2011

Ecological realism and the tension of realism and idealism in Heidegger's thought

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ECOLOGICAL REALISM AND THE TENSION OF REALISM AND IDEALISM IN HEIDEGGER'S THOUGHT

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Master of Arts

in

The Department of Philosophy and Religious Studies

By
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B.A. University of Central Florida, 2009
May 2011

TO
Katie, the love of my life

AND
my family and friends, for always being there.

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LIST OF ABBREVIATIONS

BT: *Being and Time*
BP: *Basic Problems of Phenomenology*
BW: *Basic Writings*
HR: *The Heidegger Reader*
HCT: *History of the Concept of Time*
FCM*: Fundamental Concepts of Metaphysics*

ABSTRACT

I examine the question of realism and idealism in terms of a tension in Martin Heidegger's thought between entity realism and being idealism. Entity realism is the idea that entities exist independently of humans, whereas being idealism is idea that the being of entities is dependent on humans in some way. The question then is how to reconcile entity realism and being idealism without collapsing to an unattractive position like subjectivism or naïve realism. I appropriate Heidegger's tension to answer the question of realism and idealism in terms of what I call ecological realism. Ecological realism is a way to combine the insights of both realism and idealism without collapsing into logical inconsistency or an undesirable form of either realism or idealism. We want to account for how entities exist independently of us while their being depends on us. I account for these two theses in terms of the concept of sense-making, which concerns how we make sense of the entities we encounter. Appropriating insights from Heidegger as well from modern scientific theory, I defend ecological realism against several objections, and develop an answer to the question of realism and idealism that does justice to both the reality of entities and the ideality of their being.

INTRODUCTION

I think many would agree that Martin Heidegger's position in respect to the traditional questions of realism and idealism is murky, to say the least. This is due to how his oeuvre seems to oscillate between an idealism with respect to being and a realism with respect to entities. On the one hand, Heidegger sometimes claims that the being of entities cannot be analyzed independently of human experience, and is thus ideal; on the other hand, he clearly states in several places, and strongly implies elsewhere, that entities do not depend on us for their brute, material existence, and are thus real. How then do we reconcile the ideality of the *being* of entities and the reality of their status as entities independent of our experience and opinions? Commentators on Heidegger's ontology are divided as to whether this strange tension between realism and idealism can be made consistent without collapsing into an untenable subjectivism wherein reality and experience cannot be disentangled in a meaningful way. The collapse to subjectivism would make Heidegger's ontological views no better than the methodological individualism he attempted to critique. The looming threat of subjectivist idealism (and thus human chauvinism) is especially leveled against Heidegger's early, "phenomenological" work e.g. *Being and Time*.[1] Indeed, many scholars claim that Heidegger never succeeds in overcoming this idealist subjectivism until after the so-called "Turn" in his thinking in the 1930s.[2] Moreover, many interpreters of early Heidegger have argued that this tension between realism and idealism simply ends in "*aporia*" and cannot be coherently resolved (Braver, 2007; Lafont, 2007; Okrent, 1988; Vallicella, 1983, 1985). Such philosophers argue that early Heidegger was embroiled within a logical contradiction when he claimed that being is interdependent with human

[1] One can often distinguish Anglo-American and Continental philosophers on the basis of whether this subjectivism is understood pejoratively or not, with the Anglo-Americans more comfortable with talk of realism and Continentals more comfortable with talk of idealism. There are of course exceptions to these social observations, but in general I think they are true

[2] This is the most common interpretation of the "Turn" that I have seen in the literature. I think the most significant opinion to the contrary has been produced by Thomas Sheehan (2001, personal communication).

disclosure (being idealism) but entities can exist independently of our disclosure or opinion (entity realism). Others attempt to resolve the tension by distinguishing between what can or cannot be said within different levels of analysis (Blattner, 2004; Philipse, 2007).[3] In contrast to these subjectivist readings that end in contradiction, some scholars attempt to resolve the tension by arguing that *Being and Time* must be understood in terms of an "ontic" or "robust" realism (Carman, 2003; Dreyfus, 2001) which maintains that material entities such as stars and rocks do not depend on us for their brute, physical existence.

The central contention of my thesis is that this tension between being idealism and entity realism can be adequately resolved without philosophical compromise in terms of what I "ecological realism". Crucially, ecological realism will be distinguished (chapter 3) from the "classic" or "philosophical" realisms that Heidegger distanced himself from in virtue of their focus on either Kant's Critical arguments or the various "proofs" of the external world starting from the assumption of sense-data and a spectatorial consciousness.

It is important to note that my use of Heideggerian ontology to address the problem of realism and idealism would probably not be recognizable to Heidegger himself or the German phenomenological tradition. My appropriation of Heidegger's tension between being idealism and entity realism to tackle the problem of realism and idealism in general stems from my appreciation for how he rejects the assumptions and dogmas of the Western philosophical tradition, particularly in respect to the nature of human experience. Taking my lead from his insights, I argue that we need not abandon the basic thesis of realism in order to account for the insights of idealism. Although I cannot claim to stick within the methodological constraints of

[3] William Blattner is well-known for trying to resolve the tension between entity realism and being idealism by distinguishing between an empirical and a transcendental level of questioning. He argues that on the empirical level it makes sense to claim that the planet Earth will still exist when humans die out but on the transcendental level we cannot discuss entities apart from the transcendental conditions and in this sense, the being of entities is ideal (hence, being idealism). But whereas Blattner reads the transcendental level in terms of idealism, Herman Philipse reads it in terms of realism. This is supposed to resolve the problems of establishing the legitimacy of a transcendental level of questioning in the first place. My problem with these interpretations is that they are needlessly complicated. On my reading, we can resolve the tension without making such distinctions or worrying about the legitimacy of our level of analysis.

phenomenology in the technical sense of how Husserl and Heidegger did philosophy, my development of ecological realism as a solution of the problem of realism and idealism stems directly out of my reflection on Heidegger's works. Moreover, I believe ecological realism is a plausible interpretation of some of his key ideas, just not one he would have likely endorsed given its scientific, biological context. And although the topic of my thesis (realism and idealism) is one that only rarely animated Heidegger's philosophy, I do think that the issues and problems discussed herein are nevertheless relevant to anyone who wants to deepen their understanding of Dasein's relation to the world.

Rather than claim that Heidegger would adopt this label of ecological realism for himself, I will be making the weaker claim that Heidegger can be coherently thought of as an ecological realist, but that the position itself, being a metaphysical and theoretical stance, is not derived from the phenomenological method as Heidegger practiced it. Ecological realism is better understood as a theoretical toolbox developed to solve certain conceptual problems rather than a direct product of the phenomenological method. However, I will still follow Taylor Carman (2003) in arguing that Heidegger can be plausibly understood as adopting an *ontic realism* wherein occurrent entities are theoretically understood to exist independently of our interpretation and disclosure of them *as* occurrent entities. I argue that the theoretical commitment to ontic realism and rejection of indirect perception and phenomenalism entails a direct realist theory of intentionality in regards to understanding how humans and animals encounter reality. I contend that this framework of ontic realism coupled with direct realism can resolve the tension between realism and idealism.

Moreover, I will argue that while Carman, Dreyfus, and others implicitly develop the conceptual resources for solving the tension between being idealism and entity realism, they ultimately fail to adequately address the theoretical plausibility of how exactly a phenomenon "shows-itself" in the first place, thus making the idea of *encountering the environment*

philosophically intelligible as an answer to the tension between being idealism and entity realism. By addressing James J. Gibson's theory of ecological optics and contemporary developments in 4EA philosophy of mind (embodied, embedded, enacted, extended, affective), I hope to provide the conceptual foundations for making sense of how an entity could "show itself from itself" such that a direct encounter with entities is plausible as an alternative to Platonism, Cartesianism, British empiricism, and contemporary approaches inspired by cognitivism.

In Chapter 1, I introduce the reader to the question of the meaning of being in terms of Heidegger's tension between being idealism and entity realism. This chapter sets up the textual tension between being idealism and entity realism in *Being and Time* and foreshadows my solution for deflating the tension put forward in the remaining chapters. In Chapter 2, I argue for a particular solution for deflating the tension between being idealism and entity realism. By introducing the concept of sense-making, I deflate the tension between being idealism and entity realism and provide a coherent method of answering the question of the meaning of the being of entities. In Chapter 3, I provide a short history of realism, further define my terminology, and defend ecological realism in terms of an "affordance ontology". In this chapter, I also address the question of intentionality (our directedness towards entities) and defend a theory of truth against possible objections (e.g. that ecological realism collapses to a pragmatic relativism where "anything goes"). In Chapter 4, I address the question of language in Heidegger's thought in terms of various puzzles about animal consciousness. Understanding Heidegger's theory of language as well as his thoughts on animal consciousness is critical for understanding how ecological realism also assimilates the best insights of idealism, subjectivism, and social-constructivism. In the final chapter, I provide a summary of the overall argument and my concluding thoughts on the problem of realism.

CHAPTER 1 – THE QUESTION OF THE MEANING OF BEING

Introduction to the Problematic of Entity Realism and Being Idealism

In many ways, Heidegger was concerned with only one question: the question of the meaning of being.[4] One could argue that the issues surrounding this question constitute the entire Heideggerian problematic. And since ecological realism gets its conceptual footing from Heidegger's concept of sense-making, getting a firm grasp on this question is thus crucial for making sense of ecological realism as a response to traditional approaches to the question of realism and idealism. Moreover, by starting our investigation with the question of the meaning of being, we will develop a rough sense of how to approach the tension of entity realism and being idealism. Through a direct encounter with the question of the meaning of being we can situate ourselves in respect to the guiding theme of this thesis. Doing so will also foreshadow my strategy of resolving the tension between entity realism and being idealism (Chapter 2).

The Question of the Meaning of Being

The question of the meaning of being is a question about the ontology, sense, and meaning of entities, objects, things, beings, assemblages, identities, etc. What does it mean for a being to be? What does it mean to encounter a meaningful entity? As Heidegger says, "Insofar as being constitutes what is asked about, and 'being' means the being of entities, then entities themselves turn out to be *what is interrogated*" (SZ 6). Immediately, we can see that this ontological problematic should be distinguished from classical ontological investigations insofar as that tradition was primarily concerned with the question, "What is Being itself, Being *qua* Being?" As Heidegger is at pains to point out, such a question often leads to a hypostatization of

[4] "All our efforts in the existential analytic serve the one aim of finding a possibility of answering the question of the *meaning of being* in general" (SZ 372).

being into Some*thing* that stands above and beyond entities and is then in need of special philosophical explanation.[5] To guard against such a reification or "double-counting", I agree with Heidegger that "The being of entities 'is' not itself an entity" (SZ 6). Indeed, "If we are to understand the problem of being, our first philosophical step consists in not…'telling a story' – that is to say, in not defining *entities as entities* by tracing them back in their origin to some other entities, *as if being had the character of some possible entity*" (SZ 6, emphasis added). Here, it is important to note that Heidegger distinguishes between *ontological* inquiry and *ontic* inquiry. Ontological inquiry is concerned with the *being* or *meaning* of entities made possible by *encountering* entities *as* entities; ontical inquiry is concerned with "telling a [physical] story" about the properties and structural determinations of the entities we encounter.[6]

Moreover, the Heideggerian problematic focuses, in part, on the "*a priori*" understanding of being that human beings necessarily bring to any possible ontological investigation.[7] Indeed, in order to ask the question, "What *is* being?" we must already possess an understanding, however vague or pretheoretical (what Heidegger calls "preontological"), of what it means for something "to be" in virtue of our usage of "is" in the question. Accordingly, we can begin to see how the question of the *meaning* or *sense* of being (*Sinn von Sein*) is distinct from the question of "Being itself" insofar as the former is *ecological* and concerned with the fundamental nature of cognition or sense-making.[8] By shifting the ontological problematic to the understanding of

[5]"Given Heidegger's penchant for using anthropomorphic metaphors to express his central topic, there is always the danger of hypostatizing meaning-giving into a Super-Power endowed with agency, a cosmic Something that 'does things' to human beings, such as 'drawing' them into meaning-giving"(Sheehan, 2010, p. 93).

[6]This difference will be clarified further in chapter 2 when I elaborate on the notion of being as meaning or sense-making.

[7]In the context of his hermeneutic methodology and emphasis on the facticity of experience, Heidegger's use of "*a priori*" is actually a misnomer. If there is any sense of the *a priori* in Heidegger's thought, it is a genetic or developmental *a priori*, that which must be there in order to ground the possibility of certain forms of experience.

[8] I use the term "cognition" in the broadest sense possible as a description of how the existence of living bodies brings forth a phenomenal world (Thompson, 2007). Accordingly, cognition as I am using it should not be confused with the formal manipulation of explicit symbol tokens by an abstract, generalizing intelligence. Any pejorative attitude Heidegger has against "cognitive" explanations must be interpreted in terms of this distinction between formal models and contemporary biological approaches to cognition. I believe that had a more contemporary and ecologically adequate account of cognition been available in Heidegger's time (e.g. 4EA philosophy of mind), his remarks on the state of psychology as a discipline would be remarkably different. See chapter 4.

being, Heidegger seeks to establish a way to answer the question of the meaning of being. Indeed,

> In the question which we are to work out, *what is asked about* is being – that which determines *entities as entities*, that on the basis of which entities are already understood, however we may discuss them in detail. (SZ 6, second set of italics added)

The question of the meaning of being can be seen as primarily concerned with our prereflective understanding of entities, that is, *how we primordially take them to be* before the advent of reflective consciousness and linguistic categorization. This way to approach the ontological problematic is ecological insofar as the question of the meaning of being seems to be focused on the primordial *meaningfulness* of entities in relation to organic interests as well as our immersion in an environment.[9] Accordingly, Thomas Sheehan is perfectly right when he claims that, for Heidegger, "'being' is always a matter of the synthetic-differential relation between things and human interests: it is about the sense that things have in light of those interests" (Sheehan, 2001, p. 10). This point is crucial and often misinterpreted as just another form of Cartesian subjectivism or as reducible to representational models. If we do not understand the ecological and context-sensitive nature of Heidegger's ontological problematic, his answer to the question of the meaning of being will seem inconsistent when he decisively connects the answer to an analytic of the human *Dasein* while still maintaining that entities can exist independently of *Dasein*. Making sense of this inconsistency will be the primary task for which ecological realism is deployed.

The Manifold Sense of Being: An Introductory Example

To see how ecological realism can answer the question of how we make sense of entities, let us take the familiar example of a chair. What is the meaning of a chair *qua* chair? That is, how do I take the chair to be in my everyday encounter with it? Traditional ontological methods

[9] "Even Dasein may be considered purely as life" (SZ 246).

answer this question by claiming there is a single essence to what it means to be a chair, conveniently wrapped up in the symbol "chair", which somehow corresponds, picks out, or "pictures" some actual state of affairs in the world. On this view, the essence of the chair *qua* chair is strictly determined by the material structure of the chair as a natural entity with well-defined structural determinations that are more or less stable over time.[10] In sharp contrast to this static, essentialist approach, ecological realism answers the question by supposing that there is *no single way for a chair to be* precisely because what the chair *is* depends on how I take it to be. On this view, the essence of the chair consists, not it a set of necessary and sufficient properties captured by a propositional predicate, but rather, in its *functionality* in respect to my purpose, what Heidegger calls its "in-order-to [do something]". For ecological realism then, the chair's being thus "transcends" the present-at-hand material structure of the chair because its "freedom" is determined by the vast array of possibilities of involvement made possible by its usability.[11] Accordingly, the "whatness" of a chair in my sense-making – its "thinghood" as understood by me – is primarily shaped by its functional relevance to my concerns as a complex organism with intrinsic desires.[12] For example, if I am tired the chair becomes a place to sit down and relax. If I am too short to reach the cabinet the chair becomes something to stand on. If I am decorating my home the chair becomes something pleasing to look at. If I am setting up an art display, the chair becomes a symbol for some complex idea. In each case, "The kind of dealing which is closest to us is as we have shown, not a bare perceptual cognition [of a sensible quality], but rather that

[10]Heidegger thought that Western philosophy ran into a wall when they took this static model of being and applied it to the realm of human experience. This constitutes part of Heidegger's great critique of the "metaphysics of presence". For example, in ¶64 of *Being and Time* Heidegger accuses Kant of being dogmatic for simply presupposing that the "I" is at bottom always present-at-hand in experience as an "*isolated* subject, accompanying representations in a way which is ontologically quite indefinite" (SZ 321). Indeed, in *The Fundamental Concepts of Metaphysics*, Heidegger says that for Modern philosophy, "[T]he I, consciousness, the person is taken into metaphysics in such a way that *this I is precisely not put in question*" (55).

[11] "…it is precisely intentionality and nothing else in which transcendence consists…The statement that the comportments of the Dasein are intentional means that the mode of being of our own self, the Dasein, is essentially such that this being, so far as it is, is always already dwelling with the extant" (BP 63-64).

[12]The question of "whatness" is greatly complicated by the human faculty of language and notion of communal norms of description and understanding. See chapter 4.

kind of concern which manipulates things and puts them to use" (SZ 67, bracketed comment added).[13]

Thus, the manifold sense of being for all entities is primarily determined by their usability in respect to the specific functional context of our encounter with them, which is relative to our prior needs, concerns, interests, and moods. The take away lesson is that in terms of the question of the meaning of being, what entities *are* depends on how we take them to be, and how we take them to be depends on the particular context of our encounter. This primordial, functional "taking-something-as-useful" constitutes what Heidegger calls the "hermeneutic" mode of being, which is foundational in respect to other, more complex ways of taking-something-as-something. For example, a book's mode of being is different depending on whether I need kindling for a fire or something to entertain myself on the plane. For Heidegger, this manifold sense of being holds for *everything* we encounter in our public dealings, including desks, spatulas, buildings, abstract concepts, even the Sun and stars.[14] This functional instrumentality grounded by situated needs, concerns, and interests constitutes the essential nature of what Heidegger calls entities ready-to-hand (*zuhanden*). In our daily comportments, entities function as *equipment*; they are "handy" or "on hand" for our use.[15] Indeed, "This is the way in which everyday Dasein always *is*: when I open the door, for instance, I use the latch" (SZ 67). Heidegger calls this mode of everyday instrumental dealing *circumspective concern.* It is the most fundamental mode of existence for purposeful beings such as ourselves and is most evident in our daily routines and habits such as putting on clothes, eating breakfast, brushing our teeth, driving a car, etc.

[13] "The being of something we use, for instance, a hammer or door , is characterized by a specific way of being put to use, of functioning…Equipment is 'in order to'" (BP 292).
[14] In one sense, the Sun is a luminous ball of plasma; in another, a means by which to tell time or navigate. Stars are "independent" of us, but are also used for navigation and story-telling, and hence susceptible to different cultural interpretations.
[15] Moreover, equipment is constituted by a referential totality for "Equipment – in accordance with its equipmentality – always is *in terms of* its belonging to other equipment: ink stand, pen, ink, paper, blotting pad, table, lamp, furniture, windows, doors, room" (SZ 68). Accordingly, Heidegger says there is no thing as "an equipment"; "Equipment is encountered always within an equipmental contexture" (BP 292).

Moreover, Heidegger makes an important distinction between encountering entities as ready-to-hand and encountering them as present-at-hand. Encountering entities *as* present-at-hand involves a theoretical or reflective cognition that is oriented towards more generalized, abstract properties as when, for example, we are attentively staring at the chair and reflecting on its sensible qualities or investigating it forensically as a material object with determinate spatiotemporal properties.[16] Heidegger insists that this reflective, scrutinizing mode of encountering is derivative from the more primordial mode of circumspective concern wherein we are "thrown" or "immersed" into an automatic habit, either of action or reasoning. For Heidegger then, we can say that our encounter with entities in light of prior interests and concerns constitutes the manifold sense of being; how entities *are* at this level of sense-making depends on how we take them to be and how we take them to be depends upon the intrinsic, self-generated context of our encounter.

A moment's thought reveals that we primarily encounter entities as *ready-to-hand* rather than as *present-at-hand*. Either way, the ontological mode of beings is dependent on the concerns of the particular perceiver who is encountering them, for even the abstract contemplation of scientists fits into an overall pragmatic schema involving grants, publications, and real-world methodological inquiry. In the next section, I will turn to the secondary literature in order to see how commentators have interpreted and made sense of this fundamental link between individual concern and the ontological being of entities. For some, the primacy of the ready-to-hand in our concernful dealings suggests that Heidegger ascribed to an anthropomorphic "pragmatic" idealism wherein the ontological status of present-at-hand properties is somehow "derivative" from the human disclosure of readiness-to-hand (Braver, 2007; Okrent, 1988). For others, Heidegger's ontology is simply inconsistent insofar as it appears to oscillate between both being

[16]As will be seen in chapter 4, Heidegger argues that this theoretical cognition is dependent on language.

idealism and entity realism.[17] On both readings there is an essential tension that threatens to upset the coherence of Heidegger's ontology.

Setting up the Tension between Realism and Idealism

The quickest route into Heidegger's tension is through what can be called "puzzle passages".[18] The following are the most well-known:

> (1) Being is that which determines entities as entities, that on the basis of which entities are already understood. (SZ 6).
> (2) "There is" being – not entities – only insofar as truth is. And truth *is* only because and as long as Dasein is. (SZ 230)
> (3) *Readiness-to-hand is the way in which entities as they are "in themselves" are defined ontologico-categorially*. Yet only by reason of something present-at-hand, 'is there' anything ready-to-hand (SZ 71, original emphasis)
> (4) But the fact that Reality is ontological grounded in the being of Dasein, does not signify that only when Dasein exists and as long as Dasein exists, can the Real be as that which in itself it is. Of course only as long as Dasein *is* (that is, as long as there is the ontic possibility of an understanding of being), "is there" being…As we have noted, being (not entities) is dependent upon the understanding of being; that is to say, Reality (not the Real) is dependent upon care. (SZ 212)
> (5) Entities *are* independently of the experience, cognition, and comprehension through which they are disclosed, discovered, and determined. But being "is" only in the understanding of that entity to whose being something like an understanding of being belongs. (SZ 183)

Making these passages consistent has been a cottage industry in Anglo-American Heidegger scholarship. The puzzle is that Heidegger seems to be balancing "entity realism" with "being idealism". On the one hand, he is saying that entities exist independently of humans, have existed before humans, and would continue existing if humans died off. On the other hand, Heidegger seems to be saying that being is dependent on human existence in some way. The problem then is to reconcile how being could be dependent on humans if being is "that which determines entities as entities" and according to (4) and (5), entities can exist independently of humans. If

[17] This seems to be the position of Christina Lafont (2007).
[18] I believe Cerbone (1995) was the first to use this term.

being determines entities as entities, and entities can exist independently of Dasein, then how is being dependent on human understanding and disclosure?

Perhaps no one has laid out the problem clearer than William Vallicella. He says that early Heidegger's ontology

> …entails an incoherent subjectivism: it amounts to the claim that beings other than Dasein are ontologically dependent on Dasein. For if beings are dependent upon Being [sic], and Being is dependent upon Dasein, then beings are dependent upon Dasein…But how can the cosmic totality in all its vastness depend on a miniscule part thereof? (1990, p. 247)

The critical question is thus, "If being is dependent on Dasein, but beings are not, how is the connection between being and beings to be understood?" Scholars like Vallicella believe that this incoherent subjectivism runs through the core of early Heidegger's system, particularly *Being and Time*. Moreover, this accusation of subjectivism is widely accepted by Anglo-American philosophers. As Mark Okrent argues, "The only consistent metaphysics to be derived from the program of *Being and Time* is a pragmatic [i.e. subjectivist] one" (1988, p. 217, bracketed comment added). And since Heidegger himself stated that he was trying to overcome such subjectivism in *Being and Time,* we are left with serious problems regarding Heidegger's overall consistency. Accordingly, many scholars see Heidegger's supposed "Turn" in the 1930s as a way to overcome the inconsistency of his earlier subjectivism.[19] Others take what has been called a "minimalist approach" wherein Heidegger's being idealism (his insistence that being depends on Dasein) is defined in such a way as to not contradict the claim that natural entities can exist independently of human disclosure or opinion.[20] This is the path I shall take. By reading Heidegger's idealism as compatible with the thesis of realism, I aim to show how ecological realism could coherently resolve the tension of being idealism and entity realism without collapsing into either a dogmatic and naïve realism or an anti-realist subjectivism.

[19] This is the path that Vallicella and Okrent take. Olafson (1987) also seems to take this path.
[20] This the path taken by Carman (2003) and Dreyfus (2001).

CHAPTER 2 – SENSE-MAKING

Being as Meaning

In this chapter, I will argue that both entity realism and being idealism can be coherently true if we understand them ecologically. That is, if we realize that the primordial "being of entities" is synonymous with the *meaning* or *vital significance* that entities have in relation to teleological (i.e. homeostatic) interests, the charge of subjectivist idealism is avoided without collapsing into naïve realism or "transcendental" or "critical" realism.[21] Moreover, the complexity of the structures of significance in human adults is directly related to the complexity of the sign-system learned in childhood. Human adults are usually fluent in at least three different types of signs: iconic (similarity e.g. a sound effect in a movie), indexical (nonarbitary pointing out e.g. smoke is a sign of fire), and symbolic (arbitrary and highly referential e.g. the word "President", or better yet a number). In most human cases, the meaning of entities (their significance) is intimately connected to both the biological needs of the individual as well as the communal semiotic produced by the population's attempt to settle opinion. In humans, the community is of the utmost importance because infants, having the longest gestation periods of any animal, are unusually dependent on others for survival. Of all the animals then, humans are most essentially "the social animal". Moreover, the sad cases of severely neglected children who were never exposed to linguistic stimuli during the critical window of development suggests that being embedded within a linguistic community is crucial for the normal development of the skills necessary for successful living in today's world.

[21] The most popular form of transcendental realism is the concession that on one level of analysis (the empirical) it makes sense to talk about the independence of reality from human disclosure, but on another level (the transcendental) it makes no sense to talk about the independence of reality. In contrast, there is no level of analysis in ecological realism where the independent existence of the Real is meaningless.

In the first chapter, we saw how the ecological approach to sense-making understands the being of entities in terms of *how we take them to be* in relation to our interests as embodied creatures who *seek meaning* and our embeddedness within a linguistic community susceptible to normative inquiry (the process of settling opinion).[22] This approach attempts to make sense of how the same structural arrangement of entities can manifest itself differently depending on both the individual and social context of our encounter with it. The bistable Necker cube and duck-rabbit illusion are classic examples of how perceptual givens are indeterminate with respect to meaningful interpretation. In other words, the meaning of a stimulus for an organism is always mutually constrained by the given itself and the context by which the organism encounters it and makes sense of it (or ignores it). The "background context" behind every interpretive disclosure operates in both an implicit and explicit manner and profoundly shapes how we orient ourselves in respect the geological, biological, and sociological environments we inhabit. And although the explicit level is capable of influencing the entire implicit level in virtue of its hierarchical advantage, it is the implicit level that has reigned supreme for the vast majority of human history and continues to have a dominant influence on our modes of living. As a Mark Johnson and George Lakoff put it, "Our unconscious [i.e. nonreflective] conceptual system functions like a 'hidden hand' that shapes how we conceptualize all aspects of our experience…It…shapes how we automatically and unconsciously comprehend what we experience. It constitutes our unreflective common sense" (1999, p. 13, bracketed comment added).[23] This notion of a prereflective background context shaping how the world is encountered and made sense of has

[22] Some commentators claim that Heidegger never had anything to say about Dasein's embodiment or animal nature. I find this claim to be an exaggeration. In *The History of Concept of Time* (HCT), for example, he discusses how Dasein's existential orientation is shaped by the corporeal structure of mammalian right-left symmetry. Indeed, "The fact that environmental signs are encountered, understood, and used means that being-in-the-world, concerned preoccupation in the world, is as such oriented. It is because Dasein in its being is oriented in-being that there is right and left. *More accurately put, because oriented Dasein is corporeal Dasein, corporeality is necessarily oriented*. The orientation of apprehension and looking articulates the 'straight ahead' and the 'to the right and left.' Dasein is oriented as corporeal, as corporeal it is in each instance its right and left, and that is why the parts of the body are also right and left parts" (232, emphasis added).

[23] "A stone either has a property or does not have it. We, on the contrary, can have something and at the same time not have it, that is, not know of it. We speak, after all, of the unconscious" (FCM 92).

been studied under various guises since the inception of phenomenological psychology and the cognitive sciences.[24] Its importance for ecological realism cannot be overstated.

Understood in terms of ecological realism, the ontological identity of entities is essentially "open" to a large number of possible interpretations depending on the particular factical context of both the perceiver and the perceived.[25] For example, there is no single way for a rock to exist for-the-sake-of an organism. It could exist as a plain old rock (blindly passed by or quickly forgotten) or it could exist as a paperweight, missile, gift, currency, decoration, toy, scientific object, chair, tombstone, nutcracker, prop, gemstone, etc. It is important to note that all these manifestations of the rock *as something other than itself* are structured by certain teleological principles intrinsic to the agent who encounters the rock. I think Heidegger is persuasive in showing that the significance or meaning of a rock for a living entity is dependent on there being in place intrinsic organizational determinations of the entity that structure the functional context of any particular encounter. The most general placeholder for this organization is what Heidegger calls "concern" (*Besorgen*).[26] Built into this metaphor of concern is the concept of *finding oneself*. Finding oneself does not indicate what is usually referred to as self-consciousness or self-awareness. Rather, it refers to the immediate bodily "attunement" or affectivity that operates under the surface of our reflective, theorizing consciousness.[27] For Heidegger, this prereflective attunement capacity substantively separates the animate organism from the inanimate stone. Indeed,

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[24] See Barrs (1997) and Macphail (1998) for an overview of the history of research on nonconscious mental processes.

[25] Although Heidegger clearly restricts the *explicit* clearing of being to humans insofar as we are the linguistic animal (See his *Letter on Humanism*), I think it is coherent to talk about a *prepredicative* clearing of being based on the autonomous, self-directed structure of Care shared by all organisms.

[26] "As care – that is, as existing in the unity of the projection which has been fallingly thrown – [Dasein] has been disclosed as a 'there'" (SZ 406).

[27] "The Dasein does not need a special kind of observation, nor does it need to conduct a sort of espionage on the ego in order to have the self; rather, as the Dasein gives itself over immediately and passionately to the world, its own self is reflected to it from things…This is not mysticism and does not presuppose the assigning of souls to things. It is only a reference to an elementary phenomenological fact of existence, which must be seen prior to all talk, no matter how acute, about the subject-object relation" (BP 159).

> A stone never finds itself but is simply present-at-hand. A very primitive unicellular form of life, on the contrary, will already find itself, where this affectivity can be the greatest and darkest dullness, but for all that it is in its structure of being essentially distinct from merely being present-at-hand like a thing. (HCT 255)

Accordingly, the teleological (i.e. concern oriented) structure of organic living opens up the possibility of meaning or significance, however "dull" in comparison to the world-formation of humans (which will be fully discussed in Chapter 4). I believe this open field of imminent possibility can be likened to how Heidegger understands the way nonhuman animals behave in an environment. This field of possibility is best understood as a field of free action. This field of possibility brings forth an environmental world through what Heidegger calls the "hermeneutic as-structure", a synonym of circumspective concern (the disclosure of entities for-the-sake-of some internal concern, distinct from the assertorial or linguistic as-structure, see Chapter 4). We can say then that if you take your environment (e.g. the ground) to directly mean something in respect to your self-sustaining interests (*supportability*, *moving-across*), then your existence brings forth an environmental world (as opposed to the world studied by physics, which is devoid of significance). And because inanimate entities are not structured by teleological principles of self-regulation and self-preservation, their mode of being must be distinguished from that of biological entities.[28] Strictly speaking, a lightbulb or rock does not "have" a world nor does it "exist"; whereas it subsists "alongside" or "next to" the world, it does not *live in* the world nor does it "have" a world. Moreover, the concern structure of organic behavior is self-like insofar as the capacity of self-preservation "*does not leave itself behind*, it does not escape itself as it were. On the contrary: in this instinctual 'toward', the capacity as such becomes and remains *proper to itself* –and does so *without* any so-called *self-consciousness* or any *reflection* at all, without any relating back to itself" (FCM 233). To be organic is to inhabit a lifeworld over time. A stone *subsists*, but it does not live for it has no world to encounter, no meaning to find.

[28] "A window, a chair, in general anything extant in the broadest sense, does not exist, because it cannot comport toward extant entities in the manner of intentional self-directedness-toward them" (BP 64).

A Brief Note on the Collectivity of Human Meaning

At this point some readers might complain that ecological realism is not compatible with Heidegger's own views since I am placing such a strong emphasis on Dasein as an autonomous individual[29] and looking at significance and meaning in terms of the individual's bodily interaction with the environment. This seems to be incompatible with Heideggerian statements like "So far as Dasein *is* at all, it has being-with-one-another as its kind of being. This cannot be conceived as a summative result of the occurrence of several 'subjects'" (SZ 125). Indeed, "The Self of everyday Dasein is the *they-self*, which we distinguish from the *authentic Self* – that is, from the Self which has been taken hold of in its own way. As they-self, the particular Dasein has been *dispersed* into the 'they', and must first find itself…Proximally Dasein is 'they', and for the most part it remains so" (SZ 129). The concept of the "They" and the "they-self" is meant to underscore the fundamental social nature of humanity. But this is fully compatible with ecological realism, since the *social niche* is of particular importance to the human species, who are so dependent on others in a myriad of ways, both biological and social. We are not born as individuals isolated from the immediacy of interpersonal relationships. From the get go we are immersed in a social field with immense potential for highly significant stimulation. A separation from this social milieu happens only in pathological cases. Accordingly, ecological realism agrees with Heidegger in saying that, for humans, being alone is a "derivative" state of mind in comparison to being-with-others.

Moreover, the concept of the They is meant to capture the way in which our individual behavior is shaped by the normative structure of social institutions like families, schools, peer groups, churches, etc. Ecological realism's acknowledgement of this fact provides support for the truth of being idealism in its claim that both realism and idealism can be true if understood

[29] It is important to note that this usage of "autonomous" bears no relation to the Kantian notion of the term, which is completely free from factical involvement. My usage of the terms comes from the biological sciences, where life is defined as autonomous because it is contingently self-sustaining both on the individual and evolutionary timescale.

ecologically. Heidegger is right to point out that our utilization of phrases like "You should do it like *they* do" or "*One* should not act like that" indicates the fundamentally social nature of individual cognitive control. Our absorption of stories in childhood, for example, gives us the narratological frameworks (D. Hutto, D., 2008) for understanding appropriate behavioral scripts in everyday situations, such as how to wait in line or what you should do in a restaurant. Over time, we pick up social norms from exposure to the intersubjective pressures of conformity, tradition, and authority. This is particularly salient in genderfication, racialization, and other subjectification practices widespread in our society. When a young boy steps into the social arena, he quickly learns the heuristic that "boys don't normally wear dresses, or like the color pink". Likewise, a young girl quickly learns the normative rules associated with being female in her society. These rules are not just algorithmic applications of abstract principles. The norms of society fundamentally alter our experience, both prereflective and reflective, implicit and explicit. On the prereflective level, we normally learn how to automatically react in the appropriate social setting. We learn to read faces and behavior quickly, automatically, and without reflective thought e.g. seeing someone crying automatically triggers emotional habits without the need of reflective deliberation. The prereflective system is an efficient "mind reader" and learns to pick up various verbal and nonverbal cues, particularly in respect to emotional tones and indications as to what someone might say next.

Another Possible Objection

It is important that we stop here and consider a possible objection to ecological realism's idea of organic sense-making necessarily being incompatible with Heidegger's thought. Some scholars might point out that Heidegger distanced himself from an account of perceptual

disclosure wherein a meaningless world is "valued" or "subjectively colored" relative to the mental context of the subject. Indeed, he says

> …if we never perceive equipment that is ready-to-hand without already understanding and interpreting it, and if such perception lets us circumspectively encounter something as something, does this not mean that in the first instance we have experienced something purely present-at-hand, and then taken it *as* a door, *as* a house? This would be a misunderstanding of the specific way in which interpretation functions as disclosure. In interpreting, we do not, so to speak, throw a 'signification' over some naked thing which is present-at-hand, we do not stick a value on it. (SZ 149-150)[30]

The worry is that my ecological account of circumspective concern threatens to collapse into the subjectivist "mental projection" or "mental rendering" model that Heidegger explicitly argued against. If subjective experience is a matter of projecting our mental contexts onto the world so as to create a world, are we not right back to subjectivism and Kant's problem of the thing-in-itself? In order to avoid this objection, we can to interpret Heidegger's concept of "projection" (*Entwerfen*) in such a way as to undercut traditional presuppositions of what constitutes a perceptual stimulus.

As I understand it, the way to deal with the concern in the above passage is to not assume that the environment as it exists in itself is "naked" (i.e. meaningless) and thus in need of being "valued" or "colored" by our mental paintbrush. Instead, we can assume that elementary objects, events, and social scenes are always already impregnated with meaning relative to us in virtue of our being *structurally coupled* to the environment. As Maturana and Varela define it, there is structural coupling "whenever there is a history of recurrent interactions leading to the structural congruence between two (or more) systems" (1987, p. 75). Moreover, I claim that the meaning of a terrestrial environment for an organism is dependent on what that environment *affords* the organism in virtue of the history of interaction between it (the unified organism) and the environment. And crucially, "The affordance points both ways [subjective and objective]. What

[30] "The significance-relationships which determine the structure of the world are not a network of forms which a worldless subject has laid over some kind of material" (SZ 366).

a thing *is* and what it *means* are not separate, the former being physical and the latter mental, as we are accustomed to believe" (J. J. Gibson, 1982, p. 408).

Accordingly, after perceptual learning takes places, to perceive (either visually or haptically) the rigid surface of the ground is to immediately perceive it as being *supportive,* a normative property. After learning about doorways, to perceive the contours of a doorway is to immediately perceive it as meaning *something-to-go-through*. Likewise, the open medium of air is immediately perceived as affording *movement-through*. How we learn to find and discriminate these behavioral affordances is determined by the ontogenetic history of our structural coupling (a human doorway does not afford going-through for an elephant just as a set of stairs no longer affords access for someone in a wheelchair). Under this view, we do not *first* experience the environment as a meaningless "input" and *then* "calculate" its meaning relative to our needs. Because the world *directly affords* behavioral opportunities in virtue of our history of structural coupling (which necessarily involves perceptual learning and plasticity), we need not assume that it is normally first experienced as meaningless or unfamiliar. Rather, we experience something as meaningful by reacting to it in terms of how it presents itself as an opportunity for changing our relationship with the environment (for better or worse).[31] Such prereflective meaning is prepredicative but foundational in respect to higher-order cognitive skills such as language use, social cognition, propositional reasoning, and induction. And whereas prereflective meaning is surely constituted by teleo*semiotic* principles, there is no reason to suppose that, on the implicit level, such meaning is taken in terms of propositional or *semantic* content. In other words, whereas the structure of prereflective significance is governed by an understanding of iconic and indexical signs, it is only the linguistic and propositional level of cognition that operates according to semantic norms within a logical space of reasons (Brandom, 2001).

[31] I suppose that on some abstract, physiological level of description it makes sense to say the organism encounters a meaningless, raw "input". But I resolutely deny that this is appropriate for understanding our phenomenological experience.

Granted, the meaning of some objects must be learned in experience and we could say in these cases that the object was first experienced as devoid of significance and then "valued" by the mind with the mental paintbrush. But to claim that this represents our experience with objects in general is to grossly distort the facts of experience. In reality, the prereflective background context we bring to every situation guarantees that, proximally and for the most part, the objects we attend towards are *directly meaningful* to our ongoing project of staying alive and dealing with the world effectively and bouncing back from any downturns. Indeed, we ignore or quickly forget the things that have no relevance to our life.[32] As Heidegger says, we are for the most part "delivered over to" or "thrown" into our factical life experience, for better or worse. Thrownness is often great if you are making love or playing a sports game, but can be dysfunctional if you are thrown into a gambling game, or a get-rich-quick scheme. Likewise, being highly reflective makes for bad love making, but can be helpful when deliberating on an important consumer purchase. We can suppose then that how we make sense of the world is always, on some basic level, specified by the context of our prereflective, self-generated organization or "state-of-mind". If we are still alive with a far-from-equilibrium metabolism, then we are being effective in maintaining our autonomous structural unity in respect to the environment. This organic sense of "effectivity" must be distinguished from a social sense of the term applicable to one's rise or fall within a particular sociological niche. Following Maturana and Varela, we can say that a living entity is *operationally distinct* from its surroundings insofar as it continuously maintains itself as a unified whole from zygote to death.[33] Accordingly,

> Inasmuch as the changes of state of an organism (with or without a nervous system) depend on its history of structural coupling [with the environment], *changes of state of the organism in its environment will necessarily be suitable and familiar to it*, independently of the behavior or environment we are describing. (1987, p. 138)

[32] The bystander effect in social psychology is an unfortunate reminder of this fact. When a single person comes across someone lying in the street, they are much more likely to stop and see what's wrong than if they are just one bystander amongst many. In crowds, we are morally complacent and think to ourselves "Someone else will take care of it."

[33] I believe such unity or self-closure is what Heidegger analyzes under the concepts of finitude and solitude in FCM.

In other words, the world is immediately familiar to us without the need to "stick a value on it" insofar as we are embodied creatures with a unified, self-organizing material composition. The value or behavioral significance of any encounter is already there in accordance with our ontogenetic history of structural coupling with the world, both biological and social.[34] On my reading then, we can adopt Heidegger's concept of projective disclosure without collapsing into a transcendental idealism wherein our mind "shades" or "colors" the given through passive forms of sensibility. As Thomas Sheehan puts it, "The proper translation of *entwerfen auf*…is not 'to project something upon' (a meaningless phrase in this context) but 'to take something as,' i.e., to make sense of it" (Sheehan, 2001, p. 10)

A Defense of Ecological Realism's Internal Consistency

With being understood as meaning or sense-making and ontic being distinguished from ontological being, we can now defend the internal coherency of ecological realism against the accusation that it is but another form of subjectivism. In order to do so, we must reconcile entity realism with being idealism. Entity realism (what Taylor Carman calls "ontic realism") is simply the common sense notion that the physical universe exists regardless of whether agents are around to perceive it. As it were, reality does not blink away when we turn our back on it. This is the fundamental hypothesis of the scientific method. As Charles Sanders Peirce put it, this hypothesis claims that "There are Real things, whose characters are entirely independent of our opinions about them" (Peirce, 1955, p. 18). On the other hand, being idealism is the notion that, in some sense, the being of entities is dependent on or "relative to" perceivers. To help us reconcile these two theses, let us return to the puzzle passages highlighted in Chapter 1.

[34]Indeed, "Much closer to us than all sensations are the things themselves. We hear the door shut in the house and never hear acoustical sensations or even mere sounds. In order to hear a bare sound we have to listen away from things, divert our ear from them, i.e., listen abstractly" (BW 152).

Heidegger's entity realism is evident when he says that "Entities *are* independently of the experience, cognition, and comprehension through which they are disclosed, discovered, and determined" (SZ 183). In contrast, his being idealism is evident when he says that "only as long as Dasein *is* (that is, as long as there is the ontic possibility of an understanding of being), 'is there' being" (SZ 212). While some scholars have attempted to reconcile these two passages in terms of a sophisticated distinction between different levels of analysis, my approach is much simpler. I contend that the most parsimonious way to reconcile the passages is to say that the ontological "being" of entities is synonymous with their meaning or sense in relation to human interests and concerns. We can thus propose that there are two different senses of being, the ontic and the ontological. Ontic being is synonymous with perceiver-independence whereas ontological being is synonymous with perceiver-dependence. Accordingly, we can then read the puzzle passages as follows:

> Only as long as Dasein *is*…'is there' meaning or sense-making.
>
> Meaning or sense-making is that which determines entities *as* entities, that on the basis of which entities are already understood.
>
> "There is" meaning or sense-making – not entities – only insofar as truth is. And truth *is* only because and as long as Dasein is.

It is my contention that this interpretation of being as sense-making absolves the contradiction between entity realism and being idealism. Under this framework, we can say that entities exist independently of us but their being (i.e. their meaning or significance) is dependent on *how we take them to be*.

Take, for example, Mount Rushmore. Clearly, there is a sense in which the cliff face is constituted by perceiver-independence insofar as the material rock from which it is carved existed before perceivers came about and would continue to exist if all life vanished. It is in this sense that we can say Mount Rushmore is ontically *real* or *actual*. It exists independently of our opinions about it. However, there is sense in which Mount Rushmore exists only insofar as there

are humans around to encounter it *as a monument*. The mountain thus lives a double life when humans are around. On the one hand, its reality as a contingent entity is determined by material forces which operate independently of perceivers. On the other hand, its reality as a *monument* is dependent on those entities who disclose Mount Rushmore *as* Mount Rushmore. A bird living on the cliff face, however, will not take the mountain as a monument, but rather, as a place of shelter or sustenance. For the bird, Mount Rushmore has indexical significance but for the human it has this plus symbolic significance. It is only in this sense that we can say the mountain's being is relative to the teleological interests of cognitive agents.

Accordingly, the meaning of the puzzle passages for ecological realism is now clear. Entities *are* independently of disclosure insofar as they exist as natural entities but *their being* "is" only insofar as there is an understand of being, that is, only insofar as entities are taken to be meaningful in relation to intrinsic teleological interests. The ontology of being, of meaning, is thus equivalent to the affordance ontology of ecological psychology. The ground will afford support whether any animal is around to walk on it, but the perception of the affordance is relative to the perceiver (think about an insect walking on water). In this way, we can say that the perception of affordances (the disclosure of meaning, of being) is both subjective and ecological, but neither taken in isolation. Ecological, because what the environment affords is directly related to *what it actually is*, independent of any disclosure or opinion. Subjective, because an organisms history of structural coupling determines the perception and use of what the environment affords. Accordingly,

> The meaning or value of a thing consists of what it affords. Note the implications of this proposed definition. What a thing affords to a particular observer (or species of observer) points to the organism, the *subject*. The shape and size and composition and rigidity of a thing, however, point to its physical existence, the *object*. But these determine what it affords the observer. The affordance points both ways. What a thing *is* and what it *means* are not separate, the former being physical and the latter mental, as we are accustomed to believe. (J. J. Gibson, 1982, pp. 407-408)

Moreover, it is important to note that this circumspective or hermeneutic understanding of being is operational prior to any explicit linguistic or propositional cognition. In other words, the primordial meaning or significance of entities is determined in the first place not by our language or theoretical concepts, but rather, in their immediate intelligibility relative to the teleology of *circumspective concern*. A similar point is eloquently expressed in ¶32 of *Being and Time*:

> *Any mere prepredicative seeing of the ready-to-hand is, in itself, something which already understands and interprets*…that which is understood gets articulated when the entity to be understood is brought close interpretatively by taking as our clue the 'something as something'; and this articulation lies *before* our making any thematic assertion about it. (SZ 149, emphasis added)

This point is important. If we do not understand the prelinguistic intelligibility of entities relative to the care-structure of affectivity, we will not understand how linguistic cognition takes up and modulates this more primordial, prereflective understanding of being through the powers such as *labeling*, *pointing,* and *predicating* (Chapter 4). My point is simply that insofar as we are embodied individuals, our primordial relationship to the environment is always already shaped by our history of structural coupling, which includes the learning of affordances. It is this ontogenetic history that co-constitutes my encounter with the environment and fundamentally shapes any higher-level cognitive operations.

For example, every time I enter my room and encounter a chair, I immediately understand that the chair affords the possibility of sitting. This is in fact my immediate and prereflective understanding of the chair. In Heidegger's terms, my history of using chairs as something to sit on has now created a *foreconception* that shapes my everyday experience such that my encounter with chairs is proximally grounded by the affordance of sitting. This foreconception or "foresight" is generated by learning the affordances of the environment, an act of perceptual learning. It requires an act of theoretical cognition to "deworld" or "defamiliarize" the chair such that I see it as something besides a tool for use. Indeed, Heidegger says that "In every case interpretation is grounded in *something we see in advance* – in a *foresight*" (SZ 150).

This foresight is what ecological psychologists have called "prospectivity" (E. J. Gibson & Pick, 2000, p. 164). If we carefully reflect upon our everyday experience, we can see the influence of *historicity* (our "having been") and *foresight* upon our immediate encounter (our "making-present") with entities.[35] As we go about our business, the world is made significant in relation to our prior concerns, interests, expectations, and declarative beliefs. And moreover, what we are interested in is always shaped by our internal structural history and what is currently ready-to-hand in the environment. For this reason, Heidegger is right to emphasize that perception is better understood in terms of a *meaningful encounter with the environment that brings forth a world* rather than in terms of rendering representational models or images of the environment which are then analyzed according to truth conditions (with the threat of homuncularity always lurking).

Accordingly, I contend that ecological realism is attractive as an ontology insofar as it combines entity realism and being idealism without collapsing into Cartesian subjectivism. Because we can account for how the being (i.e. meaning) of entities is relative to organisms without supposing that the perceiver synthetically contributes anything to what is perceived, I contend that ecological realism avoids the charge of *strong correlationism* in the traditional Kantian sense. As Quentin Meillassoux defines it, "By 'correlation' we mean the idea according to which we only ever have access to the correlation between thinking and being, and never to either term considered apart from the other. We will henceforth call *correlationism* any current of thought which maintains the unsurpassable character of the correlation so defined" (Meillassoux, 2009, p. 5).

[35]This structure of historicity, prospectivity, and making-present constitutes what Heidegger calls the "temporalization" of subjectivity.

CHAPTER 3 –REALISM, INTENTIONALITY, AND TRUTH

A Very Short History of Realism

In order to further establish ecological realism as compatible with both realism and idealism, we must first clarify the position of realism in respect to the philosophical tradition. Customarily, the problem of realism concerns rigorous philosophical demonstrations for the existence of the natural world "external" to the interiority of consciousness. These demonstrations are often claimed to be based on infallible knowledge, such as the foundation of sensory givens or the indubitability of *a priori* intuitions. Western philosophers since Descartes have long presupposed a sharp ontological boundary between interior mental life and exterior physicality, *res cogitans* and *res extensa*, inner and outer, mind and body. Moreover, the history of Western philosophy indicates that it is difficult if not impossible to securely connect these two realms once cleaved. Indeed, Kant said that the lack of decisive proof for the existence of the external world was the great "scandal of philosophy".[36] Consequently, it has been the traditional task of philosophy to provide a "proof" or demonstration that the world did indeed exist independently of the mind and that moreover, we have good reasons for believing so (as opposed to merely animalistic intuitions regarding its existence). According to this tradition, which we can call *philosophical* or *classical* realism, the world external to the mind is believed to exist independently of the mind (as per ontic realism) but the validity of this thesis requires rational proof, of which there have been various kinds offered, all starting from the presupposition of an interior, solipsistic consciousness set against a meaningless physical flux "outside" our minds.

[36] Kant's solution, however, wasn't to restore the external world to its proper place in our experience, but rather, to banish metaphysics from philosophy and entirely prevent discussion of "the thing-in-itself". Unfortunately, Kant did not see the virtue of *approximating* the thing-in-itself through a developmental process of abductive reasoning, what has been called the "process of elimination" or the "scientific method".

In ascribing to a realism about the "external world",[37] we must sharply distinguish classic philosophical realism from *ecological realism* (See appendix). Both positions agree on the thesis that the environment exists independently of our perceptual access to it, but they differ radically in regards to a demand for philosophical proof based on the presupposition of the inside-outside, subject-object distinction as well as methodological individualism. As Heidegger says,

> Along with Dasein as being-in-the-world, entities within-the-world have in each case already been disclosed. This existential-ontological assertion seems to accord with the thesis of *realism* that the external world is really present-at-hand. In so far as this existential assertion does not deny that entities within-the-world are present-at-hand, it agrees – doxographically, as it were – with the thesis of realism in its result. *But it differs in principle from every kind of realism; for realism holds that the Reality of the 'world' not only needs to be proved but also is capable of proof*. (SZ 251, emphasis added)[38]

In order to understand ecological realism as distinct from classic philosophical realism, we must come to grips with Heidegger's conception of "being-in" as a philosophical alternative to the classic "container" or "theater" models of sense-perception. Modern philosophy has long understood sense-perception in terms of a container metaphor wherein the mind acts as an internal storehouse for mental representations that are generated or "transduced" by precognitive machinery according to mechanistic and linear rules of causality. In neural terms, the brain is said to construct a mental representation of the distal stimulus (the objects in the environment) from the inadequate information specified by the proximal stimulus (ambiguous sense-data). Accordingly, the preeminent problem of Cartesian epistemology is to rationally prove that what is on the "outside" of the container corresponds to what is "inside" the container, with total skepticism about knowledge and radical solipsism always lurking just around the corner. Heidegger finds this position problematic precisely because it begins from the presupposition of an isolated consciousness set off against the environment by means of an internal epistemic "veil" or "inference-mechanism". In sharp contrast, Heidegger claims that "When [Humanity]

[37] My thinking in regards to Heidegger's realism in *Being and Time* is heavily indebted to Taylor Carman's book *Heidegger's Analytic: Interpretation, Discourse, and Authenticity in Being and Time* (2003).
[38] It should be noted that whenever Heidegger uses squarequotes around "world" in SZ, he is referring to the *ontic* totality of entities traditionally labeled by Western philosophers as "the external world".

directs itself towards something and grasps it, it does not somehow get out of an inner sphere in which it has been proximally encapsulated, but its primary kind of being is such that it is always 'outside' amidst entities which it encounters and which belong to a world already discovered" (SZ 89).[39]

According to ecological realism then, intentionality (our directedness-towards) can be understood in terms of a externalist, nonrepresentational, direct (but nonnaïve) realism wherein the variant and invariant structures of the environment, including the structure of light itself, are encountered directly without any sort of mediating representations "standing in for" or "re-presenting" the entities-themselves by means of internal, representational rendering. In arguing for a direct realist account of organic perception, I am primarily responding to Neo-Kantian indirect representationalism, which starts from the unquestioned premise of a Self or Mind isolated from the world by means of internal epistemic machinery which "synthesizes" ambiguous sense-data into a fully-rendered phenomenal image which corresponds to reality. On these accounts, the body is even reduced to its representation in the brain.

In the next section, I will broadly outline Heidegger's general theory of intentionality in terms of J.J. Gibson's theory of ecological optics. Doing so will allow me to develop an account of how human beings encounter reality that avoids both the simplicity of "naïve realism" and the idealism of the Kantian synthesis. Having developed a preliminary theory of truth for ecological realism, I will then address Tugendhat's influential critique of Heidegger's account of truth and show it to be founded upon an uncharitable interpretation.

Ecological Optics and Intentionality

A theory of intentionality is a theory of how an agent relates to reality. Heidegger gives his most lucid account of intentionality in his 1927 lecture course *Basic Problems of*

[39] Alva Noe and O'regan quote, bad phenomenology

Phenomenology (BP). To say that "perception has an intentional character" is to say that perceiving necessarily relates to a perceived. Accordingly, the first step in understanding intentionality is determining the nature of this relation. In BP, Heidegger describes two general ways in which intentionality has been mischaracterized.

The first way is what Heidegger calls an erroneous objectivizing of intentionality. By this, Heidegger is referring the tendency for humans to take their familiarity with the domain of objects and apply this conceptual familiarity to the domain of complex phenomena such as intentionality (or any other mental phenomenon). This follows the basic structure of analogical modeling: understanding something less well-known in terms of something more well-known. Accordingly, Heidegger claims that we naturally conceive of the relation between the perceiver and the perceived as analogous to the relation between one extant subject (the perceiver) and an extent object (the perceived). On this view, it is understood that the intentional relation comes into existence when the subject is placed aside or "comes into contact with" the extant object. But there is a grave error lurking here. "In this characterization of intentionality as an extant relation between two things extant, a psychical subject and a physical object, the nature as well as the mode of being of intentionality is completely missed" (BP 60). The problem with this model is that it sees intentionality as something generated by the addition of an extant environment to the subject rather than something intrinsic to the special nature of the subject itself. Indeed,

> The intentional relation to the object does not first fall to the subject with and by means of the extantness of the object; rather, the subject is structured intentionally within itself. As subject it is directed toward…(BP 60)

But if the intentional relation is seen as resulting from the internal structure of the subject, we might be apt to fall prey to the second way of mischaracterizing intentionality: an *erroneous subjectivizing* of the intentional relation. This mistake is made when we follow Descartes in starting from the idea of an ego embroiled within a "subjective sphere" of its own immanent

experiences as per methodological individualism. On this account, "Perceptions as psychical direct themselves toward sensations, representational images, memory residues, and determinations which the thinking that is likewise immanent to the subject adds to what is first given subjectively" (BP 62). Accordingly, the subject is–epistemically speaking–trapped within the limitations of the sensory-system, directing itself only towards the meaningless sensory input "transduced" by the receptors into ambiguous sense-data which are then in need of inferential guesswork. Here, we can see the Cartesian tradition at work in British empiricism when they set up the "problem of vision": how does the mind accurately represent reality when it is stuck with ambiguous sense-data transduced by meaningless physical machinery? Strictly speaking, the stimulus or perceptual given is said to be "raw" or meaningless ("mere molecules bumping into each other"). This is why Cartesian materialists, otherwise known as "internalists", insist that perceptual experience is "inside the head" (Adams & Aizawa, 2010). As J.J. Gibson said, internalist epistemology claims that "The Causes of the excitation of our nerves…are forever hidden from us. We have only the deliverances of our senses to go by, and we are imprisoned within the limitations of the senses. We have to deduce the causes of our sensations, as Helmholtz put it, for we cannot detect them" (J. J. Gibson, 1966, p. 38). Accordingly, Heidegger says that for internalism,

> The problem that is above all alleged to be the central philosophical problem must be posed: How do experiences and that to which they direct themselves as intentional, the subjective in sensations, representations, relate to the objective? (BP 62)

Like Gibson, Heidegger quickly undermines the central premise of Cartesian internalism by assuming we have no epistemic relation to raw sense-data except in a derivative or trivial sense. "To say that I am *in the first place* oriented towards sensations is all just pure theory. In conformity with its sense of direction, perception is directed toward a being that is extant. It intends this precisely as extant and knows nothing at all about sensations that it is apprehending" (BP 63, emphasis added). Here we can find our answer to the question of the ontological

constitution of perception. For internalists, the ontological constitution of perception is grounded by the necessity to subjectively "put a value upon" or "construct experience" from an impoverished, ambiguous, and meaningless sensory given. This is what Sellars called the "Myth of the Given".[40] For externalists, however,

> Perceiving is an achievement of the individual, not an appearance in the theater of his consciousness. It is a keeping-in-touch with the world, an experiencing of things rather than having of experiences. It involves awareness-of instead of just awareness. It may be awareness of something in the environment or something in the observer or both at once, but there is no content of awareness independent of that of which one is aware. (J. J. Gibson, 1979, p. 239)

Moreover, ecological realism disagrees with Cartesian internalism for *erroneously subjectivizing* the intentional relation by claiming that mental aboutness is subsumed by the generation of *propositional attitudes* or *representational mental states* (reflective beliefs and desires generated from reflection). For ecological realism, the very idea of a *raw input* into a belief-forming mechanism is fundamentally misleading because, strictly speaking, the organism does not receive a raw input, but rather, *reactively encounters the vital significance of the world*. Crucially, a reaction is not a response to a raw input, but rather, a *change in behavior*. Because an organism is essentially *animate* or *active* from conception until death, cognition becomes a matter of *regulating* the automatic reactivity *towards* the environment rather than constructing a model or rendering a picture of the environment from a raw input (which is then used for the generation of inferences). According to ecological realism, "Living beings are autonomous agents that actively generate and maintain themselves, and thereby also enact or bring forth their own cognition domains…the nervous system is an autonomous dynamic system: It actively generates and maintains its own coherent and meaningful patterns of activity, according to its operation as a circular and reentrant network of interacting neurons" (Thompson, 2007, p. 13).

This rejection of subject-object ontology in favor of autonomous (i.e. self-sustaining) agency necessitates a different understanding of representation and truth. In the next section, I

[40] See deVries & Triplett (2000).

will explore the question of truth in terms of *affordance ontology* in order to defend Heidegger's understanding of truth as primordial disclosure, which will be adapted as a basic criterion for truth in ecological realism.

Truth and Affordance Ontology

Heidegger's usage of the word "truth" is strictly technical and should not be confused with traditional notions of truth as representation or truth as correspondence. On my ecological reading of Heidegger, the word "truth" is used to convey an existential sense-of-reality that comes from organically inhabiting the environment. The phenomenon of truth is therefore *preontological* or *pretheoretical*. Under normal conditions, we all use our basic sense perception to settle questions of truth e.g. "Did I leave my coffee mug in the kitchen?", "Is that real gold or fake gold?" In other words (and to paraphrase the roboticist Rodney Brooks), the world acts as its own best model. We do not need to build an internal mental representation of where an object is in order to deal with it; we need only know how to direct ourselves towards it and differentiate its appearance-profile from the ambient array of energy that surrounds us. Accordingly, I claim that Heidegger's notion of truth as perceptual disclosure can be plausibly understood in terms of an ecological or *affordance* ontology. At this level of description, we can say it is true that the continuous ground surface supports my achievement of walking and standing in addition to providing a visual horizon for terrestrial perception. We can say it is true that I can protect myself from the elements underneath an overhang.[41] Crucially, the cash value of these statements is not in the correspondence of representations to objective states of affairs, but rather, in the bodily fit or "grip" between organism and environment.

But the internalist might ask, "Have you learned nothing from Plato? Perceptual disclosure cannot bestow truth because the sensory system is easily fooled. Don't you know that

[41] "In the things that arise, earth occurs essentially as the sheltering agent" (BW 168).

if you put one hand in hot water and the other in cold water and then submerge them both in lukewarm water your senses will be fooled? Because illusions are always possible, you have no rational recourse to equate perception and truth." The externalist responds by saying that sensory systems did not evolve to register or represent true states of affairs such as the exact temperature of the lukewarm water. Instead, the stimulus information for tactile temperature perception is the rate of heat exchange across the skin relative to our stable body temperature. If one hand is in the cold water and the other in hot water, the skin temperatures will be different but the perceptual system would still "truthfully" register the differential rate of change across the skin relative to the body temperature of each hand.

Accordingly, the traditional notion of truth as the internal representation of objective states of affairs does not apply at the ecological level of behavioral regulation. Instead, we must understand how "Dasein, as constituted by disclosedness, is essentially in the truth" (SZ 226).

What does it mean to live in the truth? My answer to this question lies in the notion of *structural coupling*.[42] We have seen how structural coupling occurs whenever there is a history of recurrent interaction between two independent systems. More specifically, in virtue of its autopoietic (i.e. self-organizing, self-producing, and self-maintaining) unity, an organism is structurally coupled with the environment insofar as it maintains its internal organizational unity with respect to the environment. Accordingly, cognition can be defined as a diachronic history of structural coupling that brings forth a synchronic phenomenal world. This definition of cognition is in stark contrast to the traditional conception of cognition as the manipulation of explicit symbol tokens by a central processing unit. I propose then that humans and other organisms are "in the truth" insofar as they are structurally coupled to an environment.

> *Because the kind of being that is essential to truth is of the character of Dasein, all truth is relative to Dasein's being.* Does this relatively signify that all truth is 'subjective'? If

[42] Obviously, this is likely not going to resemble Heidegger's own answer to this question, since the concept of structural coupling is taken from a modern biological context.

> one interprets 'subjective' as 'left to the subject's discretion', then it certainly does not. For uncovering, in the sense which is most its own, takes asserting out of the province of the 'subjective discretion, and brings the uncovering Dasein face to face with the entities themselves. (SZ 227)

For Heidegger, our primordial cognition is directed towards the meaning embedded in the things themselves rather than any putative re-presentation of the things inside a mental theater. According to ecological realism, perception is a matter of *encountering* or *attending to* what is already presenting itself as salient in respect to our prior interests. As long as we are alive, we have no choice but to encounter the environment and under normal conditions.[43] This is done in terms of a meaningful possibility space for embodied action grounded by the temporalization of subjectivity (historicity and prospectivity). On this account, "Knowing is effective action, that is, operating effectively in the domain of existence of living beings" (Maturana & Varela, 1987, p. 29). And in order to operate effectively in response to internal needs, the perceptual system must be capable of differentiating the stimulus information so as to perceive a possibility. Sensation (how it consciously "feels" to perceive) is irrelevant for the achievement of perception. All that matters for the act of perception is the performance of the act. And it is only dogma to suppose that the act of perception involves re-presenting the phenomena by transducing meaningless information into sense-data which are then fed into a Humean inference machine. We need not assume the given is *meaningless* and therefore in need of being processed by representational mechanisms of truth-approximation. Doing so would fall prey to the "Myth of the Given". Rather than construct an internal model of the environment, we only need to *respond* or *react* to the meanings already embedded within the ambient array of energy. Instead of models of representation based on truth, we should build models of representation based on the control of our behavioral reaction to the stimulus information specifying affordances.

[43]This lack of choice is what Heidegger means when he talks about the existential "nullity" or "primordial being-guilty" of thrown facticity. "In the structure of thrownness, as in that of projection, there lies essentially a nullity. This nullity is the basis for the possibility of *in*authenetic Dasein in its falling; and as falling, every inauthentic Dasein factically is. *Care itself, in its very essence, is permeated with nullity through and through*" (SZ 285). It is important to note that inauthenticity is a formal description, with no pejorative meaning.

This direct response to what is "really there" in the environment grounds ecological realism's notion of truth as disclosure. This notion is taken from his definition of the phenomenal given as the totality of what shows itself from itself. Under normal conditions, we encounter the environment in terms of familiarity and significance. That is, in terms of the "freedom" of circumspective involvement, what Heidegger called the "hermeneutic as-structure".

> The openness of comportment as the inner condition of the possibility of correctness is grounded in freedom. *The essence of truth is freedom*. (BW 123)

This account of showing and interpretative encountering in terms of an "open" space of possibilities can be modeled in terms of J.J. Gibson's affordance ontology. "Affordances are properties of the environment as they are related to animals' capabilities for using them…An affordance is an objective property of the environment, it exists whether or not it is perceived or realized" (E. J. Gibson & Pick, 2000, pp. 15-16). The hammer is both real and independent of me yet what it affords me is dependent on the individual dynamics of my corporeality and the idiosyncrasies of my history of affordance learning. Water affords support for an insect, but not for humans. But it does not follow that the water's affordance property is in some way *subjective* or relative to our opinions. Strictly speaking, the subject-object model does not apply to the primordial intentional relation because the affordance cuts across the split between subjective and objective.

In other words, the significance of entities (their meaning in relation to the internal dynamics of concern) is dependent on both the context of the encounter and the internal historicity and prospectivity of the perceiver, but not on the generation of subjective percepts (i.e. sense-data transduced from ambiguous receptor information). In this way, animals are always attending to a partial selection of reality and never the entire environment at once. It is important to note that this act of attention is not a semantic or *theoretical* act, but rather, an *organic achievement*. Moreover, what animals intend towards is not a raw given, but rather, the

meaning of the environment, what it *affords*. Indeed, to say that Dasein is in the truth "does not purport to say that ontically Dasein is introduced 'to all the truth' either always or just in every case, but rather, the disclosedness of its ownmost being belongs to its existential constitution" (SZ 220). Encounter is always *interpretive* and thus disclosure is always partial and selective. This is a key principle of ecological realism. It undercuts the possibility of doing philosophy from the perspective of a transcendental consciousness that has escaped from the facticity of interpretation. But skepticism does not follow from such limitations.

In contrast to a Cartesian account of truth based upon a correspondence between inner representation and the external world of primary qualities, my notion of truth is ecological insofar as it describes the history of structural coupling between the organism and the environment. As we have seen, claiming that truth is dependent on Dasein does not mean that propositional or articulated truth somehow is no longer valid or that Heidegger ascribed to some kind of subjectivist relativism wherein we have no recourse for certainty or conviction. Instead, we can understand the claim that we live the truth to mean that we are always operating within a real environment by means of structural coupling, but at the same time, we only attend to that level of reality which is salient in respect to our interests and internal historicity. Indeed,

> The existential-ontological condition for the fact that being-in-the-world is characterized by 'truth' and 'untruth', lies in the state of Dasein's being which we have designated as *thrown projection*. This is something that is constitutive for the structure of care. (SZ 223)

Tugendhat's Objection

Following Ernst Tugendhat's influential critique of Heidegger, some scholars claim that "Heidegger's understanding of truth [as disclosure] ultimately ends in dogmatism" (Smith, 2007, p. 167). Because Heidegger associated the phenomenon of truth with the disclosure of a world-horizon, truth (supposedly) becomes relative to the individual context and can no longer function as a normative criterion for distinguishing between true and false statements within a community of rational minds. In other words, Tugendhat asks Heidegger to justify his usage of the word "truth" to refer to an essentially subjective phenomenon (disclosure). As Smith puts it, "How is it that the disclosure of Dasein's world-horizon has recourse to a normative dimension, to some critical aspect that is necessary for it to be understood as truth?" (Smith, 2007, p. 172).[44]

In order to adequately address Tugendhat's objection, we must develop an account of disclosure that has a normative structure built into it. I propose that can be done in terms of the above discussion of *structural coupling*. Structural coupling must be understood in terms of *organizational* and *operational closure*. "*Organizational closure* refers to the self-referential (circular and recursive) network of relations that defines the system as a unity, and *operational closure* to the reentrant and recurrent dynamics of such a system" (Thompson, 2007, p. 45). Closure has nothing to do with the idea of being "closed off" from the material world. On the contrary, the organic system is always interacting with the environment that surrounds it. But over time the organism *maintains its unity* in respect to the self-produced boundaries between it and the environment. The normative criterion for organic disclosure is thus the achievement and maintenance of organizational and operational closure. So long as these conditions of self-

[44]"Heidegger's characterization of our disclosedness as 'essentially factical but true' is paradoxical, to say the least" (Lafont, 2007, pp. 112-113).

production and self-regulation obtain, we can say that the system is *living appropriately* or *acting effectively*.[45]

On this account, primitive organic disclosure is understood as a kind of *behavioral activity*. The normativity of behavior is not concerned with the correspondence of inner representations to external states of affairs, but rather, with the self-referential production of organization such that structural coupling occurs over time. Accordingly, this primordial normativity is understood in terms of the flexible regulation of internal reactivity so as to maintain unity "on the edge of chaos". For Heidegger, organic behavior is a kind of *captivation*. Animals are *captivated* or *given over to* the environmental meanings afforded by the resources on-hand but they are not mechanically responding to "raw" physiological input and then "processing" it so as to produce specific mechanical commands. To do so would be to confuse *anatomical* facts with *psychological* ones.

But if the primordial normativity of biological life is based on norms of survival, how can ecological realism account for simple claims of objectivity like "There is beer in the fridge"? This seems to be the heart of Tugendhat's objection, and the one most taken up by Heidegger's critics. A "practical" based norm doesn't seem to be able to account for the truth status of claims like "There is beer in the fridge" since the truth of that claim does not depend on anything I am doing or my ability to access the beer, but rather, stands in relation to the mind-independent fact of whether the beer is actually in the fridge. How do we get from survival based norms to "objective" norms of propositional discourse? The answer for ecological realism, which can only be sketched here, is that the ability to make such claims contingently developed over time as a way to adapt to ecological niches, particularly the niche of *social information*. Setting aside the question of how protolinguistic abilities like singing or making hand signals developed, we can

[45]"*Self-production* in general, *self-regulation* and *self-renewal* are obviously aspects which characterize the organism over against the machine and which also illuminate the peculiar ways in which its capacity and capability as an organism are directed" (FCM 222).

imagine that it was highly adaptive for human communities to learn how to make claims like "there is a good source of food 3 days walking due East." Conveying social information thus might have been the ecological niche that launched humans into a vast, unexplored cognitive territory of being the *articulating social animal*, the animal who pointed things out, named things, and made claims about things which could be intersubjectively confirmed or disconfirmed. With the ability to name objects and make claims about them, the phenomenal world of humans changed in a dramatic fashion. This did not just give us a new set of behaviors. It changed the very way we encounter the environment. Heidegger is particularly eloquent on this point,

> …genuinely and initially, it is the essence of language to first elevate beings into the open as beings. Where there is no language -- as with stones, plants, and animals -- there is also no openness of beings and thus also no openness of nonbeings, un-beings, or emptiness. By first naming objects, language brings beings to word and to appearance. (HR, p. 145)

To fully answer Tugendhat's objection then, it was the co-evolution of language with our brain (Sterelny, 2010) that allowed for the ability to produce claims like "The cat is on the mat" that are susceptible to norms of objectivity in the traditional sense of the term used by Western philosophers interested in truth (like early Wittgenstein). The "norm" which provides the scaffolding for making claims like "There is beer in the fridge" is communal at its core. Some philosophers (like Brandom (2001)), have already made great strides in sketching a theory of how such linguistic social norms work *qua* linguistic social norms. The logical and empirical structure and of our ability to make claims like "The beer is in the fridge" is complicated, and beyond the scope of this thesis. Needless to say, ecological realism is able to handle the simultaneous existence of both a biological, survival-based norm of truth (which gives us our basic sense of reality) and a communal, symbolic norm of truth (which allows us to make true or false claims).

In fact, it is the interaction of both these norms which provides the support for ecological realism's claim that the reality of an entity can be understood both in terms of what it actually is independent of us and what it is as we take it to be. Symbols and language provide us a way to arbitrarily transcend the logic of biological norms, and encounter the world in a way different from how nonverbal organisms encounter it. Our natural disposition of learning how to use names of objects to transcend the time and place of the person who names the object gives us the ability to talk about how the beer is still in the fridge, even when we are not looking. This is obviously not a complete answer to Tugendhat's objection, since answering it completely would require nothing less than a complete theory of how language evolved and contingently shaped human society at both the micro and macro levels. Nevertheless, I think it constitutes a plausible response. Whether Tugendhat would have been satisfied with this response is another question. Perhaps he would have insisted that the truth status of claims like "The cat is on the mat" is irreducible to the theory of the evolution of language, or that this account misses the essential nature of the kind of truth he was talking about. Here, I can only point to the productivity of philosophers and scientists in the naturalistic tradition who are working on the problem of the evolution of language in terms of how such a skill transformed the mental landscape of humans, giving birth to new forms of subjectivity and objectivity.[46]

[46] See (Clark, 2008; Colombetti, 2009; Deacon, 1997; Dennett, 1996; Herrmann, Call, Hernandez-Lloreda, Hare, & Tomasello, 2007; D. Hutto, D., 2008; Jaynes, 2000; Macphail, 1998).

CHAPTER 4 – THE ANIMAL, THE WORD, AND THE WORLD

The Problem of Animal Minds

A problem lurks in Heidegger's thought about animal minds. Let me say it outright: Heidegger contradicts himself when he says that the nonhuman animal both lacks a world yet lives in a world.

> The animal has world. Thus absolute deprivation of world does not belong to the animal after all. (FCM 199)

> Captivation is the condition of possibility for the fact that, in accordance with its essence, the animal *behaves within an environment but never within a world*. (FCM 239)

Recognizing this contradiction between having and not-having a world, Heidegger ultimately claims that the animal's *poverty of world* means lacking the possibility for world-formation as such or what he calls being-in-the-world proper (which is exclusive to humans). He distinguishes being-in-the-world proper from mere "being-in-an-environment", which characterizes the animal mind. Accordingly, despite his claim that the animal is also "attuned" or "disposed" to find-itself through self-producing and self-maintaining affective-reactivity, Heidegger ultimately endorses a sharp discontinuity between verbal and nonverbal minds.[47] Whereas Heidegger claims that the animal lives in an *environmental world*, he is insistent that the animal is not capable of *forming a world*. The animal is said to *behave or react within an environment* but it is not capable of comporting towards beings *as such*, that is, labeling them, categorizing them, and sorting them according to an understanding of beings *as* beings. This is not to say that the animal does not have *access to beings*. It does. It *encounters* or *discloses* entities in terms of what they afford,

[47]"Of all the beings that are, presumably the most difficult to think about are living creatures, because on the one hand they are in a certain way most closely akin to us, and on the other are at the same time separated from our ek-sistent essence by an abyss…Because plants and animals are lodged in their respective environments but are never placed freely in the clearing of being which alone is 'world,' they lack language. But in being denied language they are not thereby suspended wordlessly in their environment" (BW 230). This passage contradicts my earlier statement that the "clearing of being" is shared with animals but I think we can either distinguish between a preontological and ontological clearing of being (reserving the latter exclusively for humans) or simply disagree with Heidegger on this point.

making them *meaningful* and *significant* in relation to their underlying emotions and motivations.[48] But, for Heidegger, the animal does not have access to beings *explicitly as* beings.

> The lizard basks in the sun. At least this is how we describe what it is doing, although it is doubtful whether it really comports itself in the same way as we do when we lie out in the sun, i.e., whether the sun is accessible to it *as* sun, whether the lizard is capable of experiencing the rock *as* rock. (FCM 197)

> The worker bee is familiar with the blossoms it frequents along with their color and scent, but it does not know the stamens of these blossoms *as* stamens, it knows nothing about the roots of the plant and it cannot know anything about the number of stamens or leaves, for example. As against this, the world of man is a rich one, greater in range, far more extensive in its penetrability. (FCM 193)

These passages raise a problem for my appropriation of Heidegger for ecological realism. Earlier, I said that the "hermeneutic as-structure" is shared by both humans and animals in virtue of their adaptive, autopoietic structural coupling to the environment which enables the direct perception and reaction towards affordances. But in the passages quoted above, Heidegger seems to be saying that animals do not comport towards entities *as* entities. In order to reconcile this point with my earlier statements, we must distinguish the *hermeneutic* as-structure from the *apophantical* or assertorial as-structure. I read the above passages as claiming that nonhuman animals are not capable of operating in accordance with an *explicit* understanding of being grounded by the mastery of pointing-out, symbolic (referential and conventional) cognition, propositional discourse (*apophantical*), and other human-typical skills. Accordingly, we must distinguish between a *tacit* understanding of being and beings (shared by all organisms) and an *explicit* understanding of being and beings (exclusive to linguistically competent beings). The tacit system operates prereflectively, automatically, and without an explicit or declarative understanding which can be brought into autobiographical memory and discoursed on. This tacit system operates in both humans and nonhumans. In contrast, the explicit system also happens

[48] Having such motivations and meaning-making at their disposal, any animal which perceives and reacts to affordances can be understood as an *intentional system* and described in terms of beliefs, desires, and what Mark Okrent (2007) calls *instrumental* rationality.

automatically, but its contents can be brought to the surface of reflective awareness, as well as manipulated voluntarily through willful effort and reflective cognition. I argue that the explicit system is species-typical for humans, although it is logically possible that a nonhuman species could develop a similar mental style through similar cultural-evolutionary processes.

To some scholars, my ascription of a tacit understanding of being to animals is problematic. They would say that genuine understanding is reserved for those who operate according to an understanding of being *as such*. For them, it is naïve to try and develop an account of the animal that becomes an evolutionary "foundation" upon which to scaffold higher-order world-formation of Dasein because there is a fundamental *Abyss* between Dasein and every other creature. Keeping this in mind, I think I can defend the abyss Heidegger saw separating humans and nonhumans while at the same time acknowledging the unmistakable continuity as seen from the naturalistic sciences. In the next section, I will take up the question of linguistic cognition in order to answer the penultimate question of "What makes Dasein unique?"

Linguistic Cognition

We can differentiate ourselves from "lower animals" in at least two ways: (1) distinguish humans from nonhumans, and (2) distinguish verbal humans from nonverbal humans, and mature humans from very young humans (fetuses and newborns). This strategy allows us to ultimately propose a demarcation of Dasein and nonDasein (and perhaps protoDasein) based on the distinction between verbal mentalities and nonverbal mentalities.[49]

(1) Differentiating Human Animals from Nonhuman Animals

[49] It is important to note that these distinctions carry no moral weight. It is not a matter of saying which animal is "better", nor does it deliver clear solutions to ethical conundrums and questions of value. Such value judgments have no place in phenomenology or psychology proper. I am concerned purely with *getting the phenomenology straight*, of determining the universal structures underlying mental existence. Furthermore, the question of whether linguistic cognition generates unique kinds of moral responsibility is beyond the scope of this paper, but leads easily to highly interesting and morally pressing issues.

Perhaps the best starting place for understanding the abyss between humans and nonhumans is our closest genetic relatives: the great apes. While strikingly similar in many respects (to the point of greatly upsetting the Victorian mindset, especially by lack of sexual inhibition), there is growing experimental consensus that, despite their skills at social cognizing, simple tool use, and their complex emotional lives, typical great apes lack a "theory of mind" as well as the capacity for propositional thought within a logical space of reasons. In comparison with normal human children four to five years old, great apes perform poorly on nonverbal false belief tasks. In other words, nonhuman apes do not have a conceptual understanding of "mind" in terms of propositional attitudes such as belief/desire couplings and other folk psychological constructs, along with an understanding of how those constructs are systematically and inferentially connected. Because great apes demonstrably lack fully-fleshed concepts about concepts or thoughts about thinking, as well as the linguistic skill necessary to even categorize the world in such terms, we can say that these apes are not *metarepresentational* creatures in the sense of lacking *higher-order* representations. Accordingly, we can be certain that although our ape cousins have a sophisticated albeit tacit understanding of *motivation*, *agency*, and *behavior*, they are unable to wield mastery of *propositional attitudes* and understand themselves and each other as having minds, beliefs, or thoughts, along with the requisite understanding of how such mental states inferentially connect when stated aloud or spoken internally.

Without mastery of propositional language games, great apes are unable to understand actions in term of reasons *for* actions, nor are they able to systematically engage in what Andy Clark has called *epistemic actions*. And whereas it one thing to have an understanding of desire along with a rudimentary understanding of belief, it is quite another to have an understanding of what it means to act for a reason and articulate such understanding explicitly within the game of giving and asking for reasons (Brandom, 2001). While great apes are certainly capable of understanding what it means to *want* something, they are typically unable to deliberately think

about someone in terms their having a complex *state of mind*, replete with an understanding of propositional attitudes and the requisite rules for how such attitudes interlock with perceptual, emotional, and attentional states.

Another important difference with interesting explanatory implications that separates us from nonhuman animals is our natural predilection for *joint-attention*. Joint-attention is an inherently social phenomenon that involves two or more people focusing on the same object and being self-reflexively aware that the other person is paying attention to the same thing. A classic and well-studied example is a parent holding a truck in front of a child and saying, "Look at the truck!" The parent naturally uses a combination of hand gestures (pointing), eye gestures (looking), and verbal articulation to modulate how their child pays attention to the important features of reality around them. Many theorists now believe that it is the capacity for joint-attention and social cognition rather than innate formal grammar that underlies the rapid development of linguistic skills in human children, allowing our children to bypass the tedious trial-and-error language learning of nonhuman apes that requires hundreds if not thousands of trials before learning occurs. This theoretical move allows us to see propositional reasoning within its proper developmental trajectory. Rather than *underlying* the development of our language skills, propositional reasoning is the *end product* of a developmental line of flight starting from *nonpropositional* abilities such as joint-attention, a skill best understood in terms of embodied expectations rather than systematic formal reasoning (D. Hutto, 2009; D. Hutto, D., 2008).

Because such social triangulation comes naturally to normal human children, underlies some of our most important cultural achievements (e.g. mimicry of tool construction), and has obvious survival benefits, it safe to say that the capacity to develop joint-attention when exposed to the appropriate stimuli is an evolutionary adaption for humans and could be considered "innate" or "species-typical". Moreover, current research suggests that joint-attention does not

come naturally to nonverbal animals such as our closely related ape cousins. The cultural anthropologist Michael Tomasello describes how it usually takes hundreds of trials to teach a nonhuman ape to communicate through pointing. In comparing human children to nonhuman apes, the research shows that

> The apes treated the communicative attempts of the human as discriminative cues on a par with all other types of discriminative cues that have to be laboriously learned over repeated experiences. The [human] children, in contrast, treated each communicative attempt as an expression of the adult's intention to direct their attention in ways relevant to the current situation. (Tomasello, 1999, p. 102)

We have then at least two areas of cognition that separate us from our animal cousins: joint-attention and theory of mind (metarepresentation i.e. beliefs about beliefs, thoughts and thinking, explicit self-referential concepts). Even if these abilities end up not being completely unique to humans, we are certainly unique in the wide extent to which we have put these abilities to use. Recent research on congenitally deaf persons who learned sign language later in life indicates that metarepresentational skills depend on exposure to the linguistic usage of metarepresentational concepts (belief, desire, mind, self, me, "I", etc.) within a social community. And since learning a language depends on the prior development of joint-attention through intersubjective interaction, we can then propose a layercake model of the mind that starts with nonpropositional embodied expectations and affordance detection and then moves upwards with the development of linguistic skills, culminating in the highest cognitive skill of introspective thought itself.

(2) Differentiating Dasein from Preverbal Infants

Having distinguished modern human cognition from ancient and closely related ape mentalities, what about the mental difference between an embryo and a normal adult? By the time the embryo has developed into an infant, it is primed to react to the vital significance of the

breast, the face, and other part-objects within the biosociological milieu. At first a dyadic relationship between parent and child, the human's social world eventually becomes triadic: parent, child, object. In virtue of joint-attention, the child-parent relationship becomes fundamentally indicative before the first birthday: here's the breast, there's the truck, look at that, there you are! This basic interactive framework is complex and dynamic, involving a primordial, first-order capacity for awareness and sense-making as well as the cognitive scaffolding for which higher-order narratological thought can be constructed.

Given the obvious teleological, intelligent nature of infant behavior, it is tempting to ascribe them what analytic philosophers typically call *mental content* i.e. beliefs, desires, and other propositional attitudes. We want to say the infant believes the milk is in the other room, desires that milk, and is rational enough to know what to do in order to get that milk (cry). But just because we can *ascribe* infants mental content does not mean they are *true believers*. As Daniel Hutto warns, "In light of our natural predilections, it is not enough to appeal to commonplace 'intuitions' when arguing that nonverbal are, in fact, bona fide believers and practical reasoners. One should at least reserve judgment on this until it can demonstrated that there really is no other, or no better way, to explain nonverbal intentional, world-directed behavior" (D. Hutto, D., 2008, pp. 59-60).

Heidegger was one of the first philosophers to systematically show us a "better way".[50] Infants are not miniature scientists, tiny Cogitos, or intellectual deliberators in the way that adult humans are. They are embodied beings, directed outwards towards the vital world of people and objects upon which they are dependent. In the same way our closest ape cousins are not metarepresentational, infants are not *folk psychologists proper*. In order to be metarepresentational folk psychologists, children, at the very least, need to have mastered the

[50] I think William James deserves credit for the being the first and most influential thinker in this tradition. Moreover, it is highly illuminating to understand German phenomenology in light of the fact that Husserl was familiar with James' ideas on consciousness as written in his well-known *Principles of Psychology*.One could also argue that C.S. Peirce was influential in the same respect, but to a lesser and more indirect degree.

concepts of belief and desire and systematically learned how to appropriately ascribe propositional attitudes to themselves and others.

Competency in folk psychological skills is paradigmatic for adult level cognition. Any organism can intelligently react to incoming stimuli, but it takes a special skill set to achieve metarepresentational cognition and categorize and label that stimuli in terms of abstract, socially-constructed categories. Contemporary research in cross-comparative psychology is coming to a consensus that it is the supercharging effect that language has upon innate joint-attentional prowess that accelerates the development of what Andy Clark calls *second-order dynamics*. "By second-order cognitive dynamics, I mean a cluster of powerful capacities involving reflection on our own thoughts and thought processes" (Clark, 2008, p. 58).

According to recent theoretical developments in the mind sciences, it is now commonly acknowledged that second-order dynamics depend on the capacity of language to create new objects of attention and joint-attention. Humans are so easily able to direct their attention towards their own thoughts because they were given a linguistic toolkit of mental concepts during ontogeny that enables them to label and categorize such thoughts. We can think about our own beliefs and those of others precisely because we have words like "belief" in our vocabulary. If having words like "predator" supports our ability to attend to increasingly abstract patterns in nature, imagine what having words like "thought", "belief", "I", "name" would enable! Since structured language sculpts our attentional capacities in productive ways, having linguistic tags for mental concepts enables the possibility for attending to stabilized mental states, opening up the possibility of second-order cognitive dynamics. We must, however, be careful not to over-intellectualize the process of learning folk psychology. As Daniel Hutto explains,

> Long before they acquire a practical grasp of mentalistic concepts, children are able to navigate the social matrix using embodied skills, interacting with others in ways that require no understanding of propositional attitudes or reasons for action whatsoever. As their command of language increases, they are able to make use of certain syntactic constructions–in particular embedded complement clauses. This brings new objects of

> attention and joint attention into view, allowing them to graduate from engaging with others exclusively by responding to intentional attitudes, to possessing a capacity to understand them in terms of propositional attitudes. Initially, this allows children to extend their understanding about what might be desired in content-involving ways. But eventually, after actively participating in conversations and exercising their imaginative abilities appropriately, they come by an understanding of that most important of propositional attitudes, belief. (D. Hutto, D., 2008, pp. 141-142)

Putting It All Together: An Ecological Answer to the Problem of Animal Minds

I now want to construct a general sketch of Dasein's mentality that does justice to both the insight from natural science that Dasein evolved and develops from lower mentalities as well as the insight from Heidegger that only Dasein is *world-forming* in contrast to the mental lives of nonverbal animals. In regards to the first insight, evolutionary science and developmental psychology tell us that a fully reflective human adult alive today once had nonlinguistic ape-like ancestors and grew from a single cell into a full-sized body with the most sophisticated tangle of nervous tissue in the known universe. In regards to the second insight, human adults are capable of intellectual feats seemingly unavailable to nonlinguistic creatures. And this is not just the difference between one skill (such as flying) not being available for other types of animals in virtue of their physiological makeup. Language does not make humans unique in the same way that egg-laying makes marsupials unique. Rather, language use constitutes a *fundamentally different* type of existence, that of reflection, introspection, joint-attention, explicit moral judgment, mathematics, literacy, philosophical questioning, articulation of propositions, subjective interiority, mind-wandering, far-future planning and anxiety over those plans, reminiscence, guilt, a deep understanding of mortality, religion, mystical experience, and so on.

I believe it is these human-typical mental experiences that constitute Dasein's unique skill of world-formation. Accordingly, we should not think of world-formation *proper* to be a matter of simply "being-in-the-world-as-a-living-body". This interpretation of world-forming, while correct from the point of evolution and natural science, overlooks or oversimplifies the

differences between what-it-is-like to be an average human and what-it-is-like to be a nonverbal animal. A verbal animal has an understanding that some things can *stand in for* other things, not just in the sense of *signaling* or *indicating* some event or property, but rather, in the sense of having a natural disposition for acquiring the capacity for *symbolic cognition*. Symbolic cognition is another way of saying "language understanding". I use language in the standard technical sense to mean something more complicated than calling, signaling, or responding to behavioral cues. A language must at least be compositional (generated by a mix of syntax and semantics), capable of genuine substitutivity (preservation of meaning across substitution), and constituted by highly referential word relationships where one word indicates another word, or set of words (dog and bark go together, as well as bark and tree).

Accordingly, a verbal human is capable of *making assertions*. Heidegger claims that this capacity for assertions has three general structural characteristics: (1) "pointing out" (the primordial signification of "assertion"), (2) "predication", and (3) "communication". In terms of a theory of language, Heidegger can be roughly labeled as an *expressionist* as opposed to a *formalist*. The formalist thinks that language is a reflection of some fundamental Language of Thought that operates according to explicit albeit abstract rules embedded within innate knowledge schemas. In contrast, an expressionist claims that verbal language is an explicit expression of an underlying communicative functionality grounded in nonverbal emotional and social understanding, bodily language (gesture), and habits of embodied reasoning. On this view, "*The existential-ontological foundation of language is discourse or talk*" (SZ 160), with talk and/or discourse being understood in the primordial sense of being socially communicative, and not necessarily explicitly articulate. Indeed, "*Hearing* and *keeping silent* are possibilities belonging to discursive speech" (SZ 161). An example of a silent discursive speech act would be a wave, a handshake, or a hug. Accordingly, the expressionist does not claim that language is the expression of an underlying formal language, but rather, is the explicit expression or construction

of a more primordial understanding that is tacit and grounded in affective-reactivity, but which nevertheless exhibits a primitive "as structure".[51] Accordingly, a Heideggerian understanding of language acquisition is characterized by a reaction against overly intellectualized and formal accounts of language use. Indeed,

> Communication is never anything like a conveying of experiences, such as opinions or wishes, from the interior of one subject into the interior of another. *Mitdasein* is already essentially manifest in a coaffectivity and a counderstanding…In talking, Dasein *ex*presses itself [spricht sich…*aus*] not because it has, in the first instance, been encapsulated as something "internal" over against something outside, but because as being-in-the-world it is already "outside" when it understands. (SZ 162)

On this view, language is something we first come across as ready-to-hand, and only later form reflective, present-at-hand theories about what words mean, or how propositional attitudes function in terms of narratological coherency and logical consistency. This model is developmental insofar it specifies a possible transition from one mentality (only readiness-to-hand) to one that is on a higher level (readiness-to-hand plus what makes Dasein unique).[52] Although Heidegger distanced himself from "evolutionary" or "developmental" thinking, and states that "*Discourse* [the ground for language] *is existentially equiprimordial with state-of-mind and understanding*" (SZ 161, bracketed comment added), I think a reasonable interpretation of his writings allows for the naturalistic extrapolation of a developmental sequence from protoDasein to Dasein proper.

First and foremost, we can characterize a fetal Dasein or protoDasein as being-in-an-environment (the womb), being-with (the mother), and being-affective (having a mood, being-

[51] "But if deliberation is to able to operate in the scheme of the 'if-then', concern must already have 'surveyed' a context of involvements and have an understanding of it. That which is considered with an 'if' must already be understood *as something or other*. This does not require that the understanding of equipment be expressed in a predication. The schema 'something as something' has already been sketched out beforehand in the structure of one's prepredicative understanding" (SZ 359).

[52] We must be cautious with spatial metaphors like "higher" and "lower". The terms are phenomenological, not value-laden. "Higher" only indicates the human-typical phenomenon of second-order dynamics (thoughts about thinking, desires about desires, etc.) and have no moral weight. Answers to moral questions about our species obligations towards other animals do not immediately follow from any phenomenological or psychological examination of mental processes.

attuned). The intimate contact of the fetus with the mother is not theoretical or reflective for while dimly aware of and reactive towards certain features of its environment (the womb) as well as itself, it has no awareness of this awareness, nor any ability to articulate or reason explicitly about this awareness. But even as a unicellular entity, the embryonic Dasein will not be a mere present-at-hand object. "[O]n the contrary, [the cell] will already find itself,[53] where this affectivity can be the greatest and darkest dullness, but for all that it is in its structure of being essentially distinct from merely being present-at-hand like a thing" (HCT 255). Fetal Dasein has a tacit understanding of being, but it is restricted to the level of readiness-to-hand and the inauthentic temporal structure of experience that accompanies it (historicity, prospectivity, and making-present). Once born, the attention of young Dasein is swayed heavily by intersubjective stimuli, particularly in respect to her mother and father's faces. Although not yet capable of articulate speech and meta-representational cognition, a newborn Dasein already participates in various discourses and is capable of "silent" speech. "From the fact that words are absent, it may not be concluded that interpretation is absent" (SZ 157). A baby Dasein soon understands the significance of *pointing something out* as a method to coordinate social interactions and manipulate attention. This has important implications for how parents coordinate their interests with those of the child, and direct her attentions, needs, and feelings towards appropriate outlets.

Crucially, the understanding of pointing requires that the child know the parents are intentionally trying to shift her attention to some object or feature of the world. By pointing to a car and saying "Look, a car!", the parent can mold and change the way a child pays attention to the world. Once the difference is learned between a car and a truck as well as the word "automobile", the child can now pay attention to multiple levels of meaning while driving in the

[53] Recall, finding-oneself is not a matter of conscious self-reflection, but rather, is the prereflective bodily self-consciousness that accompanies the continual self-production of biological life.

car and seeing a truck in the next lane: she can pay attention to the truck *as an automobile* and she can pay attention to the truck *as a truck*, in distinction to a car. The learning of the words "truck", "car", and "automobile" reduces the complexity of the potential information that can be gathered from the scene. Instead of seeing brightly colored moving objects, the child can now extract ontological information about the *essence* of the objects, namely, their classification into either trucks, car, automobiles, or something else (a motorcycle or dumptruck).

This example does not exhaust the cognitive richness of labeling and pointing. A more powerful application of this cognitive technology is when the parents label and point to the *child herself*. The parent often plays the game of pointing to the child, saying "Who's that? That's you!" or pointing to themselves and saying "Who's this? It's me!" By teaching a child their name in distinction to the name of Mommy and Daddy, they eventually learn to construct an *explicit self-concept*. This is particularly evident in learning the skill of self-reference. Knowing their name and learning what the symbol "I", "me", and "mine" refers to when produced by others and when self-produced is a particularly significant step on their path to self-reflection, imaginative introspection, moral reasoning, and higher-order reflective thoughts.

A young child has typically learned a language, and is capable of expressing her moods and articulating reasons for her actions and the actions of others as well as giving reasons for what happens in the reality around her, both physical and social. Young Dasein has mastered the art of giving and asking for reasons for people's actions, of being socially attuned to the beliefs, desires, and motivations of the people in her life, as well as those of complete strangers. A young child is capable of adopting the so-called "Intentional stance" (Dennett, 1996) and explaining phenomena in terms of objects possessing beliefs and desires. If a child sees a cartoon cat stalking a mouse, they will know that the cat "wants" to eat the mouse, and that the mouse doesn't "want" to be eaten.

At this age, the disclosure of social meaning happens on both the prereflective and reflective level. The prereflective affective-reactivity system is fast, automatic, works in massive parallel networks for speedy reaction times, helps realize *primary feelings,* and underlies what Heidegger called the *they-self*. The *they-self* is not metaconscious, nor structured in terms of explicit representational tokens. Its operations are performed in parallel and are executed automatically and speedily without reflective oversight. The reflective level, by contrast, is metaconscious, more abstracted from the fine-grain sensorimotor details, and operates on a slower temporal scale (from seconds, minutes, to years). In young humans, these two systems are (usually) not opposed, and work in tandem to realize the total "what-it-is-like" of human experience. Unless the child is a Zen Master, or abnormal in function, a complete description of her behavior in church will have to include both an account of her bodily fidgeting as well as her internal monologue about how bored she is and a dozen other thoughts happening in succession and in reaction to each other.

Finally, with average human adults, we see the full development of both prereflective body-schemas and reflective consciousness, as well more sophisticated forms of affectivity such as romantic love, guilt, suffering, anxiety, honor, shame, pride, etc. Reflective cognition, paradoxically, also gives rise to new forms of sensory experience insofar as it allows us to perceive abstract sensory quales. As Heidegger says, "In order to hear a bare sound we have to listen away from things, divert our ear from them, i.e., listen abstractly" (BW 152). Accordingly, humans are capable of *metaconscious feeling*, including *sensory feels*. As Merleau-Ponty said,

> The sensible quality, far from being coextensive with perception, is the peculiar product of an attitude of curiosity or observation. It appears when, instead of yielding the whole gaze to the world, I turn toward the gaze itself, and when I ask myself what precisely it is I see. (1945/2006, p. 263)

Working reciprocally then, prereflective cognition grounds reflective cognition, which then gives birth to both higher-order sensory feeling and introspective metaconsciousness (mind-

wandering). Metaconsciousness is characterized by higher-order reflexivity e.g. awareness of awareness, knowing that you know, desiring about desires, thinking about thinking. Although linguistically grounded metaconsciousness is perhaps our most uniquely human characteristic, we must be clear that in order to function properly it must be coordinated with the lower mental faculties. This is an insight we see in Heidegger's oeuvre over and over and it's one that is particularly compatible with ecological realism. He insists that the apophantic, linguistic skills of adult Dasein are *derivative* from more primordial ways of being grounded in affectivity and affordance perception. Heidegger is reacting to the Modern overintellectualization of human existence that put Reason in a privileged position isolated from emotions and moods. In Modern philosophy it was thought that Reason works best when compartmentalized from moods, since emotional "bias" clouds the objectivity and universality of Reason, which operates according to the norms of logic based on propositional syntax. Heidegger attempted to correct such compartmentalization and overintellectualization by emphasizing the importance of nonreflective experience for grounding the higher-order mentalities that allow for resolute (*entschlossen*) modes of being.

As Heidegger was keen to emphasize, we must not let this bifurcated mental taxonomy between preflective and reflective overshadow the *unitary* and *reciprocal* interrelationship between lower and higher mentalities. Just as the lower grounds the higher, the higher, from its better position, influences everything beneath it, shaping and molding prereflective experience. Heidegger sometimes spoke of how higher mentalities facilitated by linguistic cognition act as a "rift-design" that allows for the categorization of experience into beings with the corresponding understanding of being, nonbeing, and emptiness. Indeed, "Language is the happening in which beings first disclose themselves to man each time as beings" (BW 199).

CONCLUSION

What is it like to live in the environment as a world-forming human? Life starts in a fundamentally social way. The embryo was formed by the interaction of two people, and its development is sustained in the living matrix of the mother's body. From the beginning of life, the blood of our mother courses through our veins. The amino acids that go into the production of the proteins in our nervous system are drawn from the diet of our mother. Moreover, when born in ideal conditions, we are immediately thrust into a social and linguistic world, a world of norms, meanings, and value, both biological and social. Having already been attuned to our mother's voice, we come into the world primed to pay attention to social information, whether in facial expressions, emotional tones, or gestures. Human babies love faces and detect information related to social affordances automatically and without reflective deliberation. One sure way to freak a baby out is to stare at it with a still, dead face. The lack of emotion in the face is immediately processed as a sign that something is wrong, which starts a physiological stress cascade with reverberating effects on the baby's sense of security. At this point in life, the baby is perhaps closer to the animal mindset of being-in-an-environment, and only harbors the slightest intimations of being-in-the-world. Yet Dasein is primed for world-formation from the beginning. It is embedded in our genes, in the epigenetic support structure for our genes, in our cultural traditions, in artificial constructions, tools, buildings, texts, cities, countries, etc.

Just as we cannot escape the environment, we cannot escape the human sociocultural world. The reality of both indicates a way to deflate the classic problem of realism and idealism. The fact that we cannot help but experience a certain "resistance" of reality, of the environment that envelops us and fights against us, indicates the theoretical truth of realism, which is the basic scientific hypothesis of a reality independent of us. Earthquakes, tsunamis, floods, and forest fires are powerful reminders of this "brute" resistance. Yet the inescapable reality of the social

world of culture, family, language, symbol, ideology, ritual, and history indicates the truth of idealism, which is the idea that part of what we experience is determined by the structure of our minds, both individual and collective.

The truth of idealism is applicable for all organisms. We have seen this with the concept of affordances and the structure of concern. A rock is not concerned about anything, except in an anthropomorphic sense (which is derived). It does not care if you break it into pieces. It does not care to put itself back together, for it was only held together by physical, not psychological, bonds. The difference here is not on account of a spooky Cartesian soul-substance which the rock lacks. The difference between a rock and an organism is that the organism is self-sustaining in virtue of its organization (but not in the sense that it is merely sustained physiologically as an entity or individual object over time). To be organically self-sustaining, you must continuously *produce* the components which constitute your self-sustaining body. This dynamism is commonly understood in terms of "homeostasis" or "metabolic function". Ecological realism recognizes the importance of homeostasis for ontology because it gives rise to the necessity of hypothesizing about a primordial reality of *norms*. In the ontological vocabulary of the physical sciences such as physics or chemistry, there is no need to talk about normativity, or value. An atom bumping into another atom doesn't necessitate talk about that atom *being meaningful* to the other atom. Meaning only seems necessary when we are discussing organisms. Whereas it does not make sense to talk about a pile of sugar being meaningful to a table, it does make sense to talk about a pile of sugar being meaningful to an organism. The sugar affords nutrition to the organism whereas it affords nothing to the table, since the table does not *take the sugar to be anything*, it merely "bumps" against it and induces physiological, but not psychological, reactions.

But we must not think affordance ontology requires the introduction of a Cartesian dualism. Heidegger saw this clearly. The reality of the social world is not at odds with the reality

of the resisting world. Organisms do not take the environment to be meaningful because they have a soul, they take the environment to be meaningful because their bodies are organized in the right way. They are organized in such a way as to be at the edge of chaos, at far-from-equilibrium. It is this constant tendency to slightly break down but then self-repair that fundamentally separates the living from the nonliving. And this can be understood as a purely physiological process. But if you understand concern in terms of physics, you will miss the original phenomenon of value that was so ontologically interesting in the first place. It is important then that we see how the idealism (mind-dependence) of biological norms does not necessitate incompatibility with naturalistic metaphysics, but rather, only indicates the need for a new field within the sciences: ecological science, the study of the living world, the world of norms, meaning, and value.

I call this "ecological realism" because I want to be a realist in regards to both the real environment and the world. To properly understand the world, you must also understand the environment, since the *first* world, the world of biological norms, came long before the arrival of human norms and was grounded in the ecological reality of simple nutritive norms, such as the norm of survival and self-production. Since what the environment *means* is not separate from what the environment *is*, to understand the most primordial world-formation requires the study of the physical sciences. But the reality of full-blown human world-formation is not as easily reduced to the low-level conceptual toolboxes. The study of traditions, culture, and language itself require a different ontological vocabulary than physics provides. Although the problem of reducing iconic and indexical signs to physical vocabulary is equally problematic, this problem of reductionism is particularly evident in considering the reduction of symbolic meaning to the models of physics. What would it mean to reduce the symbol "money" to the mere motion of molecules? It would no longer function in our mental economy, since the symbolic meaning, and thus its usefulness, will have been removed. Much of human thought is structured along

analogous lines. The symbolic level of reality takes on a life of its own once it has spread widely enough through society and becomes entrenched in childrearing practices. And though the symbolic reality is in some sense dependent on humans, and thus ideal, we should not take this to be a defeat of realism.

The goal of this thesis has been to demonstrate that ecological realism is compatible with both the realism of entities and the idealism of sense-making. I have attempted to dissolve the internal tension between these two positions by outlining an ecological affordance ontology that acknowledges that (1) entities are real and exist independently on our opinions about them and (2) what entities *are* depends on how we take them to be. The classic example is a chair. In the first sense, the chair as a physical entity made of wood exists independently of any human. In the second sense, the chair *qua* chair depends on agents taking the chair to be *something-to-sit-on*. The first sense indicates a realism of entities, and the second sense indicates an idealism of being. This thesis has attempted to show that ecological realism offers a clear path for reconciling entity realism and being idealism. Humans are simultaneously in-the-environment and in-the-world, without any contradiction.

REFERENCES

Adams, F., & Aizawa, K. (2010). The value of cognitivism in thinking about extended cognition. *Phenomenology and the Cognitive Sciences, 9*(4), 579-603.

Baars, B. J. (1997). *In the Theater of Consciousness*. New York: Oxford University Press.

Blattner, W. (2004). Heidegger's Kantian idealism revisited. *Inquiry, 47*(4), 31-337.

Brandom, R. (2001). *Articulating Reasons: An Introduction to Inferentialism*. Cambridge, MA: Harvard University Press.

Braver, L. (2007). *A Thing of This World: A History of Continental Anti-Realism*. Evanstan: Northwestern University Press.

Carman, T. (2003). *Heidegger's Analytic: Interpretation, Discourse, and Authenticity in Being and Time*. New York: Cambridge University Press.

Cerbone, D. R. (1995). World, World-entry, and realism in early Heidegger. *Inquiry: An Interdisciplinary Journal of Philosophy, 38*(4), 401 - 421.

Clark, A. (2008). *Supersizing the Mind: Embodiment, Action, and Cognitive Extension*. New York: Oxford University Press.

Colombetti, G. (2009). What Language Does to Feelings. *Journal of Consciousness Studies, 16*(9), 4-26.

Deacon, T. (1997). *The Symbolic Species: The Co-evolution of Language and the Brain*. New York: W.W. Norton & Company.

Dennett, D., C. (1996). *Kinds of Minds: Toward an Understanding of Consciousness*. New York: Basic Books.

deVries, W. A., & Triplett, T. (2000). *Knowledge, Mind, and the Given*. Indianapolis: Hackett Publishing Company.

Dreyfus, H. (2001). How Heidegger defends the possibility of a correspondence theory of truth with respect to the entities of natural science. In T. Schatzki (Ed.), *The Practice Turn in Contemporary Theory*. New York, NY: Routledge.

Gibson, E. J., & Pick, A. D. (2000). *An Ecological Approach to Perceptual Learning and Development*. New York: Oxford University Press.

Gibson, J. J. (1966). *The Senses Considered as Perceptual Systems*. Boston: Houghton Mifflin Company.

Gibson, J. J. (1979). *The Ecological Approach to Visual Perception*. Boston: Houghton Mifflin.

Gibson, J. J. (1982). Notes on Affordances In E. Reed & R. Jones (Eds.), *Reasons for Realism: Selected Essays of James J. Gibson* (pp. 401-418). Hillsdale: Lawrence Erlbaum Associates.

Heidegger, M. (1962). *Being and Time* (J. Macquarrie & E. Robinson, Trans.): New York: Harper & Row.

Heidegger, M. (1982). *Basic Problems of Phenomenology* (A. Hofstadter, Trans.). Bloomington: Indiana University Press.

Heidegger, M. (1985). *History of the Concept of Time* (T. Kisiel, Trans.). Bloomington: Indiana University Press.

Heidegger, M. (1995). *The Fundamental Concepts of Metaphysics* (W. McNeill & N. Walker, Trans.). Bloomington: Indiana University Press.

Heidegger, M. (2008). *Basic Writings of Martin Heidegger*. New York: Harper Perennial.

Heidegger, M. (2009). *The Heidegger Reader* (J. Veith, Trans.). Bloomington: Indiana University Press.

Herrmann, E., Call, J., Hernandez-Lloreda, M. V., Hare, B., & Tomasello, M. (2007). Humans Have Evolved Specialized Skills of Social Cognition: The Cultural Intelligence Hypothesis. *Science, 317*(5843), 1360-1366.

Hutto, D. (2009). Folk Psychology as Narrative Practice. *Journal of Consciousness Studies, 16*(6), 9-39.

Hutto, D., D. (2008). *Folk Psychological Narratives*. Cambridge, MA: MIT Press.

Jaynes, J. (2000). *The Origin of Consciousness in the Breakdown of the Bicameral Mind*. Boston: Houghton Mifflin.

Lafont, C. (2007). Heidegger and the Synthetic A Priori. In S. Crowell & J. Malpas (Eds.), *Transcendental Heidegger*. Stanford: Stanford University Press.

Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh : the embodied mind and its challenge to Western thought*. New York: Basic Books.

Macphail, E., M. (1998). *The Evolution of Consciousness*. New York: Oxford University Press.

Maturana, H. R., & Varela, F. J. (1987). *The Tree of Knowledge: The Biological Roots of Human Understanding*. Boston: New Science Library.

Meillassoux, Q. (2009). *After Finitude: An Essay on the Necessity of Contigency* (R. Brassier, Trans.). New York: Continuum Books.

Merleau-Ponty, M. (2006). *Phenomenology of Perception*. New York: Routedge and Kegan Paul.

Okrent, M. (1988). *Heidegger's Pragmatism: Understanding, Being, and the Critique of Metaphysics*. Ithaca, NY: Cornell University Press.

Okrent, M. (2007). *Rational Animals: The Teleological Roots of Intentionality*. Athens: Ohio University Press.

Olafson, F. (1987). *Heidegger and the philosophy of mind*. New Haven: Yale University Press.

Peirce, C. S. (1955). *Philosophical Writings of Peirce*. New York: Dover Publications.

Philipse, H. (2007). Heidegger's "Scandal of Philosophy": The Problem of the *Ding an sich* in *Being and Time*. In S. Crowell & J. Malpas (Eds.), *Transcendental Heidegger*. Stanford: Stanford University Press.

Sheehan, T. (2001). A Paradigm Shift in Heidegger Research. *Continental Philosophy Review, 43*, 183-202.

Sheehan, T. (2010). The Turn. In B. Davis (Ed.), *Heidegger: Key Concepts*. Durham: Acumen Publishing.

Smith, W. H. (2007). Why Tugendhat's critique of Heidegger's concept of truth remains a critical problem. *Inquiry, 50*(2), 156 – 179.

Sterelny, K. (2010). Minds: extended or scaffolded? *Phenomenology and the Cognitive Sciences, 9*(4), 465-481.

Thompson, E. (2007). *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*. Cambrige, MA: Harvard University Press.

Tomasello, M. (1999). *The Cultural Origins of Human Cognition*. Cambridge, MA: Harvard University Press.

Vallicella, W. (1983). Kant, Heidegger, and the Problem of the Thing in Itself. *International Philosophical Quarterly, 23*, 35-43.

Vallicella, W. (1985). Heidegger's Reduction of Being to Truth. *The New Scholasticism, 59*, 156-176.

Vallicella, W. (1990). Reply to Zimmerman: Heidegger and the Problem of Being. *International Philosophical Quarterly, 30*, 245-254.

APPENDIX: CLASSIFICATION OF REALISMS AND IDEALISMS

Table 1

	World exists independently of agent?	**Relationship between agent and world?**	**Nature of intentional relation?**	**Nature of perceptual access?**	**Can we coherently reference independent world?**	**Talk about Being idealism?**	**Talk about Entity realism?**
Classical realism	Yes	Representationalism	Indirect access to physical world by means of representta-tions	Associationist psychology	Yes	No	Yes
Classical Idealism	No	Representationalism	Direct access to mental world of representations	Associationist psychology	No	Yes	No
Transcendental realism	Yes	Direct perception	Direct access to phenomenal world	Kantian synthesis	Yes	Yes	Yes
Transcendental idealism	Yes	Direct perception	Direct access to phenomenal world	Kantian synthesis	No	Yes	No
Ecological Realism	Yes	Direct perception	Direct access to ecological reality (geo,bio,social)	Gibsonian affordance theory/ecological psychology	Yes	Yes	Yes

VITA

Gary Williams was born in Arizona in 1987 and raised in Central Florida during his formative years. He received his Bachelor of Arts in Interdisciplinary Studies from the University of Central Florida in 2009, with a minor in cognitive science. His research focus has always been on the intersection of philosophy and the mind sciences. Gary will complete his Master of Arts in philosophy at Louisiana State University in 2011 and will be entering the philosophy-neuroscience-psychology doctoral program at Washington University in St Louis in Fall 2011.