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**From Building to Dwelling:
Unfolding Infinity through Bioregional Fulfillment**

Sanjana Gauri Bhatnagar

SENIOR THESIS SUBMITTED TO
PROFESSOR JORDAN DANIELS AND PROFESSOR LANCE NECKAR
IN PARTIAL FULFILLMENT OF A BACHELOR OF ART'S DEGREE IN
PHILOSOPHY
AND
ENVIRONMENTAL ANALYSIS

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ABSTRACT

The causes of anthropogenic climate change touch every feature of our modern-day existences. Approaches to sustainability tend to focus on material actions, but unsustainable practices are guided by an ontological orientation of individuality and human exceptionalism. This thesis provides an alternate account of being that decenters individuality through weaving the metaphysics of Fazang of the Huayan School of Mahayana Buddhism with the metaphysics of Martin Heidegger. To encompass the whole of the relational network that constitutes and conditionally defines our existence, I expand Heidegger's account of locales as relational sites which are put forth solely by humans to an account of locales that are multi-species commons gathered by the human and non-human alike. To move beyond building locales that are dominated by human individualism and exceptionalism, I posit dwelling within a relation to death that rejects the finite boundaries of the self to embrace the shared space of impermanence, expanding outwards to an ecological continuity understood through Val Plumwood's ethics around the food web. Ultimately, the causal network of a bioregion is established as the locale, a place of dwelling that makes our relational ontology apparent by grounding our dwelling in ecological continuity. Building, by the account of this thesis, must work towards unfolding the infinite networks of relations that facilitate a bioregion's capacity to be a sustainable site of continuity through impermanence.

Keywords: *infinity, building, multi-species, relationality, death*

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Table of Contents

Introduction.....	1
Part I: In Infinity, To Be.....	8
How Strange It Is to Be Anything at All.....	8
Parts and Wholes.....	9
Interpenetration.....	12
The Net of Indra.....	14
Part II: To Be, Through Place.....	22
The Nothing as Emptiness.....	23
Spatial Relationality.....	29
Gathering Relational Ontology into a Locale.....	34
Part III: Through Place, In Infinity.....	42
Embracing Impermanence.....	44
Ecological Relationality.....	48
The Bioregion as Locale.....	53
Concluding Futurism, The End is The Beginning.....	67
Works Cited.....	72

The lion roars at the enraging desert,
Reddens the sand with his red-colored noise,
Defies red emptiness to evolve his match,

Master by foot and jaws and by the mane,
Most supple challenger. The elephant
Breaches the darkness of Ceylon with blares,

The glitter-goes on surfaces of tanks,
Shattering velvetest far-away. The bear,
The ponderous cinnamon, snarls in his mountain

At summer thunder and sleeps through winter snow.
But you, ephebe, look from your attic window,
Your mansard with a rented piano. You lie

In silence upon your bed. You clutch the corner
Of the pillow in your hand. You writhe and press
A bitter utterance from your writhing, dumb,

Yet voluble of dumb violence. You look
Across the roofs as sigil and as ward
And in your centre mark them and are cowed . . .

These are the heroic children whom time breeds
Against the first idea—to lash the lion,
Caparison elephants, teach bears to juggle.

- Part V of "It Must Be Abstract" in *Notes Toward a Supreme Fiction*
By Wallace Stevens (Stevens 1957)

Introduction

Most of us dwell in boxes. We find ourselves limited, our existence confined to the space between four walls. Descended from primates who inhabited leafy canopies bending toward the skies, I sit here within bleached white, the hair on my arms static under fluorescent light. The incessant hum of electricity beats against my temples as the radiator echoes like mechanized crickets. Outside, the muffled roaring of the highway runs as consistent as a river. To go outside for air is to know that I grew up with many forms of air. I am not home here, I never was.

Anxiety is my distance from the world. Enclosed in the security of the four walls of my beloved childhood bedroom during the COVID-19 pandemic, I realized that nothing could be more dangerous than those very walls. In my teens, I had the tendency to hide in my room when anxiety overtook me.

It took only two months of enforced isolation back in my childhood room to realize that it was the room itself which produced the anxiety: the world is an odd and unfamiliar place when you hide from it.

Coming to college in Southern California, I was overtaken by a mad love for the San Gabriel Mountain range that holds my college town, for the coyotes who cackle away late at night and the cacti that stand bold and resilient in the endless days of sun. Surrounded by the unconquerable forces of the Southern California ecosystem—the droughts, the wildfires, the Santa Ana winds, the arid sun—I formed a newfound awareness of how my environment shaped every feature of my daily life. Whenever I returned to my Northeastern town, the artifice of suburbia broke down more and more. Monoculture grass lawns and lonely trees are deprived of the subterranean interconnection enjoyed by the forests. This system of infrastructure is a sad replacement for the community formed within a healthy ecosystem. It is not just other species that are lonely, as humans too are isolated in their single-family homes. I eventually came to understand that the walls of my bedroom were just one of many infrastructures that worked to limit my conception of the world.

This is not to say that the ecosystems in Los Angeles County are “healthy” by any means, in fact, far from it. The suburban sprawl here is unlike any other in the world and ever-expanding industries swallow the streets. Yet, there’s a certain ecstasy that comes from zipping down the infinitely long roads that pass through the arid valleys. The moment one hits traffic, however, that beyond human feeling of speed turns into a suffocating claustrophobia. The sterile concrete buildings, repeating endlessly, trigger dissociation. When going fast, the buildings blur and the magnitude of the mountains holds me securely, but when going slow, I can’t ignore the immediacy of the built environment. It is only in those moments where the built environment dissipates into the mountains or meets an edge with a patch of sage scrub, that I find myself at home in the world again.

Built spaces encompass many moments of our day to day lives, from the rooms we wake up within to the roads we travel. There is clearly some connection between our sense of being and the spaces we inhabit. Yet, one is led to wonder, just how many of these spaces were built with a consideration of the intimate relationship between *being* and what is built? Do the spaces we occupy really reflect us? Does what we build and grow really reflect the ecosystems we are in?

We live in the geological period of the Anthropocene, an era defined by human domination of the Earth. Although this term is controversial—obfuscating the culpability of this dominion away from the various forces of capitalism, racism and settler-colonialism which have propelled it—the scale that it presents offers a genuine image of how this Earth has come to be defined by human intervention. The way in which certain groups of humans have been modifying the planet has proven to be destructive, not just for non-human others on this planet, but for humanity as well. Yet, our lives are framed and mobilized by the anthropocentric systems which we know to be unsustainable. This very manner that industrialized societies have shaped what it means *to be* in the world is meeting a collapse. As such, the climate crisis is forcing a reckoning with ourselves and the structures of those human societies that are unsustainable: how did we get here?

Sustainability offers us the ontological question of how to *be* within our ecosystems, as an interrelated part of them, not as a malevolent disruptor: it offers us the urgent question of where do we go from here? Our mortal condition is amplified in the everyday threats of climate, and this urgency presents the generative potential to transform how we live our lives. The project of sustainability cannot just be a band-aid solution to unsustainable material practices, rather for sustainability to be achieved in a true sense, it must ensure that we shift our very way of being such that it is intertwined with the being of all other members of our ecosystems. The built environment must co-emerge with a consideration of the role of humans in the places that they dwell. By disconnecting building from the question of what it means for humans to be in the world, we are severing the fundamental relation

of our being to its extension in space. Therefore, to think about building is necessarily to think about being itself. How *to be* in the world is hardly a new question, but the 21st century will be defined by the conditions of anthropogenic climate change that present a new imperative for reinventing our dwelling on this Earth. An imperative to live by relating with and nurturing all others on the Earth, rather than isolating and dominating.

Not only is it projected that hundreds of millions of humans and non-humans will die, that food insecurity, water scarcity, disease, war, and natural disasters will pervade, but it is also clear that the places we have always known will look and feel drastically different in the years to come. As such, people around the world are looking to meet this crisis by formulating a more “sustainable” rendition of the structures that we have now. Modern transportation, energy infrastructure, water systems, agricultural methods, buildings: all of it must change. However, approaches to sustainability tend to focus only on material actions like these, while ignoring the unsustainable set of ideas that permeate the relationship between human culture and the earth. The project of this thesis is to transform dominant notions of human existence to rediscover the ecological relations that constitute our being. Since the built environment shapes the way we situate our existence within place and time, the framing I develop about existence will lay the groundwork for being through building.

Building sustainably is therefore not just a material concern, but it is a matter of connecting people to the substance of what it means to dwell on this planet, what it means to relate to our ecosystems. This thesis will consist of three parts that establish a framework for thinking about building to recognize, reflect, and foster the interrelatedness of our own being with the wholes of our ecosystems. To reshape what it means *to be* amidst the climate crisis, I find it necessary to begin with the most basic metaphysical question of what it means “to be” in the first place. Part I approaches being from the most fundamental framing of understanding the whole of existence through the concept of infinity presented by Fazang of the Huayan school of Mahayana Buddhism. By this

account, everything that exists is ultimately empty, not defined by an intrinsic nature, but rather as a part of an infinitely transitive network of relations represented by the analogy of the Net of Indra.

Part II presents the connections between Martin Heidegger's perspective on the nothing and the Mahayana Buddhist perspective on emptiness, which both give substance to an ontological structure of relationality. I prescribe Heidegger's approach to building, which he defines as both constructing and cultivating, as an active way for the human subject to move beyond the appearances of an intrinsic nature and to actively gather and unfold a relational dwelling in the world by way of the cultivating and constructing of "locales." A locale is irreducible to a scientific or mathematical description of space; the term rather points to the relational nature in which we take up both our worldly lives and our thinking about such worldly lives. The goal of Part II, however, is to complicate Heidegger's methodology by proving that the metaphysical underpinning of the Net of Indra provides a more systematic reach, as the image of the universe where all subjects are a root to their own network of relations demonstrates the latent potential of all subjects, not just the human subject, to gather and unfold a distinct relationality.

Given the goal of reframing the anthropocentric perspectives on being that propel anthropogenic climate change, Part III takes an additive approach to the metaphysical accounts presented in Part I and Part II in order to rethink how building can be framed through biocentric norms, which center the value of all beings, not just humans. To rethink building while decentering humans, I adapt Heidegger's notion of holding oneself out to the nothing through relating to one's death to consider how one can relate to death, not as an individual, but in a manner that conceives of death as a shared process of ecological relationality. To do so, I first look at the Buddhist notion of rejecting the self and embracing impermanence to think about how impermanence is the shared feature of all beings' deaths. Then, I employ Val Plumwood's departure from a dualism between humans and nature by way of conceiving of death through the ecological relationality of the food web.

I frame the concept of the food web through the shared space of impermanence, expanding the bounds of individual, human existence to the shared space of impermanence we are implicated within by way of the cyclicity of the food web.

Finally, I reconceive Heidegger's idea of the locale as the more relational locale of a bioregion, a region defined by a distinct causal network of ecological relations, arguing that the bioregion offers a deeper relational account of a locale that is premised on the agency of all beings. A globalized conception of place separates relations of cause and effect, but a bioregional understanding of place makes relationality apparent. To think about a bioregion through death is to conceive of our impermanence as part of a bioregion's cycles, situating our being not in the self, but in the infinite, transitive relations that we subsist from and nurture the subsistence of. To think about building in a manner that is bioregional, therefore, is to move towards a more complete system of cause and effect, such that the locale of the bioregion is unfolding toward a seamless cycle of relational movement. In this thesis, sustainability is defined as the act of nurturing a bioregion to become self-sufficient and complete, such that the whole Earth, as a system of complete bioregions, would become sustainable. Infinity, I argue, can thus be approached through the locale of a bioregion, by unfolding the self-sustaining depths of everything's position within the specific network of relations of a bioregion that span infinitely to intertwine all.

The umbrella signifiers "us" and "we" have already been used a few times thus far, so in advance of laying out the substance of this thesis before the reader, I want to acknowledge that while my attempt is to paint a picture which I hope is applicable, I also surrender to the admission that this is a deeply personal project. Despite grappling for all the years that I can remember with many names and images for God, the self, and the world, it is ultimately through nature itself that I have felt closest to grasping the ineffable confluence of these ideas within the infinite. The inconstant constancy of the sun seeping in glimmers underneath my skin, the wind—gentle or violent—tucking my hair behind

my face, the sky eternally holding the negative space carved out behind the branches of brush and tree: these are the experiences I hold to my name.

Part I: In Infinity, To Be

How Strange It Is to Be Anything at All¹

Metaphysics is the branch of philosophy concerned with describing the abstract, underlying structures of existence. Since the structures that govern existence are unobservable, there is a sense that the key to understanding such structures is approaching the ever unobservable, infinite. Indeed, for every possible account of existence, the boundless is somehow implicated. For example, take the very existence of yourself as a causal phenomenon: you were created by your parents, and they were created by their parents. However, in attempting to trace back the root cause of all these existences, one would be thrown back *ad infinitum*. Metaphysical conceptions that situate God as the first and necessary cause put forth that God must be greater than that which is finite, that God must be infinite. The idea of the Big Bang that was previously speculated to show the universe as emerging from an initial singularity, akin to a first cause, has become muddled in modern physics, because the exponential inflation of the universe implies an initial $t=0$ that is moved outward from, but scientists can only ever describe the conditions of the first moments of the universe down to an infinitesimally small unit that approaches, but never touches, zero. This is to say that any claims about the first moment of our current universe can only be made through inference but could never be validated because the parameters required for scientific observation fall apart at $t=0$. The dependent origination of something as simple as you or me can never simply be traced back to a finite, first point. Furthermore, there are a multitude of events and ideas, resulting from cause and effect, that define our distinct existences over and above the birth of our finite, material bodies. The very axes of space and time that compose our existence are phenomena that have the potential to be rendered as divisible to infinite parts. No matter what angle you come at it from, existence cannot solely be understood through the

¹ Subtitle heading is borrowed from a lyric in the 1998 song “In the Aeroplane Over the Sea” by Neutral Milk Hotel.

finite. Rather, one needs some account of the boundless to explain the whole torrid affair of existence. While this infinity can never be understood fully by the human mind, it can be approached. The question this leaves us with is: what clues about existence can we garner from attempting to approach a conception of our relationship to infinity?

The account of infinity that will be the central focus of this chapter is the one put forth by philosophers of the Mahayana Buddhist tradition. This account will reveal that everything is ultimately empty, understood only in an infinitely recursive and repeating transitive relation to all other features of phenomenal existence. While this chapter will set up the framing of the paper, it is important to note that the metaphysical emptiness posited in this framing will be developed in the following chapters into a generative account of how *to be* in the world. Therefore, in surrendering to this emptiness, a nihilistic worldview will also be shunned, in favor of examining the creative potential offered in the space of emptiness. Indeed, Buddhist philosophy is always coupled with an ethical valence which not only paints a metaphysical picture, but also provides a way to engage with very material experiences on the day to day.

Parts and Wholes

Infinity disrupts the certainty of our attempts to describe existence, as it challenges our capacity to cleanly define things. Take sets of numbers, for example. There is the same magnitude of even numbers (2,4,6,8...) as there are natural numbers (1,2,3,4...), and the same magnitude of odd numbers (1,3,5,7...) as there are natural numbers, even though both the even and the odd numbers are entirely contained by the natural numbers. Though many might believe that the set of natural numbers must be larger than its even and odd subsets, all three sets move into an equivalently sized infinity and are thus the same size or cardinality. The infinity described by increasing sets of numbers is not the type of infinity that will be described within this paper, as it is somewhat crude when thought about outside

of mathematics. However, the example helps demonstrate the difficulty of thinking about the infinite, as its scope eludes our intuition.

Given the difficulties of describing infinity, it might be helpful to begin with the finite. Consider piling papers and counting them. With each count, 1, 2, 3, 4, we can determine that this is not infinity. However, through this example, one can realize that even the question of what finitude *is* seems far too vague. How are we designating the paper that we are counting? Each piece of paper, conceived as such, is finite. However, the parts that compose each paper can also be taken to be representative of infinity. Spatially, one could see this by ripping each paper into potentially infinite constituent parts. Temporally, even if you burned each paper, everything that resulted would potentially exist infinitely, as we know from the first law of thermodynamics—energy is never created nor destroyed—that which composed the paper would remain temporally somehow or another.

This question of designation hinted at above is one that is examined by Early Buddhist philosophers, who determined that wholes are not real, but the parts which make up a whole are. That which is finite can be broken down recursively into infinite parts, as well as viewed as a component of an infinite whole. The notion of designation is examined in *Milinda Pañha* or, in English, *The Questions of King Milinda*, a text from the first century CE that is a representation of a conversation believed to have taken place in the second century BCE between an Indian Buddhist monk named Nāgasena and Milinda, the ruler of Bactria at the time. While this work is of an earlier Buddhist tradition than the one that will be focused on in this thesis, it serves as a good starting point for our discussion of the designation of parts and wholes in Buddhist philosophy.

At the start of their conversation, Milinda asks Nāgasena his name, to which Nāgasena responds with his name and a caveat that “this, Sire,—Nāgasena and so on—is only a generally understood term, a designation in common use. For there is no permanent individuality (no soul) involved in the matter” (Rhys Davids 1890, 40). The beginning of this conversation leads to Milinda’s

confoundment and a persistent probing as to what Nāgasena *is*, for Milinda wonders, if there is no permanent individuality to the person in front of him, then what is it that experiences the life of Nāgasena? Upon this line of questioning, Nāgasena explains the Buddhist argument about the non-self (which will be explored in Chapter Three). For now, what is important, is a specific example that Nāgasena employs to make his claim about the word “Nāgasena” meaning something while also being empty: the example of a chariot. Nāgasena asks how Milinda arrived at the location at which they are speaking, to which Milinda responds that he came by chariot. Nāgasena then asks Milinda to explain what that chariot is, listing each part of the chariot—the pole, the axle, the wheels, the framework, the ropes, the yoke, the spokes of the wheels, and the goad—and asking whether those are the chariot (Rhys Davids 1890, 43). When Milinda answers that these parts on their own are not the chariot, Nāgasena then asks whether there is anything outside of the parts that is the chariot, to which Milinda can only answer “no” (Rhys Davids 1890, 44). While the chariot does not exist solely in the individual parts of the chariot or anything over and above the parts of the chariot, it still is a functional object which brought Milinda to Nāgasena. That means that the object designated by “chariot” is not non-existent, and the word is not a meaningless series of empty sounds. Rather, the “chariot” one exists to describe a relationship amongst parts. By this understanding, wholes do not exist over and above the parts which comprise them but have a form that is defined solely through its relationships.

Upon further scrutiny, even the parts that compose a whole are merely designators. For example, the axle of the chariot could be divisible into many more parts, which in turn can be divided even further, such as into disks and a cylinder which could be divided into metal alloys and so on. For each part that exists, we also provide a designator that describes a relationship between the parts that comprise the smaller part. While earlier Buddhist philosophers argued that wholes are designators, but parts are real, later Buddhist philosophers would complicate this idea by providing an explanation for why parts are also not real. Graham Priest summarizes this notion that is integral to the metaphysics

of Mahayana Buddhism in his work *The Moon Points Back*, explaining that being empty, or *śūnya*, is to not have *svabhāva* which he translates to “self-being” or “intrinsic nature” (Priest 2015, 116). He further explains this by stating that a *svabhāvic* entity is like “a metaphysical atom” in that their nature is “independent of all other things,” which stands in contrast to an entity that is empty and possesses a nature “only in virtue of its relationship to other things” (Priest 2015, 116). When one thinks about the designation of any part, this emptiness becomes apparent. It is only by virtue of a relationship that a part is identified as anything at all.

Interpenetration

Fazang (643-712), a Buddhist scholar honored as the third patriarch of the Huayan school, a Mahayana Buddhist school of thought, elucidates the role of relationality in the Mahayana metaphysical account, one in which the emptiness of everything reveals a relationship of dependent co-origination. This mutual conditionality amongst everything that exists is called interpenetration. To situate “being empty” between being in-itself and not being anything at all, Fazang describes the Huayan teaching of the six characteristics of interpenetration in his work *The Rafter Dialogue*. He begins by rejecting both the account of annihilationism, the belief that nothing exists, and the account of eternalism, the belief that everything exists independently. He starts by describing the complex dynamic between a part of a whole, the rafter (a structural component of a roof), and the whole, a building. He first claims that the rafter is the building. Without the rafter there could be no building. If there were none of the other parts that make up a building, such as the tiles, then the rafter would not be a rafter because the rafter only acts as a cause of making up a building. The rafter therefore is the building. Fazang argues that annihilationism, the belief that nothing exists, is mistaken in perceiving the parts of wholes as merely contributing to the overall power of the whole, instead of acting as a

condition for the building. On this view, the rafter is simply a part that adds to the whole of the building, so the existence of everything is just defined by many parts (Fazang 2014b, 82).

On the other hand, Fazang argues that eternalism, the belief that everything exists independently, is mistaken in asserting that all wholes exist without conditionality. If the building exists without condition, then a building would remain even if the rafter were removed. However, once the rafter is removed, there is a wrecked building with no roofing, so the building no longer exists, and it becomes evident that each part wholly forms the building, not partially (Fazang 2014b, 82). It is clear, given the previous analysis of emptiness, that if the rafter is considered a condition for the building, then the building and the rafter are both existent due to the relationship that allows them to define each other. Just as the word “chariot” means something due to the relationship amongst its parts that it describes, so too does the axle mean something due to the relationship it has with the other parts that make the chariot, as well as the axle’s own constituent parts that make it an axle. By this view, everything interpenetrates, as both part and whole, providing meaning in the space of emptiness, through relationality. There is an exhaustiveness to this claim in that it clarifies the dependent origination of everything that exists. Nothing comes into the world through itself, but rather it is brought about through a set of relations. Once something is caused, it continues to be defined by relations. Under the view where everything that exists is defined by interpenetration, there is a continuity in cause and effect, where relationality pervades as the enduring thread that weaves things together. Cause would not be without effect, and effect would not be without cause. Therefore, neither the part nor the whole cause the other, but rather they both act as conditions for the other’s existence.

It is important to note that the interpenetration of parts and wholes does not mean that there are no distinctions amongst parts and wholes. The characteristic of particularity is that if the parts were not different from the whole, then the whole could not exist. Fazang articulates this, stating, “Fundamentally, the whole is composed of parts. If there were no parts the whole could not be

formed. Thus, they are different. So it is the whole that makes them parts” (Fazang 2014b, 83). Indeed, the rafter does not exist without the building, but without the rafter, there would also not be a building. Despite the identity relationship between the building and the rafter, the rafter still holds a particular quality that renders it a rafter, providing it with the conditional quality that makes the building. Moreover, Fazang delineates the quality of difference that exists amongst parts that are not the rafter but are also conditions for the building, which is that they all have unique characteristics that make them conditions for the building. This difference means that even though each part is interconnected with each other part, as well as the whole, they individually contribute a distinct condition for interpenetration. Since all of the parts are conditions for a whole, and the whole is a condition for the existence for the parts, Fazang clarifies that despite the distinctiveness of the parts, they must become integrated for their existence. The rafter is a rafter by the nature of its role integrated within a building. Yet, due to disintegration, each part is distinctly itself even in its integration with the whole. The rafter is distinctly a rafter with a quality of “rafterness,” because if it lost its distinct nature through integration with the whole of the building, then the building would not exist; the unique characteristic of the rafter allows the building to exist, and vice versa.

The Net of Indra

To understand how all parts and wholes interpenetrate, not just the parts of particularly designated wholes, we must return to the concept of infinity. Graham Priest demonstrates the rigor of the relational account in *The Rafter Dialogues* by connecting it with another work by Fazang, *Essay on the Golden Lion*. In *Essay on the Golden Lion*, Fazang provides a systematic way to think about the relationality of parts and wholes through the analogy of the Net of Indra, a metaphor that is employed in the *Avatamsaka Sūtra*, or the Flower Garland Sutra. In the Hindu vedas, Indra is described as the king of the *devas*, and he was said to own a net that is boundless. Francis H. Cook offers a description

of the Net of Indra as described in the Flower Garland Sutra that paints a powerful image of this metaphor:

Far away in the heavenly abode of the great god Indra, there is a wonderful net that has been hung by some cunning artificer in such a manner that it stretches out infinitely in all directions. In accordance with the extravagant tastes of deities, the artificer has hung a single glittering jewel in each 'eye' of the net, and since the net itself is infinite in all dimensions, the jewels are infinite in number. There hang the jewels, glittering like stars of the first magnitude, a wonderful sight to behold. If we now arbitrarily select one of these jewels for inspection and look closely at it, we will discover that in its polished surface there are reflected all the other jewels in the net, infinite in number. Not only that, but each of the jewels reflected in this one jewel is also reflecting all the other jewels, so that there is an infinite reflecting process occurring. (Cook 1977, 2)

This net is a symbol for the interconnection of everything that is, while the jewels are representative of each phenomenal reality that exists. To delineate Fazang's argument, I will draw on Priest's reading of *Essay on the Golden Lion* which helpfully describes Fazang's Net of Indra analogy through a mathematical description of relationality.

Priest begins with examining the identity relationship posited by the model of interpenetration between parts and wholes. By the analogy of the rafter, he rejects an identity relation of the substitution of that which is identical. This means that with r as the rafter, p as the plank, and b as the building, a substitution of identicals would create a system where $r = b$ and $p = b$, resulting in $r = p$. From the previous analysis, it is evident that the rafter cannot be identical to the plank, because they each have a distinctiveness in their conditional relationship to the building, as well as their relationship to the other parts. Therefore, Priest determines that the relationship of the part and the whole is not substitution of identicals, but rather a transitive relation. In order to draw an image of what this transitive relation looks like, he turns to the concept of emptiness of being that was discussed earlier in this chapter. Priest recaps the notion that to be empty is to have no intrinsic nature, so the existence and identity of that which is empty is "determined by its locus (location) in a certain network of relations" (Priest 2015, 117). In order to better illustrate the emptiness of everything, Priest provides a few examples that explore relational identity. He starts with time, working from Leibniz's conception

of time as relational. Priest argues that any given point in time is “simply a locus in a set of temporal relations between events,” such as the year 1066, which he situates as “before Britain’s colonization of Australia, after Caesar’s invasion of Britain, contemporary with the Norman invasion of Britain, and so on” (Priest 2015, 117). Of course, one could situate 1066 in a multitude of ways, but the fact of the matter is that our conception of time is only what it is because each time stands in relation to the events of that time or the time’s relation to other moments in time. Priest then goes onto his own being, situating himself in the place and time of his birth, as the child of his parents, of the places he has resided in, as the father of his children, as the eventual time and place at which he will die, and so on. Indeed, individual people do not cause themselves or define themselves, but are constituted by the network of relations that they interact with. Priest utilizes this emptiness of being to delineate a transitive relation by drawing a structure that demonstrates the causal relationship between objects that interpenetrate. Since everything is empty, that is relational, all objects of existence are “nothing more than loci in a field of relations” (Priest 2015, 118). Each object of existence is the locus of a tree of relations that it causes, and each object that is related to the initial root is also the root of its own tree of relations. Thus, the tree from one locus, spans out infinitely to other objects to which it relates and renders a network that Priest argues is the “ontological structure” of the object. That which is empty is not nothing, but rather defined in abundance by a network of relations.

The rafter *is* the building in that they mutually encode each other. To understand how it is possible for things to be distinct yet contained within each other, Priest elaborates on the various diagrams for objects of existence. He provides the example of the north pole and the south pole of a magnet. Since the north pole would not exist without the south pole, the network of relations that the north pole branches out to includes the south pole. Yet, since the tree of the south pole’s relations would also include the tree of the north pole, the tree of the south pole would return to the root of the north pole and repeat in an infinite recursion to mutually encode each other. Priest states that

since the ontological structure of each pole includes the other, “the relation of two trees each being a subtree of the other is obviously a symmetric and transitive relation” (Priest 2015, 120). Interpenetration is best understood as this transitive relation that Priest draws. It is also through this example that we can understand the specific type of infinity that is described by the Net of Indra. The infinite expanses of the Net are not an infinite, numerical dimension of space or time, but rather an infinitely repeating network of relations. Since every object of experience contains its own specific set of relations, but also branches out to contain every other set of relations, each root repeats on an infinitely recursive loop. The network of relations that is rooted in the south pole of the magnet branches out to include the network of relations that is rooted in the north pole of the magnet which branches out to include the network of relations that is rooted in the north pole of the magnet, and so on, *ad infinitum*.

Given the interpenetration of objects of existence, there is still the question of how the Net of Indra is formed, of how every object of existence relates to each other object of existence. Priest summarizes the two forms of reality that are delineated in Mahayana Buddhism, that of conventional reality and ultimate reality. Conventional reality is made up of these objects of experience that we have been discussing, phenomenological features such as you, me, and the chair I’m sitting on right now. These are the things that are empty, defined only by relation. Ultimate reality, on the other hand, is “the reality that appears once one strips away the reification of conventional thought: emptiness itself” (Priest 2015, 120). Ultimate reality is the principle of emptiness, it is the boundless, oneness that encompasses the whole of things. Priest clarifies that ultimate reality also has the characteristic of being empty, in that it is defined by its relation to the objects of conventional reality. To understand what ultimate reality is, I like to think about emptiness itself as a locus in the Net of Indra, which branches out to every other object of experience. In this way, conventional reality and ultimate reality, like parts and wholes, interpenetrate each other, as Priest explains “each phenomenal object could not

be what it is if it were not a manifestation of this ultimate reality. But conversely, ultimate reality could not exist if it did not manifest itself through these phenomena” (Priest 2015, 120). Just as the tree of relations of the north and the south pole of a magnet contain each other, the tree of each object of experience contains the tree of emptiness that branches from the root of ultimate reality. In the Huayan school of Mahayana Buddhism, ultimate reality is signified by *li* which Priest translates to “principle” and conventional/phenomenal reality is signified by *shi* which Priest translates to event or fact. Emptiness itself is made manifest by how each event or fact of experience is an expression of that principle. Priest describes the conditional relationship of *li* and *shi* interpenetrating as *lishi wuai*. It is within the concept of *lishi wuai* that the role of infinity appears again.

Priest aids his analysis with *Meditation on the Dharmadātu*, by Dushun (557-640), the first patriarch of Huayan, who articulates the interpenetration of *li* and *shi* to demonstrate how all things come together as an interconnected whole. As ultimate reality, *li*, extends to everything, it is boundless, or infinite. I understand the distinction between *li* and *shi* is by considering the relational networks that are rooted from emptiness itself to be recursive to a greater degree of infinity than every other relational tree rooter in phenomenal objects of experience. If the relational tree that is rooted in emptiness itself is the mode by which every object of experience can relate to each other object of experience, then the relational tree of emptiness mediates every other network of relations in the Net of Indra, rendering it recursively infinite to a greater degree of infinity than the recursive relational trees of every other object of experience. Georg Cantor’s diagonal argument shows how there can be greater degrees of infinity, demonstrating that while the set of natural numbers (integers, such as -1,0,1) has an infinite magnitude, you cannot line them up in a one-to-one relationship with real numbers (any possible number on a continuum, such as 1.000010010101...., the square root of two or pi) such that every real number can be enumerated by a given set of natural numbers through some function. Every natural number can be described as a part of a series, but in the spaces between every

natural number, there is an uncountable amount of real numbers which represents a larger degree of infinity. *Li* could be thought of like real numbers, in that emptiness itself is uncountable, as it permeates the space of every single point in a recursive series of any object of experience. The indivisibility of emptiness is how infinity co-emerges with that which is empty, as the relational network of emptiness exists at every point in every other network of relations rooted in phenomenal objects of experience. Since emptiness itself is part of the relational tree of all that is finite, everything that ultimate reality touches “absorbs and embraces the infinite truth of *li* in a perfect and complete manner” (Priest 2015, 121; Dushun). While *shi*, phenomenal reality, has boundaries, or is finite, since there is a transitive relationship between phenomenal reality and ultimate reality, and phenomenal reality is only defined by its relations, *shi* is the same as *li*. Thus, phenomenal objects are in fact also infinite, as they interpenetrate with the infinite nature of ultimate reality, spreading out the relational network of emptiness itself, which is the principle that roots the relations of the whole of existence, through each specific relation to every other object of experience. *Lishi wuai* thus reveals how each object of experience comes into the whole of existence, through an interaction with the oneness of emptiness that threads together the relational network of the Net of Indra.

Since each object of experiences is conditionally defined by the whole of emptiness, each particular object of experience also interpenetrates with every other object. Dushun states, “therefore, without causing the slightest damage to itself, an atom can embrace the whole universe” (Priest 2015, 121–22; Dushun). For this reason, in the Huayan metaphysical worldview, *shi* also interpenetrates with *shi* as *shishi wuai*. If each object of experience interpenetrates with the network of relations of ultimate reality, emptiness itself, which contains a relation to every other object of experience, then each infinite chain of relations that belongs to an object of experience is also included in the network of relations of each other object of experience. Thus, the whole of each object interpenetrates with the part of each object, rendering the rafter and the building mutually contained within each other. The Net of

Indra emerges from the network of relations resulting from the root of emptiness, that contains each object of experience in its relations, who in turn contain the whole of emptiness in each of their relational trees. The whole of the Net of Indra interpenetrates each object within it, weaving an infinite tapestry of interconnectedness out of emptiness.

The interpenetration of ultimate reality and conventional objects of experience articulated by Fazang provides a systematic metaphysics that describes the nature of cause and effect, individuality and relationality, phenomenal being and ultimate truth, and emptiness and infinity. The Net of Indra brings disparate, sometimes contradictory elements together and unfolds a full image of what it means to be anything at all. *To be* is to exist within an infinitely expansive system of relations, and therefore, *to be* is to take the relationality of the whole universe unto everything that is. Although Buddhism rejects the notion of any gods, there is a sort of spiritual beauty to the idea that infinity mutually encodes everything that is finite, showing that everything perceived as finite also contains the entirety of the universe and every infinite possible relation that could exist within that.

The rafter is the building. Every part is the whole. The Net of Indra makes it apparent that no matter how one designates a whole or a part, every phenomenal object of experience is always conditionally defined by way of a transitive relation with every other phenomenal object of experience. With a distinct set of conditions for interpenetration, each phenomenal object is what it is by virtue of its relation to every part and every whole, ultimately containing the infinite whole of existence within its own recursive form. The rafter is simultaneously the building, the wood that makes up the rafter, and the whole of the universe itself. Abstract, metaphysical questions of existence are thus grounded within the parameters of the relational ontology that structures the existence of everything. In the chapters that follow, I will illustrate why the lessons of infinity and interconnectedness painted by the Net of Indra offers an option of how to live in the world that is both beautiful and capable of addressing the need to move modern societies towards a more sustainable way of being in the world.

The next section will consider how we can move beyond appearances of intrinsic beings, and fully allow ourselves to embrace emptiness, by actively unfolding our situation within the relations of the places in which we dwell through building locales.

Part II: To Be, Through Place

“Be here, now” is a phrase often used in passing to ease those who remain in a state of existential dread; it is a phrase used to emphasize the importance of being present. But this statement, which is meant to be readily comprehended, made up of three simple words, is a question of the cosmos; what could it mean to “be” within the infinite relationality of space and time? In English, here and now have been described as both the most specific words that exist, as well as the most general words that exist. Here and now are specific, down to the infinitesimal milliseconds and atoms that compose one’s own here and now, but they are also general in that the whole universe is here and all of time is now. Form and emptiness co-emerge within the here and now. The Net of Indra reveals that form unfolds in the space of emptiness, in the relational networks of interconnectedness. Yet, this metaphysical image still leaves us with the broad question of *how to reside* in the here and now, amidst a network of relations that are both incredibly vast and infinitely specific.

In his interrogation of metaphysics, Martin Heidegger aims to reunify the role of our subjective being with the broad expanses of metaphysics. He argues that we must look at metaphysics from the position of our own being, stating “metaphysical inquiry must be posed as a whole and from the essential point of the existence (Dasein) that questions. We are questioning, here and now, for ourselves”(Heidegger 1929, 94). Dasein is Heidegger’s word for the human being, which translates from German to “being-there.” It is through the analysis of humans as Dasein, as being-there, that Heidegger distances human subjects from an essential self-being—in other words, from a metaphysics that endorses an intrinsic nature, as discussed in relation to the Net of Indra in the previous section. Before looking at how Heidegger unfolds the nature of being through building, I will briefly set out the framework of his own intervention in metaphysics in comparison to the Mahayana Buddhist viewpoint. Then, to provide a more grounded image of how to live in the world, I will appeal to Heidegger’s account of building as an extension of dwelling, set out in his 1951 work *Building Dwelling*

Thinking, which defines the active nature of being, through dwelling, for mortals. In this chapter, I argue that Heidegger's conception of ontology, and building as an extension of the structure of being for humans, is ultimately stronger and more expansive when looked at through the Mahayana metaphysical lens of interpenetration.

The Nothing as Emptiness

Metaphysical inquiries that are separated from ontology flatten the unique role of beings in unfolding the whole of metaphysics. One of the dominant modes of understanding existence has been through the sciences, but in determining existence through the parameters of objectivity that science works from, being has become reduced to an object. In determining the nature of existence through the sciences, Heidegger argues that our own being also becomes defined as an object of the sciences which seeks to cast things as essences or beings that exist in-themselves. Within the sciences, everything that exists are beings themselves, and nothing over and above that. This means that to gain an image of the whole of existence, we also need to question what this "nothing" is that comes into contact with beings to define them as something. Heidegger claims that in establishing essences, the sciences are unable to reckon with the nothing, and so the sciences ultimately reject the concept of the nothing. Despite this, the sciences require some sense of the nothing to establish essences through the form of a negation, as what "there is not" (Heidegger 1929, 96). Heidegger considers how questioning the nothing could be an absurd goal as to say the nothing "is" something is to "posit it as a being," which means that the question of the nature of the nothing "deprives itself of its own object" (Heidegger 1929, 96). Yet, this perceived contradiction is one that is only rendered within the idea of a universal logic that relies on all things having essences, a logic which is already presumed to be absurd by the very fact that thinking relates to an object and we can think *about* nothing. Thus, Heidegger puts forth a conception of the nothing that is akin to the idea of emptiness that was established in the previous

chapter, for Heidegger describes the nothing as “the negation of the totality of beings; it is nonbeing pure and simple”(Heidegger 1929, 97). Since the nothing relates to the totality of things, it cannot be understood as a simple intellectual negation of an object, so Heidegger seeks a different approach to describing the nothing than the tools offered by pure logic. To gain a whole picture of what the nothing is, Heidegger refers back to understanding metaphysics from the situation of our being, asking “how should we who are essentially finite make the whole of beings totally penetrable in itself and also for us?”(Heidegger 1929, 98–99). Here one might see the metaphysics that Heidegger is establishing starting to take the basic form of the Net of Indra in regard to the nothing, one which seeks to understand the ultimate principle of emptiness by way of its relation to phenomenal existence. As the nothing is required to describe things but cannot be approached from the standpoint that attempts to define all features of existence as essential things, the nothing must be made evident through the subjective, dynamic nature of our being.

Our feelings are also a form of knowledge, and the power of this knowledge is that by way of our attunement through feelings, the appearance of the wholes of things are revealed to us. The revelation of the appearance of a whole, Heidegger argues, occurs through our attunement through feelings. Heidegger claims that feelings allow us to be attuned, a state “in which we ‘are’ one way or another and which determines us through and through, lets us find ourselves among beings as wholes”(Heidegger 1929, 100). These modes of attunement are not merely incidental but “also the basic occurrence of our Da-sein” (Heidegger 1929, 100). The objective aspiration of the natural sciences demands that moods be set aside in order to grasp things as they are. Underneath that modality, however, Heidegger points to the more primary *moodedness* of human ways of being towards things.

Attuning to the whole of the nothing, rather than just the part of negation, must also occur through the moods of Dasein. However, most of the moods that allow us to be in relation to beings

as a whole also work to conceal us from the nothing because these moods are usually felt in relation to something or another, so the particular mood which unveils the nothing must not be felt in the face of something. Heidegger determines that the mood in which we face the nothing itself is the fundamental mood of anxiety, which is “not in the face of this or that thing,” but rather emerges in in the face of that which is essentially impossible to determine, with no determinate object (Heidegger 1929, 101). The lack of determinate object to which one can attribute the feeling of being ill at ease means that in the face of anxiety, there is no action that can be taken to ease the feeling. Without an object to guide our action, Heidegger explains that “all things and we ourselves sink into indifference” (Heidegger 1929, 101). As we, along with all others, sink into our indifference, there is only “this ‘no hold on things’” that “comes over us and remains,” which is tantamount to a revelation of the nothing (Heidegger 1929, 101). Anxiety rises and all else slips away, meaning that anxiety is an attunement to the negation of the totality of beings or the nothing itself. The characteristic of wholeness emerges in the nothing, as all things are perceived by Dasein to sink into the same state, such that Heidegger explains it is “not as though ‘you’ or ‘I’ feel ill at ease; rather, it is this way for some ‘one’” (Heidegger 1929, 101). Within the state of anxiety, where everything slips away and there is nothing to hold to, Heidegger argues that “pure Da-sein is all that is still there” (Heidegger 1951, 101). In this way, we can understand how in the space of the nothing, it is only relational being or Dasein, “being-there,” that is revealed. This is much like the Mahayana Buddhist idea of emptiness, *li*, which while understood conditionally through phenomenal objects of experience, *sbi*, is only made apparent through how the whole of existence comes together within the space of emptiness itself.

Since the nothing is revealed through moods that are tied up with our very way of being, the whole of things that metaphysics seeks to explain must also be understood by way of its unique revelation through being. Heidegger claims that in anxiety “beings as a whole become superfluous,” since the very fact of the revelation of the nothing through being doesn’t annihilate existence but

rather nothingness makes “itself known with beings and in beings expressly as a slipping away of the whole”(Heidegger 1929, 102). This encounter with the nothing, nihilation, is a gesture that “rises to meet us” in an encounter that is “‘at one with’ beings that are slipping away as a whole,” and which “discloses these beings in their full but heretofore concealed strangeness as what is radically other—with respect to the nothing”(Heidegger 1929, 103). It is in the realization of the whole within which the nothing appears that Dasein springs forth in its nature, which admits beings as something and not nothing, but also allows Dasein to see its distinctiveness within the relations of a whole. In the experience of anxiety, Dasein experiences the nothing and feels their relationality alongside the absence of object—this points to relational ontology that is always present but sometimes hidden by the over-emphasis on the essences of things one is normally in relation to.

By this initial notion of relational ontology, Heidegger’s claims parallel the Mahayana Buddhist perspective, where wholes are not non-existent but rather are something only through their emptiness, through their interpenetration with all other beings in the space of relationality. Yet, Heidegger elucidates that “in the clear night of the nothing of anxiety the original openness of beings as such arises: that they are beings—and not nothing [...] it makes possible in advance the revelation of beings in general”(Heidegger 1929, 103). It is in this space that Heidegger asserts a facet of interpenetration that is not in the Mahayana perspective, which is that the awareness of the nothing is a precondition to opening interpenetration. He argues, “Only on the ground of the original revelation of the nothing can human existence approach and penetrate beings. But since existence in its essence relates itself to beings—those which it is not and that which it is—it emerges as such existence in each case from the nothing already revealed”(Heidegger 1929, 103). The nature of this revelation preceding the human subject’s penetration of other beings is called transcendence by which “Da-sein means: being held out into the nothing” (Heidegger 1929, 103). Through this vision of the nothing, there is an unfolding of being that occurs through the human subject’s experience of nothingness by which relations appear.

The problem with Heidegger's argument is that it centers Dasein—the human—as the one who unfolds the relationality of the whole of existence, which stagnates the full extent of relationality that Heidegger could possibly recover in his redescription of the human being as Dasein. Heidegger argues that for questions of the nothing to be posed “requires that we actively complete the transformation of man into his Da-sein,” and at the same time we “hold at a distance those designations of the nothing that do not result from its claims”(Heidegger 1929, 102). By framing the nothing solely through human encounters in anxiety, Heidegger's project of considering Dasein as being-there, being toward the world, is not approached in the depth that it could be. For relationality to occur in a deeper sense would require stepping back from just the human being's revelation of the nothing to the nothing that precedes this encounter and renders relationality in other forms.

Alternatively, then, the Net of Indra presupposes emptiness as underlying the relational networks that define every object of experience, a relationality that although interconnected and mutually encoded by all beings, is distinctly oriented around every object of experience in a manner that considers each to have the capacity of a unique orientation to emptiness. To deepen what it means to be-there would require moving beyond Heidegger's concession that Dasein is the only sort of being that can unfold relationally and recognize how all of the beings that necessarily exist as one within the nothing mutually encode the networks of relations that persist through the nothing. Heidegger claims that “[the] nothing is neither an object nor any being at all. The nothing comes forward neither for itself nor next to beings, to which it would, as it were, adhere. For human existence, the nothing makes possible the openness of beings as such” (Heidegger 1929, 104, bracketed for clarity). When thinking about the fact that emptiness, *li*, also conditionally defines *shi*, phenomenal objects of experience, it becomes evident that awareness of emptiness doesn't preclude the actuality of emptiness already interpenetrating everything that exists. Nothingness does not emerge solely from a being reckoning with it, but emptiness and relationality frame the conditions within which phenomenal existence even

occurs. To recognize that the conditionality of being and emptiness goes not only from being to emptiness, but also from emptiness to being, demonstrates that any object of experience is capable of penetrating other objects of experience *even without a conscious awareness of emptiness*. Emptiness pervades every object of experience from the get go, and so these relations precede the revelations of emptiness that may occur to any one object of experience.

Heidegger understands holding Dasein into the nothing as related to holding oneself out to the finitude of one's own life, being towards death as the eventual nothing of one's finite body. However, this is something that can be considered as extending out to all mortals, not just Dasein, or humans. He argues that being and nothing belong together because "Being itself is essentially finite and reveals itself only in the transcendence of Dasein which is held out into the nothing," something that he claims only occurs in the nothing of Dasein where "beings as a whole, in accord with their most proper possibility—that is, in a finite way—come to themselves"(Heidegger 1951, 108). This mental state that orients one towards finitude is one that humans can hold themselves out to, but in *Building Dwelling Thinking*, a later work, Heidegger expands the unfolding of relationality through mortality to offer another way in which human beings can take hold of their fundamentally relational orientation. In *Building Dwelling Thinking*, this unfolding of relationality is not a temporal revelation but a spatial gathering.

In the following section, I will expand on Heidegger's claims about dwelling to show how relationality, or emptiness, can go beyond subliminal interpenetration and be actively unfolded by all subjects, not just humans. However, I claim that this argument of moving beyond the appearance of an intrinsic, individual being by actively unfolding the relations that stem from the nothing is more expansive when considered from the multi-directionality of the Net of Indra's metaphysical worldview where *shi* and *li* are necessarily in tandem, rather than ultimate reality conditionally following from Dasein's revelation of it. In other words, I consider how dwelling takes place in a manner that extends

out from the relational ontology of all beings in the world. I argue that the unfolding of relationality that comes from all beings gathering emptiness is deeper than the one Heidegger presents in his early engagement with metaphysics, because it allows the unfolding of relationality to occur outside of the emotional processes of Dasein as the singular Being who brings this relationality into its unfolding.

Spatial Relationality

The relational ontological structure that Heidegger ascribes to being is made manifest through how Dasein spatially relates to the Earth by dwelling within it. Throughout the work *Building Dwelling Thinking*, Heidegger undertakes a series of etymological analyses to uncover the latent meanings of dwelling as the relational foundation of our being. To further understand the relational nature of dwelling for humans, Heidegger traces back the root of the German word for building, *bauen*, to the Old High German word for building, *buan*, which means to dwell (Heidegger 1951, 348). He claims that this meaning of building as dwelling extends to being, because the way that mortals carry out being is through dwelling on this Earth. Indeed, if we were not inhabiting this Earth, dwelling within it, then we would not *be* within the realm of phenomenal existence. To be a human is by its very nature an act of dwelling, of acting as a body within space and time. The manner in which humans dwell is through the relational act of building, by which we act in and towards the world and nurture relations with the Earth. This process of building and dwelling is fundamental to human “being” itself, in that the forms of the word building, “*bauen, buan, bhu, beo*” are connected to the forms of the word being of “I am, you are” or “*ich bin, du bist,*” which Heidegger explains also mean “I dwell, you dwell”(Heidegger 1951, 349). This is to say that dwelling and building are the things that you and I are, it is “the manner in which we humans *are* on the Earth”; it is the substance of how Dasein engages in being-there (Heidegger 1951, 349). Being and dwelling are interwoven within our subjective experiences, particularly within the way in which we act unto the world.

While building has come to be enacted as the simple act of construction, its definition is ultimately more expansive than mere construction, encompassing the relation of stewardship of the Earth. Building, or *bauen*, both means “to construct” as well as “to cherish and protect, to preserve and care for, specifically to till the soil, to cultivate the vine”(Heidegger 1951, 349). To build, which we now see is a condition for humans’ very being, consists of these fundamental active forms of being towards the world, through cultivating and constructing. These two meanings of building, Heidegger argues, are often obscured by the dwelling that comprises the habitual form of our everyday experience, which is dwelling as a passive mode of continuing to exist. Namely, the act of nurturing the land is not seen as creating in the same way as constructing or raising edifices, so cultivating becomes obscured from conceptions of building. In this way, building has been severed from its connection with dwelling, and has come to only be defined by an abstract, isolated notion of constructing. Heidegger argues that we must take the care to nurture the relations of dwelling again through both active acts of cultivating and constructing. Within this notion, one can see how Heidegger re-orient his notion of the human subject enacting relationality from the revelation contained within anxiety to an active spatial form of embedding oneself within the whole of relations on this Earth through building.

To think of building as dwelling, and dwelling as unfolding through cultivation and construction, transforms questions of existence from the abstract to offer an imperative on how to build a world within a relational ontology. Cultivating and constructing are not events that happen in themselves, but rather, they are acts we commit because we dwell on this earth. Cultivating and constructing are two relationships that exist to *being* which are integral to our existence. To be on this Earth is to actively turn to what it means to dwell, by returning to the world that encompasses our relations and relating unto it once more. By its very nature, *to be, we build*. I cannot imagine what it would mean *to be* without considering the way in which the Earth is cultivated to bring food to my

table, the roads are built to take me to the library, or my house is made up to keep me safe from the elements.

Dwelling must not be considered in isolation from the active acts of building, because then the basic relational nature of the human dweller is forgotten. To articulate the relations that comprise our dwelling which often become obscured in modern life, he explains that “The Old Saxon *wunon*, the Gothic *wunian*, like the old word *bauen*, man to remain, to stay in a place,” but the Gothic *wunian* has the added layer of meaning “to be at peace, to be brought to peace, to remain in peace”(Heidegger 1951, 350–51). Peace, elaborated on through the German word for peace, *Friede*, which also means “the free,” shows that peace means to be free, to be spared. Heidegger determines that being spared penetrates dwelling, as at its core, dwelling is “the stay of mortals on the earth” (Heidegger 1951, 351). Our finite, mortal existences are, indeed, the nature by which we are dwelling within phenomenal experience: we are dwelling in relation to our own mortality, and to the mortality of all beings. Sparing as a constituent of the active forms of dwelling is also as an evolution of the revelation brought about by anxiety. In his early discussion of metaphysics, Heidegger explains that “[in] anxiety there occurs a shrinking back before...that is surely not any sort of flight but rather a kind of bewildered calm”(Heidegger 1929, 102–3, bracketed for clarity). This calm emerges from the way the nothing allows Dasein to step back and understand its retreat into a whole. He also argues that without the revelation of nothing, there is no freedom (Heidegger 1929, 103).

Heidegger conceptualizes sparing as the active feature of building that reveals the whole of relations of “the fourfold”—earth and sky, divinities and mortals—which he describes as the fundamental relations that penetrate dwelling for humans. Heidegger argues that all parts of the fourfold can be thought of when thinking about each individual part of the fourfold, but “the primal oneness” by which the fourfold of earth and sky, and divinities and mortals come together as a whole is often not apparent to us. For instance, when we think of the sparing of mortals from death during

their stay on earth, we are also implicitly thinking of the Earth itself, the ecosystems we live within and subsist on, the life we interact with, the sky through the movements of the sun and the moon and the seasons, or of the sublimity of the divinity we seek in our lives. Dwelling, as mortals, is composed of the confluence of these features of existence. Therefore, the peace, the freedom, and the sparing that occurs within our dwelling, is also a safeguarding of “the fourfold in its essential unfolding” (Heidegger 1951, 352). We dwell in actively saving the Earth, in receiving the courses of the sky, in awaiting divinities, and in making use of our understanding of our own mortality (Heidegger 1951, 353). Dwelling as oneness within the fourfold consists of the active action of making the whole of our relational ontology apparent to us. Through building to spare the whole of relations, Heidegger resituates the revelation of the whole that emerges from the nothing within the spatial realm. Where he formerly put forth anxiety within individual beings as the mode by which the whole of existence is made apparent, he now places the act of building as the condition by which the whole of the nothing can be made apparent. By resituating this revelation within the sparing that is constituent to dwelling, the nothing becomes redefined to unfold in Dasein’s extension within spaces, rather than within the perspective of Dasein and individual moods unto the world.

By building a life within the unfolding of the fourfold, Heidegger argues that dwelling actively spares the fourfold. When we forget to cultivate, this basic relation is unable to be made manifest, as each constituent part is necessary in the unfolding of each other relation, and the role of the human mortal is to set free the appearance of the relations of the fourfold. When we dwell within these relations, we are also necessarily initiating our own being as “being capable of death as death,” which he argues “in no way means to make death, as the empty nothing, the goal” (Heidegger 1951, 352). In this way, holding oneself out to the nothing, to mortality, is a relational experience, whereby our holding ourselves out to our own mortality is fundamentally an act of interpenetrating with the mortality of others and the Earth, and the unity of our mortality within the oneness of the fourfold.

Of course, this account still centers Dasein in holding itself out to mortality by way of unfolding the relations of the world, but it also provides a more coherent account of how these relations can be unfolded in a way that ties up our being and our mortality with the other objects of experience in the world that endure through the shared world of spaces.

Dwelling to spare the fourfold consists of understanding how the finitude of mortals unfolds in relation to the oneness of other objects of phenomenal existence, the earth, and the sky, as well as that which is not finite, the infinite, the divinities. Fundamental to being spared as mortals, to dwelling on this Earth, in integrating a sense of relationality with all else that exists. In *Essay on the Golden Lion*, Fazang also conceives of understanding emptiness as a state of peacefulness. Through the notion of emptiness, one understands that there is no reality above and beyond the interconnectedness of everything. In understanding that everything is intrinsically empty, we can know that we ourselves, *are* only by virtue of our relations. Knowing the emptiness of existence enlightens us and brings us closer to nirvana, a state where infinity rolls through our finitude and “though the beautiful and the disgusting are present, our heart is as calm as the sea”(Fazang 2014a, 91). To become enlightened to this reality, however, is not just to know it, but to fully comprehend it in an embodied way.

Heidegger’s movement from his earlier metaphysics allows his philosophy to become compatible with the Mahayana Buddhist perspective, one in which a recognition of emptiness does not precede the existence of relationality but stems from an already existent relationality that is transformed into an active form of relationality through the building of spaces. In the next section, Heidegger’s argument that dwelling consists of an active preservation of the unfolding of the fourfold will be considered as a methodology to the Huayan path of becoming enlightened to the existent interpenetration of everything. Indeed, while relationality is the nature of things, the appearance of intrinsic meaning within objects of phenomenal existence are deceptive. Both theories will be brought together through a demonstration of how they assist each other in reaching their ends. Heidegger’s

method of gathering relations through locales will provide a more embodied approach towards the enlightenment of interpenetration, while Fazang's account of the multi-directionality of the interpenetration of ultimate and conventional reality will be used to give Heidegger's method a more systematic reach.

Gathering Relational Ontology into a Locale

A locale is a site where the relations of a place are gathered to be made apparent. Building can authentically attain to the relational ontology that defines our dwelling through a locale that facilitates the unfolding of the relations of the fourfold. As established, Heidegger's notion of the nothing that allows for relationality to unfold has similar content to the interpenetration of ultimate and conventional reality in the Huayan tradition. Under both viewpoints, emptiness demonstrates the simultaneous oneness and distinctiveness of all things as parts of a whole. However, they both argue that in day-to-day life, people do not notice that this interconnection exists. When Fazang was at the palace of the Chinese Empress Wu in 704 CE, he used the example of the statue of a golden lion, a whole, and the gold that composed it, a part, to show that while things seem to exist independently, they both only exist conditionally in relation to each other. Fazang states, in the *Essay on the Golden Lion*, "if we focus on the lion, there is only the lion and no gold. In this case the lion is manifest, and the gold is hidden. If we focus on the gold, there is only the gold and no lion. In this case the gold is manifest and the lion is hidden" (Fazang 2014a, 89). The interpenetration of everything is concealed by looking at distinctive parts, in the same way that Heidegger argues that the primal oneness of the fourfold is concealed when discussing each facet of the fourfold. He explains that building not only brings forth a structure or a cultivation, but it arranges a site into a locale. This locale carves out the horizons of the fourfold. The Greek root of the word technique, Heidegger explains, is *technē* meaning "producing, in terms of letting appear" (Heidegger 1951, 361). Heidegger contends that architectural

technique, and technology more broadly, have come to obscure the essence of building, which he defines relationally as “a letting-appear, which brings something made, as something present, among the things that are already present” (Heidegger 1951, 361). In this statement, Heidegger explains that architectural technique must be oriented around *gathering* the relations that already exist by building a locale that arranges existing relations in a manner that allows relationality to be apparent.

Gathering our relational ontology through locales which allow for all relations to unfold in a material way allows relational ontology to be made apparent as interpenetration, or mutual encodement. The way in which he argues that things exist through each other, in space, describes the same transitive relationship that the Net of Indra draws amongst everything that exists. Space, Heidegger asserts, is neither an external object to mortals nor an internal experience, because, as we have established, by the very nature of *being*, one is dwelling amidst the fourfold (Heidegger 1951, 358). Here, Heidegger ultimately recognizes the transitive identity of each phenomenal object of experience, where nothing has an intrinsic nature that renders its interactions with other things internal or external, but rather, each thing resides in the in-between space of distinct, but conditionally defined amidst a network of relations. Heidegger argues that we persist through spaces, even when we are not present at them. When one moves towards a door, they are already in the room that they aim to move into, because if one were not already part of a relation with that door, then they could not go into the room behind the door (Heidegger 1951, 359). As dwellers, we pervade spaces, because they are our extension. We conditionally define and are defined by interpenetration with things, through spaces, for us to move through spaces even physically, we must already contain a relation to those spaces. In this way, the spatial revelation of the nothing allows for relationality to become apparent as interpenetration, by which we can directly understand our relational nature through the conditional relations made manifest in the material world.

What is meaningful about Heidegger's argument is that it elucidates how we can actively form the relationship of interpenetration through the locales that *gather* in our everyday lives, not only unconsciously relating to spaces but actively engaging in arranging those relations. What is built serves as a locale, which simultaneously allow dwellers to exist within the fourfold unfolding as well as create the unfolding of the fourfold, of which they are necessarily a part. Humans are both creating within the gathering of the fourfold and being created within the gathering of the fourfold. Through building, humans can actively gather such that dwelling is not merely existing in the space of appearances, but rather the active act of growing and cultivating, simultaneously a response and an admittance into the oneness of all relations.

The Net of Indra paints a metaphysical image, which Heidegger's account expands by showing how agency allows us to unfold interpenetration through the act of building. Building belongs to dwelling in that it is the extension by which we are able to carry out "*the basic character of Being*" (Heidegger 1951, 362, emphasis in original). It is by building for the sake of dwelling that we can live a life that allows us to recognize our situation within the relationality of things to our fullest capacity. The Net of Indra demonstrates the interconnectedness of all things to each other, as well as to the ultimate reality of emptiness. The act of gathering brings agency into this interconnectedness, allowing us to seek out the metaphysical image of the Net of Indra by pulling the strings of the net closer together through our being to reveal their mutual dependence on each other, as well as the greater whole of emptiness or relational dependence.

Instead of the nothing being purely revealed through the moods of Dasein, Heidegger demonstrates how material objects gather the relations existent within a site to reveal the nothing in the form of a locale that unfolds the whole of those relations. Heidegger elucidates this act of gathering through the example of how the built thing of a bridge gathers the fourfold into a locale. Heidegger explains that the word gathering, *Versammlung*, also means "thing" in that it indicates a collection of

things (Heidegger 1951, 355). While we often think of things, such as bridges, as merely things in themselves, they are defined by the relations they necessarily exist within, and the way they encode or gather those relations. He elucidates how the bridge gathers the earth by creating a landscape around the stream, as it produces a new set of relations: the bridge connects stream, land and bank; the banks meet the stream because the bridge crosses; the stream runs its course under the bridge as the bridge simultaneously allows for crossing the stream onto the land (Heidegger 1951, 354). The sky's weather is gathered by the stream, as a storm's torrent brings the water up to touch the bridge's arches releasing the water once again when the sky comes to peace, the bridge is prepared for the sky's changing nature (Heidegger 1951, 354). The bridge allows mortals to cross the stream's torrent, granting goods to be moved, connecting the places which mortals occupy (Heidegger 1951, 354). Crossing the bridge itself is an act of reminding oneself of one's mortality, while safely moving through a transversal that is otherwise impossible for the mortal: "The bridge *gathers*, as a passage that crosses, before the divinities—whether we explicitly think of, and visibly *give thanks for*, their presence, as in the figure of the saint of the bridge, or whether that divine presence is obstructed or even pushed wholly aside"(Heidegger 1951, 355, emphasis in original). By way of reminder of our finitude, we remember the infinity that touches everything that is finite. The bridge gathers the fourfold into a site because it is made by us in order to dwell within the fourfold, whether implicitly or explicitly. It arranges a network of relations in a manner that renders that set of relations legible to us. In this way, that which is built has the potential to reveal the interpenetration of various objects of experience to each other, or *shishi wuai*.

It is only because every object of phenomenal existence ultimately relates to emptiness, that they relate to each other. The way that Heidegger conceives of space is systematized when thought of through emptiness, which allows all that is to mutually encode. Heidegger explains that space, conceived of as an object of the sciences is defined by the many potential calculations of dimensions

on the three planes of length, width, and depth, which we can understand as distances. In this abstract sense, space is a whole with no meaning other than abstract planes. However, Heidegger contends that spaces are in fact something, preferring to look at them as conditionally defined by locales. He does this by appealing to the etymology of the German word for space, *raum*, *rum*, which means “a place that is freed for settlement and lodging,” continuing by defining a space more broadly as “something that has been made room for, something that has been freed, namely, within a boundary”(Heidegger 1951, 356). This boundary within which a space is freed is not a limit, but referencing the Greek word for boundary, *peras*, Heidegger argues that it is the place where something “begins its essential unfolding,” such as in a horizon, which is also conceived as a boundary in the Greek form of the word *horismos* (Heidegger 1951, 356). The beauty of this is that, while the horizon is a boundary, it also conveys the expanses of distance. In this way, space which extends out is “freed” through its definition by that which is finite, the arrangement of place into a locale. That which is finite is “freed” from the abstraction presented by the expanses of space. In the space gathered by locales, Heidegger explains that intervals form, which allow for there to be relations within a space that give it meaning beyond space as pure extension. This perspective of space is helpful because it redefines space from an abstract designation to points in which relations are made evident, providing meaning to space through these sites of relational unfolding. This image of space offers an approach for humans to gather relations through the intervals of locales, because those locales are extensions of us, as dwellers: they allow the relations of space to become apparent to us through the sets of relations that we carve out within the interval.

While Heidegger’s analysis is useful, it ultimately only becomes sufficient in unfolding the whole of relations when sites of gathering are conceived of beyond merely the locales built by humans. Focusing solely on the relations that could be unfolded by a locale that is built by Dasein, when all beings extend out into space, limits the whole of relations of spaces to the singular world of relations

that emerge from the phenomenal existence of human beings. The landscape around the bridge had its own set of relations before humans built the locale, as well as many other non-human beings who performed their own active acts of gathering those relations. For example, the Beaver may have gathered the relations of the stream through building a dam, actively unfolding a set of relations intrinsic to its own dwelling within the landscape. The forms of gathering outside of the human dweller's building need to attend to any other forms of gathering to produce a site of relations that truly recognizes the interwoven relationality of things. However, Heidegger centers the human dweller's gathering of relations, which runs the risk of de-emphasizing the relations amongst other beings and objects of experience. In understanding the role of building within the mutual integration of mortals and the fourfold, Heidegger states:

From the simple oneness in which earth and sky, divinities and mortals belong together, building *receives the directive* for its erecting of locales. Building *takes over* from the fourfold the standard from all the traversing and measuring of the spaces that in each case are provided for by the locales that have been founded. (Heidegger 1951, 360, emphasis in original)

While building is a format for humans to situate themselves within the relationality of everything, the idea of building *taking over* the role of gathering obstructs the full potential of relations that can be made apparent by a building that mutually encodes with other sites of gathering produced by those within an ecosystem. Emptiness, or relationality, is conditionally defined by phenomenal existence, but in a manner that doesn't solely spring from one subject's awareness of relationality. Heidegger's account does not give weight to the fact that relationality precedes the human subjects' cultivation and construction of it, due to the manners in which other beings already spatially engage in the unfolding of relationality. The relational ontology that Heidegger presents is, in fact, much less relational when it ignores how other beings unfold the whole of existence through the situation of their own being.

The intervening quality of locales is one that emerges from any action of gathering relations in space. The Net of Indra expands Heidegger's goal of actively gathering relations to encompass the

whole of relations more profoundly, in a manner that would allow for the interpenetration of built locales and all non-human forms of gathering. In the Net of Indra, each object of phenomenal existence is necessarily related through their nature of emptiness, but they all act from a distinct position that roots their unique relations to each other. That is to say that every object of experience has a set of relations that it has the potential to gather, and these other forms of gathering must be recognized in order to understand how humans can construct locales that truly gather the oneness of all relations, without hierarchically subsuming other sites of gathering, and other beings' expressions of agency. The Net of Indra recognizes emptiness as something that is obscured and needs to be made apparent, but it also puts forth that relations pervade the existence of all things, as emptiness is fundamental, so relations are not purely formed in the space of Dasein's relation to the whole of the nothing. In just ascribing this intervening quality to locales which are built by humans, Heidegger ignores the sets of relations gathered by other phenomena which mutually define those locales. This omission is detrimental to his goal of establishing a relation to the whole of all that is related in the nothing, as it runs the risk of a human locale that dominates a set of relations, prohibiting other forms of gathering to mutually encode the relations that unfold within a locale. This is not only bad for the expression of agency of other beings, but it also prohibits humans from a full understanding of what it means to interpenetrate with all else that is, for humans to understand what it means to be-there.

The narrow focus of Heidegger's notion of gathering only through locales brings us to the summons of this paper: sustainability as a decentered account of interconnectedness. Since building is the active form of dwelling, by which we are constantly reworking how to situate our dwelling within the relations amongst things, it provides a way to respond to the urgent needs of a time. *Building*

Dwelling Thinking was conceived of in the immediate aftermath of World War II,² a time in which there was an impetus to rebuild much of what had been lost. Heidegger particularly grapples with a housing crisis in Post-War Germany. However, Heidegger argues that our pursuit to end homelessness by simply making more houses will still leave us all homeless if building is only considered as a material act. Until we learn how to build unto the world, to build dwellings that situate us within the relations that make up the world we dwell within. As such, he ends the piece with the vital directive, which holds even more true today: we must ask, what is the state of dwelling in our precarious age? Heidegger posits that “The proper dwelling plight lies in this, that mortals ever search anew for the essence of dwelling, that they *must ever learn to dwell* [...] it is the sole summons that *calls* mortals into their dwelling”(Heidegger 1951, 363). In this sense, to live into the full potential of our dwelling is an active act of allowing relations to unfold as well as facilitating the unfolding of relations to meet the needs of a time. In the next chapter, I will elucidate how anthropogenic climate change is caused by humans dictating and obscuring the relationships that unfold amongst other beings on this planet. To learn to dwell amidst this crisis, I will argue, is to learn how to gather the relations that humans dwell amidst in a manner that is biocentric, which is to say, in a manner that also recognizes the acts of gathering of other beings within any given ecosystem. The next chapter will draw on Heidegger’s account of dwelling through gathering the relationality of the whole, but in a manner that is framed by Fazang’s

² It is important to acknowledge here that Heidegger was an active member of the Nazi party, and his fascism and antisemitism must not be ignored when engaging with his philosophy. While *Building Dwelling Thinking* could be read in a manner that re-enforces the Blood and Soil ideology that fueled the Nazi party, it was also written after World War II and presented the potential to unravel the antisemitic and fascist ideology that defined the time. The Blood and Soil perspective is abstractly defined through the notion of an intrinsic being defined by race and culture, separated from the expanses of relationality that being is implicated in through their nature of dwelling. The consideration of the relational act of dwelling allows for a mode of departure from any ideology that gives way to an essential, hierarchical order of human beings. We must take care to read Heidegger in a way that does not allow for his political ideology to become manifest in the application of his philosophy. By rejecting Heidegger’s notion of Dasein as the only subject capable of unfolding relationality and extending that capacity out to all beings, I also indicate a departure from any potential domination that could be latent in Heidegger’s work.

metaphysical account of the Net of Indra and considers all objects of experience as fundamentally the same in their capacity to interpenetrate or unfold relationality.

Part III: Through Place, In Infinity

We are all situated within the universe, yet it often feels beyond the scope of our everyday knowledge to conceive of how the whole of the universe is contained within us. While the infinite recursion that weaves the universe into one whole seems unapproachable to the human mind, it stands plainly in front of us in how it binds our places together. The macrocosm of the universe is made apparent within the microcosm of our ecosystems which are each sustained by a complex, infinitely specific entanglement of relations. One of the most fascinating webs that intertwines an ecosystem are the mycorrhizal fungi networks which underlie a forest and connect its trees. Entangling themselves with the roots of trees, mycorrhiza allow trees to send everything from carbon, water and nutrients amongst each other. This brilliant subterranean network often eludes the human eye, and so too, do the many other worlds which exist amongst other species. To begin to unfold the full expanses of relations that come together to sustain the delicate balances of a particular ecosystem is therefore to approach the infinite expanses of relational networks. The places that we dwell within, which seem so familiar to us, always contain an infinite potential of relations to be further uncovered. Within an ecosystem, we can even come to understand the whole universe.

To revise our building practices to account for the expanse of relations that stem from all things, I argue that death must be reconceptualized beyond the limits of a separate, individual self, such that even our deaths are understood as an ecological process. Heidegger argues that we can build the world in a manner that makes our relation ontology more apparent by grasping our own finitude, something that appears to us resolutely in the experience of the nothing. One of the fundamental

features that Heidegger ascribes to dwelling through building is not only relating to death, but making “use and practice of this capacity” to relate to death “so that there may be a good death”(Heidegger 1951, 352). In this section, I first return to the Buddhist argument of rejecting the self to put forth *impermanence* as the guiding mechanism of perceiving our mortality through our lives, such that we think about death as not merely an individual, final act, but as the collective space of impermanence that we are constantly residing within. To situate an orientation towards death in a more embodied relationality to the world, I adopt environmental philosopher Val Plumwood’s ethics of ecological relationality which stems from reconstituting the way we hold ourselves in relation to death, a relationality to death that is configured within a network that is defined by all life forms’ situation within the food web. I will argue, then, that the food web is the specific manifestation of impermanence that results from the end of one’s finite body, releasing the individual into the boundless cyclicity of the food web. Building through relating to death by way of the food web would allow one to initiate a good death that is framed by the generosity of the sharing of energy. In implicating the human dweller’s death in the ecological terms of the food web, I also demonstrate the ethical framing of every being’s relation of generosity to sustaining the cyclicity of the greater interconnected web of their bioregions.

By presenting the bioregion as a site that allows all life forms to unfold relationality, this chapter rethinks the active act of building locales to include the agency of all dwellers, of all beings, within that act. Landscape architect Robert L. Thayer defines bioregion in his book *LifePlace: Bioregional Thought and Practice*, as “literally and etymologically a ‘life-place’—a unique region definable by natural (rather than political) boundaries with a geographic, climatic, hydrological, and ecological character capable of supporting unique human and nonhuman living communities”(Thayer 2003, 3). A bioregion offers a distinct system of relations gathered by human and non-human inhabitants defined by the particularity of the ecosystem’s relations within the greater patterns of the Earth as a whole. In

defining the parameters of a locale through the designation of a bioregion, the idea of a locale as Heidegger conceives of it expands to include all the specific and various forms of gathering that occur within the site of a bioregion beyond the human dweller.

I argue that building practices centered around interweaving the fundamental interconnection of all beings allows us to be at home in the world again by bringing the relational ontology of all beings out in its fullest capacity. This is particularly true for the specific causal networks that intertwine a bioregion, and if communities who build operate out of an understanding of relationships with particular earth others, there are concrete consequences for other species and human relationships. By building our bioregions in a manner that does not allow human relations to the world to dominate, but rather considers relationality as a collective project, our bioregions can become a more complete and self-sufficient network of relations. Not only can a comprehension of infinity unfold when building towards revealing the depths of relations of bioregional locales, but we can also rise to meet anthropogenic climate change and heal the relational networks we have destroyed to make our bioregions, and scaled up, our planet as a whole, sustainable again.

Embracing Impermanence

Across Buddhist traditions, a transformation of a subject's relations to their finitude allows them to move beyond individual self-being and abandon notions of the self for a more relational subjectivity. Buddhists argue that by rejecting the notion of the self, we can also abandon suffering. I argue that building must make emptiness apparent and enlighten subjects to hold themselves out to finitude, specifically through impermanence, as this is a spatial and temporal condition that we share with the whole of beings.

Every time I have begun to learn a foreign language, the first verb that has been taught is “to be.” This makes sense, because in conjugating *to be*, one can make the essential statement *I am, je suis*,

main boon, ich bin, njaan, jag är. Every action or position that we associate with the self is connected to the subject *I*. Since the “self” is empty, however, there is no essence to the self, there is no enduring substance which exists behind every statement preceded by *I am*. Permanence is a requirement for selfhood to exist because that which is impermanent could not possibly be carried with someone throughout their life, providing an essential, continuous location to situate the *I* within. By understanding that there is no essential self that exists as permanent construction, but only a series of impermanent relations, one can begin to re-orient their relation to finitude.

I content that suffering is the result of a shallow relationship to our finitude which can be transformed by re-orienting ourselves toward the shared space of impermanence. The Buddha sought to situate suffering in our lives through the teachings of the Four Noble Truths. In his book *One*, Graham Priest explains the Four Noble Truths, stating that the First Noble Truth is “life is *dubkha*” which he roughly translates to suffering (Priest 2014, 211). The vast claim that life is suffering is further contextualized by Mark Siderits, who explains that suffering originates in impermanence. He states that “all those things we ordinarily care about are dependent on causes” (Siderits 2021, 27). That which is causal is impermanent, as there was a time before its cause, and a time after which it will no longer exist. Therefore, even those features of our everyday life which seem to make us happy are a form of suffering, as despite our sincerest desires, they will not continually persist: a meal will end, the seasons will change, your lover will die. The Second Noble Truth follows from this by locating *trṣṇā* as the cause of suffering. *Trṣṇā* translates literally to thirst, but Priest contends that a closer meaning is found in the two words “‘attachment and aversion’: mental attitudes connected with wanting something good to go on, or wanting something bad to go away”(Priest 2014, 211). Aversion itself is self-explanatory as a cause of suffering, but attachment adds a new dimension to how one can conceive of suffering. In the transient moments of happiness, an attachment to the end of happiness will keep one clinging to the pursuit of pleasure. After a pleasure comes to an end, suffering will ensue, and that

pleasure will be tainted by a continual yearning for what once was. Suffering, as understood by the Buddhists is different from the anxiety that Heidegger describes, as attachment and aversion are always related to some object.

The suffering delineated in the first two Noble Truths is an existential suffering, so it follows that holding oneself out to emptiness, the nothing, or the non-existence of oneself is a key understanding to ending one's suffering. The suffering caused by attachment and aversion runs deeper than mere sensory experiences of pain, because it forces one to confront the impermanence of their life, and all lives. As we are mortal, there is a temporal consequence to every experience of attachment and aversion. Within the confines of a finite construction of self, there is a pressure to carry out a life for oneself that is considered meaningful. The ultimate thirst introduced by *trṣṇā* could be thought of as an image of oneself and one's life. Suffering, in that way, is the result of a shallow relationship to our own finitude, where we believe that every moment within our lives is an escape from our mortality, by way of which we construct an individuality that overcomes the weight of our ultimate finitude. The Third Noble Truth elucidates that in getting rid of the cause of suffering, *trṣṇā*, one can be rid of suffering itself. Since attachment and aversion are connected to a notion of the self, embracing the non-self is a step in the direction of getting rid of *trṣṇā*. This describes the emotional potential of rejecting an individual self-being to make emptiness apparent in our lives, defining ourselves instead by our situation in a relational network. By rejecting the permanence of the self and situating ourselves within impermanence, we are essentially holding ourselves out into the relational space of emptiness and ever relating to our deaths. Mortality is not the ultimate finale at which our finite self is held out into the nothing, but rather, we are perpetually held out into the nothing, dying and being reborn in every moment.

Suffering originates in impermanence, so it follows that it is our very belief in the permanence of the self that is the cause of our alienation. If one were to say, "I am," there is a sense in which,

whatever we say that follows “I am” is either based on an aspiration or aversion which implies some desire about the causal outcome of selfhood. In attempting to control and shift our descriptions of ourselves, we find that our very way of being is also located in the space of impermanence. Buddhists argue that if a self were to exist, then it would not tend towards this suffering. One cannot say “this am I” about things which are impermanent, so while beings might cling to a self to house them, they are ultimately reaching for something that doesn’t exist and implicating their very existence in the illusory space of suffering. By clinging on to a belief in the self, we are also vying for a sort of permanence, but as the Buddhists argue, there is no feature of phenomenal existence that is permanent. In rejecting the self, we are surrendering to the basic impermanence that permeates existence. Starting with the self, one can expand this notion outwards to all that is: we are but one impermanent construction, in the face of a world that is impermanent. The impermanence of one’s conception of their self, thus, is also a realization of the shared space of impermanence with everything else that is. In this shared space, impermanence can be seen as both the temporal and spatial substance of our ontological relationality, the emptiness which is continually redefined by interpenetration.

Rejecting the self not only directly follows from our situation within an infinitely transitive network of relations, but it is also essential to coming into comprehension of the relational network such that we can begin to unfold the whole of relations. Only after the distinct borders of the individual self are dissolved, the borders that separate us from everything else that exists, can we consider how to build within the shared space of impermanence that brings our dwelling back into a relational ontology. To build, to dwell, to be, we must step out of our finitude and become boundless through acknowledging our impermanence.

Ecological Relationality

To build sustainably, it is necessary to understand how the shared space of impermanence can connect humans to the ecological relations that constitute the places we dwell within. It is not only the individual self that we must reject, but we must also reject the anthropocentrism that has allowed human building to destructively dominate the relations of the Earth. Val Plumwood offers an expansion of the notion of rejecting an essential self by way of a framework around death that would allow us to reside in the space of impermanence through ecological relationality. The ethic demonstrated by Plumwood in her book *The Eye of the Crocodile* not only sets out how to relate to our finitude, but also provides an important perspective on how through a shifted relation to mortality, humans can move beyond the hierarchical orientation to the world that we have occupied by centering the human subject. As gathering is an active act of dwelling, it is important to define a process of decentering humans, acknowledging that our current relation of domination is based in an illusory disconnection between the human subject and others on this Earth. We are ultimately but one node within the greater network of our ecosystems. Therefore, an ethic of ecological relationality is a necessary step in thinking about how built spaces could facilitate the unfolding of our relational ontology in way that does not remain anthropocentric, centering only the human dweller's mode of relating to the world, but rather in a way that is biocentric, accounting for the ways in which all beings contribute to the gathering of that relationality.

Humanity's relation to the ecological world has become concealed in many modern, industrialized cultures, allowing for an illusory human exceptionalism to proliferate our disconnection. Plumwood's philosophical work was long concerned with elaborating an ethical orientation that recognized the value of non-human individuals and of nature more broadly. A nearly fatal encounter with a Saltwater Crocodile, however, gave Plumwood a new impetus for examining the role of death in creating a distanced, individualist, human exceptionalism within modern Western cultures. While

canoeing in Kakadu National Park, Australia, Plumwood was death-rolled three times by the crocodile. She escaped with several life-threatening injuries, but ultimately survived. At first, Plumwood recounts that her “disbelief was not just existential but ethical,” as the crocodile was seemingly “totally mistaken, utterly wrong to think I could be reduced to food. As a human being, I was so *much more than food*”(Plumwood 2012, 12, emphasis in original). For her “complex organization to be destroyed” so that she could be “reassembled as part of this other being,” was a notion that was absolutely dissonant with her pre-existing worldviews, ideas that she describes as an illusion (Plumwood 2012, 12). Ultimately, Plumwood comes to realize that the illusion was rooted in the presumption sustained by Western cultures wherein humans are not, in fact, also animals: humans are not food. Within modern Western cultures, Plumwood explains that there has been an elimination of predators, such that humans within these societies have come to think that we are superior, we are mind-stuff, never bodies to be preyed upon by other animals (Plumwood 2012, 13). The realization that humans are animals who *can* be food, Plumwood states, renders the realities of embodiment evident, such that there is a recognition of our nature as flesh, of “our inclusion in the animal order as food, as flesh, our kinship with those we eat, with being part of the feast and not just some sort of spectator of it”(Plumwood 2012, 15). It is from the shattering of the illusion that humans, as thinking things, also have an intrinsic animality, a situation of fleshiness, that Plumwood proceeds to reckon with how to embed humankind in a relationality to the ecological world.

One of the defining features of the illusion that humans are somehow separate and superior to nature is the human/nature, or nature/culture, dualism that has become prominent in Western societies. The idea forms out of the perception that humans have the unique capacity to reason and this mental advantage sets us apart from a “lower order that comprises the body, the animal and the pre-human”(Plumwood 2012, 15). This dualism between mind and body is one that has also been employed by Western cultures to separate humans into lower and higher orders; as Plumwood

explicates, “Inferior orders of humanity, such as women, slaves and ethnic Others” are considered to more actively reside in the lower “through their supposedly lesser participation in reason and greater participation in lower ‘animal’ elements such as embodiment and emotionality”(Plumwood 2012, 15). This hierarchical organization of mind versus body has not only been used by Western cultures to exploit nature and other humans, but it has also been a means of rejecting embeddedness within nature. The illusion of our separateness has rested upon this presumption of supremacy. Heidegger’s notion of rejecting the examination of human subjects as an object of the sciences also counteracts this duality, as it seeks to move us away from the idea of intrinsic self-being, located in a mind, and reorient being as something that is in relation to the world. He rejects the mind/body dualism by moving away from the notion of the human as an essentially thinking thing, to one that extends out from a mind and is defined by the way in which we dwell, as a body in relation to the world. However, Plumwood goes a step further by looking at how the mind/body dualism implicates us in a human/nature dualism, seeking to also consider how humans participate in this relational act of dwelling alongside other beings, in a manner that is fundamentally connected to an embeddedness within the whole of nature.

I argue that the antidote to our separation from nature entails moving beyond the finite limits of our body and embracing our continuity with nature by building to embed ourselves within the impermanence of ecological relations. Unlike Heidegger who considers this relation to the world unidirectionally from Dasein to the world, Plumwood approaches this task from both ends of the dualism, arguing that we must situate “human life in ecological terms” and “non-human life in ethical terms”(Plumwood 2012, 16). To situate human life in ecological terms is a difficult task. The disposition of separating humans and nature in Western culture is premised, Plumwood explains, on certain keystone concepts that position humans as masters of the universe, “in theological times this meant seeing ourselves set apart as the single recipient of divine regard while in modern times we

interpret our position as the culmination of the evolutionary endeavour”(Plumwood 2012, 17). Due to how deeply entrenched this separation is, Plumwood posits that unraveling the core of these presumptions requires examining narratives around death that can counter the foundational character of this dualism within certain cultures, working to substantially establish our ecological identity.

Moments when we are forced to confront the precarity of our flesh, such as those times when mosquitoes suck at our bodies, incite a feeling of anxiety, as being food is foreign to our conception of ourselves. Engaging with the notion of our bodies as food, therefore, would allow us to transform our understanding of our finite bodies and extend out into the whole of ecology. Plumwood claims that confronting the notion that all living creatures are both “food, and also much more than food” is a manner of affirming the mutuality and reciprocity of the food web. The idea of a food web is one that often seems to be considered in a hierarchical manner, due to the relations of predator and prey. Given modern human capacities to be at the top of this food web, it is perceived that we are at the top of the hierarchy. Yet, despite the chain of consumption within the food web, all beings will ultimately become food, if not killed for it, then through the nutrients they deposit into the soil after death which nurture microorganisms, fungi, worms and plant life. By the very nature of the fact that we are all food, the equality of the food web is rendered evident. In this way, understanding ourselves as food is an attunement to the nothing where the anxiety that comes from considering ourselves as part of the food web, is a mode in which one can truly holding themself out to the nothing. In this attunement to our bodies as food, all things slip away to the whole, since we each give and take from the food webs of our ecosystems for the system to persist as a whole. There is nothing to cling on to, namely, not even our flesh as our own. The only thing that remains when we let go of our individual, finite borders and understand ourselves within the food web is the ecological relational network that we move amidst by way of impermanence. We must build in consideration of our dwelling as a constituent part of this ecological relational network.

Our bodies are not solely our own, but rather, they are a component of the ecosystems that we dwell within. Plumwood states that there is a generosity contained within the food web, because all our bodies eventually sustain life forms that are not our individual bodies, explaining that “being in your body is more like having a volume out from the library, a volume subject to more or less instant recall by other borrowers—who rewrite the whole story when they get it”(Plumwood 2012, 35). Considered in this light, the death ritual of a coffin is a denial of reciprocity to the ecosystems that sustain us through life, as it reifies separateness through the belief that “the human essence is conventionally seen as departing for a disembodied, non-earthly realm, rather than nurturing those earth others who have nurtured us”(Plumwood 2012, 19). Death conceived of through individuality makes it such that humans remain separate even in death, masters who have received the life force of others, but refuse to give it back to the nutritive cycle. Flipped around, if we recognize that other species that we see as food are also so much more than food, then this reciprocity produces a certain kinship, rather than domination, to that which we eat. In a very real way, embedding our notions of ourselves within a food web re-integrates the characteristic of wholeness as reciprocity into the relations of an ecosystem. To hold oneself out into the nothing of the food web is therefore, not only a manner of re-integrating humans into ecological terms, but it is also a way of understanding how other beings are ethically implicated within death. The relations of death framed by the food web are uniquely intertwined with how other beings actively engage in the food web. When humans step back into the relations of the food web, all beings become capable of a good death, as everyone becomes implicated in the valence of generosity that frames their collective relations to mortality. In such a manner, we might see how not just life is reframed to counteract the nature/human dualism, but also human death is reframed in ecological terms and non-human death in ethical terms.

Building within the impermanence of ecological relations is building towards the cyclicity and continuity of our ecosystems as a whole network of relations. Indigenous concepts of animism

break up the notion of the self as individual and finite through expressions of death as a relational continuity. The reciprocity of the food web is one expression of ecological continuity and Plumwood states that animist conceptions of ecological continuity allow us to understand “life as in circulation, as a gift from a community of ancestors, we can see death as recycling, a flowing on into an ecological and ancestral community of origins”(Plumwood 2012, 20). In dominant Western cultures, the body is conceived of as a fortress to protect, property which must not be infringed upon, but the recycling of bodies allows death to be seen as within Indigenous cosmologies, as a return to “the land that nurtures life”(Plumwood 2012, 20). Through this continuity, the impermanence of an individual self can be further embraced, as it allows us to think about our very existences on a different scale: our lives are part of an infinitely transitive relation, and by building to nurture the survival of our ecosystems, we are also nurturing our very own continuity beyond finitude in the space of relational impermanence.

The Bioregion as Locale

Modern building practices are at odds with an authentic relational ontology, as they center the relations of the knowing human being at the cost of diminishing the full expanse of relations that exist amongst all things. As pointed out in the previous sections, not only is the intrinsic selfhood of humans illusory, but it also works to separate humans from the comprehension of their relational, ecological ontology. It is only after deconstructing the borders of the self that we can begin to build within the shared impermanence that connects us to the world. To build locales that unfold the multiplicity of relations amongst everything that exists would not only uncover the metaphysical and ontological structures of the world, but it would materially benefit both humans and all earth others. Building locales through the relations that extend out from all beings would allow the world to come into its fruition within the whole of relations, instead of disconnecting beings from their relations, and in turn rendering the places in which we dwell incapable of sustaining themselves. In this section, I argue that a locale must

be redefined as a bioregion in order to account for the relations that make up a place outside of the scope of the human dweller. Through this model, one can understand how to build the world in a manner that is deeply intertwined with a relational ontology, through the shared space of impermanence.

Upon seeing how situating oneself within emptiness or the nothing can be deepened by an account of death that is embedded in an ecological relationality, it is now integral to return to how these relations can be actively gathered in dwelling through building in space. Bioregions are incredibly useful designations of place because they present images of sites that are not solely constructed by humans, but rather sites that are gathered by all the biotic and abiotic objects of experience that make up the system. Place has come to be designated in an essentialized manner by way of humans imposing the static boundaries of states, zones and political and economic systems. These designations do not demonstrate any relationality to the land, because they are not distinctly defined by the features that actually come together to compose a specific place. Instead, framings are overlayed onto a place in accordance with non-specific, universalized sets of human dynamics. Since the land itself and the specific communities within the land are not reflected in the human constructions of sites, it makes sense that the abstract technologies of infrastructure are preeminent in defining place, working apart and often in contradiction with the land itself. This abstract designation of place leads to an incongruity of “perception, scale, and time” between how we live and the worlds within which we live (Thayer 2003, 8). Thayer explains how this incongruity manifests in a destructive manner:

We perceive ourselves to be principally residents of human compartments. The scale of these compartments is far too large or too unrelated to the essential structure and function of the natural living systems upon which we ultimately depend. The rates at which we alter ecosystems exceed the rates by which those systems can regenerate. And finally, the locations of origin of our material necessities, like the ultimate locations of the deposits of our wastes, are often far away from where we live. To presume to live only in human districts unrelated to local natural conditions leads directly to the exaggeration of the scale of human infrastructure and to the extraction of resources at rates far in excess of rates of natural regeneration. (Thayer 2003, 8)

In this dislocation of place, human produced sites not only prohibit the essential unfolding of relations within the places where sites are built, but they also have led to the destruction of relations that allow a place to endure and sustain itself. The error of this incongruity is that it allows building to take the role of creating relations within a place. Building must not be a thing in-itself, imposed onto the abstract planes of space that are viewed solely as the distances of depth, width and height. Instead, as discussed in the previous chapter, building must be the active form of dwelling that allows relations to appear to human dwellers, in a manner that renders the dweller and the relations to understand their interpenetration or mutual encoding.

The compartmentalization of human existence from place is detrimental not only to place, but also to people themselves, as it obscures our relational ontology, ultimately disconnecting our very being from the world we dwell in. Through the disconnected frames of a globalized world, the relations which permeate place become obscured, and so too do the necessity of those relations. Within this abstracted sense of place, human infrastructure defines place without sustaining the relations which make a place self-sufficient. By localizing our account of place within a bioregion, our relational ontology becomes apparent again through the perceivable relations that unfold amidst the locale of a bioregion. Thayer explains that in life, most of us ponder the three essential questions of “Who am I?” “Where am I?” and “What am I supposed to do?”, highlighting that “we often consider the first question in isolation, as if it were the true key to our existence—as if the matter of who we are could be resolved independently of the two remaining questions”(Thayer 2003, 1). However, he posits that those human cultures that are defined by technological and economic development have compartmentalized these existential questions in a manner that has rendered them homeless, aimless wanderers of the postmodern landscape of globalism. Here, Thayer deepens the question of the passive, unconscious state of dwelling in our modern age, which Heidegger argues has made us homeless, by presenting the system of globalism as obstructing the localized relations that define our

dwelling and should shape how we dwell unto the world through building. Instead of seeking knowledge within the specificity of the places we inhabit, the places which could ground us with meaning and allow us to integrate within our environments, those within industrialized, globalized economies substitute the depths of the knowledge of place with the shallow awareness of an entire globe. Thayer explains that “the academic world has compartmentalized knowledge and occupation while the corporate world has globalized the ‘location’ of business and commerce”(Thayer 2003, 3).). He points out that schools and universities teach “to become” before ever teaching how “to locate,” and with this essential absurdity, it becomes clear why such cultures are alienated, why rates of anxiety are higher than they’ve ever been before. We are ever attempting to progress as a society, all the while evading a consideration of where we’re moving to and from. Thayer presents the idea that we can deepen our lives beyond such shallow orientations by contextualizing existential considerations within the apparent relationality of the places where we live, within a bioregion or a “life-place.”

The active form of dwelling in this world must engage in building the world through the necessary relational structures of a bioregion. In the first and second chapter of this thesis, I elucidated through Mahayana Buddhist thought and the philosophy of Martin Heidegger why individuals do not exist independently, but rather are mutually defined by the sets of relations that they exist within. The Net of Indra demonstrates the relational ontology of all things, while Heidegger’s discussion of dwelling emphasizes the relational nature of world building within this ontology. To gather non-human relations through building, to allow these relations to appear to a human and frame their dwelling, it is thus integral to understand how the parameters of a bioregion provides a more complete image of Heidegger’s conception of a locale, or a site that gathers. The context of a bioregion will ground how to decenter a human dweller’s considerations of self, and instead locate the answer to the question of “Who am I?” through the human dwellers’ relationship to their bioregion, which they mutually are sustained by and sustain. By purely centering the human’s relations to the world, human

needs dominate and diminish the full capacity of a bioregion, such that the bioregion as a locale falls apart and is unable to sustain itself through its relations.

Bioregion is a difficult and messy term to define, as natural boundaries are not static, however, regions are, all the same, set apart by distinct systems of natural relations. The Cascadia Department of Bioregion cites Peter Berg and Raymond Dasmann, two bioregional thinkers, in delineating the site of a bioregion as bio-cultural regions that are a “geographical terrain and a terrain of consciousness—to a place and the ideas that have developed about how to live in that place’ with particular attributes of flora, fauna, water, climate, soils, and landforms, and by the ‘human settlements and cultures those attributes have given rise to” (“Bioregionalism,” n.d.). Thayer specifies this definition of bioregion through the scalar distinctions that geographer Robert Bailey gives to place. Bailey characterizes different domains moving from the global and the continental, to differentiate “ecoregions” by climate, identifying the four large-scale domains of polar, humid-temperate, humid-tropical, and dry (Thayer 2003, 16). He then divides these into further classifications based on temperature and moisture, through designations such as “subtropical” or “warm continental” (Thayer 2003, 16). The next specification is into provinces, similar to biomes, differentiated by altitude and vegetation (Thayer 2003, 16). Thayer considers bioregions in a similar way to these ecoregional provinces but emphasizes the use of “bio” instead of “eco” to ethically center the biotic communities that exist within given abiotic conditions. He elucidates the Biotic Hypothesis that “bioregions can be defined in terms of distinct communities of life, both human and nonhuman, where implicit conditions suggest particular ecological adaptations” (Thayer 2003, 33). By defining communities, Thayer describes the relations of assemblages of species, where spatial, temporal, and abiotic factors all come together with different species’ relations to each other, which then can delimit a distinct region through the causal relations amongst communities of life or expand the reach of a region by stabilizing its internal relationships, such as with migratory birds.

The spatial analysis offered by Bailey's concept of regions moves beyond the anthropocentric framing of contemporary geographic information services, which, as Thayer notes, largely describes the nature of place in an abstract, acausal way. Thayer explains that Bailey's system is "based upon the abiotic factors most critically influencing subsequent, spatially distributed expressions of life, his ecoregions are expressions of cause and effect"(Thayer 2003, 18). Bioregions, therefore, are different from abstract designations of place because they are descriptions of a distinct, causal pattern of relations. A site made up of the causal relations of a bioregion gives more instruction to building for the sake of dwelling relationally, because it sets out the network of relations that a dweller is uniquely situated within, rather than allowing for abstracted, human interpretations of the causal relations of the world. Thayer further explains the causal relations that are indicated throughout the domains that Bailey describes, stating:

macroregional differences create large geographical domains through varying manifestations of latitude, position with respect to oceans, and shapes of continents; mesoregional differences reflect responses to altitude, landform, aspect, and topography; and microregional differences relate to microclimate, geology, soil characteristics, and major vegetation zones. At the fundamental physiographic/abiotic level, the largest scales of territory relate to those characteristics that change least over time (geology, climate), while the smallest scales are those that change most over time (animal populations, plant succession after disturbance). (Thayer 2003, 18)

This system, which has been adopted by the U.S. Forest Service, is able to delineate the multiplicity of ways in which cause and effect differ based on "a complex combination of abiotic factors, scientifically supportable causes, resultant spatial distributions, and ultimate biological responses" (Thayer 2003, 18). In this way, Thayer explains that Bailey's model of scales of cause-and-effect functions in a fractal-like manner.

The fractal is a geometric phenomenon of recursive patterns that are infinitely repeating across multiple scales. These geometric formations scale up to the largest whole and repeat down to the smallest part. The image of the Net of Indra is also a fractal of infinitely recursive objects of experience which come together into the larger whole. There is the whole infinite expansion of the net, which is

repeated within each jewel that reflects the infinite relations of the net within its own root as a locus on the net. As a fractal, Bailey's manner of looking at regions based on their causal relations is the same as the relational image of the universe presented in the Net of Indra. Employing a scalar model of regions recognizes both the whole and the part, showing a way of understanding the distinctiveness of the specific roots of networks of relations contained within each region while also understanding how those distinct networks of relations are interpenetrating with the whole of a planet. Looking at bioregions, therefore, provides a means to focus in on the root of relations gathered within the site of a bioregion while also understanding how that self-contained site is mutually encoded with a larger whole.

The site of a bioregion provides a mechanism to look at the unique gathering of causal relations, amongst biotic and abiotic objects of experience. Thus, one can understand the interpenetration of the ultimate, relational reality of the universe within the way in which relationality perceivably manifests in the locus of a bioregion. A bioregion could be seen as a jewel in the Net of Indra that acts as a distinct root of relations within the greater net of the universe. Of course, the jewel of a bioregion contains the infinite recursion of all the relations that come together to make the whole. Yet, insofar as every object of experience can both appear as a part or a whole, as a larger network of relations or a smaller network of relations, when speaking about existence, it is useful to consider what is the most convenient designation of a locus on the whole of a net. As discussed in the first chapter, infinity is an incredibly difficult concept for the human mind to access. The recursion of every object of experience, as well as the greater degree of recursion of emptiness itself, is far too large to grasp as an all-encompassing whole. Globalism presents an image that is still too large for one to grasp as relational, as cause and effect within a globalist model extend beyond the limits of human perception. By using the scale of the bioregion to gather relations in a simultaneously complete and accessible scale of dependent co-origination, we can begin to understand the whole of the principle of emptiness

that unfolds a relational system of interpenetration in the event of our bioregions. The fractal of a bioregion is both a whole and a part, a part of an infinitely recursive, transitive network of relations, but also a distinct whole in how it takes the infinite relation of emptiness unto itself, through its specific parts. Through a grounding within the specificity of the infinite relations that come together to encode a bioregion, therefore, the movements of infinity that code the entirety of the cosmos can come into our reach within the immediacy of the here and now.

By appealing to the global, the network of relations that frames existence becomes too large for us to grasp, and therefore becomes obscured from human perception. Using the fractal of a bioregion to designate place thus allows us to see relationality at a scale that is perceptible and capable of being gathered. The specific evolutions of different human cultures, despite some basic similarities, have a distinctiveness that is gathered within a conditional relationship to particular bioregions. Thayer expounds upon how for much of the existence of *Homo sapiens*, there has been a pattern of social cooperation to “harvest the natural potentials of finite territories”(Thayer 2003, 55). He cites economist Hazel Henderson who explains that, as late as 1981, most humans were sustained by “growing their own food, tending their own animals in rural areas, and living in small, cooperatively run villages and settlements or as nomads following herds, harvesting wild crops, fishing, and hunting in economies based on barter, reciprocity, and redistribution of surpluses according to customs”(Thayer 2003, 55). Languages and cultures emerged in relation to the environments within which they formed. It is only from the mid-19th century onwards, with the invention of the railroad, the steamship, the telegraph and other supportive infrastructures which supplied us with resources from afar in an instant, that economics and technology have allowed people to transcend time and place. Now, we are entangled in a global economy that is not based on the resources and cultures within a given region, as we have become dependent on the resources, information and technology of places far beyond those within our immediate reach. Globalism, Thayer states, feels like something that is external to

ourselves, that is “being done to us”(Thayer 2003, 63). The effect of globalism is that the relations which have emerged are abstracted by lack of perception, obscuring specific relations under universalizing connectors that are dissonant with the specificity of our localities.

Conceiving of place through a bioregional perspective counteracts this, as it allows relations to appear to people again within the completeness of a bioregion, by way of recognizing the mutual encoding of people with the relations which sustain them. It is only within the scale of a bioregion that the more active form of dwelling can take place, where building can be known also as growing and cultivating, responsive to a causal network of relations, as well as contributing to the creation of those relations in manner that allows their interconnectedness to be evident.

The specific power of a bioregional approach to dwelling is that it is not only contextualized within the general space of interpenetration, where every relation that is dwelled within is the product of mutual encoding, but it is able to meaningfully describe a specific network of relations within the greater whole of interpenetration. The ethics of Father Thomas Berry, an American monk, is cited by Thayer in describing how bioregions can produce participatory models of dwelling. Berry advocates for a bioregional approach that shifts humans beyond anthropocentric norms of progress, and towards biocentric forms of progress. A biocentric approach recognizes that all life forms are integral in the context of a bioregion, placing value on every life form, and decentering human values that might work to dominate or obscure non-human agents. Thayer argues that humans must reconsider their role within the network of a bioregion by fulfilling Berry’s description of a bioregion “as a geographical area of interacting life-forms constituting a ‘self-propagating, self-nourishing, self-educating, self-governing, self-healing, and self-fulfilling community’”(Thayer 2003, 71). By nurturing the capacity to perceive and actively gather the unfolding of the interdependence of all species, a bioregion can become a self-sustaining system in the six ways that are characterized by Berry.

It is in this biocentric framing that we can see a model for how to sustainably build in the world, by setting out the mission of connecting our understandings of ourselves with a purpose rooted in making our bioregions self-sustaining. The world has become unsustainable because humans use more than their environments are able to regenerate. Ecosystems by their very nature are self-sustaining, but humans, as a necessary part of ecosystems, have disrupted the capacity of the ecosystems they are a part of to sustain themselves. Here, Thayer presents “the Spiritual Hypothesis” of bioregionalism, that “immersion in bioregional culture and attachment to a naturally defined region offer a deepened sense of personal meaning, belonging, and fulfillment in life”(Thayer 2003, 71). It is from this hypothesis that one can come to understand the depth of situating conceptions of what it means to be within the purpose of fulfilling the stewardship of a bioregional community as a self-sustaining system. To come to peace is at the forefront of active dwelling, as Heidegger explains, it consists of sparing the unfolding of the relations that define our dwelling. In this way, we can make the project of bioregional fulfillment into the most fundamental feature of dwelling. Building and growing can be seen as one and the same in intent, as actions which allow us to gather the relational networks of cause and effect within a bioregion to its fullest, most complete unfolding. By building towards nurturing the completeness of the bioregional locale’s gathering as a self-sustaining system, the human dweller can actively gather their relations in a way that is sustainable, attending to the whole act of gathering the bioregional locale. Understood as a fractal, the fulfilling of each bioregions’ unfolding offers the potential of a whole planet that is a sustainable system. This is a true picture of what it could mean to be-there, relating out of care for a fulfilled world of relations, not relating out of a drive for the self-realization of the transcendent Dasein.

The idea of a self-propagating, self-nourishing, self-educating, self-governing, self-healing, and self-fulfilling bioregion transforms the ethical implications of impermanence made manifest in the food-web. These goals provide an image of how every active act of building can foster an embrace

with the impermanent by supporting the continuity of the whole of our bioregions. Embracing impermanence as the cyclicity of a bioregion's capacity to sustain itself allows us to perpetually hold ourselves out to death with the added relationality of generosity, where our own deaths are part of the condition of life, an ever-changing impermanence that sustains the completeness of the relational network of energy of a bioregion. If we truly live within our bioregions, taking each other node of a bioregion's impermanent form unto our dwelling, seeking to eventually give our own impermanence back into the nutritive soil cycles that will fully let the cycle continue to flow, then the relationality of a bioregion appears to us in every action that we take. When we cultivate a native crop through agroforestry practices, or a non-native, naturalized species that is compatible with the other abiotic and biotic relations of our bioregions, we know that it will feed other life forms within the bioregion and serve as a habitat, sustaining us but also sustaining the whole of the bioregion. When we construct from the stones of a bioregion, we know that the stones will simultaneously be adapted in form for our own, self-sustaining dwelling, but will also be subject to the impermanence of a bioregion's cycles. Some of the same weather patterns and entanglement with other beings will occur to the stone as when it had been embedded in the form that we found it. Our changing the form of the stones might change the nature of its relations, but it will never take away or add anything that was not already within this cycle's stable movement. When we ultimately die and become nutrients for the soil, then we know that our impermanence will manifest in a good death, transforming its form into the cycles of a food-web that sustain a complete bioregion. We must take care to build out our worlds from the relations that underlie them. We must make every decision of constructing and cultivating with the consideration of how each action fulfills the completeness of the relational networks that compose our bioregions. We must never decontextualize, constructing or cultivating through the illusion of an intrinsic, separate being. Each act of dwelling must be made towards our impermanence, flowing out

into the whole of a bioregional locale and unfolding into the ever-circulating, ever-fluid movement that nourishes a home.

When I think about what it might look like to build within the locale of a bioregion, I am reminded of the practice of maintaining Sacred Groves, which are patches of native forests that are sustained near temples or family homes, in my mother's home state of Kerala, India. While these groves are being destroyed due to development, urbanization, and the collapse of joint-family structures, what remains still accounts for a lot of the state's biodiversity today. The traditional practice of building a joint-family home, or a *Tharavadu*, was often done simultaneously with the conservation of an adjacent Sacred Grove. Kerala is a place with an abundance of tropical biodiversity, subject to intense heat and the torrents of the monsoons, such that vernacular places of dwelling were always built to be responsive to these conditions. The houses themselves were always made around a courtyard, which brought the ecosystem and the elements into the center of the house's flow, while also making space for the whole family to convene. Materials used to build these vernacular houses were local, such as clay, timber, cow dung and leaves, while the structure of the houses were set up to facilitate the movement of rainwater, the relief of a ventilated air flow, and the reception of daylight. The Sacred Groves are places of worship believed to house a multitude of deities from the Goddess Durga to the Serpent God Naga, and the ecology itself is an extension of divinity, such that the ecosystem was never to be interfered with except in acts of stewardship. Fundamental cultural food sources grow within the groves, as well as a variety of plants used medicinally in the ancient practice of Ayurveda. Within or adjacent to Sacred Groves are tanks or constructed ponds which harvest the rainwater, streams that connect the grove to a water source, or a natural body of water, which are all understood to be shared as a resource amongst the human and non-human life of the area. The Sacred Groves are home to an undisturbed population of multi-layered native plants and fungus, as well as a variety of other animals and organisms, some of whom have made permanent homes within the Sacred

Groves, as well as some who move through them temporarily for shelter and food. These sites are fundamental to sustaining those humans and non-humans who live within them, and they are also complete as a whole, functioning as “a bioresource centre and closed system for the nutrient and water cycles for the nearby areas”(Kerala State Council for Science, Technology and Environment 2023). Sacred Groves present an image of how one’s dwelling can be embedded within the relations of a bioregion, as well as how the human acts of building and growing within such sites can allow these relations to unfold in a manner that both allows and facilitates the self-sustaining capacity of the site.

In many other parts of India, as well as around the world, from Ghana to Malaysia to Scandinavia and more, groves akin to Sacred Groves are interwoven with burial and cremation grounds. Many of these sites put the dead back into the ground to nourish the soil and nurture the ecology. Groves that become the eventual home to the dead are a fundamental place of human dwelling, for those who survive and come back to the groves to remember their loved ones through the swaying of the trees, for those who worship the divinity within the groves, and for those who pass on and move their energy into the life force of other organisms that make up the grove. There is also currently an emerging movement to integrate practices that regenerate or conserve ecologies with death rituals, by way of returning bodies to the Earth in a manner that only makes use of biodegradable materials and allows for bodies to decompose within the soil. Some people are even looking to accelerate this decomposition process by way of human composting. To integrate the process of becoming soil into our death rituals would allow us to internalize the notion that we are ultimately impermanent, rooting our dwelling within the cultivated acknowledgment that we are but one part of the impermanent flow that sustains our bioregions.

With spaces that are made up of the nutrients of our communities’ bodies, whether that be the bodies of humans or non-humans, we can directly understand our situation of dwelling as an eternally unfolding, infinitely relational one. When I think about the potential of expanding this

practice of ecological relationality in death, I also imagine the potential to build a world that is full, one that we will always be at home within. With constructed spaces that bow to the elements of the skies, with spaces we grow that connect all life through food and shelter, with a world that is always unfolding the infinite, sublime depths of our relations to everything around us, every moment of our lives would be a revelation of wholeness in which we can comprehend that we are not alone. Dwelling in a bioregion is building the active unfolding of the locale as an ever-transforming cycle of life and death, where death is relationality itself. To build in this way is to grow, it is to nurture and care for the bioregions that give us a home, and to expand ourselves out unto them such that we know, through every point of time and space, that we are inseparable from its movements. When building fulfills our dwelling, infinity is not the heaven we enter after life, but it is the substance of the enduring relations that we nurture for eternity.

One must have a mind of winter
To regard the frost and the boughs
Of the pine-trees crusted with snow;

And have been cold a long time
To behold the junipers shagged with ice,
The spruces rough in the distant glitter

Of the January sun; and not to think
Of any misery in the sound of the wind,
In the sound of a few leaves,

Which is the sound of the land
Full of the same wind
That is blowing in the same bare place

For the listener, who listens in the snow,
And, nothing himself, beholds
Nothing that is not there and the nothing that is.

-The Snow Man

By Wallace Stevens (Stevens 1921)

Concluding Futurism, The End is The Beginning

Most of us dwell in the world. We find ourselves expanded, our existence opened to the shared space of all beings. Descended from star stuff that permeated the cosmos in exploding supernovas, I sit here within temperate light, the skin of my arms glowing under the sun's soft rays. The cicadas' songs echo through the space of the courtyard. Beyond the walls, the flowing cadence of the Bronx River runs as consistent as my heartbeat. To go inside to sleep is to know that the walls which give me refuge are made of the same soil that the life beyond my window is expanding their roots into. I am at home here, I always was.

Impermanence is my oneness with the world. Encompassed by the red maple, the sweet birch, and the flowering dogwood trees surrounding the house I grew up in, I realized that nothing could bring me more peace than those very trees. In my teens, I had the tendency to sit by the Bronx River when my fear of uncertainty overtook my capacity to act in the world. It took only a few months of listening to the river to realize that the river is dying and being reborn at every moment: the April rain gives to and takes from the borders of the Bronx River's body, which narrows and expands at different

points, making its confluence with the East River next to which I was born, ultimately being given up at the estuary of the Long Island Sound, returning to the formless, oneness of the Atlantic.

In my first year of college, I moved from the bioregion I had known for all my life, the Southern New England Coastal Plains and Hills, and had to learn how to dwell in the Inland Valleys that lay on the other side of the continent. At first, I felt decontextualized by the difference. Yet, it was not long before I was overtaken by a mad love for the San Gabriel Mountain range which holds my college town, the coyotes who cackle away late at night, and the cacti that stand bold and resilient in the endless days of sun. Surrounded by the unconquerable forces of Southern California's Inland Valley bioregion—the droughts, the wildfires, the Santa Ana winds, the arid sun—I formed an awareness of how the people who dwell here move with the forces. To spare what water is here, to cultivate the plants that temper the fires, to locally harness the winds and sun to generate energy. Whenever I returned to my Northeastern town in New York, the differences began to seem, ultimately, the same. Though there is more of an abundance of water in the Northeast, the urgency of its cycles penetrates the ways in which communities of life organize around the water's flow, how human communities build with permeable paving so water can infiltrate and recharge underground stores or build bioswales to collect stormwater and filter it for drinking. Wildfires are like our hurricanes, for which we restored dunes and salt marshland (that we had once destroyed for our personal use) to break the waves and take the impact of the winds. In Southern New York, although we have different degrees of wind and sun than Southern California, we also find ways to locally harness these unending forces and convert them into useable energy. Although the communities of life and the landscape are different, I eventually came to understand that in both places, the people dwell by relating to the other beings and topographies that collectively come together to sustain their shared homes.

This is not to say that all the beings in either of the bioregions exist in perfect harmony. The sage scrub in Southern California is persistent and sometimes seeks to swallow the streets. Yet, there's a certain ecstasy that comes from seeing what is built only for humans encounter the rugged will of the biota of the arid valleys. In the narrow streets that carve out our seamless movement to nearby institutions, that exciting encounter gives way to our freedom to move. The streets connect us to other people, but they never fail to meet an edge with other species and their own corridors that facilitate free movement. The buildings that house human industry are not an interruption to the magnitude of the mountains that hold them securely, because they are made up of the same materials and echo the same aesthetics of the place within which they form. It is in those moments where the built environment is so apparently entangled with the mountains, meeting an edge with a patch of sage scrub, that I know we all are at home together.

Built spaces encompass many moments of our day to day lives, from the rooms we wake up within to the roads we travel. It is evident that our very sense of being is defined by the relations amidst the bioregions we are sharing. Yet, one is led to wonder, were built spaces always built with consideration of the intimate relationship between *being* and what is built? Have the spaces we occupied always reflected the mutual gathering of all members of our bioregions? Did what we construct and cultivate always reflect the bioregions we are in?

We still live in the geological period of the Anthropocene, an era defined by human domination of the Earth. Although this term is controversial—obfuscating the culpability of this dominion away from the various forces of capitalism, racism and settler-colonialism that had propelled it—the scale that it presents offers a genuine image of how this Earth was harmed by human intervention. The ways certain groups of humans modified the planet were proven to be destructive, not just for non-human others on this planet, but for many humans as well. Even after we managed to change the anthropocentric systems that framed and mobilized our places for a time, the effects of

climate change are still being adapted to today. We are still working to heal the damage that was wrought. The very manner that industrialized societies shaped what it means *to be* in the world could not sustain us or the places that housed us, and so it met a collapse. As such, the climate crisis forced a reckoning with ourselves and the structures of those human societies that were unsustainable: how did we get to that point of collapse?

Sustainability offered us the ontological question of how to *be* within our bioregions, as an interrelated part of them, not as a malevolent disruptor: it offered us the urgent question of where do we go from here? Our mortal condition was feared in the everyday threats of climate, presenting not only our own finite ends but also the collapse of many other systems of life. This urgency provided the generative spark that propelled us to transform how we live our lives. The project of sustainability could not have been approached through a band-aid solution, rather for us to achieve sustainability in a true sense, we had to ensure that we shifted our way of being to become intertwined within the self-sustaining cycles of all other members of our bioregions. How *to be* in the world is hardly a new question, but the 21st century has been defined by a set of conditions of anthropogenic climate change that presented us with a new imperative for considering this infinitely transitive relation. Not only did many humans and non-humans die, did food insecurity, water scarcity, disease, war, and natural disasters begin to pervade, but it is also had become clear that if something did not change, then these effects would multiply and the places we had always known would look and feel drastically different. As such, people around the world sought to meet this crisis by reformulating a more “sustainable” rendition of the structures that once defined modernity. Former modes of transportation, energy infrastructure, water systems, agricultural methods, buildings: all of it had to change. Approaches to sustainability necessitated a focus on material actions, but unsustainable practices were also guided by an unsustainable set of ideas that permeated our relationship to the world. We had to transform modern notions of human existence to rediscover the ecological relations that constitute our being.

Anthropogenic climate change called for reinventing our dwelling on this Earth such that we no longer lived by isolating and dominating. Anthropogenic climate change held us out to our deaths, and we saw a tragic end to the story. We had to transform how we dwelled, to act in the world by taking care of the relations of our locales, so that we could also be taken care of by those very same relations. So, we learned how to die in generosity, and in turn, we learned how to live.

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