alive anymore. Parallely we tried escaping from our own nature. For Metzner, each individual is suffering from a "dissociative split between spirit and nature" (p.6), between the natural self and the spiritual self, a torn psyche pathologically alienated from the rest of the biosphere. When we feel spiritually separated from our own nature "(body, instincts, sensations and so on)" (p.6) we project this separation outwards by seeing ourselves as separated from the great realm of nature. Being alienated from the outer nature leads to feeling internally estranged from our own Nature. But it is unhealthy. "The organism and the physical environment are mutually invasive" (Oschman 2016 p.19) so this disastrous split cannot and should not last. The dualism is also at play in barefooting: Roberts says they cannot stand how their feet feel when wearing traditional shoes, and that they feel "really disconnected and just far away from the ground" (2022). Traditional footwear is the physical separation from nature, and their emotional world dislikes the distance it puts between them and the ground.

In their Love Letters to the Earth, zen master, global leader, poet and peace activist Thich Nhat Hanh, declares "when we look into our own bodily formation, we see

Mother Earth inside us" (2019), and such truth needs to be recognized, for "feeling a sense of belonging to the broader natural world may be a prerequisite for increasing environmental protection" (Mayer et al 2004 p.504). Walking barefoot could be just that.

5. METHOD

A large part of the data was gathered from secondary sources. Over the 2023 spring semester, I researched and analyzed (scholarly) articles, videos, books and websites regarding barefooting, earthing, podiatry, nature connectedness and environmental consciousness.

I also collected information from primary sources by conducting an empirical study based on five virtual semi-structured interviews of 30 minutes. The sample of interviewees is voluntarily skewed towards individuals who have an active practice of barefooting. They are all adult citizens of North Atlantic countries (Canada, Belgium, US) and one is from Australia.

To explore the idea of barefooting being linked to environmental consciousness, the interviews consist of four open-ended questions, and use a scale evaluating HAs connection to Nature. I measure connectedness to nature, defined by Wesley Schultz in their 2002 book *The Psychology of Human-Nature Relations* as "the extent to which an individual includes nature within [their] cognitive representation of self", sharing ecologist and ecopsychologist belief that feeling connected to nature "is a key component of fostering ecological behavior" leading ecological destruction to be "experienced as self-destruction" (Mayer et al 2004 p.504).

After identifying six research-based instruments measuring and quantifying HAs' bond with nature, the Connectedness to Nature Scale (CNS) seems to be the best contextual fit.

The CNS is centered around HAs' connection with nature and its length fits the interview's time constraint. It was developed in 2004 by Psychology professor F. Stephan Mayer, and professor of psychology and environmental studies Cynthia McPherson Frantz at Oberlin College. They explain the CNS creation process in their article *The connectedness to nature scale: A measure of individuals' feeling in community with nature* (2004): originally developed in an environmental psychology course, it is a

“measure designed to tap an individual’s affective, experiential connection to nature, [following] from Leopold’s contention that people need to feel they are part of the broader natural world if they are to effectively address environmental issues” (Mayer et al 2004 p.505). The CNS has been used in various studies since its creation, including one by the same authors investigating why nature is beneficial and another exploring the effectiveness of the scale itself (Pasca 2017). Additionally, a fellow student at Lund University is using the CNS to explore the link between meditation and environmental consciousness (Yang 2023).

The scale consists of fourteen itemized statements⁴ in English, evaluated through a 1-5 Likert scale:

1-Strongly Disagree

2-Disagree

3-Neutral

4-Agree

5-Strongly Agree

Eleven of the statements are positive, and three are negative. Individual CNS results fall between one and five (1.00 lowest and 5.00 highest).

Interviews share the same structure. After introducing myself, the study, and asking for consent of being recorded, I ask the following questions:

- What is your name, citizenship, and occupation?
- What is your link to barefooting, and the length and frequency of your practice?
- What are the main reasons for your barefooting practice?

I introduce here the Nature Connectedness Scale and ask its 14 questions.

- Has barefooting influenced the way you relate to Nature, how/why(not)?
- The next two questions use the term environmental consciousness. What is your understanding of it?
- In your opinion, is there a link between barefooting and environmental consciousness, and if so, can you describe it?

⁴ See statements in Appendix.

- Do you think barefooting can be a tool for environmental consciousness, how/why(not)?
- Is there anything else you want to add?

After transcribing each interview and deleting the recordings, I calculate each person's CNS result and communicate it to them. Participants' gender and age are deemed irrelevant here as there is no plan to link barefooting to any specific societal factor. Having a barefoot practice was the only criteria for selecting participants.

The CNS presents limitations.

First, it might not be an effective measure for everyone. The instrument is originally in English, so some statements can be misunderstood by non-native speakers. This was reflected in my interview with Guy where I sometimes made translations in french myself.

Second, the wording can affect the response to a statement. For example, statement seven asking if one agrees with the idea that they *belong to the Earth as much as it belongs to* them might provoke a negative answer if one does not want to put a notion of ownership over the nature-HA relationship.

Third, as explained by the CNS creators themselves, an increased sense of nature connectedness does not always translate into more eco-friendly behaviors, especially with people who engage in self-destructive behaviors and the ones who truly ignore that one specific behavior is harmful. "If people feel connected to nature, then they will be less likely to harm it, for harming it would in essence be harming their very self. [...] People are also at times simply unaware that their actions are destructive. In other words, if an SUV driver really is unaware that [their] behavior is destructive to nature, then increasing this person's feeling of being connected to nature in all likelihood will have little impact, if any, on this person's driving habits" (Mayer et al 2004 p.512).

The CNS is not a 100% reliable tool, and a score of 5.00 might not necessarily translate into an individual completely nature-connected, and a 1.00 might not signify no connection at all.

Finally, the relationship between feeling connected to nature and acting eco-friendly could be bi-directional, meaning they would both be the cause and the consequence of the other.

The research, limited in time and scale by its context, could have benefited from more participants being interviewed, and from different perspectives such as a religious barefooter or a newly barefoot.

6. WHAT DO WE WANT? NATURE CONNECTEDNESS!

When do we want it? Now!

Participants come from various walks of life but all do so shoeless. While some actively chose to go barefoot for posture or mindset improvement, others felt a calling. Two reported an inexplicable feeling pushing them to remove their shoes, a voice encouraging them to get grounded. For footwear is a useless artificial separation (Yoshua) since our bodies have built-in shoes: feet. Their current relationship with shoes is conscious, chosen, and not mindless. Based on context and not on habit.

They unanimously believe that barefooting is a tool for environmental consciousness, and link it to awareness. First, physically. Barefooting automatically brings awareness to the feet. We notice more sensations, gather more information on the surface we are in contact with. The increased focused attention tends to spread to our bodies, allowing us to notice our own limitations (Yoshua), fragility (Guy), nuances (Sue). We understand our physical envelopes better and can refine our ears to listen to what they are telling us. Sue can be barefoot in the snow by being attentive to their feet's feedback, and Yoshua's barefoot runs require their five senses, a full immersion in their own body. When barefoot, we also pay more attention to our surroundings (Yoshua, Paul, Sue, Ann, Guy). For an injury-free time, barefooters must notice objects not to step on (Paul), take cues from the terrain. Bend their knees, distribute their weight, adapt their bodies and pace to their environment (Sue). For Yoshua, it is like a dance through nature. A heightened state of awareness, which is what we call presence, mindfulness.

Second, "walking in shoes is physical walking, but walking barefoot is spiritual walking" (Guillemet 2007). It invites a heightened state of awareness, which is what we call presence, mindfulness. It reactivates the stored instinct that we belong to the natural world (Sue). It is an anti-speciesist practice through which we regain our place amongst animals, rewilding our inner beings (Rewild University 2023). Yoshua tells a story about a pack of deers who came to their house. By not wearing shoes, Yoshua was able to get

much closer, contemplating that “it’s almost as if because my feet are connected to the earth [...] I am able to communicate with the deer [through] this sort of energetic connection”. Echoing these words is Guy’s recent experience of tending to their tomato plant barefoot to “not hurt the Earth and be able to have a communication with the plant [so that] it can feel I take care of the space”. That very season, their tomato plant grew four meters tall and nearby villagers came to see it for themselves, in disbelief. “I’m sure it’s not the only thing but it’s a part of it” Guy said. Getting reconnected to the Earth’s energy is communing with the natural world (Sue). It can have various names, the Qi, life force, web of life (Paul), energetic field, God, but overall stands for the same idea: there is a sacred vital force at the source of everything, and connecting to it is beneficial.

As shown in the self-made figure below, barefooting brings us closer to the Nature within and outside ourselves by directing our awareness and expanding it.

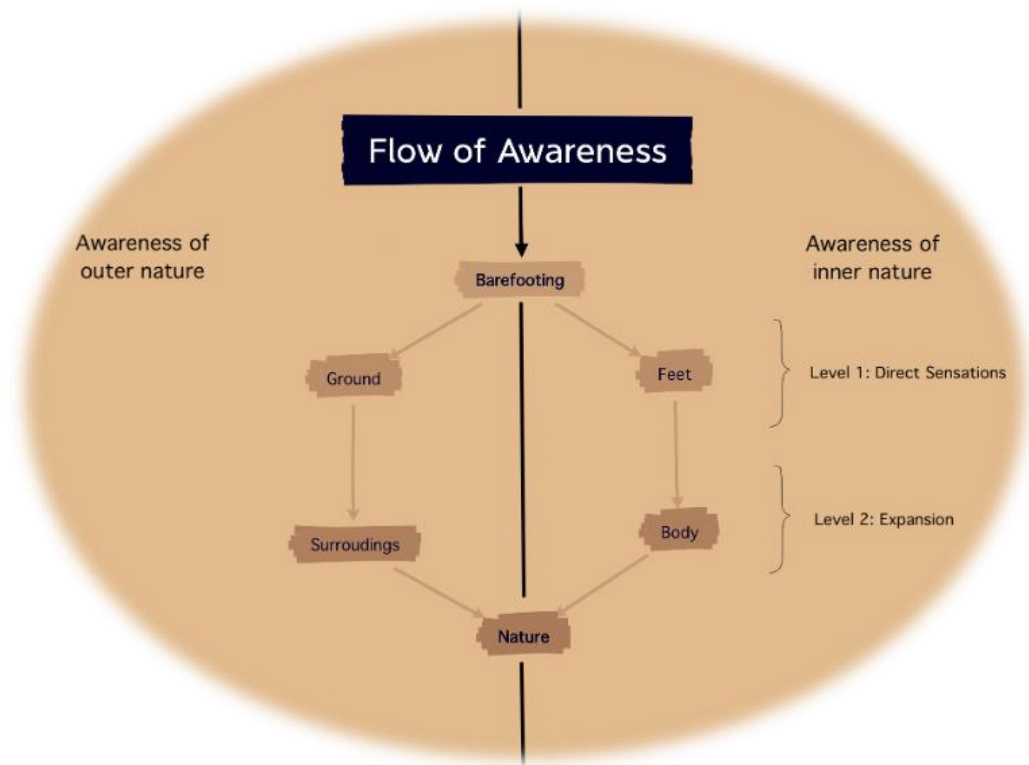


Figure 1: Flow of Awareness when Barefoot
Source: Author

Even though barefooting anywhere leads to a deepened connection with nature, none of the participants enjoy walking shoeless in cities. Guy gets the sensation of “walking on death”, Ann and Paul argue we cannot be connected to Nature through artificial surfaces, and it makes Yoshua’s feet unhappy. Environmental consciousness is facilitated by context:

shod in city < shod in nature / barefoot in city < barefoot in nature

The least favorable situation is being shod in a city and the most favorable, barefoot in nature. In a forest, we are linked to the mycelium, an intricate fungal network through which individual plants are all connected, but on asphalt, there is no nature to be connected with (Paul). It is still a way to develop awareness of oneself but it is a longer path to reconnect with Nature than direct contact with natural elements, an easier and more intense option (Ann). For Paul, when we walk in nature shod, nature tends to fall into the background of our minds. In contrast, if we do so barefoot, nature is at the forefront of our consciousness, as we have no other choice but to pay attention to where we are about to put our feet.

When asked if barefooting had influenced their relationship to Nature, all agreed. Sue explains how they previously thought they had a great connection when shod, but realized it was a perception, not a real union. We cannot become one with nature by intellectualizing it (Ann). We need to get into our bodies and our hearts for a true unification, and nature-connected awareness reflects that more. The five participants scored above 4.00 on the CNS, revealing their strong connection with nature. All talked about Nature from the heart, including the ones with scientific and academic careers. They seem to have unified their spiritual and natural selves, or at least reduced the artificial distance placed between the two.

Just like meditation, barefooting is more impactful when integrated into a lifestyle. Ann compares a barefooting practice to a one night stand with nature, arguing that a connection needs time and depth to strengthen.

Harmonious living in the Ecozoic Era

When asking where someone comes from, we wonder where are their *roots*. We can describe many abilities or behaviors by referring to human *nature*. Our language demonstrates the interconnectedness, and yet we seem to have forgotten that we *are* nature. Ann recalls the story of someone from a natural environment in Thailand who came to Belgium without ever having worn shoes before. They conformed and got footwear, expressing how weird it was to not be able to feel the Earth anymore, to feel disconnected from it because of the rubber in between. When they went back to Thailand, wearing shoes was a habit, and they did not take them off. We forget easily if we do not practice regularly.

It is what happened in our North Atlantic societies. We are domesticated and disconnected from nature (Guy). That is why during the pandemic, Barefoot Sue decided to use social media to help the youth. They felt as though “by teaching them to go outside and put their feet on the ground, it could help with their anxiety” and they could feel supported by nature. Paul’s children have spent most of their lives barefoot (they prefer it) and according to their father, seem “shockingly connected to nature” to the point where birds will come perch on their lap.

As reported by the 2022 IPCC report, we need to “engage in an inner transition process [through] raising awareness, changing beliefs [and] values regarding the human-nature relationship” (Sterckx et al 2023 p.1). Thomas Berry suggests transitioning from our anthropocentric societies to a biocentric ones characterized by an “integral human-earth community” (Murphy 2014 p.151). For a world where HAs respect NHAs and the Earth as loved ones, change is necessary, and environmental consciousness must rise. At the individual scale, barefooting can be a step in a greener direction, and transitioning to a barefoot lifestyle itself requires transformation. Yoshua argues that lasting change is slow, just like in nature. It takes a long time to uncondition ourselves (Yoshua) and shoes have been part of the North Atlantic horizon for a while.

Barefooting can be a tool for many things, including accessing our inner nature. When we “start to go more barefoot, other things start to open in [our] lives too” says Yoshua from their own experience. For them, taking shoes off is like taking off a false layer, shedding the false self. Our authentic selves, just like our feet, are forced to

conform into ill-fitting boxes. Similarly, the more we are connected to nature, the more unimportant beliefs and attitudes fade away (Yoshua) and the closer we are to our natural selves, and the virtuous cycle continues. Sue values the freedom in Nature. In their words, "mother nature lets you do whatever you want [...] and there is absolutely no judgment". Existing in a space that does not dictate behaviors, they were left to wonder what they would do if they were not being judged. The response did not wait: they would climb a tree! And so they did, at an age past North Atlantic societies' expectations.

Even our time dimension seems constrictive. Trees, just like each earthling, live in vastly different temporal scales. Nothing natural is rushed (Yoshua). What would our lives look like if we were to practice slow food, slow sex, slow growth, slow city, slow school, slow science, slow transportation, slow art...? When we are barefoot, we also slow down. Obligated to focus our attention on the surroundings, rushing through life is not more possible than rushing through natural terrain. We have the space to enjoy each step, smell the roses (Yoshua). The Slow Life Movement supports just that. Having a structure that fosters intentionality. Barefooting can be the open door to access that space of meaningful harmony.

Both Sue and Yoshua have noticed that "most people even if they're grossed out about the idea of being barefoot, if they are willing to have a conversation there is a moment they get it". When they encounter shod hikers, it is a teachable moment (Sue) during which people are usually curious, or at least open to hearing about barefooting (Yoshua, Sue). For Guy, we do not go barefoot because we are afraid of pain, discomfort, the unknown. Yet with appropriate information or accompaniment, this stage can be overcome and offer long-term consequences. Participants report a change in attitude: increased playfulness and curiosity (Yoshua), authenticity (Sue, Yoshua), calmer, clearer (Ann) and more open mind (Paul, Yoshua, Guy).

While barefooting provokes immediate state alteration, its lasting benefits are undeniable. Most importantly, it truly deepens our connection with nature in the long run, now just temporarily. Barefooting is one piece of the puzzle (Yoshua), not a finality. Using the tool gives access to others in the toolbox. Yoshua grows their own food with permaculture. Sue regularly exposes themselves to cold. Guy occasionally holds

consciousness-expansion days. All five of them seem to have realized that “everything, from king to cabbages, need a root in the soil somewhere” (Guillemet 2007) and they treasure their emotional connection with nature. “Barefooting is like a gateway drug into being more nature conscious” imagines Yoshua. It often leads into other eco behaviors, when a specific one is not what led to barefooting.

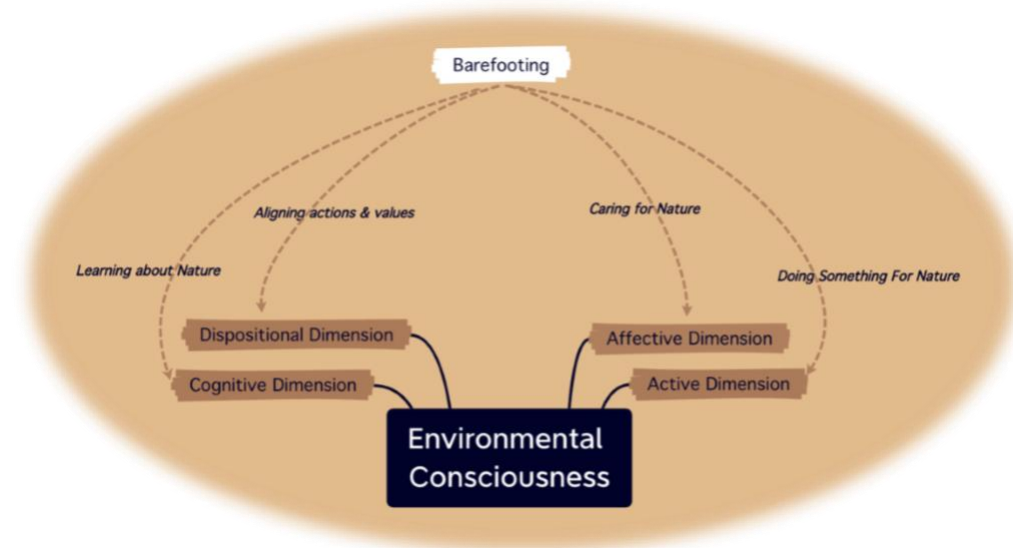


Figure 2: Barefooting Leads to Environmental Consciousness

Source: Author

As illustrated above, barefooting allows us to gather more information about Nature, therefore to care for her, to nurture a body-mind alignment and to act upon all these. While for Guy, “it is natural in us to care for the living world”⁵ going barefoot is a way to rekindle that forgotten tendency, or enhance it.

An important aspect of Sue’s practice is to “walk the talk”. They take pride in embodying their value (an example of the dispositional dimension), dedicating their life to spreading awareness of its capabilities. To be barefoot is to become an instant environmentalist (Sue), and the world could greatly benefit from that.

⁵ Quote originally in french, translated by the author

The five participants are leading by example, all engaged in the cause in their own ways. Barefoot Sue and Yoshua's social media are full of barefooting tips, sharing their experiences with the world. Ann, ecopsychologist, Paul, the barefoot podiatrist, and Guy, biodanza instructor, all heavily utilize barefooting in their career. Sue is also a Wim Hoff method instructor, while Yoshua has written many books (such as *Walking Barefoot with your Best Friend*, cited in this research as Greenfoot 2021). They all have been engaged a multitude of ways to support a transition towards a world where nature-connectedness and environmental consciousness is the norm. On their individual level, being barefoot, even occasionally, has unimaginable ripple effects.

"Awaken the foot!"⁶

What can we do? Exposure to nature is key (Guy, Ann). When we meet someone new, we get to know them by spending time with them. For Guy, it is the same with nature, we need to be with her. Environmental consciousness can still be developed in a city, but it would have deemer effects and would take longer (Guy). We need to observe Nature, her delicacy, the magnificence of its creation, from a petal to a drop of water. In societies where Gods are believed to exist in Nature, she is respected (Guy). If our beliefs differ, our admiration will nurture respect (Guy).

Additionally, the state of barefootedness is closely related to mindfulness. We can be mindful when shod and in artificial environments but being barefoot in nature facilitates the process. The longer, deeper and more frequent the exposure, the better. Ideally, it would be constant, not just a practice but a lifestyle, which two of the five interviewees have committed to. Yoshua declares they are "a barefooter for life now".

It has been established that barefooting is a recollective practice (Lertzman 2004). They can take various forms, all with the goal to reconnect HAs with nature. Each of the interviewees have knowledge about specific practices. Some are also used as eco-therapies, and "many environmental educators suggest that the development of ecological consciousness should be a goal of the curriculum" (Hughes 1991 p.6).

⁶ (Greenfoot 2021 p.99)

Guy is a biodanza instructor. It is a dance based on human movement best practiced in nature and often barefoot to deepen self-awareness. They participated in an evening session where a group went dancing in nature at night with no lamp. The supervisors invited participants to take off their shoes, dance to natural sounds, let themselves move with the rhythm of the wind in the trees, birds' melodies. It is never quiet in nature, but we think of it as silent because natural noises do not bother us (Ann). Maybe if we listen carefully, we can hear the Earth's heartbeat. Also called the Schumann Resonance, the NASA-identified movement of electromagnetic waves inside the ionosphere oscillates around 7.8Hertz (Dunbar 2013) which is also HA's resting heartbeat. Going into nature could be an opportunity to re-align ourselves with her melody, to "welcome such stillness and quietness in ourselves, receiv[ing] the song of the Earth, be in connection with her" (Ann).

Forest bathing, originally called shinrin-yoku is a physiological and psychological exercise originating from 1980s Japan, with the purposes "to offer an eco-antidote to tech-boom burnout and to inspire residents to reconnect with and protect the country's forests" (Fitzgerald 2021).

Biodanza can use forest bathing in conjunction with barefooting, and so can applied ecopsychology, sometimes in a group setting too. Ann, ecopsychologist, has seen students in their course arrive barefoot "even if you don't invite them to". A battery of exercises can be used, like "walking quick, walking slowly... Thich Nhat Hanh teaches us to walk very slowly, to feel everything of your feet on the ground, and the sensation is different by the piece that you put on the ground, [and] you can feel a lot. In that moment, you come into a space of timelessness, [...] closer to your feelings, to your emotions, to your experience also". It aims to awaken the dormant connection we have with nature

Paul, the barefoot podiatrist, makes a distinction between their career and their spiritual beliefs, especially in the public sphere. In their work with clients, they often talk about the spiritual benefits of barefooting in terms of awareness. They have found that "most people who end up going barefoot seem to be a little bit more open-minded". Even if going shoeless does not provoke an emotional reaction, at the base level it will make people litter less because they will find it annoying to step on trash, says Paul.

In Greek Mythology, the tale of Antaeus recounts the story of the eponymous giant, an unbeatable wrestler. His strength is renewed as long as he touches the Earth (his mother). Heracles finally defeats him by lifting him up from the ground, killing him (Encyclopedia Britannica 2023). Being connected to nature might not make us eternal, but it surely can help reunite the inner self with the outer self, foster environmental consciousness and induce pro-active eco-friendly behaviors.

Just like Anteus, contact with the Earth does not have to be through our feet. Other tools can stimulate different areas of the body. With gardening or permaculture, it would be the hands and forearms that would gain direct connection with the soil. What matters is restoring skin contact with Nature as a mode for caring for NHAs, hugging a tree, swimming in natural bodies of water etc. Nudism was also mentioned as a tool. For Yoshua, clothes are restricting, just like shoes are. They prefer to wear simple flowy pieces that allow them to be their natural selves. In Guy's view, being naked would allow to go even further in the human-nature connection but it is unfortunately not socially acceptable in a group setting.

In a community, different tools are accessible. In the US, some churches have experimented with Barefoot Sundays where churchgoers are invited to take their shoes off for the day and "walk the holy ground of a broken world" (Tiffany 2023). Still in the US, June 1st was declared a National Barefoot Day. Why not rise to the occasion and try it then?

In Germany and Austria we can find almost 100 barefoot parks. They often are made of forest or meadow paths meant to be walked barefoot, and often propose several ones made of a variety of materials to encourage pedestrians in their playful discovery of new sensations. But is it necessary to build particular paths for barefooting? Should it not be a practice doable anywhere? Ann deems them strange, wondering "why can't we walk just barefoot in the grass"? While they do see the utility in barefoot paths, they do not believe that artificially re-creating what our feet would experience if they were to live their lives barefoot is the way to go. Ann does not enjoy walking on tree bark that has been placed on the ground, as it feels like a sham. However, climbing a tree barefoot and feeling its bark under their sole is pleasant to them. Depending on the depth of the perceived connection with nature, an individual might find delight and value

in certain activities and practices over others. The importance is to start where they are at.

Lawmakers too can contribute by supporting nature's juridical status change. After NHAs, rivers are becoming legal entities, and the question of plants' rights is not too far behind.

For Louv, "we know enough to act" (2019) and barefooting is a step. Renowned environmentalists John Muir and Henry David Thoreau practiced barefooting, the former envying reptiles for their bosom to bosom contact with the earth (Metzner 1993).

While caring for the environment can be a factor leading to the discovery and practice of being barefoot, being barefoot can also be a factor leading to caring for the environment. For Mayer et Frantz, "people who feel more connected to nature are more likely to engage in eco-friendly acts" (2004 p.638). Barefooting is therefore both an eco-friendly act, and a tool for connection with nature.

7. "THINK OUTSIDE THE SHOEBOX"⁷

Footwear was created to support HAs yet contributed to alienating us from the very base of our existence: the Earth. North Atlantic societies have forgotten that we are one with nature, and our behaviors illustrate the split. We are distanced from our animality, authenticity, bodies, and it hurts the living world.

In wondering *how and in what way is barefooting a tool for environmental consciousness*, result show that removing physical barriers with nature can lead to removing emotional ones, allowing for an integration of ourselves as equal parts of the natural world. That getting unshod is associated with a stronger state of nature connectedness.

Barefooting is indeed a tool for environmental consciousness. Through directed awareness, it allows for a prolonged state of presence in which the artificial separation between mind and body, spirit and nature fade away. It also fosters direct eco-friendly behaviors like picking up trash, and long-lasting attitudes such as curiosity, open-

⁷ (Greenfoot 2021 p.47)

mindedness, and calmness. While it offers health benefits, it is a biocentric tool fostering a deepened nature-animal connection, a way of life that HAs are the only species not accessing.

As a recollective activity that can be practiced on the individual level or in group setting, barefooting triggers our long lost sense of oneness with the Earth, awaking instincts that counter speciesist claims.

No matter the surface, barefooting provokes something in ourselves. If we do not get connected to the Nature outside ourselves when we walk unshod in cities, we get closer to our inner Nature. We are aware of new sensations in our feet, engage our bodies fully, realize how vulnerable yet adaptable our physical envelope is. We are present in ourselves. It is a physical representation of CAS.

A state of barefootedness in nature facilitates connection to the Earth, not only through increased awareness of our own bodies but of our surroundings as well. We gather information about the terrain, the temperature, incorporating natural elements in ourselves, working with them, stimulating our primal communion with Nature. We observe the wonders of nature, can get in awe of her mere existence, and therefore, ours. It is what deep ecology encourages.

We have countless opportunities to revisit many areas of our lives barefoot. As barefooting is connected to slow life, mindfulness and pro-environmental behavior, it can contribute to reshaping how we approach food, transportation, sex, health, work, leisure, culture, clothing, housing etc....it can be a way to pull on the rope of the environmental consciousness toolbox until another tool comes out, we pick it up, try it ourselves, see how it fits and continue the deepening of our intimate relationship and personal connection with nature.

Realistically, barefooting is not, and never will be a perfect save-all tool that makes Earth a heaven for all its inhabitants and itself. But it can contribute to shaping more caring, balanced and authentic societies, carving a path towards living in harmony with the living world.

This research is pertinent in its aim to *explore how barefooting can be an important tool in the environmentalism toolbox*. I hope it contributes to bringing the

topic in the academic world for more biocentric research on it and for the enlargement of the barefoot community.

A complete barefoot lifestyle might not be for all, but occasionally removing our shoes can create more ripples than we realize. Let's put our best foot forward (Greenfoot 2021), and if possible, let it be bare.

8. APPENDICES

Interviews

The semi-structured interviews were conducted through Zoom or WhatsApp Call. All are consenting adults informed about this research who have given their vocal approval for voice recordings and use of this data for the purpose of the thesis. Participants received email confirmation when the audios were deleted (after transcription) and for the ones who wanted, their CNS results were shared with them.

The following table shows participants' general information, some self-defined (Name, Citizenship, Occupation and Barefoot Practice).

Name	Interview Date	Citizenship	Occupation	Barefoot Practice	CNS result
Yoshua	22/03/23	US	Liver of life (Yoshua Greenfoot)	Often since birth, last 3 years more extreme	4.5
Sue	29/03/23	Canadian	Wim Hoff Method instructor, Author, Coach (Barefoot Sue)	A lifestyle for the last 13 years	4.86
Guy	03/05/23	French Canadian	Biodanza instructor	Occasionally since birth	4.86
Ann	05/05/23	Belgium	Ecopsychologist	Often since childhood	4.93
Paul	12/05/23	Australian	Podiatrist (The Barefoot Podiatrist)	Often since birth	4.21

Even though the research is geographically limited to the North Atlantic, one interviewee is Australian. Their point of view as a podiatrist was voluntarily sought out, which can also be linked to literature on the Australia's barefoot culture. While all interviews were conducted in English, the one with Guy also includes passages in French.

The Connectedness to Nature Scale

The text below is a direct quotation from Mayer and Frantz's Connectedness to Nature Scale:

Please answer each of these questions in terms of the way you generally feel. There are no right or wrong answers.

1. I often feel a sense of oneness with the natural world around me.
2. I think of the natural world as a community to which I belong.
3. I recognize and appreciate the intelligence of other living organisms.
4. I often feel disconnected from nature.
5. When I think of my life, I imagine myself to be part of a larger cyclical process of living.
6. I often feel a kinship with animals and plants.
7. I feel as though I belong to the Earth as equally as it belongs to me.
8. I have a deep understanding of how my actions affect the natural world.
9. I often feel part of the web of life.
10. I feel that all inhabitants of Earth, human and nonhuman, share a common 'life force'.
11. Like a tree can be part of a forest, I feel embedded within the broader natural world.
12. When I think of my place on Earth, I consider myself to be a top member of hierarchy that exists in nature.
13. I often feel like I am only a small part of the natural world around me, and that I am no more important than the grass on the ground or the birds in the trees.
14. My personal welfare is independent of the welfare of the natural world.

Mayer, F. S., & Frantz, C. M. P. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of Environmental Psychology, 24*(4), 503–515.

<https://doi.org/10.1016/j.jenvp.2004.10.001>

“Spread the word, spread the toes”⁸

Some resources to explore barefooting:

- Society for Barefoot Living <https://www.barefooters.org/>
- Barefoot Sue <https://www.suekenney.ca/>
- The Barefoot Human <https://www.thebarefoothuman.com> and their book 'Walking Barefoot With Your Best Friend' (Yoshua Greenfoot 2021)
- Barefoot Movement, with the Barefoot Podiatrist <https://www.thebarefootmovement.com.au/>
- This thesis' YouTube playlist, with the resources used for the research and other food for thought https://youtube.com/playlist?list=PLOAzOxfdXb4moionE44chAXK82DtnU_oV

⁸ (Greenfoot 2021 p.46)

9. ACKNOWLEDGEMENTS

I am extremely grateful to my supervisor, Professor Eric Clark, for guiding me through the writing process, challenging me and enthusiastically supporting me until the finish line. This thesis would not be what it is without them.

I also want to thank my CPS classmates and Professor Vasna Ramasar, whose contributions and feedback during the seminars were extremely valuable.

I am thankful for my dear friend and fellow student Romy for sharing her ideas and being a tremendous source of inspiration and support.

Thank you to the interviewees who gracefully devoted time to share with me their knowledge, opinions and experience on their barefoot practice and intimate connection with Nature. In their own ways, they all contribute to a more environmentally conscious world. I hold them in high regard.

I want to thank my mother, siblings, pets, father, aunt, grandfather, cousins and other family members for their curiosity and open-mindedness regarding barefooting. You have given me helpful food for thought, allowing me to approach the topic with a renewed perspective at key moments.

Special thanks to my feet who got me reunited with nature, and to my physical envelope for supporting me in my intellectual endeavors without fail.

Lastly, I am grateful for mother nature herself, for her grounding and guiding presence throughout my life and the writing process. Deepening my connection with her rekindled my enthusiasm for researching when I was getting disconnected from my body, inner nature, animality. I hope not to lose sight of our bond ever again.

10. REFERENCES

- Ahmed, A. (2020, September 8). *Advertising techniques for the shoe industry*. Small Business - Chron.com. Retrieved April 18, 2023, from <https://smallbusiness.chron.com/advertising-techniques-selling-makeup-23584.html>
- Bell, J. (2022, April 19). *There is scientific proof that foot fetishes are normal*. Big Think. Retrieved May 1, 2023, from <https://bigthink.com/health/psychology-of-foot-fetishes/#:~:text=The%20fetish%20for%20feet%20is.common%20than%20you%20think...&text=A%20fetish%20is%20a%20sexual,least%20once%20in%20their%20lives>
- Bellis, M. (2019, August 18). *Everything about the history of Shoes*. ThoughtCo. Retrieved April 17, 2023, from <https://www.thoughtco.com/history-of-shoes-1992405>
- Berry, T. (2023, April 13). *The Ecozoic era*. Thomas Berry. <https://thomasberry.org/life-and-thought/about-thomas-berry/the-ecozoic-era/>
- Bodner, V. (2022, August 30). *Reflexology: What it is and how it works*. Cleveland Clinic. Retrieved April 20, 2023, from <https://health.clevelandclinic.org/reflexology/>
- Cafaro, P. J., & Primack, R. B. (2013). Environmental Ethics. *Encyclopedia of Biodiversity*, 267–277. <https://doi.org/10.1016/b978-0-12-384719-5.00012-5>
- Carter, K. B. (2021, November 8). *Why do Australians love to go barefoot? - BBC reel*. YouTube. Retrieved April 14, 2023, from https://www.youtube.com/watch?v=-ojRWeRhJc&list=PLOAzOxfdXb4moionE44chAXK82DtnU_oV&index=11&t=13s
- Chu, J. (2013, May 22). *Footwear's (carbon) footprint*. MIT News | Massachusetts Institute of Technology. Retrieved April 28, 2023, from <https://news.mit.edu/2013/footwear-carbon-footprint-0522>
- Cleveland Clinic. (2022, April 12). *Podophobia (fear of feet): Causes & symptoms*. Cleveland Clinic. Retrieved May 1, 2023, from <https://my.clevelandclinic.org/health/diseases/22707-podophobia-fear-of-feet#:~:text=Podophobia%20is%20an%20intense%20fear,couered%20in%20shoes%20and%20socks>
- Coleasa, R. (2022, July 26). *Connecting children with nature: Activities at home and at school*. kinderpedia. <https://www.kinderpedia.co/connecting-children-with-nature.html>

Cooper, M. (2021, September 21). *Marx, the environment, and "metabolic rift."* Workers' Liberty: Reason In Revolt. <https://www.workersliberty.org/story/2021-09-21/marx-environment-and-metabolic-rift#ftn15>

Deribe, K., Cano, J., Newport, M. J., Pullan, R. L., Noor, A. M., Enquesselassie, F., Murray, C. J., Hay, S. I., Brooker, S. J., & Davey, G. (2017). The global atlas of pododermatitis. *The Lancet Global Health*, 5(5). [https://doi.org/10.1016/s2214-109x\(17\)30140-7](https://doi.org/10.1016/s2214-109x(17)30140-7)

Dunbar, B. (2013, May 28). *Schumann resonance*. NASA. Retrieved May 4, 2023, from https://www.nasa.gov/mission_pages/sunearth/news/gallery/schumann-resonance.html

ICAS. Education. liberation. transformation. Institute for Critical Animal Studies Retrieved October 29, 2021, from <http://www.criticalanimalstudies.org/>

Encyclopædia Britannica, inc. (2023). *Antaeus*. Encyclopædia Britannica. <https://www.britannica.com/topic/Antaeus>

Encyclopædia Britannica, inc. (2023). *Deep ecology*. Encyclopædia Britannica. Retrieved April 10, 2023, from <https://www.britannica.com/topic/deep-ecology>

Encyclopædia Britannica, inc. (2023). *Shoe*. Encyclopædia Britannica. Retrieved April 14, 2023, from <https://www.britannica.com/topic/shoe>

Encyclopædia Britannica, inc. (2023). *Tool*. Encyclopædia Britannica. Retrieved April 27, 2023, from <https://www.britannica.com/dictionary/tool>

Fitzgerald, S. (2021, May 3). *Forest bathing: What it is and where to do it*. Travel. <https://www.nationalgeographic.com/travel/article/forest-bathing-nature-walk-health>

Foottalk. (2023, February 15). The sexualization of feet: A brief history. Retrieved April 30, 2023, from <https://foottalk.blogspot.com/2006/01/the-sexualisation-of-feet-brief-history.html>

Franklin, S., Grey, M. J., Heneghan, N., Bowen, L., & Li, F.-X. (2015). Barefoot vs common footwear: A systematic review of the kinematic, kinetic and muscle activity differences during walking. *Gait & Posture*, 42(3), 230–239. <https://doi.org/10.1016/j.gaitpost.2015.05.019>

Gaard, G. (2012). *Animal Advocacy, feminism and Intersectionality*. Deportate, esuli, profughe. Retrieved April 10, 2023, from https://www.unive.it/pag/fileadmin/user_upload/dipartimenti/DSLCC/documenti/DEP/numeri/n23/Dep_04.pdf

Grand View Research. (2021). *Footwear market size, Share & Growth Trends Report, 2030*. Footwear Market Size, Share & Growth Trends Report, 2030. Retrieved April 28, 2023, from <https://www.grandviewresearch.com/industry-analysis/footwear-market>

Greenfoot, Y. (2021). *Walking Barefoot With Your Best Friend*. You Enjoy Life Publishing.

Guillemets, T. (2007, January 27). *Quotations about Grounding and Being Barefooted*. Walking barefoot and grounding quotes. Retrieved May 5, 2023, from <https://www.quotegarden.com/grounding.html>

Hanna, M. (2022). *2 Years in Barefoot Shoes... My Feet Aren't The Same! Youtube*. Mike Hanna. Retrieved April 17, 2023, from https://www.youtube.com/watch?v=2VRLs7U3kaQ&list=PLOAzOxfdXb4moionE44chAXK82DtnU_oV&index=8

Harvard University. (2019). *Barefoot walking*. YouTube. Retrieved April 17, 2023, from https://www.youtube.com/watch?v=NNQYM8Fjxp4&list=PLOAzOxfdXb4moionE44chAXK82DtnU_oV&index=20

Hausfather, Z. (2017, December 13). *Analysis: Why scientists think 100% of global warming is due to humans*. Carbon Brief. Retrieved May 1, 2023, from <https://www.carbonbrief.org/analysis-why-scientists-think-100-of-global-warming-is-due-to-humans/>

Hughes, J. D. (1991). The Psychology of Environmentalism Healing Self and Nature. *The Trumpeter*, 8(3). Retrieved April 27, 2023, from <https://trumpeter.athabascau.ca/index.php/trumpet/article/view/458>

Hunt, K. (2017, May 22). *Work, not sex? the real reason Chinese women bound their feet*. CNN. Retrieved April 14, 2023, from <https://edition.cnn.com/2017/05/21/health/china-foot-binding-new-theory/index.html#:~:text=Tiny%20%E2%80%9Cgolden%20lotus%20%E2%80%9D%20feet%20%E2%80%93,a%20better%20way%20of%20life>

- Jiménez Sánchez, M., & Lafuente, R. (2010). Defining and measuring environmental consciousness. *Revista Internacional De Sociología*, 68(3), 731–755.
<https://doi.org/10.3989/ris.2008.11.03>
- Kesebir, S., & Kesebir, P. (2017, September 20). *How modern life became disconnected from nature*. Greater Good Magazine.
https://greatergood.berkeley.edu/article/item/how_modern_life_became_disconnected_from_nature
- Koerth-Baker, M. (2008, June 5). *Shoes go way, way back*. NBCNews.com. Retrieved April 18, 2023, from <https://www.nbcnews.com/id/wbna24988625>
- Lertzman, R. (2004). Ecopsychological theory and critical intervention. *Organization & Environment*, 17(3), 396–401. <https://doi.org/10.1177/1086026604268009>
- Liebenberg, L. (2006). Persistence hunting by modern hunter-gatherers. *Current Anthropology*, 47(6), 1017–1026. <https://doi.org/10.1086/508695>
- Lieberman, D. E., Venkadesan, M., Werbel, 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*, 463(7280), 531–535.
<https://doi.org/10.1038/nature08723>
- Liu, R. W., Lapinski, M. K., Kerr, J. M., Zhao, J., Bum, T., & Lu, Z. (2021, December 6). *Culture and social norms: Development and application of a model for culturally contextualized communication measurement (MC3M)*. Frontiers. Retrieved April 18, 2023, from <https://www.frontiersin.org/articles/10.3389/fcomm.2021.770513/full>
- Louv, R. (2019, October 15). *What is nature-deficit disorder?* Richard Louv Blog. Retrieved May 2, 2023, from <https://richardlouv.com/blog/what-is-nature-deficit-disorder/>
- Lund University. (2022). *Human ecology*. The Department of Human Geography. Retrieved April 27, 2023, from <https://www.keg.lu.se/en/education/subjects/human-ecology>
- Malchik, A. (2020, February 14). *The neglected consequences of foot-binding*. The Atlantic. Retrieved April 14, 2023, from <https://www.theatlantic.com/health/archive/2020/02/lasting-damage-foot-binding/606439/>

Mayer, F. S., & Frantz, C. M. P. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of Environmental Psychology*, 24(4), 503–515. <https://doi.org/10.1016/j.jenvp.2004.10.001>

Mayer, F. S., Frantz, C. M. P., Bruehlman-Senecal, E., & Dolliver, K. (2008). Why is nature beneficial? *Environment and Behavior*, 41(5), 607–643. <https://doi.org/10.1177/0013916508319745>

McCue, M. (2014, May 6). *Vibram agrees to settle class action lawsuit*. Runner's World. Retrieved April 28, 2023, from <https://www.runnersworld.com/news/a20783252/vibram-settles-class-action-lawsuit/>

McDougall, C. (2019, March 18). *Born to run*. Christopher McDougall. Retrieved April 25, 2023, from <https://www.chrismcdougall.com/born-to-run/>

McDougall, C. (2019, March 18). *The barefoot running debate*. Christopher McDougall. Retrieved April 6, 2023, from <https://www.chrismcdougall.com/born-to-run/the-barefoot-running-debate/>

McGinn, D. (2012, May 20). *What the barefoot running craze has done to the shoe industry*. The Globe and Mail. Retrieved April 28, 2023, from <https://www.theglobeandmail.com/life/health-and-fitness/fitness/running/what-the-barefoot-running-craze-has-done-to-the-shoe-industry/article4186746/>

Mckivigan, M. S.-E. (2020, June 23). *'nature deficit disorder' is really a thing*. The New York Times. Retrieved May 2, 2023, from <https://www.nytimes.com/2020/06/23/parenting/nature-health-benefits-coronavirus-outdoors.html>

Metzner, R. (1993). The Split Between Spirit and Nature in European Consciousness. *The Trumpeter*, 10(1). Retrieved from <https://trumpeter.athabascau.ca/index.php/trumpet/article/view/407>

Moore, J. W. (2000). Environmental crises and the metabolic rift in world-historical perspective. *Organization & Environment*, 13(2), 123–157. <https://doi.org/10.1177/1086026600132001>

Murphy, S. (2014). *Minding the Earth, mending the world zen and the art of planetary crisis*. Terebess Center. Counterpoint. Retrieved May 2, 2023, from <https://terebess.hu/zen/mesterek/mend.pdf>

National Geographic. (2017). *Why You Won't Find Bodies On The Titanic. Titanic: 20 Years Later with James Cameron*. YouTube. Retrieved April 28, 2023, from https://www.youtube.com/watch?v=adfA6VklSyo&ab_channel=NationalGeographic

NHS Foundation. (2012). *Podiatry: Foot Facts - Bridgewater Community Healthcare NHS foundation*. Bridgewater Community Healthcare. Retrieved April 18, 2023, from <https://www.bridgewater.nhs.uk/wp-content/uploads/2012/11/Foot-Facts.pdf>

Nicholson, G. (1995). Foolsucker. *Grand Street*, (53), 181–190. <https://doi.org/10.2307/25007899>

Nocella, A. J., Sorenson, J., Socha, K., & Matsuoka, A. (2014). INTRODUCTION: The Emergence of Critical Animal Studies: The Rise of Intersectional Animal Liberation. *Counterpoints*, 448, xix–xxxvi. <http://www.jstor.org/stable/42982374>

Oschman, J. L. O. L., & Chevalier, G. (2015, April). *Statement on understanding earthing*. Earthing Institute. Retrieved April 18, 2023, from <https://earthinginstitute.net/statement-on-understanding-earthing/>

Oschman, J. L., & Chevalier, G. (2016). *Essential for Women Your Body, your earth: Grounding your rhythms*. Earthing Institute. Retrieved May 2, 2023, from <https://earthinginstitute.net/wp-content/uploads/2021/03/Oschman-Chevalier.-ESPECIALLY-FOR-WOMEN-2016.pdf>

Otranto, D., Dantas-Torres, F., Brianti, E., Traversa, D., Petrić, D., Genchi, C., & Capelli, G. (2013). Vector-borne helminths of dogs and humans in Europe. *Biomed Central*, 6(1). <https://doi.org/10.1186/1756-3305-6-16>

Oxford Learner's Dictionaries. (n.d.). *Clean*. clean_1 adjective - Definition, pictures, pronunciation and usage notes | Oxford Advanced Learner's Dictionary at OxfordLearnersDictionaries.com. Retrieved April 20, 2023, from https://www.oxfordlearnersdictionaries.com/definition/english/clean_1?q=clean

Pasca, L., Aragonés, J. I., & Coello, M. T. (2017, July 19). *An analysis of the connectedness to nature scale based on item response theory*. Frontiers. Retrieved April 14, 2023, from <https://www.frontiersin.org/articles/10.3389/fpsyg.2017.01330/full>

- Pew Research Center. (2022, April 26). *Global christianity - a report on the size and distribution of the world's Christian population*. Pew Research Center's Religion & Public Life Project. Retrieved May 2, 2023, from <https://www.pewresearch.org/religion/2011/12/19/global-christianity-exec/>
- PMC Foot and Ankle Clinic. (2021, July 13). *A closer look at the nerves in your feet*. PMC Foot and Ankle Clinic Blog. Retrieved April 18, 2023, from <https://www.pmcfootandankleclinic.com/blog/a-closer-look-at-the-nerves-in-your-feet>
- Pornhub. (2022, December 8). *The 2022 Pornhub Year in Review*. Pornhub Insights. Retrieved May 1, 2023, from <https://www.pornhub.com/insights/2022-year-in-review#categories>
- Ravishankar, R. A. (2021, August 16). *Why are we so emotional about money?* Ascend. Retrieved May 1, 2023, from <https://hbr.org/2021/08/why-are-we-so-emotional-about-money>
- Rewild University. (2023). *Rewild University*. What Is Human Rewilding? – ReWild University. Retrieved May 4, 2023, from <https://rewildu.com/what-is-rewilding/>
- Reysu. (2022). *100,000 Steps in Barefoot Shoes... Why I Had To Stop*. YouTube. Retrieved April 19, 2023, from <https://www.youtube.com/watch?v=9PbpTEeZcXc>
- Roberts, L. (2022). *You Will Want Barefoot Shoes After Watching This... My 5 Year Journey*. *Balancing Laura*. YouTube. Retrieved April 17, 2023, from https://www.youtube.com/watch?v=R-dtW31wyhY&list=PLOAzOxfdXb4moionE44chAXK82DtnU_oV&index=17&t=7s
- Rowland-Shea, J., Doshi, S., Edberg, S., & Fanger, R. (2020, July 21). *The nature gap*. Center for American Progress. <https://www.americanprogress.org/article/the-nature-gap/>
- Samaritan's Feet. (2023, February 14). *Reasons Why You Should Donate Shoes*. Samaritan's Feet International. Retrieved April 20, 2023, from <https://samaritansfeet.org/our-work/why-shoes/>
- Sands, K. (2020, April 25). *Living barefoot is one small step to help end shoe pollution*. Born to Live Barefoot. Retrieved April 28, 2023, from

<https://borntolivebarefoot.org/living-barefoot-is-one-small-step-to-help-end-shoe-pollution/>

Schultz, W. (2002). Inclusion with Nature: The Psychology of Human-Nature Relations. In *Psychology of Sustainable Development* (pp. 61–78). essay, Kluwer Academic

Sterckx, A., Van den Broeck, K., Remmen, R., & Keune, H. (2023). Self-care and nature in the private and professional practice of healthcare professionals in Belgium. *Research Directions: One Health, 1*. <https://doi.org/10.1017/one.2023.5>

The Foot and Ankle Clinic. (2022, June 30). *What are the different types of feet and foot shapes*. The Foot and Ankle Clinic. Retrieved May 1, 2023, from <https://thefootandankle.clinic/blog/what-are-the-different-types-of-feet-and-foot-shapes/#:~:text=The%20length%2C%20shape%20and%20alignment,are%20Egyptian%2C%20Roman%20and%20Peasant>

The Victoria and Albert Museum Exhibition. (2015). *A History of Shoes*. Shoes: Pleasure and Pain. Retrieved April 17, 2023, from <https://www.vam.ac.uk/shoestimeline/>

Thich Nhat Hanh. (1993). *Poems*. Plum Village. Retrieved April 27, 2023, from <https://plumvillage.org/poems/>

Thich Nhat Hanh. (2019, December 20). *Touching the Earth to mother earth*. Plum Village. <https://plumvillage.org/articles-fr/touching-the-earth-to-mother-earth/>

THNKR. (2012). *Born To Run Debate: Author vs. Podiatrist*. YouTube. Retrieved April 19, 2023, from https://www.youtube.com/watch?v=2JWUHW5yRdl&list=PLOAzOxfDXb4moionE44chAXK82DtnU_oV&index=28

Tiffany. (2023). *Barefoot Sunday*. palmerchinchinchen. <https://www.palmerchinchinchen.com/barefootsunday>

Toombs, D. M. (2021, March 12). *Ecological consciousness and awareness*. Dunami. Retrieved April 17, 2023, from <https://www.dunami-somatics.com/post/ecological-consciousness-and-awareness>

Vital. (2023). *Barefoot Parks*. Footfiles. <https://www.footfiles.com/subject/barefoot-parks>

Wakatsuki, Y., & Westcott, B. (2019, June 6). *Japanese minister: High heels for women at work are 'occupationally necessary and appropriate'*. CNN. Retrieved April 14, 2023, from <https://edition.cnn.com/style/article/japan-minister-high-heels-intl/index.html#:~:text=For%20many%20years%20it%20has,petition%20to%20ban%20the%20requirement>

Watts, C. (2021, November 18). *The benefits of barefoot running*. Charlotte Watts Health. Retrieved April 20, 2023, from <https://www.charlottewattshealth.com/blog/the-benefits-of-barefoot-running#:~:text=Running%20without%20shoes%20or%20in,shift%20across%20many%20exercise%20systems>

Yang, R. L. A. (2023). *How Does it Feel to be Connected with Nature?* (thesis)

THANK YOU — BE BAREFOOT ☺