

Brian Kemple

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Brian Kemple

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Peirce and Heidegger in Dialogue

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Dedicated to the memory of
John Deely
(26 April 1942 – 7 January 2017)
Inimitable mentor and friend.
Requiescat in Pace

Preface

This book presents a complex argument. It will likely not convince all who read it. It probably will not even convince many who read it. But it will convince some, and, I hope, those are just the people I care most about convincing. Moreover, I believe it will provide at least some insight for the many, and at least some challenge for all. I anticipate there will be critique from Heideggerians, from Peirceans, from non-Heideggerian phenomenologists and from non-Peircean semioticians, and, if anyone from any other background reads it, possibly critique from those quarters as well.

The first seed of this book was, much like my previous book, an off-hand statement made by John Deely in his human nature course in the spring of 2011 at the University of St. Thomas in Houston, TX. Paraphrased, John stated that the only book of which he knew that was an extended inquiry into the meaning of what Thomas Aquinas meant by *illud quod primo cadit in apprehensione. . . est ens* (1266-68, *Summa theologiae*, I-II, q.94, a.2, c.), was Martin Heidegger's *Sein und Zeit*. Over the course of the next several years, I would work closely with John in studying both Heidegger and Thomas, eventually writing my dissertation, *Ens Primum Cognitum in Thomas Aquinas and the Tradition*, under John's direction (the "tradition" in this case being represented primarily by Cajetan, Poinsoot, Gilson, and Maritain). The initial plan had called for a treatment of Heidegger, and I'd done quite a bit of reading, note-taking, and general preparation for that treatment; but since the best dissertation is the finished dissertation, the scope was reduced to treat exclusively of Aquinas (with a brief section treating Heidegger in the final chapter, ultimately removed from the published version).

While writing with John, it was impossible to keep Peirce from coming up in conversation. Having already filled all my course requirements, I audited John's course on Poinsoot and Peirce, in which he had been working out some of his ideas for the never-to-be-completed third volume of his trilogy (preceded by *Augustine & Poinsoot* and *Descartes & Poinsoot*). The two primary texts of Peirce we discussed were "On a New List of Categories" and "A Neglected Argument for the Reality of God". Much like my first introduction to Heidegger (in 2009), my first reading of Peirce left me often feeling baffled. . . but intrigued and irritated – irritated in that I could not quite figure out whether the words I was reading really made sense.

The more I read, the more I saw that there is a common but obscured root to Heidegger and Peirce's thought – even more than there is a common thread between both these later thinkers and the Thomistic tradition. I knew it would be a struggle to unearth: Heidegger's cryptic and obscure style and Peirce's

sprawl of papers and lack of book-length systematic treatments both make for rocky intellectual soil.

But I had a great friend and champion in John Deely, who believed in the merit of what I was doing and in my ability to do it. We may not always have agreed on what is true, but we never disagreed on how important the truth is; and whatever his failings may have been, no one could in good conscience doubt that John Deely was a great sign of that belief. I hope that the work presented here, even if there are claims with which he would have disagreed, is nevertheless a fitting tribute to his memory.

Brian Kemple
9 September 2018

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General introduction: the question of intellectual progress

How do we know, what do we know, and why do we know it? These are perennial questions. Answering the third, “why?”, requires an extensive teleologically-oriented study of philosophical anthropology – that is, a deep investigation as to the nature of human beings and the end, purpose, goal, or good towards which that nature is ordered. To find an answer to the question “why do we know?” is to arrive at the intersection of ethics and metaphysics, showing the ultimate foundations of the normativity which guides us in distinguishing right from wrong in truth. Though not the question driving this book, we do arrive at elements of an answer, in a roundabout fashion, by the end of the final chapter.

The second question, “what do we know?”, seeks answers within two distinct but related categories: first, those broad, universal objects of knowledge that form the answers to questions of meaning; and second, the particular objects that belong to this or that individual, the scarce details of which as yet-discovered by human inquiry fill (and overflow from) encyclopedias and databases. The universal objects of knowledge are discovered in the philosophical – that is, *cenoscopic* – sciences, including literature, history, and other such topics, whereas the particular new facts which we discover belong to *ideoscopic* inquiries such as biology, archaeology, (biological) psychology, chemistry, and so on (cf. Peirce 1903a: *EP*.2.258–262 and 1905: *CP*.8.199). We shall provide answers to this question, “what do we know?” regarding both universals and particulars, only incidentally – that is, while we cannot avoid giving some answers, answering it is not the goal.

The first question, “how do we know?”, has rendered confusion within the practice of speculative thought for millennia; and this book is a modest attempt to help us arrive at a satisfactory answer.

Regrettably, in the twentieth and twenty-first centuries, philosophy has taken on a diminished role – or at least, adopted diminished expectations – in answering this question. Ideoscopic examination of the physical organs involved in cognition (the senses, the nervous system, the brain) has advanced our understanding of cognitive disorders, the development and alteration of cognitive activity, and especially of perception and the idiosyncrasies experienced therein. This has led many philosophers of mind, especially within the analytic tradition as well as phenomenologists in the tradition of Maurice Merleau-Ponty, either to relegate the question of how it is that we have knowledge entirely to the ideoscopic sciences, or to subordinate their own cenoscopic inquiries to ideoscopy’s endeavors: for knowledge is considered a

function of the mind, and the mind the work or product of the brain (Pinker 1997: 24), the study of which belongs in varying degrees to physics, biology, psychology, neuroscience and cognitive science. The presumption of those who have thrown over the primacy of cenoscopic for ideoscopic inquiry is that, sooner or later, these ideoscopic sciences will supply all the answers (Dennett 1991: 16):

More precisely, I will explain the various phenomena that compose what we call consciousness, showing how they are all physical effects of the brain's activities, how these activities evolved, and how they give rise to illusions about their own powers and properties. It is very hard to imagine how your mind could be your brain – but not impossible. In order to imagine this, you really have to know quite a lot of what science has discovered about how brains work, but much more important, you have to learn new ways of thinking.

And this expert insight into the workings of the brain will allow us to understand the activities which have long been considered fundamental to both our humanity and our individual personal identities, such as free choice (Squire et al. 2008: 6):

As the neuroscientific bases for some elemental behaviors have become better understood, new aspects of neuroscience applied to problems of daily life have begun to emerge. Methods for the noninvasive detection of activity in certain small brain regions have improved such that it is now possible to link these changes in activity with discrete forms of mental activity. These advances have given rise to the concept that it is possible to understand where in the brain the decision-making process occurs, or to identify the kinds of information necessary to decide whether to act or not.

Given enough information, therefore, it has been argued that even our complex emotions and moral quandaries can be understood and solved through the ideoscopic approach (Harris 2010: 80):

The neuroscience of morality and social emotions is only just beginning, but there seems no question that it will one day deliver morally relevant insights regarding the material causes of our happiness and suffering. While there may be some surprises in store for us down this path, there is every reason to expect that kindness, compassion, fairness, and other classically “good” traits will be vindicated neuroscientifically – which is to say that we will only discover further reasons to believe that they are good for us, in that they generally enhance our lives.

Undoubtedly, advances in ideoscopic investigation of the brain have and will continue to yield a rich harvest for understanding the human being. Yet there remains a question which neither neuroscience nor cognitive science has yet sufficiently answered, and which, once given an honest assessment, can never be answered by any ideoscopic inquiry (as you might find, for instance, in Strawson

1994: 81–94, where a brief moment of honesty concerning the intractable problems for those who have surrendered philosophy to the researches of ideoscopy quickly gives way to a kind of shoulder-shrugging admit of ultimate defeat in the war, paired with resolve to win as many battles as possible): namely, the indeterminacy of species-specifically-human intellectual concepts, as distinct from commonly alloanimal percepts. We call this the *indeterminacy question*.

That is: every human concept, signified by species-specific human linguistic communication and considered negatively, is incommensurable with reduction to the instances in which it is found. We can never enumerate every possible example of what is presented to us by our concepts. The meaning of such concepts, considered in abstraction from their instances, lacks finite determination in its application and its extension (cf. Gibbs 2005: 84). Our concepts are never limited to a definitive set of exhaustively enumerable significations, but, considered positively, are intrinsically open to an infinity of relational suggestions, as evidenced when we struggle to find the right words, the right ideas, or to describe something new to our experience. Even more so is the indeterminate valence of our conceptual mode of thinking evident in the analogical, poetic, metonymic, and metaphorical uses of language. Were our concepts innately determinate in a way commensurable with their applications and instances, it would be impossible to make sense of the statement (Eliot 1922: 54):

I will show you fear in a handful of dust.

Or (Yeats 1928: 163):

An aged man is but a paltry thing,
A tattered coat upon a stick

Fear can neither be seen nor shown to any sense, and what it is as a feeling manifests in countless and often antithetical physiological phenomena (sweat and cold, paralysis and trembling, and so on). We may identify common underlying neurological activity correlative with the experience of fear (cf. Squire et al. 2008: 527–28, 800, 824 [Box 35.4], 997, etc.), but we can never find it in a handful of anything. No man – nor woman for that matter – is a coat upon a stick, no matter the age, no matter the degree of emaciation; and yet both of these poetic sentences are not only coherent, but convey to us something more than could ever be conveyed by endless lifetimes of strictly empirical observation or any quantity of information.

Thus, while such ideoscopic attempts have been made, neuro- and cognitive scientists have stumbled into inadequate terminology and illegitimate confluences

of irreducibly immaterial phenomena with neurological activity (most specifically, there is confusion between “amodal” concepts and “amodal” or “supramodal” regions of the brain [e.g., Kiefer and Pulvermüller 2011; Fairhall and Caramazza 2013; Machery 2016]; as well as the pervasive use of the term “representation” as an unconscious and harmful appropriation of modern philosophy). Barsalou (2008: 91–95) aptly describes the common distinction between neuroscientific theories, in which abstract thought (“categorical knowledge”) is housed in the modal systems of perception, action, and affect, while cognitive science holds it to belong to modal and amodal semantic memory (cf. Jouen et al. 2015 and Zwaan and Taylor 2006 for some representative papers). Although this debate is significant, it does not have direct relevance upon the issue being raised here, for, although they differ in their theories, their method – different forms of computational model – is essentially the same and essentially problematic, as it is confined to either quantitative assessment or merely descriptive phenomenalism, or even to some attempt at blending the two. In other words, the indeterminate nature of human cognition, as signified through our linguistic communication and best exemplified in our metaphorical and analogical predications, cannot be explained by appeal to the activity detectable within the empirically-observable structure of the human brain, nor, for that matter, the whole human organism, if conceived mechanistically. Moreover, it is not simply concepts which lack determination, but human cognition as a whole – not only are our concepts indeterminate with regard to their valence, but so is the entire expanse of human knowing. We may therefore describe the difficulty of cognitive indeterminacy as twofold: “Why is it that our concepts are not fully determined by the particular models in which we instantiate them?” and “Why is it that we ourselves are not fully determined by the concepts, models, etc., whereby our cognition is directed?” Although such indeterminacies are, as the scholastics would say, true *secundum quid* of other animals, it will be shown in the course of our inquiry that there is a uniquely-human character underlying both the species-specifically conceptual indeterminacy and the species-specifically development indeterminacy of humankind.

In light of the inability of ideoscopic science to explain adequately the indeterminacy of human cognitive activity, long-considered *sui generis* within animal cognition, some may and have been tempted to appeal to a kind of “spiritual soul of the gaps” – since modern science cannot answer it, therefore it must be because human beings have a spiritual, immaterial, ethereal soul: *anima spiritualis ex machina*.

This spiritual soul may indeed be the answer: but to propose it as a conclusive solution simply because other attempts have as of yet failed is a desperate attempt to protect or promote an ideological agenda, rather than to engage in an earnest intellectual endeavor. Moreover, it denigrates the true significance

of the indeterminacy of human cognition; for this indeterminate modality – indeed, a *modality*, and not something *amodal* – attendant upon species-specifically human conceptualization does not simply fill in a gap in our lives, but rather pervades every last aspect of our species-specifically human experience. Barsalou (2008: 91) acknowledges this:

There is probably no such thing as a knowledge-free cognitive process. As people interact with the environment during online processing, knowledge in the conceptual system plays extensive roles. It supports perception, providing knowledge that completes perceptions and that generates anticipatory inferences; it makes the categorization of settings, events, objects, agents, actions, and mental states possible; and it provides rich inferences about categorized entities that go beyond the information perceived to support goal pursuit. The conceptual system also plays a central role when people cognize about situations not present, during offline processing. It supports the cuing and reconstruction of past events from memory; it contributes extensively to the meanings of words and sentences during language use; and it provides the representations on which thought operates during decision making, problem solving, and reasoning. The conceptual system is central to learning and development too. On encountering novel entities in a new domain, existing categorical knowledge is used to interpret them. As expertise in the domain develops, new categories that interpret the domain with greater sophistication develop, thereby expanding the conceptual system. Finally, the conceptual system is central to social cognition, playing central roles in categorizing social entities and events, in drawing social inferences, and in planning and remembering social interactions.

If we cannot account for *how* this conceptualization occurs, however, providing a coherent account of human life as a whole becomes an impossibility. Human experience is diverse and complicated. We encounter physical facts that can be quantitatively considered through mathematics. We encounter natural beings with their own cognition-independent internal constitutions. But we also encounter psychological phenomena that cannot be characterized by quantification, moral quandaries that cannot be solved by mathematical calculation, cultural realities lacking internal constitution and dependent upon the actions of the members of the culture. How are we to reconcile these complex and diverse experiences into a meaningful whole? The apparent disparity between these experiences, which follows as a consequence of the indeterminacy of human cognition, is what we call the *coherence question*.

Unveiling the true significance of the indeterminacy question, and how its answer leads to the realization of coherence, requires a systematic philosophical approach. There are many philosophers whom we could consider helpful trailblazers for this approach. In my doctoral dissertation, guided by John Deely (1942–2017), I sought the first steps towards an answer by examining the meaning of Thomas Aquinas' (1225–1274) statement (1270–71: q.94, a.2), *illud quod primo cadit in apprehensione, est ens, cuius includitur in omnibus*

quaecumque quis apprehendit, “that which first falls in the apprehension is being, which is included in everything else which it apprehends”. Though Thomas has often been incorporated in the accounts of epistemological realists (notably, Catholic philosophers following in the footsteps of Reginald Garrigou-Lagrange, Desire Cardinal Mercier, Étienne Gilson, Jacques Maritain, and the like), as a foundational thinker who stands in opposition to the idealists of modernity, what I found in investigating the meaning of his claim – that being is the first object of the intellect – is the seed of a semiotic approach: one which, especially given the development of Thomas’ thought in John Poinset (1589–1644), simultaneously transcends and unites the divisions of realist and idealist, subject and object, nature and culture, and relational and substantial modes of being.

In this volume, tools for developing this vein of understanding are sought from two other thinkers: Martin Heidegger (1889–1976) and Charles Sanders Peirce (1839–1914). The importance of Peirce as regards cenoscopic inquiry into the cognitive life of human beings has been slowly unfolding over the past several decades, thanks largely to Thomas Sebeok (1920–2001) and John Deely (1942–2017), among others. Heidegger’s thought has, however, fallen victim to its author’s own obscurity, as misinterpretations and confusions have prevailed throughout Heidegger scholarship. Yet as Deely wrote in his magisterial history of philosophy viewed from the semiotic perspective, *Four Ages of Understanding* (2001a: 667):

The one author after Peirce who contributes most to the consolidation and definitive establishment of a postmodern spirit in philosophy is Martin Heidegger (1889–1976). Although Heidegger’s philosophy has neither the scope of Peirce’s thought nor the clarity as to the being of sign as central to the development of human understanding, what Heidegger does contribute at the foundations of the postmodern age is an uncompromising clarity and rigor that exceeds Peirce’s own in focusing on the central problem of human understanding vis-à-vis the notion of Umwelt. This heretofore neglected problem is what is central to the problematic of philosophy in a postmodern age. In Peirce’s terms it is the problem of Firstness; in the language of Aquinas it is the problem of being-as-first-known; in the language of Heidegger it is the problem of the forgottenness of being, ‘*Seinsvergessenheit*’. This problem is the ground and soil of the doctrine of signs.

Through his understanding of *Sein* – parallel in many ways to the centrality of *ens ut primum cognitum* in Thomas Aquinas – and his continually-refined phenomenological approach, Heidegger develops a concept of the “world” which not only allows for but demonstrates the natural unity of the supposedly disparate spheres of human experience; thus making him truly post-modern, in the sense that Deely (2001a: 611) uses the term. Heidegger’s philosophical exposition of Dasein as fundamentally Being-in-the-world, and the disclosure of

that world, coheres with the semiotic approach taken by Peirce initiated in his “On a New List of Categories” and developed throughout his life, especially the notion of Firstness, which, like Heidegger’s *Sein*, mirrors the primacy of *ens ut primum cognitum*.

Peirce’s Categories of Experience, bolstered by his notion of synechism – the metaphysical theory of the essential continuity of the whole universe – and enriched by the doctrine of semiotics, dovetail neatly with Heidegger’s *Sein* and *Welt*. Nevertheless, this book is not strictly a comparative study; for together, the two thinkers can advance our cenoscopic approach towards answering the perennial questions of human understanding itself. Specifically, we hope to advance towards an understanding of how it is that human beings have an essential indeterminacy in their intellectual operations.

Through the phenomenology of the world in Heidegger with his understanding of *Sein*, Peirce’s Categories of Experience and synechistic philosophy – both infused with the burgeoning life of the semiotic doctrine – we hope to sow the seeds of answers to both the indeterminacy and coherence questions in the rich field of cenoscopic thought.

Ideoscopic advances and cenoscopic blinders

It would do the philosophic profession an injustice, however, to ignore the merits of ideoscopic contributions to the study of human cognition and behavior.¹ The purview of cenoscopy includes acknowledging, adapting to, and assimilating truth in any of its iterations.

¹ As is the failing, I believe of those who – finding the ideoscopic inquiries of modern science to be insufficient – claim a spiritual and positively immaterial soul solves the difficulties (or who, at the very least, attribute the functions for which ideoscopy cannot account to such a soul). While it may be unfair to paint with so broad a brush, I think we find a willingness to jump into an appeal *anima spiritualis ex machina* aimed, perhaps, at preserving religious ideology rather than seeking a real philosophical answer, in, for instance, Gilson 1935, 1939 and 1965; Régis 1959; Dewan 2006; Wippel 2000 and 2007. The explanations given of species-specifically human intellectual activity open the door to accusations of intrasubstance dualism inasmuch as they maintain two functions really and entirely distinct in *kind* as being reconcilable in one common substance – which must, apparently, straddle the lines between the physical and the spiritual (cf. Gilson 1965: 253: “In other words, the objects of human knowledge contain a universal and intelligible factor that is associated with a particular and material factor. The distinctive act of the agent intellect is to dissociate these two factors in order to furnish the possible intellect with the intelligible and universal elements that are involved in the sensible object.”).

Ideoscopy has revealed many of the underlying material conditions affecting various cognitive disorders, and in the process, shown more clearly the necessary structures to effective cognitive processing. Recent years have seen numerous studies examining the correlation between prefrontal cortex neurological activity and carrying out the organizational and attentional activities categorized under the umbrella of executive function (e.g., Minzenberg et al. 2009; Yuan and Raz 2014, Zhao et al. 2016). Meta-analyses considering enormous amounts of data are unveiling the incredible complexity of the hierarchical aggregation involved in the brain activity necessary for abstract thought (Taylor et al. 2015). Understanding the function of the neurotransmitter dopamine has shown that its overabundance – or even the simulation of its presence – can be linked to impulse control (Szalavitz 2017). That we can derive from this information more ethically sound ways of treating those suffering from brain damage, attention-deficit disorders, addictions, possibly psychosis, and any number of behavioral disorders brooks no argument. Norepinephrine, a hormone released by the body in response to stress which causes blood vessels to constrict and blood-glucose levels to increase, often appears correlated with the occasion of bipolar disorder: elevated levels of norepinephrine coinciding with mania, and decreased levels with depression (Chang et al. 2007; Wiste et al. 2008). Discovering ways to regulate its levels may help us to restrain the emotional and psychological oscillations of the manic-depressive.

The brain-architecture involved in abstract thinking (Taylor et al. 2015), in particular, may help us to eventually understand better the patterns of education which underlie the installation of the kinds of neural patterns conducive to such thought (Barsalou 2003; Barsalou et al. 2003), allowing us to become better teachers of difficult ideas – without resorting to gimmicky tricks proclaiming shortcuts to improve brain-functioning and the improvement of cognition or intelligence. We may also come to better understand how biological and environmental factors play into the differences of conceptual development across cultures and regions, or how different languages involve different neurological processes. It is true that the potential correlations between our cognitive activity and the structure of the brain are limited only by the realities of those cognitive acts themselves.

Most importantly, these ideoscopic discoveries of the electrochemical constitution of the brain's activity, and its mutual relationship with the rest of the body (cf. Merleau-Ponty 1945: 73–74),² can illumine the formation of knowledge, most

² I will make no substantial comment on the notions of “embodied cognition”, or, as Michael Wheeler (2011) proposes, “extended mind”; except that the latter sounds a distorted echo of Peirce’s description of matter as “effete mind”.

especially the processes necessary for perceptual (or phantasmal) frameworks and operation. How we perceive, and how we solve problems – how we operate as environment-dependent, context-driven creatures – can be better understood by the analyses rendered through ideoscopic inquiry.

Nevertheless, the successful identification of these correlations has given rise to an overconfidence concerning both the potential of neuroscience’s explanatory power and the causal efficacy of neural activity (cf. Kaplan, Gimbel, and Harris 2016). This overconfidence typically assumes the form of extrapolating from strong correlational evidence to positing universal causal efficacy: that is, noting the consistent patterns of neuronal conveyance in association with sensory observation, with the application of an interpretation of rules, or between common sounds and differentiated in valence by context, and presuming first that these patterns are themselves the cause of the behavior; and, secondly, presuming the extension of such paradigmatic and causal consistency to all cognitive activity (cf. Wheeler 2011). The same neural processes may be involved in recognizing the convexity in a nose and in a football; but neither recognition comprises the grasp of convexity as such.

In other words, believing that a mechanistic or computationally-modelled analysis – that is, an analysis built off of an information processing paradigm (cf. 5.1.1 below) – of the inner workings of the human brain can fully explain conscious human experience guarantees a misunderstanding of human cognitive life. To quote Brier (2008: 23): “But for its followers this cognitive information paradigm presents great and unexpected difficulties when it comes to modelling both the semantic dimensions of language, perception, and intelligence and the influence of these on cognition, communication, and action.” (Cf. Shallice and Cooper 2013; Ghio, Vaghi, and Tettamanti 2013). We constantly encounter qualities of feeling not open to empirical observation, psychological phenomena which defy quantification, and moral quandaries which cannot be solved through calculation – no matter what Sam Harris promises us. There is something richer in human experience than can be traded for in the quantitative or informational paradigms typical of mechanism and computational modelling.

Thus when a philosopher of mind such as Daniel Dennett strives to depict the role of meaning in the unfolding of human experience, and thereby give an explanation for what it means to know, he recognizes the insufficiency of a mere philosophy of language – but errs by instead positing a sublinguistic neural phenomenon as primary (1969: 88): “Verbal expressions... are not the ultimate vehicles of meaning, for they have meaning only in so far as they are the ploys of ultimately non-linguistic systems. The inability to find precisely worded *messages* for neural vehicles to carry is thus merely an inability to map the fundamental on to the derived, and as such should not upset us.” In other

words, Dennett casts language into the role of derived and conventional (and therefore “made up”) and neural activity into the role of fundamental and “real”. It is the hallmark of all cognitive modelling based upon any variation of an information processing paradigm that it treats emergent realities such as Sir Arthur Eddington famously treated his “first table”; that is, as not really real, however necessarily we must treat it as so. Consequently, it should be little surprise that Dennett denies both the reality of qualia and of consciousness as a phenomenon distinct from neural activity, positing that they are instead nominalistic veneers cast over the complex activity on-going in the neural network (See Dennett 1991; cf. Searle 1992 and 1997: 99). While others working in the neurocognitive camp may not be as direct or forthright in their denials as Dennett, the tendency to “accept nothing except quantifiable experimental data” (Champagne 2016: 40) undermines their sincerity.

There are many arguments which could be raised against Dennett (1969, 1981, 1991, and 1996) and others like him – such as Steven Pinker (1997 and 2013), Patricia Churchland (1989 and 2014; Churchland and Sjnowski 1992), Sam Harris (2010), Margaret Boden (1985), Michael Wheeler (2011), Jerry Fodor (1968 and 1975, who despite his disagreements with Dennett, is not all that different in the end), Hilary Putnam (1975), and Galen Strawson (1994), to name only a few among the many others (e.g., Searle 1992, 1997, and 1998; Chalmers 1996; Dehaene 2014; and Kaku 2014, etc.), all of whom overstate the accessibility of computational modelling to attaining proper philosophical insight to the mind – the simplest, however, is that all of these thinkers have failed to recognize necessary distinctions in the object of knowledge, as does every nominalist. It is one thing to recognize an object as convex; it is another to grasp the notion of convexity as such, or humanity as such, or justice, love, peace, truth, and so on and so forth. That we can map the neural activity occurring in correlation to the recognition of patterns does nothing to explain how that neural activity causes the grasp of *things* as possessing realities independent of our perception of them. The honest thinker will recognize that no amount of knowledge concerning neural activity ever can explain the grasp of things as things (cf. Favareau 2010: vi).

But this is not a work concerned primarily with refuting the errors of materialism or reductionism³; it is a study of how knowledge occurs. In the words of Søren Brier (2008: 101): “Knowing is the prerequisite for science. How, then,

³ Brier’s work (2008) goes deeper into refuting the adequacy of the underlying informational processing paradigm; Bennett, (et al 2007) engages Dennett and Searle in a back-and-forth discussion regarding the themes in Bennett and Hacker (2003). Feser (2013) does a fine job demonstrating that sciences of the material cannot adequately capture the immaterial dimension of thinking.

can knowledge and intelligence ever be expected to be fully explained by a science based on a physicalistic or functionalistic world view?" The great failure of cenoscopy is following Descartes not in his dualism or idealism, but that it seeks to carry out its researches in an ideoscopic fashion. Our goal is not to illuminate all the problems which result from this prevailing error, but to return cenoscopy to its rightful place in the study of knowledge.

Phenomenology and semiotics

Thus it is in quite a different vein that we find the cenoscopic endeavors of Peirce and Heidegger, the semiotician and the phenomenologist, both of whose inquiries I see as aiming at a more modest grasp of a more ambitious truth.

In the tenth article of his "Of Reasoning in General" – the first chapter of his intended but incomplete text in logic – Peirce insists that, along with formal logic and "speculative rhetoric", philosophical thinking needs to be supplied with a "speculative grammar" (1895: *EP.2.18–19*):

a very important part of the labor of the art of reasoning is undertaken by the grammarian, and may be severed from logic proper. Every form of thinking must betray itself in some form of expression or go undiscovered. There are undoubtedly numerous other ways of making assertions besides verbal expressions, such as algebra, arithmetical figures, emblems, gesture-language, manners, uniforms, monuments, to mention only *intentional* modes of declaration. Some of these are of the highest importance for reasoning. Philologists have not deemed those sorts of language interesting to them. So, cultivators of the art of reasoning found themselves long ago obliged to institute a *speculative grammar* which should study *modes of signifying*, in general. . .

The sciences of speculative grammar, logic, and speculative rhetoric may be called the *philosophical trivium*.

While formal logic, Peirce notes, is chiefly dedicated to the discerning of good and bad, strong and weak arguments in the structure and significance of judgments (or the propositions thence signifying) – (1895: *EP.2.18*): "The principal business of logic is to ascertain whether given reasonings are good or bad, strong or weak" – there is needed a more fundamental, underlying study of a "speculative grammar"; that is, a need for a study of the underlying structure of what enables thought in the first place. Since much of his chapter is dedicated to the distinctions of signs into icons, indices, and symbols, Peirce merely suggests this "philosophical trivium" without much elaboration. He renews with greater detail, however, the call for this threefold foundation of philosophy under the umbrella name of "logic" roughly eight years later at

the end of the lecture titled “What Makes a Reasoning Sound?” (1903b: EP.2.242–57):

Methodetic [i.e., “speculative rhetoric”], which is the last goal of logical study, is the theory of the advancement of knowledge of all kinds. But this theory is not possible until the logician has first examined all the different elementary modes of getting at truth and especially all the different classes of arguments, and has studied their properties so far as these properties concern [the] power of the arguments as leading to the truth. This part of logic is called *Critic* [“formal logic”]. But before it is possible to enter upon this business in any rational way, the first thing that is necessary is to examine thoroughly all the ways in which thought can be expressed. For since thought has no being except in so far as it will be embodied, and since the embodiment of thought is a sign, the business of logical critic cannot be undertaken until the whole structure of signs, especially of general signs, has been thoroughly investigated. . . I, therefore, take a position quite similar to that of the English logicians, beginning with Scotus himself, in regarding this introductory part of logic as nothing but an analysis of what kinds of signs are absolutely essential to the embodiment of thought. I call it, after Scotus, *Speculative Grammar*. . . this Speculative Grammar ought not to confine its studies to those conventional signs of which language is composed, but that it will do well to widen its field of view so as to take into consideration also kinds of signs which, not being conventional, are not of the nature of language.

Bringing clarity to the nature of signs was of paramount importance to Peirce’s scientific endeavors as a whole; for (1893d: CP.2.444n) “the purpose of signs – which is the purpose of thought – is to bring truth to expression.” Hence Peirce elaborated his notion of this speculative grammar in various and typically terse formulations of representamen or sign-vehicle trichotomies. These attempts are in many ways the foundation of a systematic approach to semiotics; but clarity, I think, still needs to be brought to bear on the nature of speculative grammar itself which finds its roots not in any particular varieties of sign, but rather the fundamental trichotomy, the Categories of Experience: Firstness, Secondness, and Thirdness.

It is no small coincide that, despite – to the best of my knowledge – complete ignorance of Peirce’s work, Heidegger remarks near the end of the second introduction to *Sein und Zeit* that (1927a: 38–39/63): “it is one thing to give a report in which we tell about *entities* [*Seiendes*], but another to grasp entities in their *Being* [*Sein*]. For the latter task we lack not only most of the words but, above all, the ‘grammar.’” This lack of an appropriate grammar is, indeed, the fundamental challenge in discussing Being, *Sein*. Conventional grammar, as the study of the structure of our linguistic communication, operates principally with respect to knowledge on what Heidegger terms an *ontic* basis – that is, a basis dealing with things according to the factuality educed from them in terms of their subjectively-constituted or quidditative character: i.e., the definitional structure whereby we distinguish one thing from another

on universalizable characteristics. Contrariwise, what Heidegger terms the *ontological* dimension – which not only transcends but also reveals and even permeates the ontic – remains hidden, having any visibility in language, so to speak, only implicitly in the use of verbs and prepositions.

The term “ontological” carries unexpected connotations, as Heidegger uses it. Conventionally, the term has been applied to traditional metaphysics, especially general metaphysics. For Heidegger, the term applies rather to what I have elsewhere called the relational mode of existence, *esse ad* (Kemple 2017: 277–334). This relationality, though implicitly present to us throughout our lives, becomes explicitly known to us first by reflection on the way in which verbs are employed in our language, particularly transitive verbs in conjunction with the use of prepositions. Even in such constructions, however, the ontological is “perceived” according to its proper meaning only with some difficulty. In order to attain clarity about the nature of the ontological, further reflection, beyond the confines of any particular language, indeed, beyond any ordinary sense of language itself, is required (Heidegger 1934: 168–70/144–46):

Language is neither something subjective nor something objective; it does not at all fall in the realm of this groundless distinction. Language is as historical, respectively, nothing other than the event of exposedness entrusted to being into beings as a whole. . . . However, such a questioning concerning the essence of language cannot take it up in its unessence; it may not misappropriate this semblance of the essence and misinterpret everything. The essence of language [as opposed to the historical; cf. Appendix 2] announces itself, not where it is misused and leveled, distorted, and forced into a means of communication, and sunken down into mere expression of a so-called exterior. The essence of language essences where it happens as world-forming power, that is, where it in advance preforms and brings into jointure the being of beings. The original language is the language of poetry.

The ontic dimension of our existence, which deals with beings as beings, manifests itself to us more clearly, and is a familiar and consistent realm for revealing what things are. The ontological dimension, the dimension of *Sein*, remains hidden insofar as it is that whereby the ontic is disclosed, and by the disclosing of the ontic is itself hidden.

A complete – inasmuch as any philosophical question can ever be completed – answer to Heidegger’s inquiries into the ontological dimension of Being requires, as Peirce suggested, a *speculative grammar*; that is, a grammar unconstrained by time, place, or culture: in essence, a grammar which governs not only language but all signification, which underlies not only species-specifically human communication but all communication. Whereas Peirce quickly places the elements of his speculative grammar into an ontic framework, however – delving into the modes of signification as divisible into this or that

trichotomy, proceeding immediately into an explicit semiotic (and therefore species-specifically human) excursion, and which tendency has been carried forward by the researches of biosemiotics, cybersemiotics, cultural semiotics, and so on – Heidegger seeks an thorough-going explanation of the ontological *itself*, of what is antecedent to any distinctions constituted by the activity of the human being – hence his attempts to overthrow a traditional sense of logic, language, and grammar and instead investigate into *thinking*. This search is carried out through Heidegger’s phenomenological method, a discursive inquiry into the revelation of beings as revealed to the intentionally-oriented human being (ostensibly different from the science of phenomenology which was proposed by Peirce and which evaluates the three Categories of Experience though not as mere “lived experience”; hereafter referred to as phaneroscopy to maintain the distinction) which attempts to unveil not only the fundamental structures of disclosure, but conversely the derivative structures through which they are known and in which they operate.

On the one hand, therefore, we have Heidegger’s search for the architecture of horizons for possible human experience; on the other, we have Peirce’s attempt to produce a roadmap for reaching those horizons. This search for the horizons and the map to get there should result in a complementarity of Heidegger and Peirce, of World and Sign.

Terminology

In many ways, despite the different backgrounds, very different language, and different personalities (though both, notably, lived tumultuous personal and professional lives) Heidegger and Peirce do have a great deal in common in their philosophies. It is fair to say that this is, in part, due to a trio of thinkers who strongly influenced them in common: I mean the trio of Immanuel Kant, John Duns Scotus, and Thomas Erfurt – the crucial work of the lattermost both Heidegger and Peirce thought to belong to Scotus (an error widely accepted and not corrected until Grabmann 1922; cf. McGrath 2006). Indeed, the idea of a speculative grammar, of a grammar transcending the perspective of historical time, place, and particularized linguistic structures originates for both Peirce and Heidegger with Erfurt’s *Tractatus de modis significandi seu Grammatica speculativa* (the focus of the second half of Heidegger’s 1915 *Habilitationsschrift*, *Die Kategorien- und Bedeutungslehre des Duns Scotus*), mistakenly included in the Vives edition of the *Opera Omnia* of Scotus. The fifty-four chapters of Erfurt’s *Tractatus de modis significandi* examine the hidden ontological structures of meaning revealed by the common parts of speech and the ordinary ways of

their construction. In effect, it denies any and every nominalistic tendency, by positing an essential structure to language independent of any convention. Erfurt's influence on both thinkers is cursorily examined in the following chapter.

Meanwhile, the reader will find that I often employ Scholastic vocabulary, anglicized where suitable. Beyond its endorsement by Peirce in his "Ethics of Terminology" (1903o: EP.2.266), it is amenable material to construct a bridge between the thought of Peirce and Heidegger – the latter of whom could have saved the world from much intellectual strife had he known of and followed the second rule of Peirce's terminological ethics, "to avoid using words and phrases of vernacular origin as technical terms of philosophy." While there is some merit in the etymological and historical investigations of vernacular terms which Heidegger makes (however questionable his analyses may in fact be), the continued use of such terms often conflates the various senses of the term and results in a muddle of unclarity (see Appendix 2). That being said, I have tried, as much as possible, to ensure consistency in vocabulary and to minimize my technical terminology to recognized terms, used clearly, (I introduce only one neologism, "Bildendwelt", in c.2.3) so as to not entangle the discussion in questions of jargon beyond the unavoidable and necessary attempts to clarify the already-established terminologies in the respective traditions. To assist with this and "evitate needless misunderstanding" (cf. Deely 2007: xiii), I would like to provide a *proviso* of three terminological clarifications.

Objective and Subjective. Those familiar with John Deely's work are undoubtedly aware of his reclamation of the term "objective" (2009: 8–15). What the Latins originally coined as a term signifying a thing considered specifically as related to a power was perverted over time to designate a thing considered precisely as independent of any such relation. In the process of this perversion, English was robbed of any word including the former meaning. To have such a word is highly desirable. Yet the perverted use of "objective" is ubiquitous. Likewise, while the term "subjective" has not suffered quite so ubiquitously violent a semantic inversion (for the term "subject", at the very least, retains something of its original meaning), it too has become primarily associated with a meaning opposed to that of its origin: namely, that the term is usually used to signify *psychological* subjectivity, which is to say, the realm of thoughts, feelings, emotions, desires, and whatever else one might wish to relegate to the domain of opinion or a private, personal, interior world, of anything which exists solely by this psychological constitution.

Consequently, we are left at a crossroads, wherein both forks are thick with weeds: do we attempt to introduce *new* terms, and thereby introduce new confusions, ambiguities, questions of etymological significance, and misleading connotations – or attempt to reclaim the uses of antiquity? Fortunately, Deely's

shoes' have already trod down the once-overgrown path of the Latin meanings, and while the path is certainly not yet cleared, it is a beginning to which we may contribute – rather than lose readers in the wild and untouched growth of neologisms.

Moreover, these uses are germane to our own approach to the discussion of objectivity and subjectivity. These terms should not be understood, we will argue throughout, solely or even primarily by their opposition to one another – however deeply ingrained a habit that is in most native English speakers today – but rather in their *complementarity* to one another. Every subject is determined in its environment, in its World, by relations to its objects, and every object is an object because of some subject. This, too, was a point which John Deely made consistently (e.g., 2007: 33–37 and 2009: 8–15): that not all things are objects and not all objects are things, but rather to be a thing is to exist regardless of whether or not something is cognized, whereas to be an object is to be precisely as cognized – perhaps also as a thing, but perhaps not. However, there is a historical complication: *thing*, or in Latin, *res*, has not always signified what exists independently of cognition (cf. Aquinas 1266–68: q.13, a.7, c.; Kemple 2017: 3n6, 292), but rather signifies the intelligibility independent of cognition, i.e., independent of being an object which is cognized. Consequently, I prefer to distinguish between what is cognition-independent (or subjective) and what is cognition-dependent (or objective), for some *things* are cognition-dependent (e.g., anything which is by stipulation or custom, such as the boundary between two states or the appointment to a governmental office).

Thus, while we use the terms “objective” and “subjective” according to their ordinary, perverse contemporary meanings – though never a perverse use of “object” – we do so only in the context of commenting on others who have adopted these fallacious paradigms, as should be clear. If, in any case, it seems unclear how the terms are being used, clarifications have been added.

Sign, sign-vehicle, and representamen. By a terminological looseness – or perhaps laziness – the term “sign” is often conflated with the “sign-vehicle”: that is, signs are always only and everywhere triadic relations, but triadic relations affected principally by one of their three terms, namely the sign-vehicle which mediates between the object and the interpretant, making the former known to the latter. Thus we define a sign as the irreducibly triadic mediation accomplished by a relation through a sign-vehicle between a fundamēt and a terminus; that is, not one thing standing for or in relation to another, but the completed actuality of mediated relating between two beings through a third. A sign-vehicle is that element of the sign which *actually* signifies the significate (or object) to the interpretant. I use the term “vehicle” to signify this element as a thing or individual which may or may not have an existence independent of

the sign-relation but which, in itself and insofar as it does exist is always nascently significative, insofar as the vehicle always relates to the object as potentially a sign of it to some interpretant.

To help understand this distinction, it is helpful, as was the practice of the Latins, to divide signs in a twofold manner (Poinsoot 1632a: 27/8–28):

inssofar as signs are ordered *to a power*, they are divided into formal and instrumental signs; but insofar as signs are ordered *to something signified*, they are divided according to the cause of that ordering into natural and stipulative and customary. A formal sign is the formal awareness which represents of itself, not by means of another. An instrumental sign is one that represents something other than itself from a pre-existing cognition of itself as an object, as the footprint of an ox represents an ox. And this definition is usually given for signs generally [but it applies only to an instrumental sign]. A natural sign is one that represents from the nature of a thing, independently of any stipulation and custom whatever, and so it represents the same for all, as smoke signifies a fire burning. A stipulated sign is one that represents something owing to an imposition by the will of a community, like the linguistic expression “man.” A customary sign is one that represents from use alone without any public imposition, as napkins upon the table signify a meal.

The distinction between formal and instrumental signs, a persistent debate up until Poinsoot, helps us to understand the distinction between the thing-which-may-signify, or the vehicle, and the thing-as-signifying, the sign-vehicle. A formal sign requires no understanding of itself in order to be a sign-vehicle; its whole being consists in the other-representation. An instrumental sign, contrariwise, requires an understanding of itself in order to function as a sign-vehicle; it needs both a self-representation and an other-representation. A stop-sign (a stipulated sign), for instance, is an instrumental sign-vehicle, as is smoke (a natural sign). But an instrumental sign absent an understanding of itself cannot function as a sign, for it does not signify to an interpretant. Natural, stipulated, and customary signs can all fail to signify (even if signification remains “virtually nascent” [Deely 2001a: 640]) not through any fault of their own but strictly by a lack of understanding on the part of the interpretant.

But it is also important – indeed, perhaps more important – to recognize that the distinction of instrumental and formal signs does not follow from what makes a sign-vehicle to signify in the first place, but secondarily from the nature of the kind of representation which belongs to the sign-vehicle (Deely 2010b: 368):

signs are called “formal” or “instrumental” not according to what is proper to them as signs but only according to the representative aspect which in the sign belongs to the *foundation* of the sign relation rather than to the *relation itself* in which the sign as such exists in its actual signification. The same point applies, however, to the other main traditional division of sign into natural and conventional. Like the division of signs into formal

and instrumental, this division, too, into natural and conventional is made not from the point of view of that which constitutes every sign as such, but from the point of view rather of that subjective or “absolute” characteristic of some individual which makes of that individual the foundation for a relation in the essential sense of existing over and above its subjective ground. Yet what *constitutes* every sign as such is an ontological relation triadic in character (which may be either rational and purely objective or categorial – physical as well as objective – depending on circumstances, and even sometimes one and sometimes the other, also depending on circumstances). Hence [the sign] cannot be identified with any *term* in the sign relation, not even that term from which the sign-relation primarily performs its function as *vehicle* for the presentation of something (namely, the signified object) which neither the sign vehicle nor the sign relation itself is. Never identified with any one term, in fact, the sign as such *consists* in the uniting or nexus of the three terms – sign-vehicle (that from which representation is made), interpretant (that to which representation is made), object signified (that which is represented). “By the one single sign-relation which constitutes the proper being of the sign,” Poinsoot says, are the three terms of sign-vehicle, object signified, and prospective observer brought into unity.

This manner of distinguishing sign and sign-vehicle, which was first made clear by Poinsoot (cf. 1632a: 65–76) was unknown to Peirce, for whom his reading of the Latins stopped with the Conimbricenses, who maintained an identification of signs with the vehicles (Conimbricenses 1606: q.1, a.1, p.45). But Peirce nevertheless recognized this distinction, despite his ignorance of Poinsoot’s work (cf. Deely 2001a: 634–44).

Crucially, the distinction between formal and instrumental sign – if over-emphasized – will detract from the fundamental nature of the sign itself; for both formal and instrumental signs consist essentially in representing some other to an interpretant and this makes no difference if the sign-vehicle is an external material structure accessible only through sense-perception or a psychologically-constituted internal sign (Deely 2001a: 640):

Strictly, Peirce agreed with Poinsoot that the sign in its proper and formal being consists not in a representation as such but in a representation only and insofar as it serves to found a relation to something other than itself, namely, an object signified as presented or presentable to and within the awareness of some organism, some observer. He saw also that, loosely, we, like our Latin forebears, speak of sign as that one of the three terms in the triadic relation from which the sign-relation – the sign formally – pointed towards its significate directly and the prospective observer indirectly. At once it was clear to Peirce that a further precision is called for, an improvement in the extant terminology, and “formal vs. instrumental sign”, as we have just seen, will hardly do what is called for at this point . . .

The present point is that whether the sign loosely so called is a material structure accessible to outer sense or a psychological structure accessible as such only inwardly (by feeling directly and cognition only indirectly, say), this in either case is the element in the sign formally considered that conveys the object

signified to the observer, actual or prospective. We have come to call this sign loosely so-called (indifferently formal or instrumental in the older parlance) the *sign-vehicle* in contrast to the *sign itself* as triadic relation linking this vehicle to its object signified and the interpretant through which the link is here and now actualized or verified. But Peirce had another name for the sign-vehicle, psychological or physical. He called it the *representamen*.

For this reason – that the term which functions as a sign-vehicle or representamen (which terms are here used synonymously), considered in itself as prescinded from the relation, has only a nascent signification (namely, insofar as it has some connection with the object) and unless that relation is grasped by the interpretant, the sign-vehicle does not actually signify (i.e., it does not accomplish an “other-representation”) – it is essential to note that the “sign-vehicle” *as a vehicle* can only be **prescinded** and never **dissociated** (that is, and still be considered a vehicle) from the sign-relation. Smoke considered apart from its representation of fire (or anything else it may represent) is not a sign-vehicle. In consequence, we call this potential sign-vehicle, to indicate it as considered in precision from the sign-relation, merely a “vehicle”; rather than use an entirely new term, or to read a distinction between “sign-vehicle” and “representamen”, by omitting the “sign-” we may imply the precision of the individual term while retaining the possibility of its becoming part of the sign-relation. In contrast, when we wish to convey the twofold signifying role of the term – its actuality in the triadic-relation – we use either “sign-vehicle” or “representamen”.

Meaning. When we say the word “meaning”, we typically mean one of three things: either we are indicating how something is to be understood, as when I ask about the meaning of a word; or we are asking about what a word or other sign indicates, about the object of reference; or we are indicating why something is important for something, as when I ask about what an item or an action means to you. These three senses – respectively, termed the intelligibility, referential, and the teleological senses (the first two being indicated by the German terms of *Sinn* and *Bedeutung*,⁴ respectively) – are related to one another: if we are going to say that something is important to us, it has to be

⁴ Sheehan (2015: xviii) argues that *Bedeutung* in Heidegger refers only and always to the “meaning” of a particular thing, whereas *Sinn* is used in broader applications, primarily to indicate the “thrown-open” clearing. I disagree on both counts: while *Bedeutung* may and often does indicate in the particular, this follows from its indexical function, it’s “pointing” (*be-deuten*). Note that the use of these terms is radically different from that explained by Frege – whose framework for considering the two terms is built by an implicit Cartesian dualism of “subjective” and “objective” – for whom the “reference” is the “extramental” reality and the “sense” is the “mental” possession of a meaning.

because of what we believe that thing is, in itself; if we have strong beliefs about what something is or what it means in itself, that strongly suggests it has some importance to us; and the entire framework our experience of intelligibility and importance alike is constituted by references. If a spouse is important to you, it is not arbitrary – it is because there is something about what a spouse is that you understand. If a job is important to you, it is because of the role that a job plays in your life. If a treat is important to a dog, it is because the dog perceives it to be tasty; and if a flower is important to a bee, it is because the bee perceives nectar as useful. It is arguable whether or not it could be said that water is important to a flower: certainly, we recognize it as so, but does the flower? Not in any conscious, interpretative process which germinates in the self-possessed operations of the flower itself, no; but in its very structure, in the very activity in which the flower naturally engages, one would have to say that although the flower does not *recognize* the importance of water, it is ordered towards water as important. As we will expand on later (4.2.3), the same can be said of any inanimate object as well.

Unfortunately, the subjective, objectivizing-dependent pole of meaning – that something has meaning *to* or *for* some subject, meaning by reference – has often been latched on to so tightly that the cognition-independent dimension has been occluded or inverted. In other words, the captivation (cf. 3.1.1.n3, 6.3.1. below) of the Umwelt has been extended also to the world of humankind, such that we cannot ascertain meaning outside of its framework, to the point that intelligible meaning is grounded on referential meaning. Thus (Hoffmeyer 2010a: 386): “meaning is nothing more and nothing less than the formation of interpretants in the Peircean sense – that is, the formation of a relation between a receptive system and a supposed object that results from the action of a sign that somehow itself is related to that same object.” Or (Luhmann 1997: 18): “Meaning exists only as meaning of the operations using it, and hence only at the moment in which it is determined by operations, neither beforehand nor afterward. Meaning is accordingly a *product* of the operations that use meaning and not, for instance, a quality of the world attributable to a creation, a foundation, an origin. There is accordingly no ideality divorced from factual experience and communication.” This reduction of meaning to the referential context grounded in the individual animal’s species-specific Umwelt circumscribes meaning within the confines of objectivization – such that Hoffmeyer goes on to add that (2010a: 387): “Meaning, according to this theory, remains a local and situated phenomenon” – and thereby fails to take note of the singular capacity of human cognition to recognize that there exists meaning in and of *things* as more than mere objects (cf. Deely 1994a, 2010a); that is, that referential and teleological meanings are possibly only on the basis of there being cognition-independent intelligibilities.

Once we recognize the existence of the intelligibility sense of meaning, it becomes indisputable that there exists a relationship between that sense of intelligibility and that of teleology. But what is that relationship, precisely stated? Is a flower, for instance, actually meaningful in itself, or is it only meaningful-as-useful for the bee, or meaningful-as-beautiful for the human (cf. Stjernfelt 2007: 236–37)? That is, is the intelligible meaning of something a what-it-is-itself or only ever a what-it-is-for-another? Or could there be a third option? If there is – is “meaning” therefore an abstraction? Does that abstraction belong to the constructivist sphere of nominalism, or naïve realism? Or, again, could there be a third alternative? And what role does reference play?

Our answers? Every being, whether objective, subjective, or some combination of the two, is richly, abundantly, and in some sense almost infinitely meaningful in itself, in its own subjective constitution – but only in potency. It takes an agent to turn that potency into actuality – some self-organized active subject operating on or in relation – i.e., bringing into actuality some potential reference – to that meaningful thing, as not simply a thing in itself, but as a specified object.

What we will attempt to validate throughout the book here is that, while the meaning of something is always a meaning-for, a what-it-is-for the objectivizing subject, the what-it-is-for of anything to a human being includes its what-it-is-in-itself, which is not limited to the internal subjective constitution of that being but extends to all of the possible relations of that being to others. Thus the what-it-is-for a human being of any object whatsoever includes the what-it-is-for every other being as well. This orientation towards the universe of possible meanings – of which term the intelligibility sense is primary – is the singular distinguishing capacity of human beings and, therefore, is the common orientation of both phenomenology and semiotics: for it is at the disclosure and grasp of meaning in every dimension that these two intellectual traditions intersect.

1 Historical and theoretical introduction

Though semiotics as a science begins only with Charles Peirce, the study of signification began long before he set his eyes on Whately's *Elements of Logic* (Brent 1993: 48). Socrates' insistent questioning after the meaning of words, Aristotle's inquiry into the categories and the predicables, and Augustine's introduction of a general notion of sign – transcending nature and culture – are well-known occasions in the proto-semiotic development. John Deely has further elaborated on the pivotal importance of Thomas Aquinas and especially John Poinsett in the history of signs, as well as the utter lack of a meaningful engagement with signs in the period of modern philosophy (Deely 2001a). But while signification was weaved into the studies of earlier philosophers, it was Peirce who first made the sign itself, properly understood, a central subject of study and thereby established the science of semiotics.

Peirce likewise attempted the establishment of a new phenomenology: one which he desired to differentiate from that of Hegel (and, after encountering Husserl's *Logische Untersuchungen*, possibly that of Husserl as well), whose approach he found so fundamentally flawed that eventually he discarded the name “phenomenology” and christened his own endeavor “phaneroscopy”. Though this phaneroscopy bears some similarity to the phenomenological approach of Husserl, the science advanced by Peirce aims at a different object altogether, as will be shown in the following pages. Despite this difference of aim, much attention has been paid in recent years to the parallels between Peirce and Husserl (Bondi and La Mantia 2015; Sonesson 2006, 2015; Lanigan 2014; Houser 2010; Petrilli 2008; Stjernfelt 2007; Ransdell 1989; Dougherty 1980; Spiegelberg 1956)⁵ – despite each's apparent disregard for the other's work (Peirce 1906d: *CP*.4.7; Spiegelberg 1956: 182–83) – especially because Husserl also undertook a considerable study of signification in the context of his developing phenomenology, with the apparent aim of a mutually beneficial cross-pollination of the two traditions (Stjernfelt 2007 and Sonesson 2015). In short, it is becoming realized that phenomenology and semiotics, as two major intellectual traditions conceived in the nineteenth century and born in the twentieth, may have a fruitful maturation together in the twenty-first.

⁵ Sonesson suggests that if we extend “semiotics to cover meaning in general. . . it can be argued that phenomenology is nothing but semiotics” (2015: 42), a suggestion he ultimately rejects, but which is very telling about the orientation of this research nonetheless.

Yet while there are undeniable correlations between Husserl and Peirce, I believe that there are insurmountable obstacles in the way of complementarity. Husserl's phenomenology and, within that, his attempt at semiotics, both rely upon principles which are at odds with those of Peirce's phanerescopy and semiotics. Thus, while there is content within Husserl's work that occasionally bisects the content of Peirce, their commonalities are more incidental overlap than fortuitous pursuit of the same goal. That is, followed far enough, the apparent parallel tendencies of Peirce and Husserl will be discovered to diverge.

Contrariwise, little serious or worthwhile comparison has been made of Peirce and Heidegger (cf. Buczynska-Garewicz 1985; Hope 2014). While Heidegger's own writings explicitly concerned with the nature of signs (see, e.g., 1927a: 76–83/107–114) are scant in comparison to Peirce's extensive consideration of signs – although, as we will eventually see, Heidegger's account of signs does play an important role – his phenomenological method remains open to an integration with Peirce's semiotics by virtue of its non-reductive principles, in addition to which he develops a rich notion of the world as constituted by significance. That is, Heidegger's own phenomenological approach, aside from the crucial appropriation of the categorial intuition, bears little similarity beyond the superficial to the phenomenology of Husserl, and, although it contains an important parallel to Peirce's categorial triad, Heidegger's phenomenology is only ever a method, rather than a science; unlike phanerescopy. These interestingly weaved similarities and differences, as we will argue in this book, result in Heidegger's phenomenology and Peirce's semiotics possessing a surprising complementarity to one another.

At the root of this complementarity is the influence of the relatively obscure medieval thinker mentioned in the general introduction, Thomas of Erfurt (c.13–14th century), and the speculative grammar which he developed. Although explicit mention of speculative grammar all but disappears from Heidegger's work after his 1915 *Habilitationsschrift* – as he distanced himself from Catholicism and coextensively from medieval philosophy in the late 1910s (Safrański 1994: 107–25) – its influence can be found throughout his career if one knows to look for it. Peirce, contrariwise, exhibits explicit use of the term “speculative grammar” as late as 1908 (*EP*.2.481–91). We will examine, briefly, both Erfurt's work as well as its incorporation into the thinking of Heidegger and Peirce, for whom this work is respectively influential on both phenomenological method and semiotic science.

But prior to this, to clarify precisely the senses in which we are using these terms, we need to lay out and clarify some of the background relationships between phenomenology and phanerescopy.

1.1 Phenomenology and phanerescopy

As just mentioned, the genesis of the nascent cooperative development between the intellectual traditions of phenomenology and semiotics emerges from recognition of some apparent resemblances between Peirce, who treats of what he initially called “phenomenology” as a science antecedent to semiotics, and Husserl, for whom signification is subsumed into his overall phenomenological project. Both speak of phenomenology as an antidote to the psychological tendencies of their time, and as a grounding or normative science, and both speak of signification as a complex act. In sum, both are engaged with the scientific question of meaning.

Despite their apparent complementarity, however, there are key differences in Peirce’s and Husserl’s approaches to the issues of both phenomenology and semiotics: most importantly, first, that the latter regards phenomenology not only as a science but also a method, and, moreover, a method which hinges upon his notion of the phenomenological reduction; and, second, that signification is *essentially* linguistic-semantic for Husserl, whereas it is only *incidentally* so for Peirce. Anyone would be remiss to ignore, obscure, or take these differences as unimportant in attempting a fusion of the two traditions.

That is, while there are undeniable similarities between Husserl and Peirce – for instance, that (Dougherty 1980: 352): “the common root of Husserl and Peirce’s phenomenologies is the recognition of the mind’s active collaboration in the process of knowing”, that each seems intent upon some establishment of categories (Sonneson 2015: 45), or that they insist upon radical distinctions between the phenomenological and the psychological (Spiegelberg 1956: 182; Stjernfelt 2014: 13–35) – what Husserl means by “phenomenology” and what Peirce means, first by “phenomenology” but later by “phanerescopy”, are not only not the same sciences, they are not even compatible approaches to the same object.

1.1.1 Husserl’s science of phenomenology

To understand Husserl’s phenomenology – however brief must be our attempt to do so – and specifically how it differs not only from Heidegger but also from Peirce’s phanerescopy, it is helpful to put his work into some historical context.

One can justifiably divide Husserl’s career into many stages (cf. Mohanty 1995: 47): the easiest such division being his mathematical beginnings (1878–1900), and the early (1900–1913), the “quiet” (1914–1929), and late phenomenological periods (1929–1938). The early phenomenological period, of which his studies under Brentano in 1884–86 were the root, began with the 1900–01

Logische Untersuchungen and culminated in the 1907 *Ideen zur einer reinen Phänomenologie und phänomenologische Philosophie*. The quiet period saw little production (aside from the controversial *Encyclopedia Britannica* article and the *Vorlesungen zur Phänomenologie des inneren Zeitbewußtseins*, controversially edited by Heidegger and published in 1928), but resulted in the pivotal *Formale und transzendente Logik* in 1929. The late period, which begins with *Formale und transzendente Logik*, and in which we find the 1931 *Cartesian Meditations* and in 1936 *Die Krisis der europäischen Wissenschaften und die transzendente Phänomenologie: Eine Einleitung in die phänomenologische Philosophie*, could arguably be considered as a series of attempts at clarification and defense of Husserl's understanding of phenomenology, largely against the criticisms levelled by Heidegger (among others), who had long-since diverged from his teacher. Consider, for instance, that *Die Krisis der europäischen Wissenschaften und die transzendente Phänomenologie* departs from Husserl's long-standing insistence upon a purely theoretical study and instead begins by historical inquiry (1936: 3–121); or that he says it is through the human being that the world “is” at all (1936: 152); or that Husserl adopts the language of “*Sein-bei*”, being-with – critical to Heidegger's 1927a *Sein und Zeit* – in the *Formale und transzendente Logik* (1929: 141; cf. Moran 2004: 167).

While the connection between Peirce's thought and Husserl's has primarily focused upon Peirce's late period (roughly, from 1892 until his death in 1914) and Husserl's early phenomenological period (particularly the 1900–1901 *Logische Untersuchungen*; see the works cited in the introduction to this chapter for the studies of this connection), it is a legitimate question as to whether, as Husserl himself insisted (cf. Sheehan 1997), the middle and later periods of Husserl's phenomenology were a development of the early approach rather than a departure from it. The position taken here is that the three periods represent a mostly-continuous but not necessary development; that is, the incipient phenomenological opening of the *Logische Untersuchungen* is not contradicted by Husserl's later developments, but could have been developed in another way. In other words, to understand the theory which belongs to Husserl as a whole, and not just as his thought is presented in the earliest of phenomenological works, we must read each of his various works as parts of a whole (not coincidentally, this seems the best approach to Heidegger's works as well, despite the infamous “turn”).

Thus we see the early period of Husserl's phenomenology, from the first breath in *Logische Untersuchungen* to the adolescent flourishing of *Ideen*, as constituting an initial stage, a development which is never abandoned but only revised, clarified, and further determined by works such as *Formale und transzendente Logik* or the *Cartesian Meditations*. That said, the structure built in

the *Logische Untersuchungen* is not itself Husserl's phenomenology, but only the discovery of that phenomenology's essential possibility – consisting in the grasp of consciousness as intentionality (*Untersuchung V*) and the categorial intuition (*Untersuchung VI*) which grasps the indeterminate sphere of possible fulfillment – underneath which Husserl would later find the foundation of his system in the phenomenological reduction (hinted at but not grasped at 1900: 170 and 1901: 198–99), which came to maturation between the 1907 *Die Idee der Phänomenologie* and the 1913 *Ideen zu einer reinen Phänomenologie und phänomenologische Philosophie*. This foundation, the phenomenological reduction, remains the constant basis of Husserl's phenomenology.

The summary of the interpretation I am advancing, consequently, is that Husserl's phenomenology is an attempt at producing the science of sciences or the source of ultimate scientific objectivity through a method of first-person transcendental subjectivity (cf. Husserl 1933: 84–85).

That Husserl desired such a science is evident from the very beginning of his phenomenological development, in the prolegomena to *Logische Untersuchungen*. There, he rejects all attempts at the foundation of science on the premises of a transcendental psychologism (Husserl 1900: 40–140). The arguments of psychologistic thinkers, he states, do nothing to ground normative logic; rather, their arguments prove only that “psychology *helps* in the foundation of logic, not that it has the only or the main part in this, not that it provides logic's *essential foundation*” (Husserl 1900: 45). In seeking what he later described as an apodictic ground for scientific inquiry (Husserl 1933: 28–30), Husserl found that the experience of the mind itself, taken as a collection of given empirical facts (Husserl 1900: 46–48), admits of too wide a variation which in turn produces a foundation too dependent upon probabilities, vague generalizations from particulars, and admits of too great an admixture of uncertainty; a poor foundation for logic – necessary for the consistency of scientific practice – which is itself certain, exact, regards experience as irrelevant, implies no facts, and ascertains universal truths (cf. Dougherty 1980: 308). Thus, an entirely different foundation is necessary to exercising logic itself. This new foundation must be pure of all the prejudices and uncertainties inescapable in psychologistic grounds; much as Kant intended, but with the intention of being more successful (Husserl 1900: 14):

The outcome of our investigation of this point will be the delineation of a new, purely theoretical science. This is the science intended by Kant and the other proponents of a ‘formal’ or ‘pure’ logic, but not rightly conceived and defined by them as regards its content and scope. The final outcome of these discussions is a clearly circumscribed idea of the disputed discipline's essential content, through which a clear position in regard to the previous mentioned controversies will have been gained.

This purely theoretical science is therefore conceived as the antidote to psychologism and as a pure phenomenology which frees pure logic from the errors of trapping objectivity within the limits of one's own mental experiences (Husserl 1900: 149):

Psychologism can only be radically overcome by a pure phenomenology, a science infinitely removed from psychology as the empirical science of the mental attributes and states of animal realities. In our sphere, too, the sphere of pure logic, such a phenomenology alone offers us all the necessary conditions for a finally satisfactory establishment of the totality of basic distinctions and insights. It alone frees us from the strong temptation, at first inevitable, since rooted in grounds of essence, to turn the logically objective into the psychological.

The pure phenomenology is difficult, however, chiefly due to its “unnatural direction” and focus not upon objects or the contents as perceived in the natural attitude, but upon acts and their immanent presence as meaningful (1901a: 170):

The difficulties of clearing up the basic concepts of logic are a natural consequence of the extraordinary difficulties of strict phenomenological analysis... The source of all such difficulties lies in the unnatural direction of intuition and thought which phenomenological analysis requires. Instead of becoming lost in the performance of acts built intricately on one another, and instead of (as it were) naïvely positing the existence of the objects intended in their sense and then going on to characterize them, or of assuming such objects hypothetically, of drawing conclusions from all this, etc., we must rather practise ‘reflection’, i.e. make these acts themselves, and their immanent meaning-content, our objects.

By grounding logic in the structure rather than the content of intuition (1933: 59–60, 65), Husserl hoped to found a science of logic which avoids the pitfalls of empirical basis, and therefore deals with things not as they are *observed* but as they are considered *possible to be at all*. In this regard of considering things in their possibilities, Husserl's phenomenology is consonant with both Heidegger's and Peirce's; but his means of access remain an obstacle which divides his approach from both of the others.

We can see this if we examine how the phenomenology which Husserl developed parallels psychologistic reductions, as to the content of its inquiries – for the structure of intuition, which Husserl sought, is available only through considering the content. Thus, both phenomenology and psychologism aim at understanding what is occurring in the mind, with differing intentions; that is, whereas psychologism seeks to understand mental content, (1901: 168) “The phenomenology of the logical experiences aims at giving us a sufficiently wide descriptive (though not empirically-psychological) understanding of these mental states and their indwelling sense, as will enable us to give fixed meanings to all the fundamental concepts of logic.” In other words, the psychologistic

approach attempts to educe generalizable principles from empirical data concerning psychological states, while Husserl's phenomenology attempts to understand the universal nature of mental states, correspondent to a framework of universal meanings, as the given *a priori* framework on which any mental experiences are founded.

Nevertheless, both psychologistic and Husserlian phenomenological approaches attend to the mental content of experience as the *primum datum*. On the surface, it may appear that Husserl does not share in this premise of the psychologistic approach (1901: 168):

Here *phenomenological analysis* must begin. Logical concepts, as valid thought-unities, must have their origin in intuition: they must arise out of an ideational intuition founded on certain experiences, and must admit of indefinite reconfirmation, and of recognition of their self-identity, on the reperformance of such abstraction. Otherwise put: we can absolutely not rest content with 'mere words', i.e. with a merely symbolic understanding of words, such as we first have when we reflect on the sense of the laws for 'concepts', 'judgements', 'truths' etc. (together with their manifold specifications) which are set up in pure logic. Meanings inspired only by remote, confused, inauthentic intuitions – if by any intuitions at all – are not enough: we must go back to the 'things themselves'.

Upon certain experiences there is founded an "ideational intuition" through which logical concepts are formed. The psychologistic approach attempts to build towards certainty from the uncertain, building upwards from an amalgamation of individual instances, while Husserl looks here to find indubitability within experience of uncertain events by finding the fundamental unity underlying those individual instances and therefore explaining their unity. Rather than make an inductive leap from a collection of particulars to a universal, he wants to discover within the (subjectively-possessed) objects of intuition "valid thought-unities" which "admit of indefinite reconfirmation". He insists therefore with genuine scientific rigor upon the "reproducibility" of our logical concepts: they must obtain and thereby provide meaning consistently, continually, a meaning always applicable to the "things themselves" in order to be valid.

Digging deeper, however, in what the return to the "things themselves" actually consists, however, we find an apparent confusion; for Husserl immediately adds (1901: 168): "We desire to render self-evident in fully-fledged intuitions that what is here given in actually performed abstractions is what the word-meanings in our expression of the law really and truly stand for." It seems that Husserl's "things themselves" are not the points of origin for his epistemology, but the *experiences* of the things themselves – as first intuited and then abstracted, and only subsequently do we "go back"; but, curiously,

we do not seem to begin with that to which we are supposed to return, namely the thing *experienced* itself, and so we cannot really be said to return at all – except, perhaps, to the subjective having of experience. The verification sought by a return goes no farther back than to the intuition.

Husserl's phenomenology more clearly distinguishes itself from psychologism by investigating the *datum* of intuited experience (bracketed from all questions of truth or falsity extrinsic to the experience of the mind itself by the process termed the phenomenological reduction – Husserl 1913: 61–62) not as a set of empirical facts. Indeed, the empirical aspect of action is cut off from the investigation; and instead, the act of knowing itself becomes the object of study (Husserl 1910/11: 39):

We put in *brackets*, as it were, every empirical act, which may rush forward, so to speak, or which we enacted a short while ago. In no way do we accept what any empirical act presents to us as being. Instead of living in its achievement, and instead of clinging naïvely to its positing with its sense after its achievement, we rather turn to the act itself and make it itself, plus what in it may present itself to us, an object.

This provides a methodology which supposedly frees us from prejudicial presuppositions – the phenomenologist (1936: 152) “forbids himself to ask questions which rest upon the ground of the world at hand... All natural interests are put out of play” – since the self as architect of meaning and therefore of presuppositions is unveiled.

Through this transparency of the experiencing structure, we free ourselves for examining things precisely as experienced – in the process of eidetic or free variation (cf. Stjernfelt 2007: 185–88) – within which, it is argued, pure, universal meanings, essences, belonging to the content of experience can likewise be unveiled (Husserl 1913: xx). Thus one attains the eidetic reduction by discerning the transcendental meanings, present in consciousness but irreducible to it (Husserl 1913: 147):

If we heed the norms prescribed by the phenomenological reductions, if, as they demand, we exclude precisely all transcendencies and if, therefore, we take mental processes purely as they are with respect to their own essence, then, according to all that has been said, a field of eidetic cognitions is opened up to us.

Within this “field of eidetic cognitions” one may, through a continual process of reflection and clarification, seize upon essences with a perfect clarity (Husserl 1913: 156–57). This grasping, despite the necessity of “free phantasy” (1913: 157–60), and thus of a power of dealing with contingent particulars, is oriented towards meaning, i.e., towards the ideal or “pure essences” (1913: 68) of which the objects found in sensuous intuition are merely elucidatory

examples (cf. 1901a: 275). “In the process, the single facts, the facticity of the natural world taken universally, disappear from our theoretical regard – as they do whenever we carry out a purely eidetic research” (Husserl 1913: 68).

What this reveals for Husserl is that the act of thinking (*noesis*), i.e., the “openly endless life of pure consciousness”, and the object thought, the meaning of the thing (*noemata*) “the meant world, purely as meant” (1933: 37), as grasped through the eidetic reduction, entail no complete distinction but are as two moments of one reality (Husserl 1913: 307), precisely because the universality of what is thought and what is thought about, the object, are intrinsically correlated. And because the meanings of things thought are what they are by reference back to the “objective” realities, we are able through such an analysis to attain objective, universal knowledge of the world in which we live (Husserl 1913: 308–25) and are therefore truly transcendental subjects. That is, our consciousness is always *of* meaning, and meaning, when of a universal which can be seen as what is meant across a plurality of individuals (Husserl 1907: 42–43), is what it is independent of the acts of thinking; but meaning *exists* only by virtue of the act of thinking, and the act of thinking cannot be but of some meaning.

That Husserl’s phenomenology is centered around this valid truth – that our consciousness is what it is precisely because its “what” is a relational reality – which counters the subjectivistic error of psychologism (though it may not escape psychologism altogether – see 1.1.2 below), perhaps obscures the two key difficulties in reconciling Husserl’s phenomenology with Peirce: first, Husserl’s limitation of meaning to what can be presented in a linguistic-semantic dimension (Husserl 1901a: 224–27; cf. Isaac 2016: 247 and Sonesson 2015: 47–48) and, second, the correspondent de-coupling of the phenomenological from the pre-theoretical or natural (see 1.1.2. and Deely 2007: 7–8n9 quoted in 1.1.3. below) such that meaning is fundamentally constituted by the relation of the transcendental subject to the object, from “inside” the subject, which discerns the ideal, “outward” to the imperfect recipient of that ideal. That is, Husserl’s human being is essentially a subjectivity, for the field of meaning – the “world” – is constituted precisely by the subjectivity itself (Husserl 1933: 21): “By my living, my experiencing, thinking, valuing, and acting, I can enter no world other than the one that gets its sense and acceptance or status in and from me, myself.” Meaning resides strictly within the world-constituting function of subjectivity-as-transcendental, rather than in the suprasubjectivity in which the subject always-already-exists. As we will see, this is a key distinction from both Peirce’s and Heidegger’s approaches, and one which, ultimately due to his semiotics, prevents Husserl’s phenomenology from escaping the framework of modernity.

1.1.2 Heidegger's criticism of the science

Though well-known as Husserl's student, and that his phenomenological vision shares in the "keystone" of "the inevitable fact of meaning in human comportment" (Sheehan 2015: 117), it is also by now well-known that Heidegger's phenomenology consists in a radical departure from that his teacher (cf. Sheehan 1997). Adjectives have been applied to each approach in an attempt to distinguish them – such that, for instance, Heidegger's phenomenologically is called hermeneutical, or even factual, and Husserl's descriptive, epistemological, reflexive, or intentional. Yet these adjectival distinctions presuppose a fundamental sameness which is questionable – for, while early enamored of the *Logische Untersuchungen* and their attempt to produce a purified approach to philosophical questioning, Heidegger seems never to have really produced any significant work which truly follows in Husserl's path; even as early as 1919, he clearly separates his own thinking from that of the elder philosopher.

Leaving the tumultuous twists and often acerbic turns of their personal relationship aside, it is undeniable that, by the time of *Sein und Zeit* (1927a), Heidegger had completely departed from Husserl, such that what Heidegger means by "phenomenology" is, despite some common features, profoundly distinct from what Husserl means by the same term. We discuss Heidegger's own approach to phenomenology at length in the following chapter. Here, we are focused only on his critique of Husserl. This criticism began explicitly with Heidegger's very first course after the first World War, given in 1919, where he accuses Husserl of placing upon the theoretical an undue primacy (Heidegger 1919: 87/73–74):

It is... the general prevalence of the theoretical, which deforms the true problematic. It is the primacy of the theoretical. In its very approach to the problem, with the isolation of sense data as the elements to be explained or eliminated as unclear residues alien to consciousness, the all-determining step into the theoretical has already been taken.

In other words, Heidegger here levels the accusation of a vicious circularity at Husserl: that one could, from within the perspective of the theoretical provide a fundamental basis for all theoretical inquiry. By eliminating the "pre-theoretical" from consideration, by extracting consciousness and its contents from the "en-worlded" context of actual living, one steps into the theoretical and therefore has no way of providing a "meta-theoretical" grounding (Heidegger 1919: 87/73): "When I attempt to explain the environing world [Umwelt] theoretically, it collapses upon itself."

Heidegger saw this preference for the theoretical in Husserl's phenomenology as based upon his idealization of mathematics and its precision

(cf. Husserl 1913: 149), such that phenomenology's scientific rigor was considered contingent upon its ability to raise description to the same status (Heidegger 1923: 71/56).⁶ But this preeminence of the mathematical was cast into doubt by Heidegger, in a criticism which one could consider as perhaps equally scathing of Peirce's own early dependence upon the mathematical (Heidegger 1923: 72/56–57):

Is it justified to hold up mathematics as a model for all scientific disciplines? Or are the basic relations between mathematics and the other disciplines not thereby stood on their heads? Mathematics is the least rigorous of disciplines, because it is the one easiest to gain access to. The human sciences presuppose much more scientific existence than could ever be achieved by a mathematician. One should approach a scientific discipline not as a system of propositions and grounds for justifying them, but rather as something in which factual Dasein critically confronts itself and explicates itself. To bring mathematics into play as the model for all scientific disciplines is unphenomenological – the meaning of scientific rigor needs rather to be drawn from the kind of object being investigated and the mode of access appropriate to it.

That is, we cannot impose on any genuinely phenomenological inquiry the method of mathematics, nor that of any mathematically-inspired science. Phenomenology, subject to the frameworks of ideoscopy, loses its specific character and thereby becomes an instrument producing misleading results.

What undermined the promise phenomenology held at its inception however, as Heidegger saw it, was that it still operated within Husserl's system upon a psychologistic reductionism, even if it protested against that name. That is, in attempting to turn phenomenology into a science, on the archetypal model of mathematics, its scope was reduced from the entire expanse of Being to a particular class of objects, namely, experiences “as experiences” (Heidegger 1923: 72/57):

⁶ Notably, Husserl himself asserted (1913: 169–70) that “It is only a misleading prejudice to believe that the methods of historically given a priori sciences, all of which are exclusively *exact* sciences of ideal objects, must serve forthwith as models for every new science, particularly for our transcendental phenomenology – as though there could be eidetic sciences of but one single methodic type, that of ‘exactness.’ Transcendental phenomenology, as a descriptive science of essence, belongs to a *fundamental class of eidetic sciences totally different* from the one to which the mathematical sciences belong.” However, I believe Heidegger's criticism is not so much aimed at Husserl's *intention* as it is at his *practice*: the continual attempt to raise the structure of phenomenological inquiry such that it produces universalized results. While Husserl recognized the distinction of the classes of science to which phenomenology and mathematics belong, it is implied that he nevertheless held the purity of the latter to be superior; and it is precisely this search for purity in all the disciplines (not obscured at all in Husserl's work) to which Heidegger is objecting.

the meaning of the thematic category of “phenomenon” had to be reworked into a regional category. Thus it encompassed those objects characterized with the terms “experiences” and “contexts of consciousness.” Here experiences as experiences are the phenomena. Thus one domain of being was demarcated over against others. Phenomena were now the objects of a specific science.

This reduction of phenomena to the domain of experiences and thus of phenomenology to the limits of psychological structure stripped phenomenological method of its real potency, as Heidegger saw it (cf. 2.1.1. below). Heidegger saw the attempt to turn phenomenology into a science itself as resting upon unjustified presuppositions based within the Cartesian tradition (1925: 138–39/101, 147/107, 164–71/119–23) and as the fundamental, inescapable flaw of Husserl’s approach (cf. von Herrmann 2000: 107–30 for a thorough discussion of the “formal” differences between Heidegger and Husserl). To save phenomenology, Heidegger would need to give it new principles (Sheehan 2015: 123). After some years studying with Husserl and exercising his own practice of teaching phenomenology, a question grew in his mind that he could no longer ignore (Heidegger 1969: 87/79): “Whence and how is it determined what must be experienced as ‘the things themselves’ in accordance with the principle of phenomenology? Is it consciousness and its objectivity or is it the Being of beings in its unconcealedness and concealment?”

In summary, we can designate Husserl’s phenomenology, seen through Heidegger’s eyes, as ultimately subjectivistic and operating in an ideoscopic reductionism (cf. Heidegger 1925: 180/130, 253–54/187–88). This is opposed to Heidegger’s own phenomenology, which, as we will see in the second chapter, is suprasubjective⁷ and reduces not to the scientific point of view, but to the primordial domain of species-specifically human intellection.

1.1.3 Peirce’s science of phaneroscopy

One reason many have come to regard Peirce’s phenomenological approach as comparable to Husserl’s is that both seemingly originate in the phenomena of

⁷ This in contrast to the attempt at establishing a mere *intersubjectivity* whereby one attains a transcendence of the self by ascription to others what one could ascribe intelligibly to oneself. That is, the beginning of Husserl’s intersubjective transcendence is from (1933: 91) “within myself, within the limits of my transcendently reduced pure conscious life”; there is a fundamental structural divide between the (ibid) “intersubjective world, actually there for everyone” and the life of the individual which exists in an essentially subjective sphere of selfhood: i.e., a sphere that *begins from* the subject and only *later* transcends into or attains the fullness of intersubjectivity.

so-called “first-person” experience, treated as the primary access to subjectivity as subjectivity (e.g. Cobley 2016: 17–28, 36; Brier 2010: 1909; 2008: 268, 271, 362–73; 2008a; Hoffmeyer 2008: 38; Favareau 2008: 30). After all, Peirce’s phenomenology is said to exercise its study of the Categorical Triad – Firstness, Secondness, and Thirdness – by taking these Categories themselves in their Firstness, the category of *feeling* (cf. Peirce 1893a: CP.4.71; 1887–88: EP.1.260; 1903d: EP.2.160, 1903e: EP.2.272). Describing Peirce’s phenomenology as originating in first-person experience, however, is a mistake which misunderstands both Peirce’s phenomenological endeavor and the Categories it discerns.

Peirce evidently regarded Husserl’s phenomenology – with no certainty as to how carefully he read the *Logische Untersuchungen* – as irredeemably psychologistic (despite Husserl’s extensive prolegomena attempting to condemn psychologism; Peirce 1906d: CP.4.7; cf. 1904c: 8.189). I believe the root of this condemnation, on which Peirce never elaborates, is somewhat ironically (Stjernfelt 2014: 34) “Husserl’s rejection of [external sign-vehicles] as being part and parcel of psychologism. . . over the years leading him to locate all relevant structures in the depths of ‘transcendental subjectivity’.” This impression of the *Untersuchungen* as ultimately psychologistic was, not incidentally, shared by Heidegger, who found the fifth investigation to turn Husserl’s endeavors back against their own professed enemy (Heidegger 1969: 83/76: “Husserl falls back with his phenomenological description of the phenomena of consciousness into the position of psychologism he had just refuted”). As will be argued in this book, Peirce and Heidegger, in the species-specifically human experience of Firstness and the experience of *Sein*, respectively, see a pre-subjective basis for the development of our experience, in stark contradistinction to Husserl’s basis in transcendental subjectivity. To categorize the latter as psychologism perhaps requires a justified expansion of its definition, such that it comprises not only empirical study of minds and brains (cf. Stjernfelt 2014: 13–14), but also an *a priori* such study, so long as that study places the principle of experience exclusively or originally in the mind or its actions.

Peirce, at any rate, to avoid any misinterpretations of his own work, made attempts to distinguish with clarity his proposed science of “phenomenology” from the reductionistic, nominalistic, psychologistic phenomenology of Hegel (Peirce 1903n: EP.2.143):

This is the science which Hegel made his starting point, under the name of the *Phänomenologie des Geistes*, – although he considered it in a fatally narrow spirit, since he restricted himself to what *actually* forces itself on the mind and so colored his whole philosophy with the ignorance of the distinction of essence and existence and so gave it the nominalistic and I might say in a certain sense the *pragmatoidal* character in which the worst of the Hegelian errors have their origin. I will so far follow Hegel as to call this

science *Phenomenology* although I will not restrict it to the observation and analysis of *experience* but extend it to describing all the features that are common to whatever is *experienced* or might conceivably be experienced or become an object of study in any way direct or indirect.

One might mistakenly read the opening of Peirce's phenomenology from the consideration of "what *actually* forces itself on the mind" to include also what "might conceivably be experienced or become an object of study in any way direct or indirect" to parallel Husserl's phenomenological reduction, inasmuch as the *epoché* too suspends judgment about the existence or non-existence of the objects considered (Stjernfelt 2007: 11). The *epoché*, however, is only one moment of Husserl's reduction; the reduction proper is the move to a supposedly presuppositionless position (Fink 1988: 41). The distinction between the experience and what is experienced is crucial; the former is the thing as present in or to the mind, the latter takes that presence and extends through it to the possibilities of a world beyond immediate, immanent presence. Peirce's three Universes, or the Categorical Triad, while they encompass the experiencing of the mind, are what they are by relation to Firsts, Seconds, and Thirds, which are what they are by being *irreducible* to the mind. If we do not recognize the distinction between Firstness and First, Secondness and Second, Thirdness and Third, we fail to grasp the true "transcendental" universality of Peirce's phenomenology (cf. 4.1 below).

The universality of the Categories gives them a unique and clearly stipulated positioning in Peirce's schematic classification of the sciences. Consequently (1903n: *EP.2.144*):

This science of phenomenology is in my view the most primal of all the positive sciences. That is, it is not based, as to its principles, upon any other *positive science*. By a *positive science* I mean an inquiry which seeks for *positive* knowledge, that is, for such knowledge as my conveniently be expressed in a *categorical proposition*.

Nothing can contribute to phenomenology's principles; it is, itself, *the* principle in determining the validity of other processes of intellectual discovery. Consequently, "phenomenology must be taken as the basis upon which normative science [divided into aesthetics, ethics, and semiotics] is to be erected" (1903n: *EP.2.144*). Thus, despite his protests against Husserl's perceived psychologism, Peirce's phenomenology occupies much of the same role that Husserl sought for his phenomenology: that is, as what gives validity to the investigations of the other positive sciences, cenoscopic and ideoscopic alike.

It accomplishes this task of providing grounds for the other sciences not by investigating the truth of anything it discovers (cf. c.1904–1905: *CP.1.284*) –

truth itself being a subject belonging to semiotics – but instead simply discovering what elements belong to every and any appearance of some experience whatsoever, so as to disentangle those elements into clear and distinct categories or modes of being (1903c: *EP*.147):

The initial great department of philosophy is phenomenology whose task it is to make out what are the elements of appearance that present themselves to us every hour and every minute whether we are pursuing earnest investigations, or are undergoing the strangest vicissitudes of experience, or are dreamily listening to the tales of Scheherazade...

Be it understood, then, that what we have to do, as students of phenomenology, is simply to open our mental eyes and look well at the phenomenon and say what are the characteristics that are never wanting in it, whether that phenomenon be something that outward experience forces upon our attention, or whether it be the wildest of dreams, or whether it be the most abstract and general of the conclusions of science.

While Peirce suggested at times that phenomenology may perhaps deal with categories other than the “ubiquitous elements” of “the Universal Phenomenon” (1903m: *EP*.2.196–97) – Firstness, Secondness, and Thirdness – the only application he himself seems ever to have made of it is with regard to those primary categories. That is, he appears to have focused only upon the “opening of mental eyes” to observe the truly universal and common elements of each and every experience, the irreducible triad of Firstness, Secondness, and Thirdness, which respectively make present Firsts, Seconds, and Thirds as the exhaustive list of primordial modes for things to affect the being of any other.

It seems, consequently, that the application of Peirce’s phenomenology is the means for the fundamental grounding of any inquiry whatsoever: that is, any observation, being of something experienced, may be reduced to the immediacy of its constituent elements: “For Phenomenology treats of the universal Qualities of Phenomena in their immediate phenomenal character, in themselves as phenomena. It, thus, treats of Phenomena in their Firstness” (1903m: *EP*.2.197). That Firstness is often described as consisting in *feeling* has led some to illegitimately subjectivize Peirce’s phenomenology, either as to its extension (i.e., that it deals exclusively with experience and does not extend to the experienced) or because of its treatment of the Categories in their primordial character of Firstness (considered as consisting in qualia). This subjectivization is perhaps because of the ambiguity of the term “feeling” (Spiegelberg 1956: 173): “Apparently, when Peirce speaks of Firstnesses as ‘qualities of feeling,’ he never distinguishes between the quality felt and the feeling *of* a quality.” We address this ambiguity below in 4.1.1; in the

meantime, it is sufficient to note that what Peirce means by *any* of the Categories, *including* Firstness, is *not* something “subjective” or “first person”. This will become evident by the consideration of iconic semiosis (especially in 6.1.2), for icons are archetypal signs by Firstness, and that an archetype of Firstness is a sign shows the inherent “transcendence” of Peirce’s phenomenology, i.e., such that it need not transcend from subject to object since such a division never occurs at all.

Peirce’s phenomenology and his semiotics have an intimate relationship; things appear to the mind by means of signs which present their objects according to the categorical triad, such that the affect upon the interpretant is an affect by Firstness, Secondness, or Thirdness. Because Peirce’s phenomenology is not limited to interior worlds of experience, but considers the things experienced themselves, it has an intrinsic relationality to the exterior world. This extends the triadic relation of semiosis beyond “phenomena” considered as mental events, i.e., as the results of sense perceptions, and includes sensation itself (Deely 2007: 7–8n9):

True sensation prescissively considered is only what arises in experience from a stimulation of external sense by a physical stimulus here and now existing as stimulating, an “other” whose objectification opens the way for mental representation interpreting sensation to be *other*-representation – that is to say, representations that are of something other, in principle but not always in fact, than the self and its activities sustenative of objectivity, the awareness of “things as known”. That analytical framework, according to which sensation differs from sense perception (as also from understanding) in being involved with the order of *ens reale* prior to the possibility of *ens rationis*, is the basis of “realism” philosophically speaking. Yet such a framework, the very opposite of ‘epoché’, is beyond the power of phenomenological procedure to establish.

That is, without a consideration of signification which is broader than sense-perception or what occurs in correlation with sense-perception, a consideration of signification broad enough to encompass strictly non-cognitive material procedures, which occur as antecedent requisites to such cognitive processing, is unable to attain a true philosophical realism. Here, Deely echoes the critique of Heidegger given above – by the *epoché*, Husserl’s phenomenology condemns itself to a theoretical tomb.

Because the name “phenomenology” is so closely associated with the so-called “continental” philosophers who took Husserl’s work as, at the very least, their point of departure, we will refer to Peirce’s endeavors instead by his own preferred term in later days, “phaneroscopy” – chosen to distinguish his idea from Hegel – of which the primary datum is named the “phaneron” (c.1905a: CP.8.213):

Much as I would like to see Hegel's list of categories reformed, I hold that a classification of the elements of thought and consciousness according to their formal structure is more important. I believe in inventing new philosophical words in order to avoid the ambiguities of the familiar words. I use the word phaneron to mean all that is present to the mind in any sense or in any way whatsoever, regardless of whether it be fact or figment. I examine the phaneron and I endeavor to sort out its elements according to the complexity of their structure.

While there is no definitive text in which Peirce declares once-and-for all for “phaneroscopy” over “phenomenology” (he is found to use the term “ideoscopy” in a letter to Lady Welby, for instance, to mean the same thing – rather distinct from our use here in changing the spelling of “ideoscopy” to “ideoscopy”; cf. Spiegelberg 1956: 175–81), we will use the former term, phaneroscopy, specifically in reference to the inquiry which discerns the universal categories and their presence in phenomena (or “phanerons”).

What bridges Peirce's phaneroscopy with his logic or semiotics as a whole is what he designates the first part of logic: namely, speculative grammar. Historically considered, in the work of Thomas of Erfurt, speculative grammar is the originary locus of the endeavor common to both Peirce and Heidegger – that is, a “non-transcendentalist”, because “suprasubjectivist” account of human knowledge – and so to it we now turn.

1.2 Speculative grammar

Medieval grammar in the twelfth and early thirteenth centuries was characterized by the study of two primary sources, Donatus and Priscian, both of whom treated grammar as primarily a series of more or less arbitrary rules by which language conventionally operated. By the latter half of the thirteenth, however, as Aristotle's and Avicenna's works permeated the universities (Pinborg 1982: 255), a more metaphysical paradigm of grammatical thinking began to emerge, exemplified in the thinkers now known as the *Modistae*, among the first of whom appear to have been Martin of Dacia – whom Martin Grabmann asserted, without evidence, to be Thomas Aquinas' teacher – and Boethius of Dacia (Pinborg 1967; Covington 1984). The best known of these thinkers, however, is none other than Thomas of Erfurt, whose *De modis significandi sive Grammatica speculativa* was proliferated for centuries as part of Scotus' *Opera omnia*, mistakenly being attributed to the Subtle Doctor for its apparent coherence with his metaphysical teaching (McGrath 2006: 92):

Widely reproduced and commented upon in the Middle Ages, Thomas of Erfurt's *De modis significandi sive Grammatica speculativa* is the most complete ‘speculative

grammar' extant. Against nominalism, Erfurt affirms a metaphysical foundation to language, which could be disengaged through grammatical analysis. He transforms metaphysics into ordinary-language philosophy on the assumption that grammatical forms, the *modi significandi* of common verbs, nouns, and adjectives, indicate deep, unobjectifiable, but no less intelligible ontological structures embedded in historical life.

Central to all of the Modistae's work, including Erfurt, are the *modi significandi* – that is, the modes of signification, the ways in which something signifies another, such that one and the same thing can be signified in different ways (Covington 1984: 22, 26). Rather than considering these modes as they exist in one or even in several languages, the Modistae focused on what essential truths could be derived from the study of a single language, Latin, as transcending the possibilities realized in any particular language (Pinborg 1982: 255–56; Covington 1984: 26–27). Thus, they attempted to develop a kind of “pure” grammar: one which attained the essential modes of signification, apart from any arbitrary or individualized idiosyncrasies belonging to this or that given language or its terms.

There is a temptation to see in Husserl's “pure grammar” a parallel to the speculative grammar of the Modistae, as Heidegger initially did (see 1.2.4. below). Husserl's pure grammar is a grammar of meaning, to be sure, quite similar to that of the Modistae. But the purity of the Modistae's grammar is not a purity from *existentia*, or a purgation of the particular, but rather the discovery of universal structures of disclosure present in sign, object, and interpreter, which make meaning possible; and not, therefore, a grammar of meaning itself taken as belonging to a class separate from the three moments of a triadic relation – of the idealism with which Husserl so often flirted – but rather a grammar of meaning as permeating the universe.

The Modistae's prominence was, however, short-lived (Covington 1984: 24): “The development of modistic theory ground to a halt in the early decades of the fourteenth century as the doctrine of modes of signifying proved incompatible with the nominalist philosophy that was then gaining popularity.” Though the speculative grammarians were realists in opposition to nominalism, and though had a germ of insight which, had it been fully developed, could perhaps have stemmed the rise of nominalism – as Deely wrote, the Modistae's speculative grammar “might have come to something; it just didn't in fact” (Deely 2001a: 435) – their focus was too strongly-linguistic (the “reasons in principle for the failure”) and did not develop into the semiotic it should have. This task was instead left to John Poinsoot (Deely 2001a: 430–35), whose own work failed to overcome nominalism not because it did not answer the challenges it raised, but because of a fragmented political society which left Iberia's intellectual culture largely insulated from the rest of Europe, which had already turned away

from the incipient proto-semiotic realism of Aquinas (cf. Deely 2001a: 442–47). Nevertheless, the Modistae, though relatively unimportant in the history of philosophy, provided in the culmination of Erfurt a strong inspiration for both Peirce and Heidegger.

The last text of any great theoretical importance was that produced by Erfurt, around 1300, which, while it continued to be taught, seems to have received no further elaboration or attention in the context of theoretical development until, perhaps, Martin Heidegger's *Habilitationsschrift*.

1.2.1 Thomas of Erfurt

As the last of the Modistae to produce any notable work which has survived the centuries, Erfurt's work retains the key metaphysical structure common to his predecessors: that is, the modes of the Modistae – which should not be understood primarily but rather secondarily as the modes of signification – as a primordial threefold distinction into modes of actuality.

We can break this threefold distinction down simply: the *modus essendi* is the way things exist, which, when actively engaged by an intelligent being, gives rise to the *modus intelligendi*, the way they are understood. The *modus significandi* is the way they are expressed in language (Erfurt 1300: c.4). The *-ndi* gerundive-participial ending acts as a linguistic commonality among the three, expressing the commonality which is then differentiated by the modes, namely, a differentiation of being or having actuality. This is not the being of *esse in*, the existence proper to the Aristotelian categorical modes of substance-grounded existential standing outside of nothing, but a more general sense; that is, *esse* or *ens* prior to any division. It is important to note that the *content* of each mode can be one and the same, such that what belongs to a *modus essendi* can be replicated in both *modus intelligendi* and *modus significandi* without being necessarily diminished or lost.

Yet there are important differences among the *modi*. Erfurt divides the *modi intelligendi* and *significandi* into both *activus* and *passivus*. The *modus intelligendi passivus*, considered materially is the *proprietas rei* – that is, something belonging to the thing understood itself – but considered formally, is that that property of the thing understood *prout ab intellectu apprehenda*, insofar as it is apprehended by the intellect. Likewise the *modus significandi passivus* is on the material hand the *proprietas rei* but on the formal is that property *prout per vocem consignificatur* – that is, insofar as it is signified not only as the immediate referent of the term but also as engaged in a meaningful web of syntactical relations through a verbal expression.

In contrast, the *modi intelligendi activus* and *significandi activus* differ not only formally – the former considered under the *ratio intelligendi* (or *prout ab intellectu apprehenda*) and the latter under the *ratio consignificandi* (or *prout per vocem consignificatur*) – but also materially or in reality: the *modus intelligendi activus* comprising a *proprietas intellectu* and the *modus significandi activus* a *proprietas voci*. Consequently, each mode as active and passive is formally the same, but materially different; and the passive mode of each is formally different but materially the same, as is, moreover, the *modus essendi* (Table 1). Thus Erfurt is clearly a realist, and clearly opposed to nominalism: the thing as it exists materially or in reality is one and the same in all three modes; for the *modus significandi activus*, which is the primary concern of speculative grammar, is derived immediately from the *modus intelligendi passivus* (Erfurt 1300: c.3) and ultimately from the *modus essendi* (Erfurt 1300: c.2).

Table 1: Modes considered materially and formally.

Mode	Considered materially	Considered formally
<i>Essendi</i>	<i>Proprietas rei</i>	<i>Absolute</i> [<i>Simpliciter</i>]
<i>Intelligendi passivus</i>	<i>Proprietas rei</i>	<i>Ratio intelligendi</i> [<i>prout ab intellectu apprehenda</i>]
<i>Significandi passivus</i>	<i>Proprietas rei</i>	<i>Ratio consignificandi</i> [<i>prout per vocem consignificatur</i>]
<i>Intelligendi activus</i>	<i>Proprietas intellectus</i>	<i>Ratio intelligendi</i> [<i>prout ab intellectu apprehenda</i>]
<i>Significandi activus</i>	<i>Proprietas voci</i>	<i>Ratio consignificandi</i> [<i>prout per vocem consignificatur</i>]

The double-sidedness of both *intelligendi* and *significandi* (i.e., passive and active) provides the dynamic connection between the ultimate term of signification – the *significandi activus*, achieved in some verbal expression – and the *modus essendi* of the thing signified. That is, if the apprehension of the intellect is correct, and the consignification of the verbal expression is correct (i.e., that the *proprietas intellectus* and *proprietas voci* match the *proprietas rei* of the *modus essendi*), then meaning has been carried through from a cognition-independent existence to a cognition-shaped signification.

Among the most difficult of Erfurt's notions is that of consignification. Literally translated, *prout per vocem consignificatur* would be rendered “insofar as it is consigned through a voice”. But *vox*, as Erfurt explains in c.6, is

grammatically signified only insofar as it is a sign, i.e., a bearer of meaning; hence we have rendered it “verbal expression” to give this connotation which is absent from the word voice – “voice” being a term used univocally of all alloanimal vocal expression. Likewise, “*cosignificatio*” has no succinct and accurate English translation; for it is through consignification that a word is rendered a *pars orationis*, a part of speech – which is to say, part of the syntactical structure of a composite verbal construction. One could think of consignification in a variety of ways: on the one hand, it suggests the explicit and direct consideration of the categorematic substance of every noun, pronoun, adjective, verb, and adverb, along with their implicit syncategorematic elements, especially in inflected languages (where such syncategorematic functionality is signified by, e.g., cases and their various uses – cf. Erfurt 1300: c.19) and the explicit syncategorematic function of conjunctions and prepositions (Erfurt 1300: c.41). On the other hand, the consignification of a verbal expression can be understood as the implicit suggestion of *relatio secundum dici* in every being considered under the umbrella of *esse in* and the explicit indication of *relatio secundum esse* in every being considered as *esse ad* (see 5.2. below for more on *esse in* and *esse ad*).

In reply to a nominalist’s objection to the thesis that *modi significandi* are derived from *proprietas rei*, which objection rests on the grounds of fictions and privations having no *existentia extra animam* which would make them falsely consignificative (i.e., by suggesting existence for non-beings), Erfurt makes an important observation (1300: c.2):

It must be said that this is not true. On the contrary, the names of privations, through their own active modes of signification, [specifically as] concerning privations, designate the modes of understanding of privations which are their modes of being. Next it must be known that although privations are not positive beings outside of the soul, nevertheless they are positive beings within the soul, as is clear in Aristotle’s *Metaphysics* 4.9. And they are beings in the soul, both because the understanding of them is the being of them and therefore the mode of understanding of them is the mode of being for them: whence the names of privations, through their own active modes of signification, are not falsely consignificative, because when the modes of understanding are reduced to the relational modes of understanding (for privation is not cognized except through relation) therefore the modes of being of privations are eventually reduced to the modes of relational being.

That is, *relational being* is recognized by Erfurt as an equally valid *modus essendi*. Although he does not elaborate upon this himself, it is worth noting that relational modes of being – as *modi essendi* – can be the ultimate bases for the *modi significandi activus* (and mediately, the *modis intelligendi passivus*).

Thus, the understanding of both *entitative* and *relational* being is considered by Erfurt as grounded in a real mode of existing independent – in at least

some regard – of the act of understanding itself; that is, every *modi intelligendi* is preceded by some apprehension of a *modus essendi* (even if one is incorrect in that apprehension).

1.2.2 Peirce's development

Peirce's interest in speculative grammar (under the name of "formal grammar") evidently arises as early as his "On a New List of Categories" (1867: *EP.1.8*). Yet his only explicit commentary on the *Grammatica speculativa* of Thomas Erfurt, mistakenly believed to be the work of Duns Scotus (1869: *W.2.317–33*) and found in an early lecture bearing scarce content, betrays only an incipient encounter with the ideas of that speculative grammar itself. Most of the lecture focuses upon Ockham. Where "Scotus" is invoked, the notes are little more than an outline, and the focus is primarily upon the *distinctio formalis*.

The terms of speculative grammar disappear from Peirce's work for the next several decades, and reappear prominently only much later, showing up in texts from around 1896 to 1908. At various places in this span, he asserts that speculative grammar studies "the general conditions of signs being signs" (c.1896: *CP.1.444*) as well as "those properties of beliefs which belong to them as beliefs, irrespective of their stability" (1896: *CP.3.430*); considers "the general conditions to which thought or signs of any kind must conform to assert anything" (1902h: *CP.2.206*); that it is a "propedeutic to logic proper" and an "unpsychological *Erkenntnislehre*" (1902f: *CP.2.83*); and may be termed "pure grammar" as it "has for its task to ascertain what must be true of the representamen used by every scientific intelligence in order that they may embody any *meaning*" (c.1897a: *CP.2.229*).

In other words, Peirce considered speculative grammar to be the most fundamental inquiry in the normative science of true and false, which he called either logic or semiotics.

The influence of speculative grammar is felt also as late as Peirce's letter of 24 December 1908 to Lady Welby, in which he described the "chief division of signs" divided into the following ten modes (1908b: *EP.2.482–83*):

The ten respects according to which the chief divisions of signs are determined are as follows: first, according to the Mode of Apprehension of the Sign itself; second, according to the Mode of Presentation of the Immediate Object; third, according to the Mode of Being of the Dynamical Object, fourth, according to the Relation of the Sign to its Dynamical Object, fifth, according to the Mode of Presentation of the Immediate Interpretant, sixth, according to the Mode of Being of the Dynamical Interpretant, seventh, according to the Relation of the Sign to the Dynamical Interpretant, eighth, according to the Nature of the

Normal Interpretant, ninth, according to the Relation of the Sign to the Normal Interpretant, tenth, according to the Triadic Relation of the Sign to the Dynamical Object, and to its Normal Interpretant.

The phrase “Mode of Apprehension” bears similarity to *modus intelligendi*; “Mode of Presentation” to *modus significandi*; and “Mode of Being” is a precise translation of *modus essendi*. To attempt a precise mapping of Peirce’s tenfold division here on to any of the various divisions offered in Erfurt’s *Grammatica speculativa*, however, would be a frivolous endeavor – Peirce simply does not provide any elaboration whereby one could justify that attempt. That he takes his inspiration from Erfurt seems a reasonable inference – but that he also looks to do something *more* with his own speculative grammar also seems evident, for while the notions of Immediate and Final [here, “Normal”] Interpretant, and of Immediate and Dynamical Object recall the active and passive modes of *intelligendi* and *significandi*, respectively, it would be a stretch to say they are exact copies – for Peirce considers Interpretants and Objects according to affects and effects, whereas Erfurt is concerned with their ontological statuses. Moreover, the relations of signs are not present in Erfurt’s treatise, except perhaps as a suggestion – but only if one reads a very fine print between the lines.

The most prominent development, however, is that Peirce considers signification not merely as the expression (*modus significandi activus*) of what is understood (*modus intelligendi passivus*), but also as what determines that understanding in the first place. This more fundamental positioning of signification explodes into a far more complex speculative grammar. While Erfurt considers signs specifically as verbal means of determination for listeners in communication, such that their perfect construction entails a precise and equal grasp of the *proprietas rei* by both speakers and listeners, (1300: c.51), Peirce expands his semiotic far beyond the confines of human verbal discourse to comprise all interaction, at least virtually (see 5.1.2) – despite his “sop to Cerberus” of including in the definition of an interpretant that it is an effect upon a person (1908a: EP.2.478). But even within species-specifically human communication, Peirce expands the kinds of sign far beyond that considered by Erfurt or the other Modistae; that is, where they limited themselves to the conventional *pars orationis* – nouns, pronouns, adjectives, verbs, adverbs, conjunctions, prepositions, and interjections – and thus limited their consideration of signs to *symbols*, Peirce considers specifically-human signs as rhemes, dicents, arguments, as icons, indices, symbols, and as qualisigns, sinsigns, and legisigns (1903e: EP.2.295). This follows from his more general consideration that a “Sign may have any Modality of Being, i.e. may belong to any one of the three Universes” (1908b: EP.2.485). In consequence of these modal possibilities, he gives

ten different trichotomies of signs, for which many names were applied over the years, and not all of which were thoroughly explored.

In sum, it seems most accurate to describe the relationship of Erfurt's speculative grammar to Peirce's as one of inspiration: that is, the basic theoretical premise and its fundamental divisions were adopted by Peirce as though infants which he raised in quite a different manner than by any of the Modistae, but with the same ultimate goal: the exposition of the essential nature of the sign. For Peirce, this extended far beyond verbal construction to subsume not only intellectual semiosis, but *all* semiosis – conscious and unconscious alike. Moreover, he grappled with a broader framework of semiotic factors, considering the distinction of signs as regards not only their determination by objects but their determining of interpretants – hence the final six of the ten trichotomies of 1908 are divided according to their effect on the interpretant.

1.2.3 Heidegger's appropriation of Erfurt

It would not be a stretch to say that the early studies of Scholasticism, especially of Erfurt's *Modis significandi*, exerted an influence over Heidegger's entire career. Indeed, it was seemingly because of Erfurt's speculative grammar that Heidegger was attracted to Husserl's early phenomenological work, for, as he wrote in his *Habilitationsschrift* (1915: 327): "In the present time, Husserl has once again brought to honor the 'idea of a pure grammar', and shown that there are *a priori* laws of referential meaning, which ignore the objective validity of the referential meanings." This non-psychologistic, "pure" foundation of meaning was an important connection between Erfurt and Husserl in the progress of Heidegger's research – even though he noted himself, in the course of studying Erfurt (Heidegger 1915: 309–11) the vital import of the *modi significandi*'s dependence upon the *modi essendi*, and would himself, some years later (certainly by 1925), abandon belief in a truly pure theoretical *a priori*. But even after his attachment to and subsequent separation from Husserl, Heidegger's work still bore the marks of speculative grammar: thus, in his course, *Prolegomena zur Geschichte des Zeitbegriffs*, given in 1925, we find Heidegger positively relating the name "phenomenology" to the *λόγος* which is in things primarily and in thought only secondarily, as a disclosure (1925: 110–22/80–89); in his 1934 course, *Logik als die Frage nach dem Wesen der Sprache*, he chastises contemporary logic for reducing itself to a "doctrine of mental acts" which has not wrestled with the original nature of language (1934: 168–70/144–45); and the 1949 "Brief Über den ‚Humanismus'" preoccupies itself throughout with the opposition between formalized, systematized studies and the underlying truth of language which they obscure.

This rejection of *a priori* rules for understanding in favor of the disclosive unveiling undoubtedly does not appear in the *Habilitationsschrift*. Yet I believe the germ of his later, anti-*a priori* position is to be found in the essential continuity between *modus essendi*, *modus intelligendi*, and *modus significandi* discovered in the work of Erfurt – a continuity wherein the dependence is always of thought upon the given (*Gegebenheit*; Heidegger 1915: 318, 321) real, wherein the real does not obscure or contain an *a priori* “framework” of intelligibility but rather an intelligibility which is coextensive with itself, illimitable by the meanings that we can articulate or understand but demonstrative of the unity itself (1915: 402: “Die Untersuchung der Beziehung zwischen dem *modus essendi* und den „subjektiven“ *modi significandi* und *intelligendi* führt auf das Prinzip der Materialbestimmtheit jeglicher Form, das seinerseits die fundamentale Korrelation von Objekt und Subjekt in sich schließt.”).

Sean McGrath, in his *Early Heidegger and Medieval Philosophy* (2006), has expertly charted the Scholastic influence – and struggles against Scholasticism – which exerted itself on the young Heidegger. As he points out, since Grabmann had not yet distinguished Erfurt from Scotus, the two were intertwined in Heidegger’s mind; thus the *distinctio formalis* and *haecceitas* of Scotus are seen as at work in Erfurt’s *Modis significandi*, and Scotus’ ontology is seen as undergirded by Erfurt’s three primary modes. These entanglements lead to a foundational insight for Heidegger’s career, namely that (McGrath 2006: 108):

The *modus essendi* is the mode of primordially given *ens*, the undetermined whole of the *prima intentio*... All intentions are founded upon this original givenness, the sheer, fore-theoretical and unfathomable *thisness* of being... In a 1915 prefiguration of the 1919 notion of the “primordial something,” Heidegger describes the *modus essendi* as the universal domain of “the something in general” (*der universale Bereich des “Etwas überhaupt”*) (GA1 314). The *modus essendi* is never directly grasped, for being is always mediated by the *modus intelligendi*, the mode of understanding. The *modus intelligendi* is the objectifying intention, the cognizing of a being as an instance of a class.

Explicitly formulated and grammatically structured verbal languages, as signifying the *modus essendi* by means of the *modus intelligendi*, therefore become bearers of an already-existing, itself-undifferentiated meaning. Notably, this meaning is not “universal”, as it exists in itself, but only through a painful process of abstraction which denudes that meaning of the existential reality whereby they actually exist.

It is therefore a mistake, as Heidegger would go on to see it for the rest of his career, to find “pure” meanings as what the mind makes of them; rather, the mind, to fulfill its function, has to engage those meanings as they really are in and of themselves (McGrath 2006: 119):

From Scotus, Heidegger learned that the “logos of the phenomenon” must be liberated from thinking that arrogates to itself the production of meaning; it must be permitted to show itself, or better, to speak itself. We are enjoined to *let language speak*. Language is not a human construct, something we do. Being is permeated by language, the primordial words coincident with the self-showing of things. This Scotist position, which captivated Heidegger in 1915, resurfaces in his later writings. “Mortals live in the speaking of language,” Heidegger writes in 1950. “Language speaks. Man speaks in that he responds to language.” A cryptic saying, but one that Duns Scotus would have understood.

And, indeed, Thomas of Erfurt and the rest of the Modistae would have understood this “cryptic saying” as well. Scholastic philosophy was pervaded by the notion of the Word as a formal cause of all creation, as intimated in the beginning of John’s Gospel (cf. Aquinas c.1270–72: c.1 lec.2). Likewise, the Scholastics made more of relation than is commonly acknowledged; although it has only recently come to light, it plays a prominent role (cf. Kemple 2017: c.5). McGrath does not include in the points he highlights how the relational – suggested in Erfurt’s emphasis on consignification – seems to have permeated Heidegger’s thinking.

Heidegger, however, diverges from the Modistae and Scotus, however, with his focus on the factual (which might justly be seen as a development or exaggeration of Scotus’ *haecceitas*); which is constituted by the various, particular, potentially infinite variety of equiprimordial *Existenzialien* which are intertwined in a very complex relational web indeed (McGrath 2006: 117):

Thomas of Erfurt finds concealed and indefinable ontological structure in the forms of ordinary language. *Formale Anzeige* is a method for phenomenologically thematizing what which cannot be directly expressed but which nonetheless formally determines the expressible. Dasein’s *Existenzialien*, for example, are not universals. They are enmeshed in the singularized experience of being-in-the-world. They can never be isolated from one another but are intertwined in the web of relations that constitutes “my” world. The *Existenzialien* must be teased out of the phenomenological description of everydayness, approached obliquely, or formally indicated. The frequently repeated term *gleichursprünglich* in *Sein und Zeit* highlights this inextricable coentwinement of *Existenzialien*. In Scotus’s language, the distinctions between these phenomena are formal. Heidegger takes pains to show that certain phenomena “imply” or disclose each other without being causally related to each other – one is not the ground of the other. Rather, the phenomena are “equiprimordial,” that is, always co-given.

It seems, at times, that Heidegger was to his influences much as Aristotle was to Plato: that is, he immanentized the abstractions which characterize both Husserl and the Scholastic tradition, bringing down the questions of phenomenology and logic to the diurnal world of factual reality. We will pick up this

thread of facticity in the following chapter, as the core around which Heidegger wove his phenomenological method.

At any rate, much like Peirce, Heidegger's relation to Erfurt and his *Grammatica speculativa* is best described not as a strict following, but as one of inspiration which germinated in other thinking. Certainly, much of the *Habilitationsschrift* adheres to a Husserlian-influenced pursuit of (1915: 340) “*die logische Struktur der Bedeutungen*”, a pure and *a priori* structure for referential meaning. Despite his eventual departure from this aspiration for a “purity” of thinking, Heidegger retains the belief that *meaning* (not only *Bedeutung* but more fundamentally *Sinn*; see above, “Terminology”) lies in an intelligibility behind the apparent structures of its communication (cf. 1925/26: 135/113 where “Wahrheit” signifies truth in the sense of ἀλήθεια).

Unlike Peirce, Heidegger did not seek to develop any systematic speculative grammar of his own; despite which, he did continually, throughout his career, treat the essence of language not as the apparent linguistic structures with which we deal daily, but as a primordial rather than developed human capacity; and as a capacity residing primarily in the “really real” (i.e., the *modi essendi*) rather than the “conventionally real”. Truly (McGrath 2006: 105): “Heidegger is particularly interested in Erfurt's assumption that deep levels of meaning are hidden under more obvious and theoretically accessible linguistic structures”. In other words, Heidegger fully appropriated from Erfurt the notion that the structures disclosed through signification – or of signification – belong not only to the *modus intelligendi* but also and originally to the *modus essendi*; such that our particular languages and grammars are derivative from the primordial reality which exists independently of our deliberate, constructive action.

1.2.4 Husserl's pure grammar

In contrast stands the pure grammar of Husserl. Meaning, once limited to ideal universality (Husserl 1901a: 229–33), divides the species-specifically human consciousness and its operations of thought from the material and particular universe, essentially constituting two distinct and irreconcilable spheres. That is, Husserl considers such non-universal beings, as what belongs to the domain of sensibility, as mere triggers, rather than as *bearers*, of meaning. This can be seen in the *Logische Untersuchungen*, where Husserl divides signs (*Zeichen*) into indications (*Anzeichen*) and expressions (*Ausdruck*), of which only the latter possess meaning (Husserl 1901: 183–88). This does not make indications irrelevant for species-specifically human signification, but rather consigns them

to a supporting role; that is, while all expressions used in communicative speech require indication, such that by some physical sign (*physischen Zeichen*) the auditor can be made aware of the mental state (*psychischen Erlebnisse*) of the speaker, in order to apprehend the meaning (*dem Sinn*) of the object named (*dem Gegenstand*), which indicative function Husserl names intimation, it is nevertheless the case that (Husserl 1901: 190): “an expression’s meaning, and whatever else pertains to it essentially, cannot coincide with its feats of intimation.” Even non-verbal “expressions”, Husserl says, are not really meaningful (1901: 188):

In such manifestations [as facial movements or other gestures lacking deliberate communicative intent] one man communicates nothing to another: their utterance involves no intent to put certain ‘thoughts’ on record expressively, whether for the man himself, in his solitary state, or for others. Such ‘expressions’, in short, have properly speaking, *no meaning*.

In stark contrast to the meaninglessness of such non-verbal pseudo-expressions, one may have meaningful expressions without any typical indicative word-structure (Husserl 1901: 191): “In a monologue words can perform no function of indicating the existence of mental acts, since such indication would there be quite purposeless. For the acts in question are themselves experienced by us at that very moment.” Words may be necessary bearers of meaning in intersubjective communication, but semantic access is something prior to verbal expression.

It is worth speculating that Peirce’s ultimate dismissal of Husserl as irredeemably psychologistic may be inspired by just this passage – that is, while Peirce was adamant against the possibility of introspection (1868a), it seems that Husserl’s semiotics depends entirely upon it, for although meaning may be indicated by a sign, he seems to hold it to reside, or at the very least arise from, acts immanent in one’s experience.

The ideality at which Husserl aims is also evident in his distinction between the spheres of sensibility and understandability (1901a: 286). The completeness of an expression consists not only in conferring the meaning-intention, but also in providing a relation to the meaning-fulfillment (Husserl 1901: 192–93; 1901a: 206–08); that is, the intended universal meaning alone is empty without some particular object for imagination or perception, but these particulars are in their constitutions irrelevant except insofar as they adequately correspond to the intended universal meaning.

In other words, intentionality as the essence of consciousness, for Husserl, is intentionality conceived of in terms of universal and therefore trans-subjective meaning, which meaning is the goal of phenomenology. His is, therefore, a

subjective and epistemological phenomenology, concerned primarily with the “reality” of the ideal (Dougherty 1980: 311) and only as a response to the solipsistic errors of idealism does it attempt reconciliation of this ideal reality with the decidedly not-ideal reality of particular and sensory being. Indexicality, as a consequence, is a deficient or diminished means of signification. Iconicity bears no semiotic function whatsoever; that is, despite an importance of the pictorial, of “phantasy” for Husserl’s theory of signification (cf. Stjernfelt 2007: 50, 92–93), the pictorial is not itself the bearer of meaning, but rather either a recipient or an indicator of a meaning which exists only at the level of linguistic-semantic abstraction.

At best, I think, one could argue no more than that Husserl’s *Logische Untersuchungen* are a fertile ground from which one might grow a semiotic phenomenology, but in which Husserl himself saw the seeds of the descriptive or reflexive phenomenology of ideal but subjectively-constituted meanings which he nourished over the next 30-plus years.

1.3 Semiotic science and phenomenological method

By trying to make phenomenology into both a science and a method, Husserl conflates objects of study with ways of thinking. That he, despite his protests against psychologism on the grounds of its attempt to lead from empirical data to universal truths, eventually adopts the moniker of “transcendental idealism” for his phenomenological approach (Husserl 1933) is neither an accident nor a deviation from the path on which he first set foot in the *Logische Untersuchungen*. By presuming that we have valid access only to the intuited phenomena, and thus our own experiences (and not the things experienced), Husserl set up idealism as the only possible solution, and was therefore condemned to that as his inevitable conclusion. Like all idealists, the certitude of truth for Husserl depends upon a certitude about the object-as-objectified, resulting in too-strong a distinction between formal and material objects. While Peirce at times described himself as an “objective idealist” (1891: EP.1.293), this turns out to be a thinner thread of commonality with Husserl than it might at first appear; for Peirce’s ideal existed in the object not only as mental phenomena, but in the thing itself, as staunchly against nominalism (1893b: CP.6.605). Despite the similarities between Husserl and Peirce’s phenomenological aims – the establishment of firm grounds for science based upon the primordial structures of experience – Husserl’s attempt to make phenomenology a *scientia universalis* and his idealist development make their approaches incompatible.

Contrariwise, we aim to unveil a different relationship between the thinking of Peirce and Heidegger. To demonstrate the complementarity of Peirce's semiotic, of which the bedrock is the development of a speculative grammar, and Heidegger's phenomenological method, which proceeds from and returns to investigations of the hidden "language" of Being, we need first to make an observation concerning Peirce's classification of sciences. This division occurs most broadly into sciences of discovery, sciences of review, and practical sciences; we are concerned only with the foremost of these. The sciences of discovery are divided into mathematics, cenoscopy (or philosophy), and ideoscopy (or what are today generally considered the "sciences"). Cenoscopy is divided into phaneroscopy, normative science – itself divided into aesthetics, ethics, and semiotics (or logic) – and metaphysics. Semiotics is the normative science of truth, and is subdivided into speculative grammar, critic, and speculative rhetoric. That semiotics is a science, and not a method (contra, e.g. Bondi and La Mantia 2015: 7), is crucial for understanding its correlative possibilities with Heidegger's phenomenological method.

A key argument being made in this book is that Heidegger's phenomenology, although it contains elements common with Peirce's phaneroscopy, is not identical with it. Rather, Heidegger's phenomenology is not a science at all, but only, always, and everywhere a method, and indeed, a method common to the whole of the philosophical endeavor. That is, Heidegger's phenomenology is a method of inquiry proper to the whole of Peirce's cenoscopy, *including* phaneroscopy, which is, as it were, the *anima* – understood in the sense of a "basic organizing principle" – of the entire cenoscopic project, *and* semiotics, which is the science that allows all other discoveries to be systematically understood in the fullness of their meaning.

Consequently, the categorical triad which is unveiled through Peirce's phaneroscopic science (and echoed in Heidegger's *Vom Wesen des Grundes*; cf. 6.3) is considered here primarily as the necessary grounding for semiotics, and Heidegger's phenomenology, of which the principles (not as the first starting points in a linear progression but as always-already-necessary-groundings) are *Sein* and *Welt*, is the method for a holistic integration of the semiotic discovery of truth. Each philosopher promotes a discursive, recursive process of discovery which coalesces in the human being as the nexus of truth's disclosure.

What do we mean when we talk of a world? Obviously, we are not discussing something so tangible as the sense of “world” held by physical science – which faces its own challenges in determining which attributes constitute a planet, as opposed to an asteroid, comet, moon, and so on, and to which semiotics should sooner or later be invaluable – though of course, the planet and its respective environment within which a living being exists are important factors for the psychical, philosophical sense which we are discussing.

Rather, we begin with the notion of an environmental world (Umwelt), one which surrounds, surrounds with something (*Umgebung*): with possible objects, actual subjects, and thereby establishes an innumerable myriad of possible relations, both cognitive and otherwise. This surrounding requires a stable presence of the actual subjects involved, and these actual subjects must be somehow alike to the being which is environed: capable of not only being acted upon by that being, but acting upon it as well. The actual provenation of such reciprocal relationships is prerequisite to what we mean here by “world”: in its broadest signification, namely, the totality of interactive possibilities present to an individual living being; or, in the more specific signification pertinent for our inquiry into the cognitive activity of the semiotic animal, the totality of beings open to the cognitive grasp by, and involvement with, an individual human being in the context of human life.

The distinction of human life from non-human life broadly, and from other animals, alloanimals – that is, the “superspecies” constituted from the distinct species of animals which are distinguished over and against human beings by their lack of the species-specific semiotic difference – more specifically, has been well-argued by John Deely throughout the corpus of his works (see especially 1971a, 1994a, 2002, 2007, and 2010a). We will not dwell on this difference extensively – we hope only to build and further clarify Deely’s insight. Nevertheless, it is vital that the importance of the adjective “human”, in talking about “human life”, be fully understood before any development can be offered. To quote Deely on the cardinal moment of human distinction (2010a: 99–100):

What, then, distinguishes the human being among the other animals? It is not by any means semiosis, as we have seen. What distinguishes the human being among the animals on earth is quite simple, yet was never fully grasped before modern times had reached the state of Latin times in the age of Galileo. While every animal of necessity *makes use* of signs, yet because signs themselves consist in relations, and because every relation, real or unreal, is *as relation* – as a suprasubjective orientation toward something other than the one oriented, be that “other” purely objective or subjective as well – invisible to sense (and hence can be directly *understood* in its difference from related objects or things, but can never be directly *perceived* as such), what distinguishes the human being from the other animals is that *only human animals* come to realize that *there are* signs distinct from and superordinate to every particular thing that serves to constitute an

individual (including the material structure of an individual sign-vehicle) in its distinctness from its surroundings.

This distinctively human realization of the existence of signs, to which Deely points, nevertheless depends upon an existentially antecedent element, from which antecedent follow some other consequences running parallel to the realization that there are signs: namely, those characteristics of human knowledge pointed out by Thomas Aquinas – that it is “immaterial, universal, and immutable” (1266–68: qq.79, 84, 85).

The antecedent itself is the realization of “being”; this is what Thomas Aquinas means by stating that *illud quod primo cadit in apprehensione est ens*, (1270–71: q.94, a.2, c.) the first object of human understanding is “being” (cf. 1256–59: q.1, a.1, c.). By *ens*, being, as the first object of understanding, Thomas means an object without any differentiation, distinction, precision, or specification; which is to say an object unlimited by the thing in which it is found. It is present in every intellectual grasp, just as sound is present in every auditory sensation. We should not therefore misunderstand Thomas to mean that *ens primum cognitum* represents a first chronological moment – though it is undoubtedly present at the chronological first intellectual realization – but rather that it is “first known” as “causally first” or “existentially first” (i.e., that without which no other contemporaneous reality could also exist) in the act of understanding (cf. Kemple 2017). Thus, while the realization of the suprasubjectivity of signs may be the moment at which human understanding emerges into a conscious awareness of its own distinction – and though signs’ suprasubjectivity is latently present in every intellectual act – the grasp of the unlimited is a necessary antecedent to grasping the reality proper to signs.

Were it not for some apprehension of the nature of signs themselves, the distinctively-human world would remain a mere latent possibility: for it is only through the radiation of a semiotic consciousness that culture truly evolves, and the distinctively-human world is one permeated by culture. But were it not first for the inescapable and *sui generis* preoccupation and perfusion of human life with being, *ens*, semiotic consciousness would not – could not – ever emanate at all. The semiotic consciousness of animal intelligence cannot without first grasping being itself (a grasp explored in 6.2 but which cannot be understood without the progression developed in the intervening chapters) develop into a fully-semiotic awareness.

I have elsewhere investigated Thomas Aquinas’ consideration of *ens primum cognitum*, an essential and enormous step (I might even say “whole flight of stairs”) in the development of what Deely has termed the “protosemiotic development”, i.e., the realization of semiotic insights in the history of thought

prior to the explicit doctrine of semiotics initiated by Charles Peirce. Here, in the first part of this book, I investigate another essential and sizeable step necessary in semiotics' continued blooming: namely, Heidegger's phenomenological approach to the same issue of the "first known". Though by no means in agreement with modernity, Heidegger's philosophical endeavor benefits from the epistemological difficulties raised by modernity's turn to the subject. Thus, while his treatment of *ens primum cognitum* lacks the cleanliness of resolution which may be derived from Aquinas' work, it does provide more vigorous avenues in which to treat of socially-constituted reality and the complex involvement of individual psychological subjectivity with the essentially supra-subjective process of social-constitution.

It is easy, in writing about Heidegger, to become lost in the cryptic and obscure. Indeed, the obscurity present in any one of Heidegger's texts is amplified by the fact that no two developments of his thought, even those nearly simultaneous, parallel one another exactly. Rather, his work represents various paths. They may cross one another from time to time, and one may be visible from another; but they neither end up in precisely the same locations, nor do any reach a truly final destination; each leaves one stranded in the woods. Some may find this a worthy goal in and of itself; to wander the proverbial Black Forest endlessly. Thus we find theories concerning the development from *Dasein* to *Sein*, to *das Sein des Seienden*, ἀλήθεια, *Wesung*, *Seyn*, *Ereignis*, and so on (cf. Sheehan 2015: 5–9); and so we find it easy to meander off into the woods of language, getting lost in endless thickets of jargon. Nearly every work of Heidegger, when translated into English and released, receives the acclaim of centrality and essentiality to understanding Heidegger's thought as a whole. Every verbal tree is examined, and finding that its roots spread farther than previously perceived, each tree comes to be called *the* tree. Different terms are called decisive over one and another – despite essentially signifying one and the same thing. Few thinkers have so thoroughly succeeded in perplexing while enticing their audiences. While writing about Heidegger's thought always entails a considerable degree of complexity, especially terminological complexity, attempting definitive solutions to the confusion raised by Heidegger's lifelong wanderings through the Black Forest of language provides little in the way of helpful insight as to what the objects of his thought actually were, or how studying his work can help us attain a better understanding.

What follows, in light of the confusion which dominates Heidegger scholarship, attempts to attain clarity concerning Heidegger's thought, at the expense of disengaging (as much as possible) from close adherence to recognizable trees, in order to perceive the whole forest.

2 Phenomenology as fundamental ontology

Interpreting the concepts and terminology of Heidegger's philosophy as falling under the uses of or as coherently mapping on to other traditions undermines the entirety of his project.⁸ Though he does engage the Western tradition, mostly with criticism, and though he does, especially in his early writings (1915–1930), speak the language of traditional metaphysics – with occasional coincidence in meaning but far more frequently discomfort – to assert that Heidegger's "ontological difference" aligns with Thomas Aquinas' difference between *esse* (as the *actus essendi*) and *ens* (Fabro 1974: 450, 482, 489–91), or that, as Žižek claims (2006: 24), it is a difference between "stupid" being-there and the horizon of meaning, though this certainly comes closer, not only contradicts the textual evidence but is philosophically inconsistent with Heidegger's stated intentions. Since we cannot here take the time to deconstruct these or other alternative interpretations, we will instead present our own interpretation of Heidegger, and show how Heidegger's approach to *Sein* opens doors to understanding the full range of human experience.

To accomplish this monumental task in an economic fashion requires a few provisional definitions of terms Heidegger commonly uses.

Ontic. Heidegger uses the term ontic, derived from the Greek for "being", *ὄν*, *ὄντος* (the genitive form), to signify our categorical understanding of beings

⁸ A brilliant example of this error is to be found in Oliva Blanchette (1991 and 1999). Against Blanchette's reading, contrast the treatment given in Deely (1971b: 9–28). While Heidegger is not **extricable** from the tradition, and while an understanding of his, as we will see, overreliance upon a Suarezian reading of Thomas allows us to see the problem in the ontotheological critique, this does not mean that Heidegger's concept of *Sein* must necessarily reduce to either the more abstract, empty predicamental sense of the infinitive, nor the more concrete, content-filled sense of the participle. We infer Caitlin Smith Gilson, in her (2010) *Metaphysical Presuppositions of Being-in-the-World*, to have a similar reading of Heidegger's subjugation to the traditions of late scholasticism and modernity. Cf. (Deely 1971b: 23): "The metaphysical Being-question as St. Thomas framed it and the phenomenological one which Heidegger poses are radically different, and everything depends on their being recognized as such. Their origins are diverse and their terms are not the same. Neither can be judged true or false relative to the other in any direct way because their terms in principle need never coincide. Metaphysics grounds its inquiry into *ens commune* on things-which-exist, which exercise *esse*, 'as if it were taken for granted that the truth of Being could be set up over causes and basic explanations or, what is the same thing, over their incomprehensibility.' Phenomenology seeks to ground its determination of the sense of *Sein* in the transcendence of Dasein where alone the concealing-revealing manifestation of things-in-Being takes place." To get a sense of the complexity of the term *Sein* in Heidegger and Heidegger scholarship, one need only consider the entry in Richardson 1967: 738–39.

in the dimension of their individual substantial constitution. The most tempting mistake in interpreting the significance of “ontic” is to reduce it to merely superficial or non-critical consideration of beings. The second most tempting mistake is to think of the ontic as the intractably concretized account of some being – as though ontic understanding is tied to a pre-Copernican cosmology of an unchanging universe or a Platonic realm of ideas. Underlying both mistakes is a presupposition of the ontic as hypostatically divided from the ontological. Such hard and fast divisions are inimical to Heidegger’s thought (cf. e.g., 1923: 45–46/36). While we may focus our attention on the ontic qualities possessed by a being, that being is itself inexorable, both in reality and in our own thinking, from the ontological. Hence, we refer to the ontic as a dimension, i.e., as a part of what constitutes human understanding upon which we can *focus* separately from the ontological, but which *exists* inseparably from the whole of that understanding, and therefore includes an implicit connection to the ontological dimension of thought. To give one alternative phrasing, the ontic dimension represented through any of our thoughts is a *moment* (cf. Sokolowski 2000: 22–27); to give another, the ontic can be prescinded but never dissociated (cf. Peirce 1867: EP.1.3) from the ontological.

Ontological. The term ontological, incorporating the Greek λογία, the theory or study of, with ὄντος, has a long and complex history with the philosophical discipline of metaphysics (cf. e.g., Gilson 1949). This history presented a problem for Heidegger: on the one hand, he accuses the tradition of obscuring the true question of *Sein* through reducing its study of ὄν to ὄντα, to beings (or *Seienden*). On the other hand, the term “ontology” captures a distinctive aspect of the human mode of relating to beings, and to Being, which capturing Heidegger (in his early work) seeks to preserve (cf. Heidegger 1923: 1–3/1–3): namely, that human relation to beings and Being is characterized primarily by thought – thinking, logic, reasoning, understanding, and the provision of an intelligible account, all of which is suggested by the suffix, λογία, λόγος (cf. Heidegger 1927a: 32–34/55–58) which Heidegger understands to mean, primarily, “discourse”, i.e., the letting-be-seen through unveiling, which is to say, a kind of disclosive articulation (cf. Deely 1971b: 142). Consequently, to distance his account from the tradition while preserving the essential relationality, he often terms his inquiry in early works (1919–1929) an effort of *fundamental ontology*: that is, a seeking of the foundational relationality of *das Sein des Seienden*.

We can therefore justly describe Heidegger’s use of the term *ontological* as referencing the dimension of beings whereby they are related, especially the relation to understanding. To be clear, however, the ontological dimension refers not only to relations as such, but to relatedness as pervasive; not just as an element belonging to beings in their subjective constitutions, but as pervading

and enveloping them in their intrinsic relationality.⁹ We will examine this two-fold consideration of relationality – relations as such, and relatedness as pervasive – in 5.2 and 7.1.

Ontological difference. In the foreword to the third edition of *Vom Wesen des Grundes*, Heidegger enigmatically states (1949: 5/97) that “the ontological difference is the nothing between beings and Being”. This “nothing” of the ontological difference is compared and contrasted with the equally-enigmatic *das Nichts* (the Nothing) which is identical with *Sein* (Being) – *Sein* from the perspective of beings being considered as *das Nichts* (Heidegger 1949: 5/97): “Das Nichts ist das Nicht des Seiendem und so das vom Seienden her erfahrene Sein.” We explore the meaning of *das Nichts* at length in chapter 3.2. In the meantime, however, it should be known that the “nothing” of which Heidegger speaks, referring equally to both *das Nichts* and the ontological difference, is not the absence of *Sein* or even the absence of beings, but rather “not being a being.” The ontological difference, specifically, refers to the distinction between the ontic and ontological dimensions of human understanding when made explicit in a thematic consideration (cf. Heidegger 1927b: 454/319): the ontological can never be reduced to the ontic, such that the relational consists in nothing more than properties of the substantial, and, vice versa, the ontic constitution of a being can never be identified with the ontological dimension whereby it is engaged in web of relations.

It is a topic of seeming endless discussion whether Heidegger’s later work – not only the *Kehre* occurring after or around 1930, but especially in the late 1940s, 50s, and 60s – possesses a conceptual continuity with that of *Sein und Zeit* and the earlier lecture courses. The interpretation taken here is that suggested by Heidegger himself in the 1962 *Vorwort* to William Richardson’s *Heidegger: Through Phenomenology to Thought* (and accepted by Richardson himself [1963], as well as by Thomas Langan [1959], John Deely [1971b] and Thomas Sheehan [2001, 2015]): that the fundamental task of all his work was the same, and the difference is primarily one of searching for the right

⁹ Heidegger 1963: xi: “Welches ist die alle mannigfachen Bedeutungen durchherrschende einfache, einheitliche Bestimmung von sein? . . . Woher empfängt das Sein als solches (nicht nur das Seiende als Seiendes) seine Bestimmung?” “What is the pervasive, simple, unified determination of Being that permeates all of its multiple meanings? . . . Whence does Being as such (not merely beings as beings) receive its determination?” Deely interprets the ontological (in the sense of “fundamental ontology”) to refer specifically to the domain of *esse intentionale* (cf. 1971b: 120–21); Sheehan interprets it to refer (as, ultimately, all Heidegger’s pursuits do) to *die Lichtung*, the clearing/opening/illuminating itself (cf. 2015: 20–23). I believe both Deely and Sheehan to have grasped the focal point of the image while perhaps neglecting other aspects of the entire picture.

language, the right means to communicate the fundamental task. This does not mean there is no conceptual evolution, or that, for instance, the “ontological difference” is not thought differently between *Sein und Zeit* (1927a) and the *Beiträgen zur Philosophie* (i.1936–38), but that this difference does not differ as to its target; only that it aims at it from a new angle. That is, the ontological difference – the distinction of *Sein* and *das Seienden* – must be “leapt over” (Heidegger 1936–38: 250–51/197); which does not mean abandoning the distinction, but that the ordinary method of distinction – between *res et res*, or between one thing at the very least *conceived on the model* of a *res* and another likewise conceived – must be overcome (hence the difference is not a “something” between Being and beings, like the relation between “subject” and “object” is a “something” [cf. 1936–38: 252/199], but a “nothing”) in order properly to think *Sein*.

2.1 The phenomenological method

Heidegger, though his early days of phenomenological inquiry were fostered under the tutelage of Edmund Husserl, operated under a profoundly different concept of phenomenology, which requires clarification. Like his one-time mentor, Heidegger held that phenomenology is not the study of a particular subject matter delineated apart from all others but rather a method of investigation¹⁰: a method which initially strove for overcoming the epistemological quagmire of modernity, and which continues to strive for insight into what beings themselves are, for insight into *meaning* or the domain of *meaningfulness*. Unlike Husserl, however, Heidegger disavowed the formalization of phenomenology into a purely theoretical science. As mentioned above (1.1.2), he found such an attempt to rob phenomenology of its true vigor, i.e., what he terms its possibility as a “mode of research” (1923: 71–73/56–57). Unlike sciences, which are determined by the kinds of their objects so as to be clearly discernible “whats”, phenomenology is (1923: 72/57): “a *how of research* which makes the objects in question present in

¹⁰ Heidegger 1927a: 27/49ff. The characterization of phenomenology as “the study of the structures of experience, or consciousness”, specifically “as experienced from the subjective or first person point of view” (Smith 2013), while an apt descriptor of Husserl’s train of thinking, in no way applies to the Heideggerian concept of phenomenology (despite the trend of speaking about phenomenology this way; e.g., Sheehan 2015: 125), and subjects it to what Heidegger would consider an outdated pedagogical taxonomy: namely, dividing subjects of study through purely-object-grounded distinctions – precisely the sort of thinking which Heidegger’s phenomenology attempts to overcome. Cf. Deely 1971b: 134.

intuition and discusses them only to the extent that they are there in such intuition [and thus both sensibly and categorially].”

Through reflecting upon this method of inquiry itself, as such a “how” rather than a “what”, Heidegger had a key insight: namely, that phenomenology, when directed upon itself, is capable of cultivating awareness, avoidance, and rectification of the forgetting or “oblivion” of *Sein*, the *Seinsvergessenheit* (1927a: 1/19 and 2/20): “Do we in our time have an answer to the question of what we really mean by the word ‘being’? Not at all. So it is fitting that we should raise anew *the question of the [intelligible] meaning of Being...* This question has today come into oblivion.”

By directing the phenomenological method not simply towards beings, but towards itself – that is, towards the process through which human beings attempt to unveil that which is – *Sein*, Being, enters explicitly into the consciousness of the phenomenologist (Heidegger 1925: 85–99/63–72). This awareness of *Sein* is not merely an incidental product of the phenomenological process, but an essential part of its accomplishment. This is evident in how Heidegger distinguished his phenomenological “reduction” from that of Husserl (Heidegger 1927b: 29/21):

For Husserl, phenomenological reduction, which he worked out for the first time expressly in the *Ideas Toward a Pure Phenomenology and Phenomenological Philosophy* (1913), is the method of leading phenomenological vision from the natural attitude of the human being whose life is involved in the world of things and persons back to the transcendental life of consciousness and its noetic-noematic experiences, in which objects are constituted as correlates of consciousness. *For us* phenomenological reduction means leading phenomenological vision back from the apprehension of a being, whatever may be the character of that apprehension, to the understanding of the Being of this being (projecting upon the way it is unconcealed).

Whereas phenomenological vision for Husserl consisted in the entry to theoretical comportment – attained through the *epoché* – and therefore the departure from the “natural attitude”, Heidegger, though his phenomenological method requires a remove from “everydayness”, does not insist upon the achievement of phenomenological insight through a science of pure theoretical abstraction (1925: 253–54/187–88). In other words, phenomenological vision cannot stop at intuitive apprehension of “things themselves”, especially not as they are grasped theoretically, but must be led back into Being, into the manner of unconcealment itself.

Heidegger’s phenomenological reduction (for which we will occasionally use the term “resolution” as a near-synonym; see glossary entry for reduction) alone is a negative process which allows for but does not complete the achievement of phenomenological vision. As Heidegger goes on (1927b: 29/21):

“Phenomenological reduction as the leading of our vision from beings back to Being nevertheless is not the only basic component of phenomenological method; in fact, it is not even the central component.” Rather than a “reduction” back to subjectivity, Heidegger suggests an “induction” of the self – a leading of the self into – in addition to whatever beings are under consideration, into the realm of disclosure (1927b: 29/21): “For this guidance of vision back from beings to Being requires at the same time that we should bring ourselves forward positively toward Being itself.” In other words, we must see that we ourselves are equiprimordial with beings in the revelatory reality of Being. Heidegger illustrates this in a lengthy description of how, apart from theoretical abstractions, we see a table (1923: 90–91/69):

[The table’s] standing-there in the room means: Playing this role in such and such characteristic use. This and that about it is “impractical,” unsuitable. That part is damaged. It now stands in a better spot in the room than before – there’s better lighting, for example. Where it stood before was not at all good (for . . .). Here and there it shows lines – the boys like to busy themselves at the table. These lines are not just interruptions in the paint, but rather: it was the boys and it still is. This side is not the east side, and this narrow side so many cm. shorter than the other, but rather the one at which my wife sits in the evening when she wants to stay up and read, there at the table we had such and such a discussion that time, there that decision was made with a *friend* that time, there that *work* written that time, there that *holiday* celebrated that time.

That is *the* table – as such as it is there in the temporality of everydayness, and as such will it perhaps happen to be encountered again after many years when, having been taken apart and now unusable, it is found lying on the floor somewhere, just like other “things,” e.g., a plaything, worn out and almost unrecognizable – it is my youth.

First, this passage must be recognized for its rich semiotic significance. In the table, Heidegger recognizes a plurality of signs, from the forensic, hypocoic lines in the paint, to the indexical associations to what events occurred alongside it, to the habit of his wife and the symbolic collation of youth. Second, we must recognize the presence of the self: the table is not merely a collection of properties, measurable in the structure we sensibly encounter, but it is “my youth”. It is considered not simply as a *res ipsa*, but also a *res relativa*, constituted in Being not just by what it possesses itself but by the way in which it has been possessed by others – as a *res relativa secundum dici*, according to the way all things are in themselves not *only* themselves, but also relative. As Heidegger adds a little later (1923: 99/76):

In the there of the table and other such “things” which are being encountered, one is one-self therewith in an inexplicit manner what is being encountered. And this is not – and even less so than in the case of the others – in the sense of something grasped theoretically or in some other explicit manner. And above all one-self is there in this manner

without any self-observation turning back upon an ego, without reflection – on the contrary, one encounters one-self in this being-occupied with the world in dealings

We do not encounter the world as independent of our selves; and consequently, it would be a mistake to attempt a philosophical engagement of that world as though we could (1925: 254/187): “inasmuch as phenomenological investigation is itself theoretical, the investigator is easily motivated to make a specifically theoretical comportment to the world his theme.” But such mistakes the nature of phenomenology’s perspective with phenomenology’s object. Rather, we need to bring to disclosure the structures of disclosure themselves and thus one must practice (1925: 254/187–88): “phenomenologically placing oneself directly in the current and the continuity of access of the everyday preoccupation with things, which is inconspicuous enough, and phenomenally recording what is encountered in it.” The phenomenological vision of a being requires that we see it in terms of Being; and Being does not manifest itself as do beings; hence, bringing oneself forward toward Being and (1927b: 29–30/22) allowing it to “be brought to view in a free projection. This projecting of the antecedently given being upon its Being and the structures of its Being we call *phenomenological construction*.”

But even this twofold process of reduction and construction, Heidegger says, is not enough; one needs also a process of “destruction” – an unfortunately-chosen term which connotes a more negative concept than Heidegger intended, but which fits neatly into a memorable trio with the terms reduction and construction. This “destruction” is not the oblivion of history or tradition, but rather (1927b: 31/23) “a critical process in which the traditional concepts, which at first must necessarily be employed, are deconstructed down to the sources from which they were drawn.” We readily take the truth of many concepts for granted, not questioning their meaning – not only in the ordinary, everyday, practical sense, but also in our theoretical frameworks. The history of ideas is an intrinsic and unitary part of any sincere philosophical investigation, for that history shapes how we think, and without critical examination, it may *determine* how we think.

Attaining a clear comprehension of beings – what beings are and how they are – requires an account of how they become known; and this account, in turn, cannot be satisfied by an examination of beings themselves. For even when we correctly judge of beings according to their ontic constitutions through a phenomenological approach, we might unthinkingly obscure the dimension of *Sein* and thus the ontological dimension whereby and wherein beings are themselves disclosed. This is the difficulty of intellectually penetrating the ontological dimension of the phenomenon; in letting things be seen, that which enables

them to be seen itself also disappears. Hence, the threefold process of phenomenological method – reduction, construction, destruction – attempts to evade this oblivion of Being by bringing Being itself explicitly into awareness (even though it cannot be brought into view in the same manner as a being); by revealing that the question of meaning is not a question about being, however much it must inevitably entangle itself with beings, but is rather a question about Being. Let us investigate what this means a little deeper.

2.1.1 Phenomenological appropriations

The phenomenon, Heidegger says, is that which “shows itself in itself”; phenomenology seeks, therefore, “to let that which shows itself be seen from itself in the very way in which it shows itself from itself”; phenomenological inquiry goes “to the things themselves!” (1927a: 34/58). But a thing which shows itself does not always do so directly. Oftentimes it is mediated by another which *does* show itself directly, and in that direct evidence, announces that which does *not* show itself. Thus we might have some x , the thing which shows itself through another, and some a , that which announces the x that does not show itself directly. The x could be something such as cancer or the Higgs boson or even the essential nature of a being, none of which shows itself directly, but must be understood through other things which do show themselves, through one or perhaps a myriad of a .¹¹ A thing may also show itself from something which it is not; what we might call a “semblance” or “mere appearance,” such as the way in which it appears as though the sun rotates around the earth (as T.S. Eliot [1935: 17] put it, “with slow rotation suggesting permanence”) or a snake appears as the leaves around it. Even though, from a causal point of view, the sun does not move around the earth, but vice versa, something about the sun is revealed in this deceptive

¹¹ Whereas cancer and (perhaps) the Higgs boson may both become evident in themselves by showing themselves directly – though they are first announced by other things: the symptoms of cancer, the results of particle collision experiments – natures can never be so directly encountered. This is not to say that natures are merely fictitious results of some intellectual activity (nominalism), but that they manifest themselves only in and through the various relations by means of accidental attributes which make manifest their reality. In other words, whereas there may be sensible data for cancer and the Higgs boson, among other such things which similarly operate with regard to showing themselves and announcing themselves, natures, as what belongs to something on account of itself, can be ascertained only by supersensory cognitive operation.

appearance – if nothing else, this deceptive appearance reveals something true about the relativity of perspective.

What unites all three modes of appearing – through another, in itself, and in something not itself – is that, on the one hand, all three modes proceed from some *thing*; that is, from the *x*, the thing itself (echoing the primordially of the *modus essendi* of Erfurt); and on the other hand, that each is a mode of appearing. Consequently, something more primordial and more fundamental occurs in this appearing than the thing itself which appears; something which embraces all three modes; something which we vaguely and inadequately refer to as “Being,” which embraces not only the thing itself, but the very appearing of the thing and the disclosure of the thing in its appearing. Phenomenology, though concerned with the things revealed and therefore with effectively revealing them, obtains its greatest importance in what it shows us about the revealing itself (Heidegger 1925: 184/135–36)¹²:

The greatness of the discovery of phenomenology lies not in factually obtained results, which can be evaluated and criticized and in these days have certainly evoked a veritable transformation in questioning and working, but rather in this: it is the *discovery of the very possibility of doing research in philosophy*. But a possibility is rightly understood in its most proper sense only when it continues to be taken as a possibility and preserved as a possibility. Preserving it as a possibility does not mean, however, to fix a chance state of research and inquiry as ultimately real and to allow it to harden; it rather means to keep open the tendency toward the matters themselves and to liberate this tendency from the persistently pressing, latently operative and spurious bonds [of a closed tradition]. This is just what is meant by the motto “Back to the things themselves”: to let them revert to themselves.

In other words, Heidegger extols phenomenology as the method which validates philosophical investigation by being the one method which preserves the

¹² Cf. (1927a: 11/31): “Ontological inquiry is indeed more primordial, as over against the ontical inquiry of the positive sciences.” Cf. (Deely 1971b: 136): “while the research-mode of phenomenology as such, or, what amounts to the same thing, of ontology as such. . . is directed straight to the Being of beings and so in principle leaves untouched the questions which concern the beings within the various domains (physical, chemical, physiological, psychological, sociological, etc.) of Being, the ‘object domains’ secured at any given time by the progress of positive science.” While it is true that phenomenology or fundamental ontology pursues Being rather than beings, it does so, can do so, only through investigation of beings; that its investigations would, therefore, leave “untouched” the questions concerning such beings, seems so improbable as to be impossible. The ontical and ontological dimensions of beings are inexorably fused, however much we may intellectually divide them. This does not mean that phenomenology overrides the autonomy of the “positive sciences”, but rather that, in shaping their inquiries, it cannot but help shape their conclusions.

possibility of understanding what things are according to the full scope of natural human reasoning. This means keeping “open the tendency toward the matters themselves”; to maintain an openness towards the possibilities of things. Heidegger’s phenomenology hinges upon persistently maintaining this openness, upon not closing itself off through the imposition of either “realist” or “idealist” interpretations of what is primary (1925: 224–25/166–67). When examination of the meaning and significance of beings is confined within the boundaries of a particular tradition, for instance, possibilities are eliminated, and research – genuine inquiry – suffocates. If we close the inquiry into *das Sein des Seienden* against further investigation, we close philosophy itself. Therefore, he claims (1927a: 35/60): “Phenomenology is our way of access to what is to be the theme of ontology, and it our way of giving it demonstrative precision. *Only as phenomenology, is ontology possible.*”

But as Heidegger will add shortly after the claim of phenomenology’s necessarily remaining open to possibilities, one may assume the questions of a tradition without it necessarily being “traditionalism”, i.e., an unthinking deference to the supposed answers or tendency of a tradition. If one has a “*genuine repetition*” of a traditional question, this (1925: 187/138) “lets its external character as a tradition fade away and pulls back from the prejudices.” A genuine repetition of the question of *Sein*, therefore, even if it has been “covered up” by an obstinate insistency within the tradition (cf. Heidegger 1927a: 6/25), can be retrieved successfully (this “retrieval”, incidentally and perhaps ironically – as it preserves what is worth preserving – is attained by “destruction”). Could we not revive the traditional questions, we could never “progress” in philosophy, for we could never penetrate deeper nor expand farther into the constitution of reality; could we not retrieve the genuine inquiries into *Sein*, there would be no point in reading anything, nor writing anything, as no one would be able to “relive” our questions.

Therefore, traditional questions asked in genuine repetition serve alongside contemporary inquest in the explication of the phenomena, and thence belong to phenomenology (Heidegger 1927a: 37/61):

That which is given and explicable in the way the phenomenon is encountered is called ‘phenomenal’; this is what we have in mind when we talk about “phenomenal structures”. Everything which belongs to the species of exhibiting and explicating and which goes to make up the way of conceiving demanded by this research, is called ‘phenomenological’.

Destruction as historical inquiry is therefore a crucial part of the phenomenological vision; it allows us to see things as they really are, and not simply as history would shape the lenses through which we see them; for in genuine

appropriation of historical questions, we are able to build upon the work of others in explicating phenomena.

Nevertheless, the catalogued historical philosophical pursuit of “being” and the traditional questions genuinely asked about the meaning of “being” remain always vague and inadequate because words, the signs of thoughts, in their unavoidable contraction to some limitation, cannot comprise that which supersedes every limitation. However, we may, and even *must* in some sense, signify *through* such limitations, that limitless possibility which undergirds the species-specifically human appropriation of referential meaning (Heidegger 1953a: 87/86):

Let us assume that there is no such fact [that the referential meaning of ‘Being’ is indeterminate and yet we understand Being as clearly differentiated from ‘not-Being’]. Suppose there were no indeterminate [referential] meaning of Being, and that we did not understand what this [referential] meaning signifies. Then what? Would there just be one noun and one verb less in our language? No. *Then there would be no language at all.* Beings *as such* would no longer open themselves up in words at all; they could no longer be addressed and discussed. For saying beings *as such* involves understanding beings *as beings* – that is, their Being – in advance. Presuming that we did not understand Being at all, presuming that the word ‘Being’ did not even have that evanescent [referential] meaning, then there would not be any single word at all.

The ordering of our intellectual capacity towards its own fulfillment always requires, at least from time to time, contraction to the determinate. The accomplishment of an understanding (or even a misunderstanding), terminates in the production of a concept to which a name can be put. In contrast, *Sein* is by its very nature incapable of being determined. This indeterminacy is implicitly understood in itself, and is, Heidegger claims the very ground for all human understanding; without some understanding of Being as inherently indeterminate (even if we do not fully or clearly understand what “Being” signifies), we could not understand anything in our species-specifically human way, and thus would have no language, no words as symbols of signification.

Consequently, if we are to have an inquiry fully-developed in the phenomenological method, not only must we “go to things themselves” as they are in the ontical order, but we must also consider them in the ontological dimension, i.e., have Heidegger’s phenomenological reduction of beings to Being (Heidegger 1924–25: 5–6):

Phenomenology means *phenomenon*: that which shows itself, and *legein*: to speak about. As so determined, however, phenomenology could be identified with any given science. Even botany describes what shows itself. The phenomenological way of consideration is distinguished by the determinate respect in which it posits the beings that show themselves and in which it pursues them. The primary respect is the question of the Being of these beings.

If an answer to the question of the Being of beings is requisite to the phenomenological understanding of beings, then some understanding of Being is also requisite. It is not enough, therefore, to bring beings back to the field of disclosure established with *Sein*, but one must also investigate *das Sein selbst*. This is accomplished through the “constructive” move whereby one brings oneself toward Being; the entry way to which is the ontological difference, the “not” between Being and beings, the doorway from the ontical to the ontological. How are we to traverse the no-thing of the difference? We cannot rely upon the rules of the ontic, of *des Seienden*; we need a grammar of *Sein*, of relational constitution. But the unveiling of an ontological grammar can only be attained by examining the actual existence of a being in the ontological dimension – that is, the being for whom its own Being is an issue (Heidegger 1927a: 12/32).

2.1.2 Reflexion

Consequently, phenomenological method requires a reflexive awareness. This is not an introspective awareness producing a direct knowledge of one’s ideas, nor is it an account of “first person experience” (a silly term; I can have second or third person *accounts*, but all *experience* is, of course, “first person”)¹³ but rather an awareness of one’s awareness. Such awareness does not involve a separation of the *anima* from *quod extra animam*, but instead recognizes the innate relativity of each to the other. For engaging the ontological, therefore, this reflexive move is essential. As Deely writes (1971b: 137):

From the very outset of the philosophical project, reflexivity, clearly recognized as such, must be taken as primary. That sphere toward which the phenomenological stance alone is directly and immediately oriented is the very Problem area which, under the title of Being, “all philosophy searches for with varying sureness and clarity.” From reflexion philosophy sets out to perceive, a-priori, what is immediate; and therefore the conviction is taken over (i.e., the assumption is made) that reflexion can, by turning back upon direct operations and their objects (which are grasped first in the mind’s “natural attitude” of spontaneity), fashion for itself in and through the latter an “object” that would be

¹³ Sheehan (2015: 129–30) somehow manages to recognize this truth without acknowledging the absurdity of the phrase: “The upshot of Heidegger’s phenomenological reduction is that we engage with things from a contextualized, first-person, embodied-experiential involvement with things, which inevitably makes sense of them. Even if I get information about a thing from someone else, it is still *I* who get that information in the first person.” Cf. Spiegelberg 1971: 668.

grasped beforehand (not temporally, to be sure) and grasped more immediately. The reflective stance phenomenologically defined, the mind's "second movement" rather than its "first (and spontaneous) movement," is for Heidegger the starting point of philosophy as a whole.

Deely raises two questions for us to pursue in understanding how reflexion brings us into the ontological. First, what is meant by the *a priori*? And second, what is this "second movement" of the mind, the reflective stance?

The *a priori* for Heidegger refers to the fundamental structures present in and making possible every disclosure of phenomena. In one sense, this meaning is taken from Kant. But where Kant locates the *a priori* structures of disclosure solely in the subjective constitution of the human mind – the pure intuitions of space and time, the categories of the understanding, the transcendental imagination, and the various synthetic operations performed among these – and therefore speaks of *a priori* knowledge or the construction of knowledge the content of which is construed through *a priori* bases, Heidegger refers only to the disclosure of the *a priori*. We may come to know the *a priori*, and we can discern the *a priori* basis for a disclosure, but the disclosures themselves are not *a priori* as prior to experience (Heidegger 1925: 101/73–74):

The apriori in Kant's sense is a feature of the subjective sphere. This coupling of the apriori with the subjectivity became especially pertinacious through Kant, who joined the question of the apriori with his specific epistemological inquiry and asked, in reference to a particular apriori comportment, that of synthetic apriori judgments, whether and how they have transcendent validity. Against this, phenomenology has shown that the apriori is not limited to the subjectivity, indeed that in the first instance it has primarily nothing at all to do with subjectivity. The characterization of ideation as a categorial intuition has made it clear that something like the highlighting of ideas occurs both in the field of the ideal, hence of the categories, and in the field of the real. There are sensory ideas, ideas whose structure comes from the subject matter's content (color, materiality, spatiality), a structure which is already there in every real individuation and so is apriori in relation to the here and now of a particular coloration of a thing. All of geometry as such is proof of the existence of a material apriori. In the ideal as in the real, once we accept this separation, there is in reference to its objectivity something ideal which can be brought out, something in the being of the ideal and in the being of the real which is apriori, structurally earlier. This already suggests that the apriori phenomenologically understood is not a title for comportment but a *title for being*. The apriori is not only nothing immanent, belonging primarily to the sphere of the subject, it is also nothing transcendent, specifically bound up with reality.

Heidegger consequently gives a fourfold characterization to the *a priori*: 1) it possesses a universal scope, applying to every disclosure; 2) it is indifferent to subjectivity, meaning that it does not reside in the subject (nor, for that matter,

in the object); 3) it is demonstrable in a simple intuition (or simple apprehension); and 4) it belongs not to beings but to *das Sein des Seienden* (Heidegger 1925: 102/75; cf. Heidegger 1929a: 171–76/132–36). The first two characteristics, the universal scope and indifference to subjectivity (and simultaneously the so-called “objectivity” of beings independent of observation), mean that the *a priori* is given in every instance of cognition, but not as the given object itself – since the given is always particularized. Rather, the *a priori* is the condition for the possibility of a disclosure pertaining not only to the nature of the subjective recipient of the disclosure, but simultaneously the objects disclosed. We can therefore speak of the *a priori* itself as common to all disclosures, and the *a priori* conditions of a specific disclosure as particular in themselves (e.g., the color, materiality, and spatiality Heidegger mentions, which give rise to the coloration experienced by a perceiver).

By the third characteristic, the simple intuition of the *a priori*, Heidegger indicates that the *a priori* does not hide as an “invisible” element requiring an inferential leap from the visible object perceived to the *a priori* as a separate object to be discovered anew (1925: 101–02/74):

Inasmuch as the apriori is grounded in its particular domains of subject matter and of being, it is in itself demonstrable in a simple intuition. It is not inferred indirectly, surmised from some symptoms in the real, hypothetically reckoned, as one infers, from the presence of certain disturbances in the movement of a body, the presence of other bodies which are not seen at all. It is absurd, to transpose this approach, which makes sense in the realm of the physical, to philosophy too and to assume a stratification of bodies and the like. The apriori in itself can be apprehended much more directly.

Nor, we can ourselves infer, does the simple intuition of the *a priori* require a nominalistic construction (cf. Heidegger 1925: 63–99/47–72 regarding ideation and categorial intuition as against nominalist positions). Rather, the intuition itself contains the *a priori*. It is not the whole content of such an intuition, but as an integral element present therein, a demonstrable aspect. One can separate out the *a priori* from the consideration only in an act of logical separation – as, for example, we can consider the extension of a surface apart from its color, despite every surface necessarily being colored – a necessity so intense that we can never imagine a color without it occupying a surface (or at least, an extended space). In other words, we can achieve only a *distinctio rationis*, or what Peirce called a discrimination (1867: EP.1.2–3), of color from extension – but one can never remove the *a priori* from either the intuition nor from the object intuited (Peirce’s “dissociation”).

The fourth characteristic, belonging to Being rather than to beings, defines the “prioriness” of the *a priori*: rather than being prior in the sequential ordering

of knowing or of substantial constitution, the *a priori* is prior inasmuch as it is ontological, rather than ontical (Heidegger 1925: 101/74). In other words, the *a priori* is the revealing itself, rather than the revealed. As a whole, these four characteristics guarantee that the *a priori*, as a foundational element of disclosure, cannot belong to the researches of positive science (Heidegger 1927a: 50/75) but only to phenomenological philosophy: for the *a priori* belongs to none other than the structures of exhibiting phenomena.¹⁴

The explicit revelation of the *a priori* requires a turn to the subjective constitution of the knower, i.e., a reflexive or second movement of the mind. This turn opens the door to the scientifically philosophical endeavor; for only the consciousness of oneself as standing in a relation to the known, and that relation being determinative of the knowledge of the known, can unlock the critical stance necessary. One could easily misunderstand this reflexivity as signifying an introspective insight into the self and unveiling the ideas themselves, as representative images, thereby making the ideas things in themselves. Once this introspective insight is posited, returning to the “extramental” becomes inherently problematic: for it sets up an unbridgeable chasm between two distinct domains. Modern philosophy, as a whole, toppled into this abyss, so-called empiricists and rationalists alike. Heidegger, therefore, sought to overcome the chasm, not by attempting to bridge it, but rather by not dictating terms which divided the “mental” and the “extramental” in the first place. Consequently, in the turn to the subjective constitution of the knower, the turn is not to an immanentized objectification of the self or of the concepts of the self as such, but rather, the turn is a reflective examination of the action proper to the subject as a knower,¹⁵ to the knower as essentially defined by its relation to the known. Such an examination reveals that the subject-as-a-knower is already outside of itself. It is in the light of this revelation that Heidegger does not speak of “the human being” in *Sein und Zeit*, but rather of Dasein.

¹⁴ One way in which this could be viewed is that the *a priori* is to Heidegger what was latently present as the common suffix in the triplex *modus essendi*, *modus intelligendi*, and *modus significandi* for Thomas Erfurt: the active structure of intelligibility which is towards another.

¹⁵ The non-introspective subjective turn is the hidden tradition common to most scholastic philosophy, though exemplified especially in Thomas Aquinas and John Poincot and their collective treatment of second intentions and the requirement of logic to scientific philosophy. See Kemple (2017: 89–142 and 216–76) for detailed exploration of these points.

2.1.3 Dasein

Heidegger distinguishes “Dasein” from traditional conceptions of philosophical anthropology, biology, and psychology (1927a: 50/75). These disciplines treat of the human being as something present-at-hand – that is, as a thing considered in its essence as extracted from the relations constituting its historical being, extracted from its particular context, or “de-worlded” (cf. McGrath 2006: 72). Heidegger does not disavow these treatments, which are concerned principally with the ontic dimension of knowledge, but for the phenomenological method seeking an understanding of *Sein*, the purview cannot be contracted to *des Seienden* as such. Thus (Heidegger 1927a: 42/67):

The ‘essence’ of this entity lies in its “to be”. Its Being-what-it-is (*essentia*) must, so far as we can speak of it at all, be conceived in terms of its Being (*existentia*). But here our ontological task is to show that when we choose to designate the Being of this entity as “existence”, this term does not and cannot have the ontological signification of the traditional term “*existentia*”; ontologically, *existentia* is tantamount to *Being-present-at-hand*, a kind of Being which is essentially inappropriate to entities of Dasein’s character.

As he goes on to explain throughout *Sein und Zeit*, the “to be” of Dasein is a kind of “ec-static” existence: a complex dynamic and progressively-unfolding reality which is characterized, on the one hand, as care (*Sorge*), and on the other as Being-towards-death (*Sein zum Tode*). This threefold characterization – Dasein, Care, Being-towards-death, can be summarily named the “intentional life of the human being” (cf. Deely 1971b: 88–110); or, as McGrath says (2006: 67), “Dasein is not a substance; it cannot be characterized as subsisting. It is not an in-itself but a for-itself, not *a being* in the sense of a thing, but a *to be*.” As Heidegger himself puts it (1925: 205/153): “This designation ‘Dasein’ for the distinctive entity so named does not signify a *what*. This entity is not distinguished by its what, like a chair in contrast to a house. Rather, this designation in its own way expresses the *way to be*.” Dasein cannot be rightly treated as a *what*, since it names rather a *mode*; thus, attempting to unveil the nature of Being by investigating the nature of the rational animal, the pure ego, a *res cogitans*, or a featherless biped will only result in a discovery of beings. Consequently, every copulative “is” used in describing Dasein identifies not an ontical characteristic but an ontological descriptor of its *how*, of the mode of intentional life.

Coextensive with its living intentionality, Dasein is identified with its possibility (cf. Heidegger 1925: 184/136) and with a singular possession of that possibility; it is an itself which is “for”, and not simply “in”. In other words, Dasein is constituted, and Dasein constitutes itself, through relations, both the actual

and the possible. This is true both in the attitude submerged within everydayness and that which adopts the phenomenological perspective. The totality of its relational context determines Dasein's "boundaries", such as they are. The encounter of beings comprised by this relational context unfolds not simply in the de-worlded, de-contextualized abstraction of theoretical thinking – the thinking of beings as present-at-hand – but rather in a fore-theoretical context, the ready-to-hand, marked by structures of temporality: proceeding and receding, appearing and withdrawing facticity. The fore-theoretical, which is not "fore" as chronologically prior, but prior in the constitution of an experience, provides the initial framework which makes possible the explicitly theoretical; and thus, though the theoretical is essential to the progress of knowledge and constitutes the distinctively-human interpretations on the basis of which Dasein unfolds its world, the fore-theoretical must be accounted for in the phenomenological process in order that we can get a grasp on what the theoretical is at all, and what its purpose is or ought to be.

It is to this end – understanding the constitution of the world as a whole – that Heidegger gives his "analysis of environing worldhood and worldhood overall" ("*Die Analyse der Umweltlichkeit und Weltlichkeit überhaupt*") in §15–18 of *Sein und Zeit*. Here, the focus is on the structures of disclosure as fore-theoretical and specifically in the attitude of everydayness. Within this discussion, we encounter a handful of German terms which translate poorly into English and require clarification: *Zeug*, *Verweisung*, *Umsicht*, *Bewandtnis*, and *Bedeut-samkeit*. Macquarrie and Robinson translate these as "equipment", "reference", "circumspection", "involvement", and "significance", respectively; Stambaugh differs in translating *Zeug* as "useful things" and *Bewandtnis* as "relevance". Each of these translations loses at least some part of what Heidegger indicates (not that there exist adequate single word, or even short-phrase, translations) or imports a connotation foreign to his meaning. *Zeug*, for instance, is a vague word (comparable to the English "stuff"), but lacks the specification of being outfitted which attends the English word "equipment"; but it is doubtful that a better word could be found. What is crucial for gaining the true understanding of what Heidegger means, however, is the context in which Heidegger describes his use of the term (1927a: 68/97, translation slightly modified):

Taken strictly, there 'is' no such thing as an equipment [*ein Zeug*]. To the Being of any equipment there always belongs a totality of equipment, in which it can be this equipment that it is. Equipment is essentially 'something in-order-to . . .' [*etwas um-zu*]. A totality of equipment [*Zeugganzheit*] is constituted by various ways of the 'in-order-to', such as serviceability, conduciveness, manipulability.

In the 'in-order-to' [*um-zu*] as a structure there lies a referral [*Verweisung*] of something to something.

Macquarrie and Robinson interpret this passage to signify that the term *Zeug* is used exclusively of a collective (1927a: 97, n.1); however, it seems that what Heidegger really has in mind is that the property of being a *Zeug* is not what belongs to the ontic structure of the thing itself in its own subjectivity – and thus Stambaugh’s translation is found even more unsuitable – but is due to its proprietary position within some referentially-constituted whole. Therefore, it is essentially not “*something* in order to”, but “*something in order to*”, defined not by its own constituent parts, but by the referential structure of some greater whole.

This brings us to the term *Verweisung*. As Macquarrie and Robinson rightly note, there is no clean translation (1927a: 97 n.2) in English for this word, which contains the root verb of *weisen*, meaning “to point”. Unfortunately, the translators also pair the translation of “reference”, which at least suggests the proper notion, with “assignment”. This suggests a constructivist connotation, certainly absent from Heidegger’s intention; that is, while the in-order-to does involve each equipmental item in a context of purpose, thereby bestowing some “assignment” on the item, the word itself suggests a deliberate, animal-bestowed purpose, when rather the inverse is true – the context gives assignment to the item *for* the individual. Thus *Verweisung*, as Heidegger uses it, indicates referral – a term which suggests the act more than the object, unlike “reference”, which is ambiguous – specifically as a change away from one thing to another thing by means of a pointing or a showing, a kind of relation, resulting in a disclosure about the “in order to” for some world-constituting cognitive agent.

Referral stands at the center of Heidegger’s phenomenological description of Dasein’s Being-in, for it is through referral that the “there” of the “in” is constituted, providing the “in-order-to” which makes what would be otherwise disparate entities, present-at-hand in the barest sense, into a meaningful totality. In the vision of concern (*Besorgen*), this referential totality (*Verweisungsganzheit*) is a totality of “equipment” (*Zeugganzheit*), i.e., of things specifically as designated for use. The “arising” of this equipmental totality is affected by signs (*Zeichen*). Importantly, Heidegger does not consider signs to be *things* as such, but rather *Zeug* which, by its activity of indication (*Zeigen*), brings into view the worldly character of some equipmental totality (cf. Geniusas 2012: 117). This “view” is named *Umsicht* – which receives the egregious translation of “circumspection”. While the Latin etymology of this English word matches part of the etymological signification of the German (“looking-around”), the connotation of “wariness” and “caution” which are attendant upon the English term make it entirely unsuitable to capture Heidegger’s meaning: the kind of vision which indeed looks around at things, not to be cautious of them, but to

see them as parts of the whole whereby each “thing” (*Ding*) is transformed into “equipment” (*Zeug*). For Dasein, *Umsicht* constitutes the *Umwelt* by discovering the equipmental referral of beings (Heidegger 1927a: 82–84/113–15).

Subsequently, the Being of beings which are ready-to-hand is described as *Bewandtnis*. Macquarrie and Robinson state this term to be “among the most difficult for the translator” (1927a: 115n2). Most uses of the term translate only into very rough English idioms. The two attempted translations – Macquarrie and Robinson’s “involvement” and Stambaugh’s “relevance” – are noble attempts. At the heart of Heidegger’s use is that beings, as ready-to-hand, are disclosed as meaningful or intelligible in the context of an equipmental totality by the referential constitution of their circumstances: the beings *with* which they are together *in* some totality. Beings are not understood thus as relatively independent substances, but as dependent parts, revealed through their relations.

Finally, this referentially-constituted totality does not simply absorb Dasein into a wholly-determining *Umwelt*. Rather, the totality is disclosed to Dasein through understanding – *Verstehen* – and therefore becomes imbued with a referential meaning (*Bedeutung*), giving the world *as* something; i.e., as seen through an interpretive lens of a “referential significance” (*Bedeutsamkeit*). Again, the term *possibility* (suggested in the suffix of *-keit*) comes to prominence; something about the vision which Dasein attains, with regard to the equipmental character of its enviroing world, is undetermined. How are we to understand, in clear and precise terminology, the nature of this world-constituting disclosive referential context in which Dasein always is? Turning to our scholastic paradigm, we find a term which applies neatly to Heidegger’s description of things seen only or at least predominantly in their use-relation contexts: *relativum secundum dici*¹⁶: that is, the innate relativity of things which is not relation itself, but rather a way in which we cannot help but express the things we encounter.

Additionally, because the totality of the *secundum dici* relational context of any given Dasein undergoes the constant shift attendant upon existence in material reality, Dasein’s boundaries are always subject to transience. Pursuit of *Sein* through the analysis of Dasein in a phenomenological method, therefore – in that method which “goes to the things themselves” as they actually are – obliges inclusion of this transient characteristic: that is, taking his orientation from both Scotus and Augustine, Heidegger makes of time, proximately, or *temporality*, fundamentally, a necessary element of the phenomenological account (McGrath 2006: 61) and therefore inseparable from the question of Being (1925: 442/319–20):

¹⁶ See 5.3. below.

The being of having-been is the past, such that in such a being I am nothing but the *future* of Dasein and *with it its past*. The being, in which Dasein can be its wholeness authentically as being-ahead-of-itself, is *time*.

Not ‘*time is*’ but ‘*Dasein qua time temporalizes its being*.’ Time is not something which is found outside somewhere as a framework for world events. Time is even less something which whirs away inside in consciousness. It is rather that which makes possible the being-ahead-of-itself-in-already-being-involved-in, that is, which makes possible the being of care.

The time which we know everyday and which we take into account is, more accurately viewed, nothing but the Everyone to which Dasein in its everydayness has fallen. The being in being-with-one-another in the world, and that also means in discovering with one another the world in which we are, is being in the Everyone and a particular kind of *temporality*.

The movements of nature which we define spatio-temporally, these movements do not flow off ‘in time’ as ‘in’ a channel. They are as such completely *time-free*. They are encountered ‘in’ time only insofar as their being is discovered as pure nature. They are encountered ‘in’ the time which we ourselves are.

As we can already see, this is not the temporality of an external time, or time ontically conceived, nor is it merely “internal time consciousness”. The notion of “temporalizing” – an almost barbaric word – suggests that Dasein “makes” things temporal; and indeed, it does, but only if we understand that the temporalizing is a product not of the individual, but of the world at which Dasein is in the center. Temporality is, as Heidegger sees it, something multimodal, varying according to the ways in which Dasein experiences being-in and which thereby determines our experience of “time”. We will see these notions of time and temporality more clearly below (2.3.3).

2.2 Phenomenology and the *Seinsfrage*

In the meanwhile, let us ask: why does the question of *Sein* need to be asked in a phenomenologically-structured inquiry at all? Why have the traditional attempts at understanding Being always, according to Heidegger, fallen short? Why this need for a re-thinking of human existence as “Dasein”? The ontological dimension of *Sein*, i.e., the relationality of being-towards, has remained hidden from the perspective of metaphysics because, in its illuminating of beings, it does not become the focus of our awareness; and metaphysics, the traditional domain of Being, consumes itself with the consideration of *essentia* and *existentia* (as the positive actuality of a being). Just as we do not see the light, but the thing illumined, so too we do not see *Sein*, but *Seienden*. The essential freedom of human intellection, which is the

proximate source of illumination, and the open field of opposedness, i.e., the medium in which the light comes to bear, are therefore occluded from our ordinary perceptions.

This hiddenness of *Sein* is twofold: on the one hand, the ontological dimension never shows itself in itself, either directly or through phenomena. This hiddenness Heidegger terms concealment. On the other hand, we ourselves conceal *Sein* not only as the illuminating ontological dimension, but also within the ontic dimension where *Sein* derivatively appears – that is, not as itself, in itself, but in the manifesting of beings. I call this human-generated concealment *obstinate in-sistent conceptual errancy*. In other words, because the attitude of everydayness requires that we not consider the disclosure of beings themselves, but rather treat them as equipment in a totality of what is ready-to-hand, we are ready to see them only as fits as a part into that totality. The more obstinately we comport ourselves to these beings in this way, the more thoroughly the dimension of *Sein* becomes hidden. Thus, while the former hiddenness of *Sein*'s innate concealment naturally follows from *Sein*'s nature, the latter in-sistent conceptual errancy, while it comes about almost inevitably and has a temporary necessity (cf. Heidegger 1947: 332–33/253), often becomes exacerbated by humans who seek dominion over beings: which is to say, the tendency of the human being not to approach the realities of the objects we encounter across an open field of opposedness, but with an obstinate perspective that denies or ignores things' natures in themselves and instead views them as objects for use in accordance with some predetermined plan (cf. 6.1 below) – a kind of willful ignorance which encompasses not only attitudes of physical or material dominance but also those of theoretical in-sistence.

2.2.1 In-sistence and language

This nature-dominating perspective emerged most clearly in the industrialization prevalent in the latter half of the 19th and early half of the 20th century. Such thinking subordinates considerations about what things are, independently of human cognition, to the planning of an environment in an extreme form, to the extent that even the human intellect itself becomes subservient. Such thinking Heidegger says (1953b: 15/14) is “a challenging, which puts to nature the unreasonable demand that it supply energy which can be extracted and stored as such.” This challenging may be incited by the desire to improve the condition of human life, to ease the burden of labor and/or to increase pleasure. Once adopted, however, such a challenge alters the relationship between human beings and φύσις. Rather than engaging the beings of nature as things

to be disclosed and understood in themselves, the challenge of technologized thinking to nature perceives the latter as a “standing-reserve,” i.e., a collection of resources to be used for human projects (cf. Heidegger 1924–25: 28; Maritain 1959: 3). Though this attitude towards beings entails some degree of revelation, it reveals only a very narrow slice; namely, a selectively incisive abstraction which cuts into the beings of nature, mentally dissecting them, to facilitate the extraction of their energy for use.

This challenging of nature and the beings found therein, Heidegger asserts, emerges as a dominant way of thinking since the beginning of classical physics (1953b: 22/21):

It remains true, nonetheless, that the human in the technological age is, in a particularly striking way, challenged forth into revealing. That revealing concerns nature, above all, as the chief storehouse of the standing energy reserve. Accordingly, man’s ordering attitude and behavior display themselves first in the rise of modern physics as an exact science. Modern science’s way of representing pursues and entraps nature as a calculable coherence of forces. Modern physics is not experimental physics because it applies apparatus to the questioning of nature. The reverse is true. Because physics, indeed already as pure theory, sets nature up to exhibit itself as a coherence of forces calculable in advance, it orders its experiments precisely for the purpose of asking whether and how nature reports itself when set up in this way.

The experimental framework of classical physics, of the empiriomathematical (or empiriometric) approach to investigation sets up in advance a conclusion for which it is looking. The question of its investigation, then, is not “What is the nature of this?” but “How can we make x do y ?” or “How can we achieve z with x and y ?” If one has reasonably ascertained the nature of the objects involved, such a question oftentimes becomes necessary; but when this kind of questioning, this kind of thinking which Heidegger terms the *Ge-stell*, “enframing”, comes to dominate, it undermines true philosophical thinking, for it ignores and distorts the nature itself. Natures are fragmented into their elements, and their elements perceived as means.

Because the method of the *Ge-stell* consists in the subjugation of the natural world to the designs of humankind (Heidegger 1953b: 28/28), “the impression comes to prevail that everything a human encounters exists only insofar as it is one’s construct. This illusion gives rise in turn to one final delusion: it seems as though the human being everywhere and always encounters only himself.” When technological thinking “holds sway,” i.e., becomes prevalent, humans begin to see things only insofar as they are objects for human use; objects’ existences in themselves (as things) are no longer objects sought for disclosure. Given a technological interpretation of φύσις, such that there is no essential difference between the product of φύσις and that of τέχνη – that the

former is simply an “autonomous artifact” – then perceiving the interior principle of a physical being, as something which exists in itself, produces no distinct good. As Edward Engelmann puts this (2007: 200), “Unlike the Aristotelian scientist, therefore, the mechanical philosopher is not interested in apprehending an inner principle for its own sake, since the inner principle of an autonomous artifact does not itself exist for its own sake. Rather, the mechanist is interested in finding the inner cause only for the sake of explaining the phenomenal effect for the sake of which the inner cause exists.” (Cf. Gadamer 1960: 70–71). In the terminology of *Sein und Zeit*, the readiness-to-hand of what is encountered within the world utterly prevails over and obliterates not only their presence-at-hand but their very abilities to be seen in their own presences. But this tendency towards a kind of Ge-stell also predominates in speaking, even and especially in the discourse which belongs to highly-educated specialists of every profession, the theoreticians.

Speaking – discourse as the linguistic expression of discerned meaning, whether it be with another person or with one’s self – has for its purpose the “letting something be seen” (Heidegger 1927a: 32/56):

that is, it lets us see something from the very thing which the discourse is about. In discourse (ἀποφάνσις), so far as it is genuine, *what* is said is drawn *from* what the talk is about, so that discursive communication, in what it says, makes manifest what it is talking about, and thus makes this accessible to the other party.

Genuine discourse discloses the reality of its object itself from itself, whereas, we infer, illegitimate discourse fails to reveal the reality but instead presents a falsehood which imposes a meaning on the object that is somehow improper – either to the object or to the context of the discourse (e.g., an outright lie or the fallacious rhetorical defense of *tu quoque*). Moreover, the letting-be-seen, if genuine, has a synthetic character – not in that the mind forms judgments of disparate concepts, as in the so-called epistemology of Immanuel Kant – inasmuch as it reveals the “togetherness” of a thing or of some totality. In other words, while words can express beings only in a limited fashion according to some particular aspect (regardless of whether such an aspect is essential or accidental to the being in question), genuine discourse nevertheless always intends to show the unity of the beings discussed with greater clarity than was previously possessed; genuine discourse allows a being to be seen not simply in the light of one or another distinct aspect, but as one thing underlying and unifying these distinct aspects (Heidegger: 1927a: 33/56):

And only *because* the function of the λόγος as ἀπόφανσις lies in letting something be seen by pointing it out, can the λόγος have the structural form of σύνθεσις. Here “synthesis” does not mean a binding and linking together of representations, a manipulation of psychical occurrences where the ‘problem’ arises of how these bindings, as something inside, agree with something physical outside. Here the συν has a purely apophantical signification and means letting something be seen in its *togetherness* with something – letting it be seen *as* something.

Yet this revelation, that of the unified identity of some being within a manifold of appearances, when expressed in some contracted form – any articulation – can also become mistakenly taken, despite its inherent limitation and limiting function, as adequately representative of some whole; a whole which remains, in fact, greater than that what the articulation directly signifies. Discourse, which in its purest function ought to be a progressive unveiling of the truth of things, becomes perverted into the portrayal of reality as what corresponds to the contracted content of our own ideas (cf. Heidegger 1930: 22/133–134). The attempt to demonstrate the “objectivity” – in the sense of conforming to some independent, “divine eye” view – of the objects of discourse establishes linguistic paradigms asphyxiating to the “letting-be” that is discourse’s proper function (Heidegger 1947: 317/242):

the public realm itself is the metaphysically conditioned establishment and authorization of the openness of beings in the unconditional objectification of everything. Language thereby falls into the service of expediting communication along routes where objectification – the uniform accessibility of everything to everyone – branches out and disregards all limits. In this way language comes under the dictatorship of the public realm, which decides in advance what is intelligible and what must be rejected as unintelligible.

In other words, when objects of thought are seized upon in a definitive manner (in the literal, etymological signification of “de finis”), so as to terminate the discursive inquiry, the freedom which allows for the possibility of correctness suffocates. While the public tyranny of political correctness is well-noted, the domination of conventionally-established paradigms of intelligibility is often more pervasive and therefore less noticeable. In some cases, wherein a divide exists between large and vocal groups, the confrontation over meaning is evident, as, for instance, between Christian theists and anti-theists whose oppositions often follow from mutually-perverse discourse which stands in obvious need of clarification. When the issues are more complex and less prominent in the average individual life, however – as in the difference of science and philosophy and their respective roles for human understanding – false narratives are often left unchallenged because no immediate need for challenging them is seen. Thus (Heidegger 1930: 23/134–35 [emphasis mine]):

left [in the sphere of that which is readily available], humanity replenishes its “world” on the basis of the latest needs and aims, and fills out that world by means of proposing and planning. From these man then takes his standards, forgetting beings as a whole. He persists in them and continually supplies himself with new standards, yet without considering either the ground for taking up standards or the essence of what gives the standard. In spite of his advance to new standards and goals, man goes wrong as regards the essential genuineness of his standards. He is all the more mistaken the more exclusively he takes himself, as subject, to be the standard for all beings. *The inordinate forgetfulness of humanity persists in securing itself by means of what is readily available and always accessible.* This persistence has its unwitting support in that *bearing* by which Dasein not only ek-sists but also at the same time in-sists, i.e., holds fast to what is offered by beings, as if they were open of and in themselves.

Having engaged beings ek-sistently, Dasein holds to what has been revealed in that engagement, in-sists, and in so doing, prevents further unveiling of those beings. We find this in-sistence in the history of philosophy in the modern way of ideas, where it was adamantly held that ideas themselves are the direct objects of our knowledge. The Cartesian attempt to treat of being by means of mathematical “entities” – to make a metaphysics of mathematics and to explain physics by mathematics alone (cf. Simon 1970; Gilson 1937: 176–97) – is a strong example of such myopic intellectual hubris. The notion that philosophical speculation guided by mathematics would supersede the Scholasticism of Thomas Aquinas or Duns Scotus and their followers was founded upon the mistake that truth in its most fundamental meaning consists, not in the revelation of Being, but rather in the narrow certitude of the precision possible only to objects abstracted with the highest degree of precision (Heidegger 1927a: 153/195): “Because understanding, in accordance with its existential meaning, is Dasein’s own potentiality-for-Being, the ontological presuppositions of historiological knowledge transcend in principle the idea of rigour held in the most exact sciences. Mathematics is not more rigorous than historiology, but only narrower, because the existential foundations relevant for it lie within a narrower range.” In other words, “the most exact sciences” study beings which are furthest removed from the reality of *das Sein des Seienden*; according to the narrowest possible conceptualization not of beings, substantial subjects, but of accidental modes of being, and most specifically quantitative abstraction. Likewise, as discussed in the introduction, many authors within neuroscience and cognitive science can be found discussing the nature of conceptual representation in terms of modal or amodal cortex activity, with neglect of the necessary purview of cenoscopic inquiry to determine what is meant by “conceptual representation” in the first place (e.g., Barsalou et al. 2003; Zwaan and Taylor 2006; Kiefer and Pulvermüller 2011; Fairhall and Caramazza 2013). Such perverse discourse, though still linguistic signification indicating something about the nature of reality, becomes distorted. Rather than

signifying *things* as they really are, the discourse signifies primarily the error of the one speaking, the error in his or her mind. It signifies the in-sistent holding of beings to the pattern one has concocted, limiting the possibility for *Sein* and its grasp by *Dasein*.

2.2.2 Hiddenness of *Sein*

There remains, however, a reality more fundamental than the realities of particular beings which is covered up, not only by false and arrogant declarations, but even in truthful declarations about beings: namely, *Sein* itself (Heidegger 1927a: 35/59):

Yet that which remains *hidden* in an egregious sense, or which relapses and gets *covered up* again, or which shows itself only *‘in disguise’*, is not just this entity or that, but rather the *Being* of entities, as our previous observations have shown. This Being can be covered up so extensively that it becomes forgotten and no question arises about it or its meaning.

The revelation of *das Sein des Seienden* cannot be explicated as an intelligible object in opposition to an intellecting subject. As Deely says (1971b: 112): “*Sein und Zeit* opened the inquiry into the ‘disclosure of Being,’ which means as we have seen ‘the unlocking of what forgetfulness of Being,’ i.e., the traditional interpretation of the Being-question as the question of beings (*res existentes*) as such, ‘closes and hides.’” We lose – or never discover – sight of *Sein* not because it is too far removed from us, too lofty or elevated, but rather because it is too close; it hugs us so closely, in fact, that we struggle to distinguish it as an object of our experience from ourselves, as experiencing subjects, as well as from the things themselves which give content to our experience (Heidegger 1947: 331/252):

Being is essentially farther than all beings and is yet nearer to the human being than every being, be it a rock, a beast, a work of art, a machine, be it an angel or God. Being is the nearest. Yet the near remains farthest from the human being. Human beings at first cling always and only to beings. But when thinking represents beings as beings it no doubt relates itself to Being. In truth, however, it always thinks only of beings as such; precisely not, and never, Being as such.

Contrariwise to beings, the *Sein* in question not only transcends the dichotomy of subject and object – a dichotomy which has always been more proper to particular grammatical structures than to philosophy (cf. Heidegger 1947: 314/240 and 1930: 28/140) – but in fact obviates it

altogether.¹⁷ For, despite its ubiquity, *Sein* never shows itself. It is not an object seen, nor a subject seeing, or even something belonging to one or the other. Rather, *Sein* is manifested in the revealing of others, in the phenomena which it brings to light; and in this very revealing, *Sein* itself is hidden. Consequently, it is encountered through beings, but never as some part “within” any being. Substances, likewise, or substantial natures, are never directly encountered either, for that matter; but a substance is more directly encountered than is *Sein*, for a substance is pointed at by its accidents; it is an object of reference and reveals itself as itself through others. *Sein*, in contrast, is found only in the “pointing at” itself, in the act of referencing. Therefore, the intentional characteristic of phenomenological investigation, the Dasein’s ek-sistence as towards things, must become self-reflexive in order to fulfill its task, and in so doing, discover its own proper grounding. In order to see *das Sein des Seienden*, or to fully see beings in their *Sein*, we must grasp beings not simply in the *Sein* which belongs to them in the sense of an *esse proprium* – as the mode or manner of being *in se*, as a subjective entity – but the inter- and even suprasubjective dimension by which and in which they are revealed.

Because *Sein* can never be separated out from beings, as though a distinct object of consideration in the pattern of a *res*, even phenomenology cannot ask

¹⁷ As Deely keenly pointed out through his career, if we are to grasp *ens* in its fullest possible extension, we need to examine beings not simply from the position of subject and object, but also from the modes of relation; that we cannot get a full sense of things by amalgamating individuals into a sum, but we must see the inherent interdependence of each being others, and, along with that, the nature of the relations themselves whereby such interdependence occurs (2007: 136): “This requirement that every finite being in order to be understood requires being referred in thought to many other things which the individual in question subjectively is not but cannot either be (now or previously) or be understood without, the later Latins called (another expression taken from Boethius) *relativum secundum dici*, ‘relation according to the way being must be expressed in discourse’, or *transcendental relation*, because relativity in this *secundum dici* sense applies to all the categories of *esse in*.”

“Thus, just as the traditional distinction between *inesse* and *adesse* exclusively and exhaustively divides the order of *ens reale*, so this later Latin distinction (as Poinsoot draws it) between *relativum secundum dici* and *relativum secundum esse* exhaustively and exclusively divides the prospective *ens primum cognitum* concept – the concept which initiates and permeates through the species-specific awareness of the objective world as distinctive of human animals – in a way which foregrounds in contrast with the *ens reale/ens rationis* distinction, which rather backgrounds relation as providing the common tie which unifies the ‘many ways in which being can be said’ insofar as being constitutes an object whole irreducible to *ens reale*.”

a pure and simple question of *Sein*, but must always do so with and through *des Seienden* (Heidegger 1947: 331/252): “The ‘question of being’ always remains a question about beings. It is still not at all what its elusive name indicates: the question in the direction of being.” Such beings are always encountered in the “world”, although the “world” is not the “realm of beings”; if we are to find the question in the direction of *Sein*, it therefore behooves us not simply to ask about beings, but in asking about them to ask about their “world”. Thus we will examine what Heidegger says as regards the “world” in which *Dasein* is to be found, and the manner of its discursive unveiling in and through the species-specific characteristic of *Dasein*, for (1947: 350/266) “‘world’ does not at all signify beings or any realm of beings but the openness of being.”

2.3 The phenomenology of Being-in-the-world

To recapitulate: because *Sein* is not a “thing” which can become an object but transcends the subject-object dichotomy, yet can be considered only through beings, the being most apt for a consideration of *Sein* is that to which *Sein* is made manifest: namely, the human person. To avoid conflation with the positive sciences which treat of a determinate essence of the human, however, Heidegger de-limits his purview and designates the subject of his inquiry “*Dasein*,” literally, “being-there.” The etymological significance of this denomination should not be overlooked. “*Dasein*” does not indicate any one aspect of the human – not quiddity or “what,” neither factual existence nor *actus essendi*; not substantiality, accidents, nor even the totality of these ontic predicates – each of which, or each related set of which, belongs to some specific scientific inquiry. Rather, “*Dasein*” signifies the characterizing encountering of *Sein* which belongs to the human being, which constitutes the human being as an ontico-ontological unity – or as a being which, in its ontic dimension, possesses an ontological mode of encounter (cf. Heidegger 1927a: 13/33) – and thus “*Dasein*” specifically points to the consideration of the possibilities of human existence in a manner antecedent to any conceptual or categorical divisions. It is a recasting of the conception of the human being, intended to unfetter our thinking concerning the human person, who is intrinsically, in and by the ontic or essential subjective constitution proper to itself, irreducible to that ontic structure, because that structure necessitates existence in the ontological dimension; the human being is essentially (ontically) existential (ontological). Put in scholastic terminology, we would say that the *esse naturae* of the human entails an *esse intentionale* inherently in potency to relations with all possible objects of

consideration, including itself; the structure of the *esse in* of the human being inevitably provenates an existence which is *esse ad* not only in the unconscious and unthinking relations which typify all beings, nor with the limitation of the environmental *Umwelt*, but with the awareness of the domain of *esse ad* itself (cf. Deely 2010a: 99–100). “Dasein” signifies the dimension of the human which, over and above the *Umwelt*, unfolds into an unrepeatable and unique *Bildendwelt* (i.e., “culturing-world” or the intersubjective development of the *Lebenswelt* [as this term is used by Deely], which two terms we use as near synonyms),¹⁸ through the encounters of *das Sein des Seienden*.

2.3.1 The meaning of world

This encountering of *Sein*, achieved only through encounters with beings, is what Heidegger means by stating that “Being-in-the-world” (*In-der-Welt-Sein*) is a basic state of Dasein. This “world” is the “there” of the being that is Dasein, the mode of being that in its possibilities can encounter *Sein*. Although “world”

¹⁸ This term, *Bildendwelt*, is my own neologism, taken from the German text of Heidegger’s *Die Grundbegriffe der Metaphysik*, as he elaborates the thesis that “Humans are world-forming,” i.e., “*der Mensch ist weltbildend*” (1929–30: 401/287), the “-bildend” sharing for its etymological root *Bildung*, one of the meanings of which is “culture”. I think this term adequately captures, as German seems so capable against the poverty of English, the species-specifically different “world” belonging to human beings, permeated as it is not only by *entia naturae*, but also by intersubjectively constituted *entia rationis*, recognized as such; not only beings which are presented on the basis of some subjectively-constituted and cognition-independent reality, but also those beings which are presented inter- and suprasubjectively through the cognitive and linguistically-communicative acts of human beings. What this term **fails** to capture is that the world of the human beings is not **strictly** cultural, but rather it incorporates natural beings into its own cultural development. The *culturing* world (keeping the verbal/adjectival form *-bildend* as opposed to the nominative form *Bildung*) of the *Bildendwelt* subsumes and in many cases elevates the environmental world of the *Umwelt*.

The term *Lebenswelt*, in contrast, is used in the same sense as by Deely, the “modeling system rendering physical surroundings ‘meaningful’ as objective world”; the “subjective correlate of *Umwelt* as objective world” (2010a: 155), i.e., the ability in perceiving the objects present in one’s environment, the objects of consciousness, not merely in the objective dimension whereby they are considered in light of their relation to the self, but the penetrative insight which considers them as subjects in their own right. We will use the term *Lebenswelt* to denote this fundamental distinction of the species-specifically human cognitive difference, in distinction from the alloanimal *Umwelt*. *Bildendwelt* will be used to signify the development of a cultural world, as a fluorescence of the *Lebenswelt*. The two do not signify a different reality, but different focus (*Lebenswelt* – specifically human, personal; *Bildendwelt* – cultural, development across individuals and generations) on the same.

principally signifies (1) the context of beings wherein a given Dasein lives and encounters *Sein* as the unifying, uniting factor which takes the manifestness of those beings as a whole, the referential totality of beings as illumined in *Sein* – what we have termed the *Bildendwelt* and within which we include the concept of the *Lebenswelt* – there are three other closely related meanings: (2) the totality of beings which can be present-at-hand (i.e., the things which can be perceived as things in their own right and not simply objects; in the terminology of Peirce’s “New List”, the things to which predicates can be applied as attempting to signify their reality as grasped within the present in general); (3) the *Sein* of those beings inasmuch as they are considered objectively, or things considered as objects in light of the possibilities which may be opened up for their use by Dasein but *not* in light of their own specific possibilities; and (4) the possibility of such an environment of not only objective consideration, but also the possibility of objects being grasped in some way as belonging to a whole (Heidegger 1927a: 64–65/93).¹⁹ The principal signification of “world” (1), as it is used in the phrase “Being-in-the-world,” in some way either depends on or includes these other meanings, and the experience of these others are enriched for Dasein by Dasein’s experience of the world meant in its primary signification. We will therefore reserve the term “world” for the first (1) meaning when used generally and therefore including the relation to the other three senses, and either “*Bildendwelt*” or “*Lebenswelt*” when used in explicit distinction from the others; “physical environment” for the (2) second; “*Umwelt*” for the (3) third (Deely 2011: 7; Heidegger 1929–30: 383–84/263–64); and “worldhood” for the (4) fourth (Heidegger 1929–30: 412/284; Heidegger 1925: 227–28/169).

In the *Umwelt*, where beings are interpreted as relative to the animal and thereby take on what Heidegger terms “readiness-to-hand,” beings are understood not as things in themselves, but as objects having the character of being-for-the-sake-of Dasein (1927a: 84/116):

When an entity within-the-world has already been proximally freed for its Being, that Being is its “involvement”. With any such entity as entity, there is some involvement. The fact that it has such an involvement is *ontologically* definitive for the Being of such an entity, and is not an ontical assertion about it. That in which it is involved is the “towards-which” of serviceability, and the “for-which” of usability. . . . But the totality of involvements itself goes back ultimately to a “towards-which” in which there is *no* further

¹⁹ Note that we have taken what is, at its core, Heidegger’s third sense for our first, but broadened it to include a relation to the other three senses. Though written close together in time, there is ambiguity in the terminology Heidegger uses concerning *Welt* and *Umwelt* in *Prolegomena zur Geschichte des Zeitbegriff* (1925), *Sein und Zeit* (1927a), and *Die Grundbegriffe der Metaphysik* (1929–30).

involvement: this “towards-which” is not an entity with the kind of Being that belongs to what is ready-to-hand within a world; it is rather an entity whose Being is defined as Being-in-the-world, and to whose state of Being, worldhood itself belongs [that is, Dasein].

Whenever we encounter beings such that they are disclosed as ordered to use, that use indicates or relates to something for the sake of which they are used. In the understanding of things as objects in this level of the world, the Umwelt, the thing-as-object enters into an “interobjective” dimension, inasmuch as Dasein, in its consideration of the object, does not consider the thing alone by as in a context of relations. If someone uses utensils to eat his dinner, the utensils have a being-towards the food, and the food has a being-towards his fulfillment of the desire for nourishment, and a desire for nourishment has a being-towards the continued existence of the human being – which opens up to another network of relations. In their involvement with one another (*Bewandtnis*), the utensils and the food both have a being-towards a that-for-the-sake-of-which, i. e., the being which has the character of “mineness”, of the awareness of ownership of other beings, of actions, and of the self. In other words, they are always characterized by incorporation into the referential totality of the animal (Heidegger 1925: 253/187):

the references [to enviring objects] are precisely the *involvements* in which the concerned occupation dwells; it does not dwell among isolated things of the enviring world and certainly not among thematically or theoretically perceived objects. Rather things constantly step back into the referential totality or, more properly stated, in the immediacy of everyday occupation they never even first step out of it.

While the awareness of objects as ordered towards the good of the self applies to alloanimals and human animals alike, there is however a fundamentally distinctive difference in the way in which this “other things being-for-the-sake-of” applies to Dasein: namely, that for Dasein (Heidegger 1927a: 84/117), “in its Being, that very Being is essentially an *issue*.” (Cf. Heidegger 1927a: 37–38/61–62).

2.3.2 Care

Having its own *Sein* as an issue for itself is the “primordial structural totality” of Dasein which Heidegger terms “care”, *Sorge* (Heidegger 1927a: 191/235). Unlike any particular states or activities such as fear, anxiety, wishing, or willing, care comprises the complete ontological horizon of Dasein’s being. In other words, care is the ontic foundation for the essentially ontological engagement

which characterizes Dasein. Care is, first, a pre-ontological interpretation Dasein has of its own being, carried out in a limited degree even in the realm of the animal Umwelt. It is a state of Dasein's being (Heidegger 1927a: 199/244) "which is already underlying in every case," i.e., in any particular instance where Dasein could be said to "take concern" or to "care for" something. But, second, because Dasein has not only its being as an issue, but its Being – because it is concerned not simply with the interpretation of beings as they are relative to itself (a sort of introverted intersubjectivity; a directing of a limited grasp of the possibilities of beings towards a fulfillment of the self, grasped on a merely pre-intellectual level), but also with its own existing (or *ek-sisting* as Heidegger often wrote to emphasize Dasein's innate connection to the "extra-mental" world) according to that sort of engagement of *Sein* which is proper to it – the care distinctive to Dasein transcends the Umwelt and takes account of the world in all its significations. Care is the basis upon which Dasein not only engages beings ontologically, but engages the ontological *Sein* itself, what allows for Dasein, as having its own *Sein* as an issue for it (meaning that the revelatory disclosure of experience is something that matters to and for Dasein), to grasp that its world is a specific modality of the ontological possibility of worldhood.

Despite its universal comprise of all possible ways for Dasein to be in a world, care is not a wholly undetermined state. Rather, it manifests itself only in the context of the world, provided first by the physical environment and second by the Umwelt. Care, too, arises in and takes its direction from the context of a referential totality. Consequently, Heidegger says that Dasein is *in* a world, such that care for Dasein means having its own *Sein* as an issue for it – including not only that which is inseparable from its own subjective constitution and its intersubjective interactions with those things that it considers only according to the objectivity of the Umwelt, but also the *Sein* of those things, whatever particulars they may happen to be notwithstanding, with which it is or will be inevitably related. In other words, the preposition "in" indicates that while Dasein may be the *sine qua non* of its own world, this world is not the product of Dasein as the result of an *esse est percipi* principle, but rather an independent-if-fluctuating reality serving as the ultimate foundation inseparable from Dasein's ontico-ontological existence. We must keep in mind the manifold significations of "world": the "there" in which Dasein is "placed" – the particular geographic or spatial dimensions and positions being significant for the individual but not determinative for the notion of the world in general – is an intricate system of beings which gives rise to the possibility of Dasein's *Sein*, through the multitudinous ways in which Dasein can engage with these beings. These possible engagements are dependent upon care, the basic ontological

structure from which Dasein, in its “there,” enters into the disclosure of *Sein* and gives rise to its own species-specifically world; in which, so long as it unfolds authentically, not only are the objects of the Umwelt involved as ready-to-hand, but are also understood or interpreted as belonging to the Umwelt inasmuch as the Umwelt is partially constitutive of the Lebenswelt.

Yet although the “there” of Dasein is not undetermined, and though the care of Dasein depends on that world of its placement, the *Sein* of Dasein in its “there” remains always undetermined for Dasein. Contrary to the world-placement of Dasein, the “thrownness” which we might also call a “being-from,” Being-in-the-world involves also a “being-towards.”²⁰ This being-towards is the possibility of having a mode of directedness toward *Sein*. It may be either authentic or inauthentic; the inauthentic being-towards having its mode in in-sistence, which can occur first by considering and interacting with beings in an everyday manner, the “natural attitude,” which fails to perceive the ontological dimension (Heidegger 1927a: 176/220):

On no account, however, do the terms “inauthentic” and “non-authentic” signify ‘really not’, as if in this mode of Being, Dasein were altogether to lose its Being. “Inauthenticity” does not mean anything like Being-no-longer-in-the-world, but amounts rather to a quite distinctive kind of Being-in-the-world – the kind which is completely fascinated by the ‘world’ and by the Dasein-with of Others in the “they”. Not-Being-its-self [Das Nicht-es-selbst-sein] functions as a *positive* possibility of that entity which, in its essential concern, is absorbed in a world. This kind of *not-Being* has to be conceived as that kind of Being which is closest to Dasein and in which Dasein maintains itself for the most part.

The natural attitude attends to the daily concerns which require we live and operate with things according to a kind of ready-to-handness. Contemplating eggs will never scramble them. This sort of inauthenticity, so long as it does not come completely to dominate Dasein, is a practical necessity which entails no obstinate obstruction of truth.

More pertinaciously, and perniciously, inauthentic being-towards may occur second by constricting the *Sein* of a thing to its “value” and thereby attempting to subjectivize the disclosure of beings (Heidegger 1947: 349/265):

To think against “values” is not to maintain that everything interpreted as “a value” – “culture,” “art,” “science,” “human dignity,” “world,” and “God” – is valueless. Rather, it is important finally to realize that precisely through the characterization of something

20 We avoid the term “projection” as it has become more closely associated with either the mischaracterization it received, on the one hand, from the philosophy of Jean-Paul Sartre or, on the other hand, its use by psychiatrists to describe a kind of the phenomenon of obstinate in-sistence, mentioned above.

as “a value” what is so valued is robbed of its worth. That is to say, by the assessment of something as a value what is valued is admitted only as an object for man’s estimation. But what a thing is in its Being is not exhausted by its being an object, particularly when objectivity takes the form of value. Every valuing, even where it values positively, is a subjectivizing. It does not let beings: be. Rather, valuing lets beings: be valid – solely as objects of its doing. The bizarre effort to prove the objectivity of values does not know what it is doing. When one proclaims “God” the altogether “highest value,” this is a degradation of God’s essence. Here as elsewhere thinking in values is the greatest blasphemy against Being. To think against values therefore does not mean to beat the drum for the valuelessness and nullity of beings. It means rather to bring the lighting of the truth of Being before thinking, as against subjectivizing beings into mere objects.

Just as the Ge-stell of a technologized thinking sees all things in the context of a subjectivized readiness-to-hand, so too the thinking of values reduces all things to their subjective importance, making of them no more than a mirror of one’s own feelings, rather than seeing them as they are in themselves. Contrariwise, the modality of an authentic being-towards ek-sists towards Being without in-sistent subjectivizing interpretations, resulting in the unfolding of the species-specifically Bildendwelt.

In other words, whatever the particularities of our own specified actually existing worlds constituting the “there” into which we are placed, we may move outward from the “there” towards, in, and through *Sein*, towards, in, and through the relations whereby beings are a whole (cf. Heidegger 1927a: 56–57/83–84 and 192/237).

2.3.3 Temporality

This moving towards an authentic appreciation of beings as a whole, united in *Sein*, unfolds temporally. Heidegger does not speak of the temporal primary in the conventional sense of time (the partial “destruction” of which concept, promised in the never-to-appear Part II of *Sein und Zeit* he carries out in *Die Grundprobleme der Phänomenologie*) – i.e., the ontic notion of time as the measure of motion, a measure which is the same regardless if one applies this ontic structure to “internal, subjective” time consciousness or to “external, ‘objective’” durational time (Heidegger 1927a: 326/374): “In our terminological use of this expression [temporality, *Zeitlichkeit*], we must hold ourselves aloof from all those significations of ‘future’, ‘past’, and ‘present’ which thrust themselves upon us from the ordinary conception of time. This holds also for conceptions of a ‘time’ which is ‘subjective’ or ‘Objective’, ‘immanent’ or ‘transcendent’.” Rather, the sense of temporality which Heidegger has in mind can only be

explicated through perhaps the most terminologically-intricate of all his texts (Heidegger 1927a: 326/374):

Coming back to itself futurally, resoluteness brings itself into the Situation by making present. The character of “having been” arises from the future, and in such a way that the future which “has been” (or better, which “is in the process of having been”) releases from itself the Present. This phenomenon has the unity of a future which makes present in the process of having been; we designate it as “*temporality*”. Only in so far as Dasein has the definite character of temporality, is the authentic potentiality-for-Being-a-whole of anticipatory resoluteness, as we have described it, made possible for Dasein itself. *Temporality reveals itself as the meaning of authentic care.*

In few places throughout *Sein und Zeit*, or the entirety of his oeuvre, for that matter, do the limits of ordinary language appear in Heidegger’s struggle for expressing some meaning as profoundly as they do here. First of all: *Entschlossenheit*, here translated as “resoluteness” – a term Macquarrie and Robinson note is etymologically connected to *Erschlossenheit*, “disclosedness”. The term “resolution” connotes a firmness of purpose, determination in the sense of unwavering commitment. Heidegger earlier describes resoluteness as (1927a: 298/344) the “*authentic Being-one’s-Self*” or “*authentic one’s-selfness*” (*eigentliches Selbstein*). This is not the cheap “being true to one’s self” mantra of pop-psychology, but rather the opposite of obstinate in-sistent conceptual errancy concerning what one is and has been. When we comport ourselves to beings according to a limited, determinate, and closed conception of them (whether this is a personally-held conception, or one rendered from submergence in *das Man*), we lose the distinctive character proper to Dasein: the ability to know things as they are. This loss is inauthenticity; it becomes anti-resolute inauthenticity when the being-so obstinately in-sistently comported-towards is oneself.

Secondly, “having been” is not the pastness of what is no longer present-at-hand, but rather the character of something belonging to the historical reality of Dasein experienced as present (cf. Heidegger 1927a: 328/376). When Dasein authentically engages the “having been”, events ontically past are rendered ontologically present and enter into the constitution of the “there”. Authentic “having been” is repetition in precisely the same way that a traditional question can be “repeated”, i.e., taken up again as an authentic way of comporting oneself, towards disclosing what is (Heidegger 1927a: 339/388). It is neither a re-living of the past, nor a making present something past as past (as a nostalgic dwelling), but a gathering, a resolving, of the history of oneself into a whole.

Third, and finally, in saying that this “having been”, as an element of authentic resoluteness, arises from the future, Heidegger signifies that the

projection towards possibilities for oneself is responsible for giving direction to whatever has existed as “having been”. In other words, the fundamental structure of being-towards, synonymous with the intentional life of the human being, undergoes a continual fluctuation such that the “authentic potentiality-for-Being-a-whole” (*eigentliche Ganzseinkönnen*) requires an appropriation of “having been” by “being-towards” (anticipatory resoluteness) which is the authentic mode of ontological temporality (cf. Heidegger 1927a: 327/375). This (1927b: 376/266) “original unity of the future, past, and present which we have portrayed is the phenomenon of original time, which we call *temporality* [*Zeitlichkeit*]” is the (1927b: 388/274) “*condition of the possibility of the constitution of the Dasein’s Being,*” to which “*constitution there belongs understanding of Being,* for Dasein, as existent, comports itself toward beings which are not Daseins and beings which are. Accordingly, *temporality must also be the condition of possibility of the understanding of Being that belongs to the Dasein.*” (Heidegger distinguishes temporality, as factually-experiential *Zeitlichkeit*, from thematically considered *Temporalität* – a distinction which English does not translate easily.)

When the phenomenological method is bent in reflection upon the intentional and historical life of the human being, the concept of “world”, *Welt*, emerges as essential; (1927b: 360/255, translation mine): “the *phenomenon of time*, conceived in an original meaning, *hangs together with the concept of the world* and, at the same time, *with the structure of Dasein itself.*” The world of Dasein is not merely an *Umwelt* – the objectification of the physical environment according to the relationally-dictating structures of an *Innenwelt* (or internal “psychological” constitution) – but both a *Lebenswelt*, by which we here mean a *personal* world which encounters objects as things, as well as a *Bildendwelt*, a world which subsumes the *Umwelt* into an ever-developing cultural web (Heidegger 1927a: 388–89/440):

In so far as Dasein exists factually, it already encounters that which has been discovered within-the-world. *With the existence of historical Being-in-the-world, what is ready-to-hand and what is present-at-hand have already, in every case, been incorporated into the history of the world.* Equipment and work – for instance-books – have their “fates”; buildings and institutions have their history. And even Nature is historical. It is *not* historical, to be sure, in so far as we speak of ‘natural history’; but Nature is historical as a countryside, as an area that has been colonized or exploited, as a battlefield, or as the site of a cult. These entities within-the-world *are* historical as such, and their history does not signify something ‘external’ which merely accompanies the ‘inner’ history of the ‘soul’.

Consequently, every being, as present in any way to Dasein, or towards which Dasein has a comportment, is present temporally (1927b: 453/318):

Temporality makes possible the Dasein's comportment as a comportment toward beings, whether toward itself, toward others, or toward the handy or the extant. Because of the unity of the horizontal schemata that belongs to its ecstatic unity, temporality makes possible the understanding of being, so that it is only in the light of this understanding of being that the Dasein can comport itself toward its own self, toward others as beings, and toward the extant as beings.

Therefore, it is on the basis of temporality (*Zeitlichkeit*), by which we engage a factual-experiential reality rather than the abstracted-theoretical, that a world can be formed in the constitutive-comporting of the intentional life of a human being. The species-specifically intersubjective human world of the *Bildendwelt* – temporal, changing, but possibly incorporating every aspect of beings' realities, of what they are in themselves (realizable in the explicit distinction between *Sein* and *die Seienden*, the ontological difference), what they have been and therefore what they can possibly be, including the socially-constituted aspects possible only in a society which produces a culture – is what phenomenology strives to unveil. The *Bildendwelt* is therefore the total structure of disclosure (one might say the governing relations of disclosure which exist as an instantiation of a fundamental speculative grammar), including the “having been” and “being-towards” of Dasein's historical existence both individually and among others. *Sein*, the illuminating of *Seienden*, illuminates not only the world of things, but the entire world of objects contained within the horizon of Dasein's purview. It is to this illuminating that we now turn.

3 *Sein* and knowledge

Heidegger's approach to *Sein* is twofold. On the one hand, he develops a positive account in *Sein und Zeit*, wherein he partly carries out the "destruction of traditional ontology" – that is, "ontology" in the sense of the study of *ens inquantum ens* or according to the highest causes – and seeks to replace it with the "fundamental ontology" (1927a: 13/34) we have just discussed, thereby forming a study of Being according as it underlies all species-specific experience of human beings.

The traditional ontology of Scholasticism seeks an ultimate resolution of all beings into the first cause of their existence in the order of substantial constitution, and thereby has a resolution *secundum rationem* to *ens inquantum ens* (the subject of metaphysics) and a resolution *secundum rem* to a first cause (God). The traditional ontology of modernity seeks a resolution of all things to a first principle of knowledge providing certainty and verification of the knower truly grasping the known. Resolution, a technical term of Scholasticism, means here the demonstration of coherence and continuity in accord with principles. Something which cannot be resolved to a first principle signifies an incoherence: either in what one has taken as a principle, or in the understanding of the particular found to be irresolvable. Thus Scholasticism's ontology attempts a demonstration of the world's continuity with a creator; modernity's ontology attempts a demonstration of the world's continuity with a self.

Heidegger's fundamental ontology, by contrast, seeks resolution only into that first principle of knowledge, perceived by Thomas Aquinas (1225–1274) and named by John Poinsett (1589–1644) as *ens ut primum cognitum*: being as first known (1633: q.1, a.3). That is, if we are to understand Heidegger we must always keep in mind that when he speaks of Being, *Sein*, of ontology, he is speaking not of being considered in the traditional concept of *ens inquantum ens*, or in terms of a fundamental existential principle (first in the order of substantial constitution, first in terms of the causal order of reality) but of being considered as *primum cognitum*, as the fundamental intentional principle, first in the order of human beings' innate openness to and apprehension of all beings and simultaneously first in the fact of beings' capacity for presence to cognitively apprehensive entities. *Sein* as the principle of resolution militates against both traditional ontological conceptions, that is, the Cartesian subjectivism and the Scholastic "objectivism", for each tradition attempts (or, at the very least, easily lends itself to) a reduction of the essential transcendence of *Dasein* to one or another principle of the totality of experience, either the subjective principle (the *cogito*) or the "objective" principle (God). This purpose of Heidegger's, discovering the meaning of *Sein*, may be easily

lost inasmuch as *Sein und Zeit* – as do all of his early, important works, including *Die Grundbegriffe der Metaphysik*, *Die Grundprobleme der Phänomenologie*, *Vom Wesen des Grundes*, *Kant und das Problem der Metaphysik*, and *Die Frage nach dem Ding* – unfolds against the backdrop of the ontotheological critique and the destruction of traditional ontology.

On the other hand, Heidegger's question of *Sein* also takes a negative formulation, that is, in his consideration of *das Nichts*, the Nothing, as a fundamental, primordial condition of human experience most easily described as the essential possibility, always in some sense prior to any actuality, of intentional existence. In a way, this seemingly negative approach, though itself more opaque than the positive approach taken in *Sein und Zeit*, nevertheless better illuminates Heidegger's understanding and its partial compatibility with the Thomistic tradition, as well as with the Peircean Categories.

Therefore, to see the application of Heidegger's phenomenological methodology in pursuing the question of *Sein*, we will proceed in three steps. First, we will examine *Sein* as a principle of illumination, the function of *Sein* as revealing-source of truth, and develop the understanding of *Sein* itself through its unfolding in experience. Second, we will look at Heidegger's depiction of *das Nichts* as an alternative approach to the question of *Sein*. Finally, we will conclude this chapter by demonstrating where the ontotheological critique, in Heidegger's own pursuit of *Sein* as inexactly parallel to *ens primum cognitum*, results in an unsatisfactory answer.

3.1 Illumination, unfolding, and meaning

How is *Sein* to be conceived? As primordial, it cannot be defined; as what is "nearest", it cannot be held at arms' length and examined as an object. It is not merely the fundament of all experience, but what permeates every aspect of experience. Thus, its meaning is best grasped through acts of cognitive discursion themselves. We discover the grammar of experience, the ontological grammar, through examining the bases of experience. We did this in the prior chapter by examining the phenomenological method of Heidegger; here, let us turn to the practice of phenomenology itself.

3.1.1 Illumination

To open a path for discovering the "ontological grammar" Heidegger seeks, we should begin by examining his meditations on truth. In his early works, he

develops a notion of truth which provides a key avenue to his fundamental ontology – that is, an ontology not of beings as beings, nor as towards resolution into a divine principle, but an ontology of *das Sein des Seienden*, of the intentionality whereby things become known. Accurately formulating Heidegger's notion of "truth" is essential. As he says in *Sein und Zeit* (1927a: 230/272), "The Being of truth is connected primordially [ursprünglichen – 'originally'] with Dasein." The ontological dimension of truth has a primordial or originary connection with Dasein. But what is the essence of truth itself? That is, what is it that distinguishes every truth as truth?

In *Vom Wesen der Wahrheit*, Heidegger begins by examining the "usual concept of trueness", *der geläufige Begriff der Wahrheit* (1930: 6/137).²¹ This consists in the "accord" of one thing with another, for instance (Heidegger 1930: 7/137): "Genuine gold is that actual gold, the actuality of which is in accordance with what, always and in advance, we 'properly' mean by 'gold'." This is an accordance of a thing, *die Sache stimmt*, with what we mean, with the concept being thought. More principally, however, we tend to say that our statements or propositions are true or false – that is, that they somehow do or do not accord with the thing, with the reality that is outside the mind. This twofold accordance, both the accordance of thing-to-concept and the propositional, of statement-to-thing(s), is expressed by the traditional definition of truth: *veritas est adequatio intellectus et rei*. This traditional definition is itself twofold. On the one hand, there is the *adequatio intellectus ad rem*, the conformity of a created mind to the reality of some thing; thus, a mind is said to be true, or to have truth, when it conforms with the thing, grasping it as it is or expressing that grasp through a proposition. On the other hand, there is the *adequatio rem ad intellectus*, the conformity of a thing to an intellect (Heidegger 1930: 7–8/138) – which is not the nature-giving judgment of the Kantian pure categories of the understanding, but the creative activity of the Divine Intellect: what things are is determined by the conception of the God who creates them. This twofold application of the definition of truth is or has been interpreted, in the "Christian theological belief", to mean that the possibility of a human intellect's accordance with a thing is guaranteed by the conformity of that thing

²¹ Note that, though we for the most part follow the translation by John Sallis in *Pathmarks*, we translate *Wahrheit* in some instances as "truth" and in some others as "trueness" – this latter better encapsulates the sense of essentiality after which Heidegger is asking. We can say that something is a truth or is the truth, but we never say that something is a trueness or is the trueness. Additionally, we translate *Sache* not as "matter" but as "thing", so as to clarify the connections Heidegger makes with the traditional definition of truth, *veritas est adequatio intellectus et rei*, where "*res*" is translated as "thing".

with the Divine Intellect (Heidegger 1930: 8/139): “*Veritas as adaequatio rei (creandae) ad intellectum (divinum) guarantees veritas as adaequatio intellectus (humani) ad rem (creatam).*” Here we see the hint of the Scholastic *resolutio ad Deum*, the resolution which Heidegger rejects. Given an absence of the Divine, this notion of the conformity of things to the intellect may still be applied, in the sense of the plan of a worldly-reason; and there, perhaps, a hint of the modern *resolutio ad se*.²² The accordance expressed by the definition of *veritas est adaequatio intellectus et rei*, Heidegger says, has a common-sense clarity and acceptance; but, he protests, do we really know what is meant by this accordance? What does it mean for two things to be in accord?

Indeed, there is a profound strangeness in the accordance of an intellect, or of knowledge possessed by the intellect, *Erkenntnis*, with a thing: the intellect, as well as any accidents of it, and the thing to which it corresponds are quite evidently different in the manner of their outward appearance. In contrast, it is clear to see how two coins, as material, concrete, sensible entities, accord with one another (Heidegger 1930: 10/140): “We say, for example, considering two five-mark coins lying on the table: they are in accord with one another. They come into accord in the oneness of their outward appearance. Hence they have the latter in common, and thus they are in this regard alike.” The basis of the accordance is evident between two material things: two coins, particularly if they are of the same denomination, are said to be the same inasmuch as they accord with one another. They have roughly the same weight, size, shape, coloring, and imprinted images, and power of economic value in a stable societal context. On the contrary, when we say that a statement (or a concept, for that matter) is in accord with the thing, we must ask (Heidegger 1930: 10–11/140):

wherein are the thing and the statement [*Aussage*] supposed to be in accordance, considering that the *relata* are manifestly different in their outward appearance? The coin is

²² Heidegger does not develop this notion much here, and this leaves an ambiguity. On the one hand, the “worldly-reason” might be interpreted as something intrinsic to the structures of the world – something like the laws of physics – while on the other hand, it might mean a kind of planning by rational agents, which seems readily adaptable to his later concept of “technological thinking”, the *Ge-stell*, which presents itself as a kind of ubiquitous perceiving of things only as ready-to-hand in an equipmental framework; i.e., that all things are perceived only according to their practical use and not in their essential being; a mode which, when pervasive, fits into what we might call an “obstinate in-sistence” (Cf. Heidegger 1930: 23/150): “The inordinate forgetfulness of humanity persists in securing itself by means of what is readily available and always accessible. This persistence has its unwitting support in that *bearing* by which *Dasein* not only *ek-sists* but also at the same time *in-sists*, i.e., holds fast to what is offered by beings, as if they were open of and in themselves.”

made of metal. The statement is not material [*stofflich*] at all. The coin is round. The statement has nothing at all spatial about it. With the coin something can be purchased. The statement about it is never a means of payment. But in spite of all their dissimilarity, the above statement, as true, is in accordance with the coin. And according to the usual concept of truth this accord is supposed to be a correspondence. How can what is completely dissimilar, the statement, correspond to the coin? It would have to become the coin and in this way relinquish itself entirely. The statement never succeeds in doing that. The moment it did, the statement would no longer be able, as a statement, to be in accordance with the thing. In the correspondence the statement must remain – indeed even first become – what it is. In what does its essence, so thoroughly different from every thing, consist? How is the statement able to correspond to something else, the thing, precisely by persisting in its own essence?

We might rephrase this difficulty as such: given that truth consists in an *ad-equatio intellectus et rei*, how are these two, *intellectus* and *res*, manifestly different in their modes of being, made to be somehow the same? It is worth noting at this point that Heidegger does not abandon the usual conception of truth – the correspondence of intellect and thing – but rather that he continues his search for the essence by looking not at the most proximate definition, but at the existential conditions which allow for it to occur; he wants to discover why it is that truth is manifested in such accordance.

Consequently, Heidegger goes on to investigate the “inner possibility of accordance” and the “ground of the possibility of correctness”: that is, what it is within the human being that allows the formation of statements capable of signifying things without having a “thing-like similitude”, *dinghaftes Gleichwerden*, i.e., the similitude belonging to things in the order of their subjective constitution. This “inner possibility of accordance” is that as-yet-unknown ability which allows our statements to be in some manner the same as the things which they express; or, considered from the other *relatum*, for things to be such that they accord with what is meant in statements or by concepts. This unknown ability, Heidegger states, relies upon the pre-senting (or “fore-standing”) of a thing so as to allow it to “stand opposed” as an object, i.e., to “objectivize” (1930: 11/141): *Vorstellen bedeutet hier... das Entgegenstehenlassen des Dinges als Gegenstand*. Note that *Gegenstand*, sometimes indiscriminately translated as “subject”, signifies here in its etymology and its nominalization – “[what] stands against”, a point of which Heidegger was well aware (1935–36: 107/137):

What has been said also makes clear that not only is knowing (*Erkennen*) twofold, but that the knowable (*Erkennbare*), the possible object (*Gegenstand*) of knowledge, must also be determined in a twofold way in order to be an object at all. We can clarify the facts of this case by examining the word *Gegenstand*. What we are supposed to be able to know must encounter us from somewhere, come to meet us. Thus the ‘*gegen*’ (against) in *Gegenstand*. But not just anything at all that happens to strike us (any passing visual or

auditory sensation, any sensation of pressure or warmth) is already an *object* (*Gegenstand*). What encounters us must be determined as standing, something which has a stand and is, therefore, constant (*beständig*). Nevertheless, this only gives us a preliminary indication of the fact that the object must obviously also be determined in a twofold way.

This being of the object as “what stands against” is the same notion as is found in the Latin term *obiectum* (cf. Deely 2009: 9–15). Etymologically derived from *obicio*, from *ob* (“in front of”, “in the way of”) and *iacio* (“to throw”), the *obiectum* – “what is thrown in front of” – is not necessarily that which is considered as a thing in itself (*Ding an sich; res ipsa*), but rather that which is considered as in its relation to the “subject”, i.e., in this case, as related to the knower.

This allowing-to-stand-opposed (*Entgegenstehenlassen*) of the thing such that it is an object, whereby the pre-sentative (*Vor-stellen*) statement is related to the thing, is “the accomplishment of that bearing [*Verhältnis*] which originally and always comes to prevail as a comportment [*Verhalten*]” (Heidegger 1930: 12/124) and is always in a determinate mode. A bearing, *Verhältnis*, is a fundamental kind of being-towards which is made into a particular and determinate being-towards, a comportment, *Verhalten*. When we allow something to stand opposed to ourselves as an object it results in a determinate mode of “holding” that thing.²³ This comportment – that is, a determinate manner of directing ourselves towards beings, across an “open field of opposedness” – attempts presenting beings as they actually are. Thus, we have to consider them in some way according to their otherness and, as specificative objects, they must also be considered in the manner in which they present themselves to us, and not simply as we would have them be presented. An “open field of opposedness” is what allows us to comport ourselves towards other things such that they are allowed to show themselves in their specificative objectivity. This is what Heidegger means in

23 *Verhalten* suggests by its etymology, though there is a wide diversity of possible meanings for the prefix *ver-*, a resultant (*ver*) holding (*halten*), and thus a confinement or restriction of that which is held. (Cf. Heidegger 1929–30: 397/274): “only where there is the manifestness of beings as beings, do we find that the relation to these beings necessarily possesses the character of *attending to ...* whatever is encountered in the sense of *letting it be* or *not letting it be*. Only where there is such letting be do we find at the same time the possibility of not letting be. Such a relation to something, which is thoroughly governed by this letting be of something as a being, we are calling *comportment* [*Verhalten*], in distinction from the behaviour of captivation. But all comportment is only possible in a certain restraint [*Verhaltenheit*] and comporting [*Verhaltung*], and a stance [*Haltung*] is only given where a being has the character of a self, or, as we also say, of a person.”

saying (1930: 12/141) that “all comportment is distinguished by the fact that, standing in the open region, it adheres to something opened up *as such*.” Things do not open themselves up to us in these “open fields” completely and wholesale, but in this or that way, as one could be comported towards two different dogs doing the same activity as either fearsome, as when an angry pit bull comes charging and barking; or cute, as when a Welsh Corgi growls. Yet this comportment is not determined solely by the specificative objectivity in which the thing presents itself, but also by the one so-comported; someone with a traumatically-induced fear of dogs can find even the miniscule danger posed by the Welsh Corgi to be intimidating. In other words, this is not truly an “open field”; it is closed off by a certain prejudicial attitude which inhibits the thing from being presented as it is in itself. Yet the ability to comport ourselves is still obscure: the opening of the object as such, *der Gegenstand als solches* – which is to say the relatedness of “subject” (or knower) and “object” (or known) on the basis of a psychologically subjective preconditioning to the interpretation of the specificative objectivity of the thing itself – refers to the instantiation of such comportment, but not its grounding. The possibility of the sameness of a statement and the thing, the corporeally manifested sign of such sameness, remains unknown. Without this ability explained, we cannot yet say why some statement accords while another does not.

Thus, Heidegger makes the surprising claim that the inner possibility of accordance, which is the inner possibility of correctness, i.e., of presenting things as they actually are, is freedom. This freedom, however, is not the mere “human caprice” to decide what things are; instead, (1930: 15/144) it “now reveals itself as the letting-be [*Seinlassen*] of beings [*Seiendem*].” This is not the “letting be” of a common parlance, in which things are ignored or neglected, but rather what Heidegger calls engaging oneself (or “letting oneself be with”) with beings (1930: 15/144): “To let-be is the self-engagement [*Sicheinlassen*] with beings.” To engage oneself with beings, to “become involved” with them, is not involvement in the sense of being a busybody or of a volunteer in a cause or a movement. Rather (Heidegger 1930: 16/144):

To engage oneself with the disclosedness [*Entborgenheit*] of beings is not to lose oneself in them; rather, such engagement withdraws in the face of beings in order that they might reveal themselves with respect to what and how they are, and in order that presentative correspondence might take its standard from them.

That is, we engage ourselves in the disclosure, the unconcealment, of beings as they are in themselves, by our own natural mode of being: by ek-sistent

dwelling.²⁴ This disclosure is signified originally, Heidegger claims, in the Greek word for truth, ἀλήθεια, which he defines as the more literal “uncovering”.²⁵

In other words, the freedom of human beings is what allows for humans to allow beings to reveal themselves, or to be revealed, for what they really are. We are not fully determined by either the particular, material limitations upon any actual *quid* or “what” – that is, those limitations which are attendant upon the involvement of material potency which consists in being always subject to the reception of a distinct form or different accidental forms – nor by the determinations of our own psychological subjectivity, the unique and individualized complex of perceptions, thoughts, and neurological structures which have shaped our personality, through which we interpret the things which are presented to us. Rather, because we are intellectual beings and therefore capable of seeing beings as they really are, we are free from the constraints of our own perception.

In juxtaposition to this revelation of truth as the unconcealment of reality, Heidegger considers the essence of untruth, first as concealment and secondly as errancy. The first of these is fairly obvious: if truth is unconcealment, then untruth must be concealment. Concealment considered generally, however, is not falsity, but rather the antipodal antecedent to truth; what is unconcealed must first in some way be concealed (Heidegger 1930: 21/148): “Concealment denies ἀλήθεια of disclosure and yet does not render it στέρησις (privation), but

24 The hyphenation of *Ek-sistent* emphasizes the “standing outside” of the human as *Dasein*; the “there” of “being-there” is the world of things with which we may engage. This sense of existence is distinct from the Latin *existentia*, i.e., *esse* or the *actus essendi*. Rather, in Heidegger’s notion there is a strong shadow of Aristotle’s human soul being in some way all things; by the *ek-sistent* mode of *Dasein*, human beings are able to engage with beings as they really are.

25 Few points are as essential to understanding Heidegger as is that concerning his interpretation of ἀλήθεια. Thomas Sheehan’s 2015 book, *Making Sense of Heidegger*, discusses three key ways in which Heidegger uses the term. Since a thorough investigation cannot be undertaken here, I point the reader to Sheehan (2015: 25–26) and these key texts: (Heidegger 1927a: 219–20/261–63 especially 219/262): “The ἀλήθεια which Aristotle equates with πράγματα and φαινόμενα in the passages cited above, signifies the ‘things themselves’; it signifies what shows itself – entities in the ‘how’ of their uncoveredness.” (1927a 220/263): “Moreover, the ‘definition’ of ‘truth’ as ‘uncoveredness’ [Entdecktheit] and as ‘Being-uncovering’ [Entdeckendsein], is not a mere explanation of a word. Among those ways in which *Dasein* comports itself there are some which we are accustomed in the first instance to call ‘true’; from the analysis of these our definition emerges.” Note that in *Vom Wesen der Wahrheit*, Heidegger prefers the term “Entborgenheit” (1930: 21/148), “deconcealment”, in opposition to the term “Verborgenheit”, “concealment”. I believe this change represents a slight linguistic development but a conceptual continuity.

rather preserves what is its most proper characteristic.” We possess truth only by engaging with beings in such a way that the Being of their being, which is at first concealed both by the infirmity of our own intellects and by the common-sense opinions which we take for granted, might be disclosed, unconcealed. “Truth (uncoveredness) is something that must always first be wrested from entities. Entities get snatched out of their hiddenness. The factual uncoveredness of anything is always, as it were, a kind of *robbery*. Is it accidental that when the Greeks express themselves as to the essence of truth, they use a *privative* expression – ἀ-λήθεια?” (Heidegger 1927a: 222/265; cf. Sheehan 2015: 71–85).

The second account of untruth, errancy, is a bit more complex and obscure. Errancy is not simply being incorrect, but a kind of wandering; in comporting ourselves to beings, we engage with them across that open field of opposedness within limitations: engaging the *Sein* of a goat, for instance, precludes (so long as we are engaged) the engagement of the *Sein* of Dasein. Thus, Heidegger states, by ek-sistent engagement, we also become in-sistent. That is, we stand outside of ourselves, but in one thing, one way, at a time. Moreover, if we take some particular object of engagement to be in some way determinative of the ways in which we may engage others, our ek-sistence becomes, in a way, obstinately in-sistent. Nevertheless (Heidegger 1930: 24–25/151):

By leading them astray, errancy dominates the human through and through. But, as leading astray, errancy simultaneously contributes to a possibility that humans are capable of drawing up from their ek-sistence – the possibility that, by experiencing errancy itself and by not mistaking the mystery of Da-sein, they *not* let themselves be led astray.

In other words, errancy, the indeterminacy of the comportment whereby Dasein holds itself in relation to an object of understanding, experienced in itself, reveals the mystery which underlies Dasein’s ek-sistential reality.

Heidegger concludes *Vom Wesen der Wahrheit* with the paradoxical-seeming statement that the essence of truth is the truth of essence. However, this inversion is not, he says, to invoke the specter of paradox, but rather to point to this: that disclosure of a being as it actually is consists in grasping its mode of Being – what he calls a “sheltering that lightens” (Heidegger 1930: 28/153–54):

The question of the essence of truth arises from the question of the truth of essence. In the former question essence is understood initially in the sense of whatness (*quidditas*) or material content (*realitas*), whereas truth is understood as a characteristic of knowledge. In the question of the truth of essence, essence is understood verbally; in this word, remaining still within metaphysical presentation, Being is thought as the difference that holds sway between Being and beings. Truth signifies sheltering that lightens as the basic characteristic of Being. The question of the essence of truth finds its answer in the proposition *the essence of truth is the truth of essence*. After our explanation it can easily be

seen that the proposition does not merely reverse the word order so as to conjure the specter of paradox. The subject of the proposition – if this unfortunate grammatical category may still be used at all – is the truth of essence. Sheltering that lightens is – i.e., lets essentially unfold – accordance between knowledge and beings... Because sheltering that lightens belongs to it, Being appears primordially in the light of concealing withdrawal. The name of this lighting is ἀλήθεια.

To be a sheltering that lightens: that is, to enclose and thereby distinguish; to exclude other objects from the light and thereby illumine one object all the more brightly. This means that Dasein is itself the locus of “truth”, for Dasein is the “Being-uncovering”, *Entdecken-sein* which uncovers, i.e., lightens, illumines, or clears the way for manifestation of the beings which are within-the-world. Those beings are themselves are “secondarily true”, as the “Being-uncovered”, *Entdeckt-sein* (Heidegger 1927a: 220/263):

Uncovering is a way of Being for Being-in-the-world. Circumspective concern, or even that concern in which we tarry and look at something, uncovers entities within-the-world. These entities become that which has been uncovered. They are ‘true’ in a second sense. What is primarily ‘true’ – that is, uncovering – is Dasein. “Truth” in the second sense does not mean Being-uncovering (uncovering), but Being-uncovered (uncoveredness).

What is the significance of this definition of “truth” as Being-uncovering or Being-unconcealing? This definition, Heidegger says, does not “shake off” the traditional correspondence definition, but rather appropriates it. That the “traditional conception of truth” belongs as a derivation to Heidegger’s proposed definition (Heidegger 1927a: 220/262), and the profound implications which follow, belongs to the following section (3.1.2); here we want to discern the decisive impact of truth’s “relocation” to Dasein.

On the one hand, this overcomes the problems generated by idealist empiricism: i.e., we are not constrained to signification in the realm of materiality because our thought entails sources beyond the materially exogenic. In other words, though materially determined in our own corporeal cognitive structure – the brain and our sensory organs – and though our objects of cognition are materially determined in their substantial being – both in what they themselves are and in their presentation to us – the grasp of things’ meaning, the expanse of signification, is not materially determined. In the language of Scholasticism, we may distinguish between the formal object and the material object, as between “that which is understood” and “that in which it is understood”; the latter is materially determinate, but the former extends beyond the empirical-foundations of sensory objectization.

On the other hand, “relocating” truth to Dasein overcomes the problem of cognitive transcendence plaguing idealist rationalism: for Dasein is always in its

“there”, in a world characterized not just by the possibility of projective ideation but by the actuality of brute encounter. While we may grasp a being over and above the material determination present to us, such a grasp is always at any moment of a determinate extension, such that what is made present to us through this cognitive grasp is at that moment limited, but not in all ways: the object is sheltered – enclosed, but in such a way that the object is brought to light – illuminated, but to the momentary exclusion of other objects. Thus, the realm of meaning, the ontological, the lighting itself, ἀλήθεια, the species-specifically human intentional domain, is one which remains obscure to us, but is simultaneously and necessarily the realm in which meaning is conveyed: and in this conveying of meaning itself, *Sein* obliquely comes into view for the first time.

3.1.2 Unfolding

In the first introduction to *Sein und Zeit*, Heidegger discusses three common considerations about “Being” which have made restating the question necessary: first (Heidegger 1927a: 3–4/22–23), “that ‘Being’ is the ‘most universal’ concept”; second, “that the concept of ‘Being’ is indefinable”; and third, “that ‘Being’ is of all concepts the one that is self-evident.” The universal conception of *Sein* as analogical, he says, muddles the meaning of the term and that, as what is *transcendens*, *Sein* does not enter into the definition of those things with which it is included; it is present, but not contained in the concept. This makes *Sein* itself (Heidegger 1927a: 3/23) “the darkest of all” concepts. The indefinability of *Sein* shows us that *Sein* does not have an entitative character, and therefore, the question of *Sein*’s meaning is not effaced by its indefinability, but rather (Heidegger 1927a: 4/23) “demands that we look that question in the face.” The self-evidence of *Sein*, correlated with the fact “that the meaning of Being is still veiled in darkness,” Heidegger claims (1927a: 4/23), “proves that it is necessary in principle to raise this question again.” In short, these three considerations show what Heidegger holds as an inauthentic confusion about the meaning of *Sein* and being – *Sein* and *Seiende* – that dominates throughout history. Traditional metaphysics, he claims, has obscured this meaning by looking always at principles of beings and in seeking the highest beings, rather than looking at (or for, since it cannot be an object) the Being itself which is closest to us.

A more elaborate presentation of what Heidegger sees as the problem with traditional metaphysics or ontology is given in the slightly later *Die Grundbegriffe der Metaphysik: Welt – Endlichkeit – Einsamkeit*, a 1929–30 lecture course. Here, he ascribes three “inherent incongruities of the traditional concept of

metaphysics” (1929–30: 40–45): 1) it is “trivialized”, inasmuch as it makes Being the subject of a scientific study, as “some being”, a consideration which is simply one-among-many and thereby reduces what is properly ontological to an ontic object; 2) it is “intrinsically confused”, because it conflates suprasensuous beings (spiritual, immaterial beings) and the unsensuous *das Sein des Seienden*, and thereby these “two fundamentally different kinds of lying beyond come to be combined into one concept”; and 3) these two incongruities tend to make the conception of metaphysics itself one which is unproblematic, and thence to bury the question of *Sein*, which is at odds with the very nature of *Sein* as we experience it.

Heidegger points to Thomas Aquinas, in the proemium of his commentary on Aristotle’s *Metaphysics*, as an exemplar of these three incongruities (1929–30: 46–51). Most evidently problematic to Heidegger’s mind is the second incongruity, the conflation of the concept of being as being – *ὄν ἢ ὅν* – with being as conceived in the highest concept; of the “unsensuous” and the “suprasensuous” (1929–30: 50):

I emphasize only the incongruity and difficulty lying in the fact that Aquinas says that this science, which is the highest and which we name metaphysics in equating these three titles, deals on the one hand with the ultimate cause, with God who created the world and all that is, yet at the same time also deals with those determinations that pertain to every being, the *universalia*, the abstract categories, and simultaneously with that being which is supreme according to its specific manner of being, namely pure absolute spirit... These are determinations that both have the character of what is highest, what is ultimate, yet are completely different in their inner structure, so that no attempt whatsoever is made to comprehend them in their possible unity.

This is the heart of the “ontotheological” critique. As Heidegger points out, these two concepts, the conflation of *ens* and the highest beings, are later divided into the treatments of general and special metaphysics (1929–30: 48). This accusation against Thomas is unfounded, but nevertheless understandably made, given Thomas’ own lack of clarity about the uses of the terms *ens* and *esse*. Exacerbating Heidegger’s misreading of the reading of Thomas is a Suarezian lens (woefully tinted by the interpretation of Giles of Rome) distorting the use of Thomistic terminology, as manifest in Heidegger’s *Die Grundprobleme der Phänomenologie* (Heidegger 1927b: 108–158/77–112; especially 116–19/83–84), which misreading may have been exacerbated by Heidegger’s consideration of a spuriously-attributed work, *De natura generis*, as authentically of St. Thomas (Heidegger 1926–27: 47–64).

Thus, motivating Heidegger’s ontotheological critique, particularly as levelled at Scholasticism (cf. McGrath 2006: 208–42), is a desire to extricate from

the confusion of the terms of Being – το ὄν, εἶναι, *ens*, *esse*, *essentia*, *res*, *Sein*, *Seiende*, *Seienden*, etc. – and thereby discover the ground of intelligibility, considered as it is realized in the experience of the human being, considered as the universal comprise of care. Heidegger's is not a quest for *ens inquantum ens*, nor even a quest for the "to be" of beings, as the intrinsic principle of existence, the act of being or *actus essendi*; his is not a search upwards into the heights – his conception of traditional metaphysics does indeed seem discolored by the doctrines of late Scholasticism and modernity, with the unsuitable confluences of "epistemology" as "first philosophy" and general and special metaphysics prevalent at the time (cf. Heidegger 1949: 7–10/277–79)²⁶ – but a digging downwards, a search for the roots of knowledge and experience. He looks not for *ipsum esse subsistens*, but for *esse ad omnia*; not for the principle of all actual existence (*esse ut exercita*), but the principle of human intentionality (the principle of *esse intentionale* – which principle should not be confused with *esse intentionale* itself), the principle of all possible cognition (Heidegger 1929a: 22/8–9):

Ontic knowledge can only correspond to beings ("objects") if this being as being is already first apparent [offenbar], i.e., is already first known in the constitution of its Being. Apparentness of beings (ontic truth) revolves around the unveiledness of the constitution of the Being of beings (ontological truth); at no time, however, can ontic knowledge itself conform "to" the objects because, without the ontological, it can not even have a possible "to what."

That is, with ontological knowledge, Heidegger is looking for *Sein* in *Da-Sein*, for the explanatory genesis of the curious fact that the human being essentially possesses the capacity for unity with all beings. This can be found only in a resolute authentic being-towards, the ontological dimension.

This resolute authentic being-towards lies in the fundamental existential structure of *understanding*, developed primarily in *interpretation* and derivatively in *assertion* (Heidegger 1927a: 142–60/182–203). Heidegger develops his notion of understanding against the background of Scotus' *simplex apprehensio* and Husserl's categorial intuition: that is, understanding is a pre-categorial and pre-analytic (or deliberately non-categorial, non-analytic) simple grasping of some thing as a whole (cf. McGrath 2006: 89–119, especially 118–19). Understanding is the openness, on the part of Dasein, to grasp the possibilities present in the content

²⁶ While Heidegger initially considered his endeavors to be "metaphysical", inasmuch as they dealt with Being, using a similar terminology, and following in some sense the confusion the meaning of "first" in "first philosophy" (cf. Deely 1987 and 1988), his search is much more clearly devoted to understanding the principles of knowledge, and not of knowledge-independent existence.

of a sensory intuition. Heidegger expresses this in saying (1927a: 143/183): “The kind of Being which Dasein has, as potentiality-for-Being, lies existentially in understanding.” The potentiality-for-Being which Dasein possesses is a potentiality for its own *Sein* to be somehow the same *Sein* as all other things. As the Aristotelian adage has it, the soul is in some way all things. It becomes all things, however, not primarily by any creative or productive act of its own, but rather first and foremost through a receptivity of the other; that is, in some intuition (Heidegger 1929a: 29/15), in the perceptive function of αἴσθησις (Heidegger 1933–34: 241/185): “αἴσθησις in its proper meaning as perceiving is taken up first as the essence of knowing, spontaneously as it were, because for the Greeks, perceiving and being perceived mean the same thing as φαίνεσθαι: to say that this shows itself, something shows itself, is the same as saying that something is perceived.” (Cf. Dreyfus 1991: 45–46).

In finite intuition, there is an immediate unifying of the precategorially-grasped and the one intuiting. Heidegger characterizes this unity as *hinnehmen* – a “swallowing” or “accepting” – which is not merely being acted upon, but cooperating with the actor to go along with; or as Taft translates the term (Heidegger 1929a: 31–32/18), a “taking in stride” (Cf. Leask 2011: 73). But this “going along with” or “taking in stride”, is an incomplete union; it is merely a juxtaposition accomplished through a unidirectional brute action upon a receptive but passive faculty. It gives the “there” of Dasein; but not the *Being* (Heidegger: 1933–34: 243/186): “The answer that ἐπιστήμη = αἴσθησις lies close at hand because αἴσθησις comes upon us immediately, because it is the fundamental form in which things are there for us.” Through intuition, Dasein (Heidegger 1929a: 32/19) “must necessarily take [the] already-existing being in stride, that is to say, it must offer it the possibility of announcing itself.” But Dasein, for whom *Sein*, and its own *Sein*, is an issue, seeks a deeper, richer world: one imbued not merely with the given, but with the Being of things given (Heidegger 1933–34: 244/187): “while a *certain* openness surely takes place in perception, this openness is not yet in itself the openness of *beings as such*. In a certain sense, αἴσθησις is necessary, for *through it*, something *comes upon* us, but perception and being-perceived are insufficient to make openness equal the truth of a *being* for us.” Thus, intuited beings are not simply taken in stride, but are understood in an ecstatic projection of Dasein’s own possibility for *Sein* (Heidegger 1927a: 148/188): “As understanding, Dasein projects its Being upon possibilities. This Being-towards-possibilities which understands is itself a potentiality-for-Being, and it is so because of the way these possibilities, as disclosed, exert their counter-thrust upon Dasein.” This projection of possibilities is not, however, to say that there is a determinate content to the projection, as though Dasein accomplishes a

transcendence by the imposition of pure *a priori* determinate categorical synthesis, as Kant would have it. Rather (Heidegger 1929–30: 397/24):

The manifestness of beings as such, of beings *as* beings, belongs to world. This implies that bound up with world is this enigmatic ‘as’, beings *as* such, or formulated in a formal way: ‘something *as* something’, a possibility which is quite fundamentally closed to the animal. Only where beings are manifest *as* beings *at all*, do we find the possibility of experiencing this or that particular being as determined in this or that particular way – experiencing in the broader sense which goes beyond mere acquaintance with something, in the sense of having experiences with something.

All of which is to say, that the projection of possibilities depends entirely upon being in a world which presents us with beings which can be taken “as”; that is, they are possibilities for grasping the meanings of things (Heidegger 1927a: 81/112; Maritain 1956: 60).

When the being-towards of Dasein in its understanding unites with beings other than its own, another possibility is opened up: interpretation, what Heidegger calls (1927a: 148/189) the “working-out of possibilities projected in understanding.” Interpretation is the means through which we formulate what a being is, in terms of its *Sein*; that is, interpretation discursively reveals the ontic by means of the ontological, through a dimension not contained within the subjective constitution of a thing. By interpretation, we see a thing not only in the constitution of it as a thing, but also as an object, such that the possibilities projected in understanding include not only the possibilities or potencies of the thing according to its own subjective constitution (i.e., the possibilities opened up in interpretation are the ways in which the thing may be understood as an object – a parallel, we will see in 4.1.4, to how the Firstness of Peirce establishes a thing not only as a Second, but also makes present to the mind the aspect of Thirdness), but also its intersubjective possibilities, the possibilities inherent to it as a public-in-principle or subrasubjectively disclosed object possessing an openness to relations. In other words, interpretation establishes a cognitive “as”, wherein things are conceived *as* occurrent *possibilities*. For example, when we interpret a book as phenomenological, we are conceiving the content of the work to realize the possibility of a particular method of philosophical inquiry; when we interpret a person as a spouse, we are conceiving the individual to be partially determined by an integral relationship with oneself, to have realized an intersubjective possibility. When the object of understanding is purely objective, the possibilities are according to the internal constitution of some particular cognition-dependent object and the aforementioned interobjective constitution through which are constituted wholly new purely objective realities. Thus, when we interpret one contemporary portrayal

of Sherlock Holmes to be more authentic than another, this follows from conceiving a certain pattern of relations – boredom and disaffection with common life and common pursuits, plus a kind of quiet desire for meaningful human companionship, subordinated to an all-consuming interest in solving puzzles – as what constitutes authentic or genuine Holmesian character. Something too far out of accord with that pattern (such as, in the case of Holmes, a propensity for small talk) is inauthentic because it is not a possibility which can be realized within it.

Consequent to this process of interpretation, a further derivation of the understood occurs through assertion, the (Heidegger: 1927a: 156/199) “*pointing-out which communicates the determinative.*” (Cf. Heidegger 1927a: 223/266). In assertion – the threefold signification of which includes “pointing-out” (*Aufzeigen*)²⁷ or letting beings be seen from themselves inasmuch as they have been seen by the one doing the pointing-out, “predication” (*Prädikation*) or the pointing-out of some definite character of a being, and “communication” (*Mitteilung*) or the sharing of our being-towards what has been pointed out (Heidegger 1927a: 154–55/196–97) – we find the classical *locus* of truth, the agreement of the product of some judgment with some object (1927a: 214/257) – which judgment requires a contraction of the relatively-indeterminate *Sein* of whatever being is grasped in understanding and worked out in interpretation. In other words, an understood being is subsequently worked out interpretatively in terms of the possibilities, both subjectively and objectively considered, which give rise to a further understanding of that being – in its innersubjective, intersubjective, and objective significance – which is then defined in a manner open to communication (suprasubjective) through assertion; it is publicized by condensation into a communicable package, i.e., a linguistic, symbolic sign-vehicle.

When a being within the world is interpretively understood, such that it is perceived to be not merely ready-to-hand and an object of *Dasein* (i.e., as a piece of equipment) but to have a presence-at-hand which points towards its own independent substantiality, it is understood as having its own possibilities,

²⁷ Note that in a slightly later work (examined in 5.3.1), *Vom Wesen des Grundes* (originally 1929, but revised up until 1949), Heidegger describes one of the essential elements of transcendental grounding as *Ausweis*, from the verb *Ausweisen*, also meaning “to point out”. While it would be desirable to use different English phrases to translate these two words, capturing the prepositional prefix “*Aus*”, “out”, is difficult to do aside from the phrase “point-out”. To most accurately capture Heidegger’s sense of this latter word, we would want to say something along the lines of, “the act of showing by specifying as distinct in some regard from its context” – but that would be a bit wordy.

and not merely possibilities for-the-sake-of-Dasein's use. Dasein, as Being-in-the-world, has an undetermined being-towards; likewise, beings are disclosed through understanding to have their own possible modes of *Sein*, within the context of the world of Dasein (Heidegger 1927a: 144–45/184):

As a disclosure, understanding always pertains to the whole basic state of Being-in-the-world... when that which is within-the-world is itself freed, this entity is freed for *its own* possibilities. That which is ready-to-hand is discovered as such in its *serviceability*, its *usability*, and its *detrimentality*. The totality of involvements is revealed as the categorial whole of a *possible* interconnection of the ready-to-hand. But even the 'unity' of the manifold present-at-hand, of Nature, can be discovered only if a *possibility* of it has been disclosed.

These possibilities are grasped in the understanding as possible, and left by the understanding as possible; they are freed for their Being inasmuch as Dasein does not bind the self to grasping it definitively (Heidegger 1927a: 145/184):

the character of understanding as projection is such that the understanding does not grasp thematically that upon which it projects – that is to say, possibilities. Grasping it in such a manner would take away from what is projected its very character as a possibility, and would reduce it to the given contents which we have in mind; whereas projection, in throwing, throws before itself the possibility as possibility, and lets it *be* as such.

As an ek-sistent being, Dasein can engage beings in their *Sein* and “let them be,” not in the usual sense of indifference or neglect, but rather “to let beings be as the beings which they are.” Only in interpretation are these possibilities worked out so that the undetermined “something” grasped in understanding is understood *explicitly* as a “this something” which it is in itself (Heidegger 1927a: 150/190–91)²⁸:

In interpreting, we do not, so to speak, throw a ‘signification’ [*Bedeutung*] over some naked thing which is present-at-hand, we do not stick a value on it; but when something

28 This “Bewandtnis” (involvement, relevance; a relational being-with, towards, for, among, as belonging to an object of cognition – the suffusion of a being within the *relativum secundum dici* context) is, as Heidegger points out, partly due to the fact that we do not experience sensible things as “a throng of sensations”, but rather always as a something (Heidegger 1960: 25–26): “We never really first perceive a throng of sensations, e.g., tones and noises, in the appearance of things – as this thing-concept alleges; rather, we hear the storm whistling in the chimney, we hear the three-motored plane, we hear the Mercedes in immediate distinction from the Volkswagen. 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.” (Cf. Heidegger 1929–30: 435–532/301–66) for an extended discussion of interpretation and the “taking-‘as’” in its essential role for the world-formation of human beings.

within-the-world is encountered as such, the thing in question already has an involvement which is disclosed in our understanding of the world, and this involvement is one which gets laid out by the interpretation.

This designation notably lies open to the possibilities which are not subjectively presented by the being in question; objectively-constituted elements can also belong to a “this something” inasmuch as interpretation is working out the possibilities *on the basis of Dasein’s Sein*.²⁹ That is, a “this something” as it is in itself is **not** hypostatically suspended in a substantial, subjective constitution independent of its relational context.

Thus most decisive in Heidegger’s presentation of understanding-interpretation-assertion, the hermeneutic circle,³⁰ is its emphasis not on the grasping of essences or the understanding of beings in ontic terms – or perhaps we ought to say **merely** ontic terms – but on the realization of beings in, through, and due both to their *Sein* and to the ontico-ontological structure of Dasein: that is, to the *Sein* proper to Dasein, or more fundamentally, due to *Sein* itself, which transcends and embraces both “subject” and “object” in a relation of knowing (Heidegger 1947: 336/256):

But does not *Being and Time* say on p.212, where the “there is / it gives” comes to language, “Only so long as Dasein is, is there [gibt es] Being”? To be sure. It means that only so long as the lighting of Being comes to pass does Being convey itself to man. But the fact that the *Da*, the lighting as the truth of Being itself, comes to pass is the dispensation of Being itself. This is the destiny of the lighting. But the sentence does not mean that the Dasein of man in the traditional sense of *existentia*, and thought in modern philosophy as the actuality of the *ego cogito*, is that being through which Being is first fashioned. The

29 In back of Heidegger’s mind, one could easily speculate, is the correlation between the possible and the real: the possible being encompassed by the “real”, which deals not primarily with the actual, but with meaning. (Heidegger 1961: 451/341): “In Kant’s thesis ‘real’ means, then, not that which we mean today when we speak of *Realpolitik*, which deals with facts, with the actual. Reality is for Kant not actuality but rather substantiality. A real predicate is such as belongs to the substantive content of a thing and can be attributed to it.” (Cf. Luchte, 2008: 62–63). The essentialist understanding of “real” has a long history in Scholastic philosophy (Gilson 1949).

30 The presentation here of the hermeneutic circle, moving from confused to distinct, so as to produce a new confused whole, which then receives new distinctions, potentially *ad infinitum*, has a parallel in the medieval notion of the twofold way of intellectual proceeding, *via resolutio* and *via inventionis*. Thomas Cajetan, in his commentary on Thomas Aquinas’ *De ente et essentia*, also tracks a fourfold progression of intellectual knowledge, beginning with actual confused knowledge, progressing through virtual confused, actual distinct, and virtual distinct, which likewise parallels the central idea of the hermeneutic circle. But more will be said about these connections in the book’s conclusion.

sentence does not say that Being is the product of man. The “Introduction” to *Being and Time* says simply and clearly, even in italics, “Being is the *transcendens* pure and simple.”

The ontological dimension, *das Sein des Seienden*, is not something which arises purely out of the *esse intentionale* of Dasein – the intentional life of the human being – as though a product of one’s understanding. Rather, the ontological dimension comes to light only in Dasein’s activity as a being who understands and interprets beings. Though *Sein* is not handed over to Dasein as a singular element contained in an object intuited, the realization of *Sein* occurs only on the basis provided by the intuitive encounter of some being. When the intuitive encounter, given the structure of understanding, is subsequently interpreted and results in an assertion, a relation obtains between the human being and the being grasped. Relation therefore emerges as a constitutive factor in the “there” of Dasein – the relation itself becomes something present-at-hand.

This is made manifest moreover in assertions, even in those assertions which are ready-to-hand because taken over through an absorption into *das Man*. Heidegger demonstrates this in showing how his definition of truth, as unconcealment, provides the basis for the derivative definition of truth as correspondence (Heidegger 1927a: 224/266–67):

Dasein need not bring itself face to face with entities themselves in an ‘original’ experience; but it nevertheless remains in a Being-towards these entities. In a large measure uncoveredness [*Entdecktheit*] gets appropriated not by one’s own uncovering, but rather by hearsay of something that has been said. Absorption in something that has been said belongs to the kind of Being possessed by *das Man*. That which has been expressed as such takes over Being-towards those entities which have been uncovered in the assertion. If, however, these entities are to be appropriated explicitly with regard to their uncoveredness, this amounts to saying that the assertion is to be demonstrated as one that uncovers. But the assertion expressed is something ready-to-hand, and indeed in such a way that, as something by which uncoveredness is preserved, it has in itself a relation to the entities uncovered. Now to demonstrate that it is something which uncovers means to demonstrate how the assertion by which the uncoveredness is preserved is related to these entities. The assertion is something ready-to-hand. The entities to which it is related as something that uncovers, are either ready-to-hand or present-at-hand within-the-world. The relation itself presents itself thus, as one that is present-at-hand. But this relation lies in the fact that the uncoveredness preserved in the assertion is in each case an uncoveredness of something. The judgment ‘contains something which holds for the objects’ (Kant). But the relation itself now acquires the character of presence-at-hand. The uncoveredness of something becomes the present-at-hand conformity of one thing which is present-at-hand – the assertion expressed – to something else which is present-at-hand – the entity under discussion. And if this conformity is seen only as a relationship between things which are present-at-hand – that is, if the kind of Being which belongs to the terms of this relationship

has not been discriminated and is understood as something merely present-at-hand – then the relation shows itself as an agreement of two things which are present-at-hand, an agreement which is present-at-hand itself.

When the assertion has been expressed, the uncoveredness of the entity moves into the kind of Being of that which is ready-to-hand within-the-world. But now to the extent that in this uncoveredness, as an uncoveredness of something, a relationship to something present-at-hand persists [durchhält], the uncoveredness (truth) becomes, for its part, a relationship between things which are present-at-hand (intellectus and res) – a relationship that is present-at-hand itself.

The importance of this passage for understanding Heidegger cannot be overstated. Assertions are always an uncovering, a disclosing, even assertions belonging to the kind of *Sein* possessed by *das Man*, i.e., assertions uncritically assumed and which “take over” the Being-towards, determining the way in which one holds oneself towards what the assertion discloses; as Peirce says (1904a: EP.2.324): “A sign cannot even be false without being a sign and so far as it is a sign it must be true.” In both authentic and inauthentic assertorical disclosure, “*the uncoveredness of the entity moves into the kind of Being of that which is ready-to-hand within-the-world.*”

However, this also causes the relationship between the disclosive statement and the disclosed object to become present-at-hand. Recall, as made clear above, that the *a priori* is an element present in every intuition. In perceiving the terms of the relation, the statement and the object in this case, as *relata*, the relation between them comes into view. Relation itself thereby becomes a possible being encountered within-the-world which opens it as a possible object for thematic discovery. A thematic discovery is one which opens its object to true unconcealment (Heidegger 1927a: 363/414):

[Thematizing’s] aim is to free the entities we encounter within-the-world and to free them in such a way that they can ‘throw themselves against’ [*entgegenwerfen*] a pure discovering – that is, that they can become “objects”. Thematizing objectivizes. It does not first ‘posit’ the entities, but frees them so that one can interrogate them and determine their character ‘objectively’. Being which objectivizes and which is alongside the present-at-hand within-the-world, is characterized by a *distinctive kind of making-present*. This making-present is distinguished from the present of circumspection in that – above all – the kind of discovering which belongs to the science in question awaits solely the discoveredness of the present-at-hand.

Thematizing is a (cenoscopic) scientific projection, the entrance into a theoretical structure of disclosure. It is what allows things to become objects for critical thought, properly speaking; it “objectivizes” in a way which attempts to disclose the things themselves. In this process, things are freed from any in-sistent

compartments, such that they can be discovered in themselves, as they are in themselves, apart from the imposition of a limiting readiness-to-hand. Since relation becomes an entity disclosed as present-at-hand within-the-world through assertion, it becomes open to thematic inquiry. As a footnote to this passage (occurring after “*distinctive kind of making-present*”), Heidegger states that the intentionality of consciousness – that is, the comporting relation of conscious awareness (cf. Deely 1971b: 79–82), the relation signified by an assertion – is grounded in the ecstatic unity of Dasein, which grounding was to be explained in the never-to-appear third division of *Sein und Zeit*’s first part. Fortunately, as we will see later (6.3), Heidegger does give this explanation – and thereby thematizes the relational possibilities for Dasein – which remained absent from his incomplete magnum opus, just a few years later in *Vom Wesen des Grundes*. For now, let us note well this statement (Heidegger 1949: 50/132): “*The essence of ground is the transcendental springing forth of grounding, strewn threefold into the projection of world, absorption within beings, and ontological grounding of beings.*”

The essential Being-uncovering (*Entdeckt-sein*) which belongs to Dasein is one which operates circularly: understanding always already in advance has some conception of that which is understood – beginning with all things understood as somehow contained in the pervasive nearness of *Sein* – which particular being must enter intuitively to the world of Dasein. Understanding (*Vorstellung*) is repeatedly characterized as a kind of projection, as what is “*fore-*” (*Vor-*); that is, the anticipatory disclosure of possibilities. Through interpretation, this understanding is developed (and thereby made capable of disclosing further possibilities), allowing, when the interpretation is correct, for a fuller unity of the understanding and the intuition, which unity forms knowledge.

3.1.3 Meaning

This circular development is, according to Heidegger, what allows beings to have meaning, in the sense of intelligibility, for Dasein; for meaning is relational, meaning is always “*meaning-to*” or “*meaning-for*”; which is not to say that it is creatively produced as though a nominalist construct, but rather that it is “*given*”. Meaning belongs to the disclosure of beings as discovered within-the-world. In a sense, meaning is the developmental disclosure itself (Heidegger 1927a: 324/371): “*If we say that entities ‘have meaning’ [hat Sinn], this signifies [bedeutet] that they have become accessible in their Being; and this Being, as projected upon its ‘upon-which’, is what ‘really’ ‘has meaning’ first of all.*” To become accessible in their *Sein*, for beings, is to be illumined by a free

disclosive engagement. The being itself does not “have” meaning in the first place, but is that upon-which meaning is projected, in the unveiling of its possibilities. In the terminology of Scholasticism, the material object receives its meaning because the concept projectively reveals, gives, the intelligible structure as the formal object. In and of itself, that formal object does not exist as a meaningful reality separate from the material object. There is not some secret realm of “meaning” hiding behind the sensible characters of things; but because the *Sein* of entities can be disclosed to Dasein, Dasein can then “render” those entities “meaningful” as part of its *Lebenswelt* (Heidegger 1927a: 324–25/371–72):

Beings ‘have’ meaning only because, as Being which has been disclosed beforehand, they become intelligible in the projection of that Being – that is to say, in terms of the ‘upon-which’ of that projection. The primary projection of the understanding of Being ‘gives’ the meaning. The question about the meaning of the Being of an entity takes as its theme the ‘upon-which’ of that understanding of Being which underlies all *Being* of entities.

The disclosure of *Sein* is antecedent to the disclosure of beings’ meanings; the intelligibility of beings is possible only because Being makes intelligible. Meaning, therefore, is the result at any given moment produced by the hermeneutic circle as discursively unveiling what is present in any relational context (Heidegger 1927a: 151/192–93): “The *concept of meaning* [*Begriff des Sinnes*] embraces the formal existential framework of what necessarily belongs to that which an understanding interpretation articulates. *Meaning is the ‘upon-which’ of a projection in terms of which something becomes intelligible as something; it gets its structure from a fore-having, a fore-sight, and a fore-conception.*” In other words, through our innate engagement with Being, we turn the referential significance (*Bedeutsamkeit*) of the *Umwelt* into the meaning (*Sinn*) of a richer world. Or, in Erfurt’s terminology, we are recursively led back through the *modi significandi* and *intelligendi* to the *modus essendi*.

There is no “secret-behind” of beings’ meaning hidden in an invisible realm of abstractive intelligibility, but rather meaning comes to light in the discursive understanding Dasein has of *Sein*; and with this realization, Heidegger’s analysis of disclosure gives us a helpful means for understanding the cultural world. By pressing beyond the quidditative/ontic or insistently conceptual theory of human knowledge as itself a peering-into the theoretical domain, into the fundamentally Being-constituted and Being-oriented nature of a creature within not merely an object-world (*Umwelt*) but a thing-world (a true *Lebenswelt* or *Bildendwelt*), we can see this as a world in which we have not merely a static order of beings but a dynamic and living Being. As Deely says (1971b: 42):

It is a transformation of the idea of human nature that marks the first step away from the forgottenness of Being toward the determination of the sense of Being. The step is possible once it is clearly realized that what is most basic in man as man is not a specific trait in the ontic (entitative) order, but rather something which precisely does not reside in man after the manner of an “accident” or “inherent property”, something that does not correspond in any way with an observable fact, something that cannot be fitted into a substance/accident or subject/object ontology according to what is most proper and formal to it, something which in fact belongs to an order fundamentally distinguished from the ontic (entitative) order and which lies as the prior possibility for any subject-object “field” as such, namely, man’s comprehension of Being. Man is before and during all else the Comprehendor of Being,³¹ the being endowed from his source with a comprehension of Being. This comprehension is not at all present in him under the guise of a knowledge that is either completely achieved or conceptually explicit, yet it is always at issue in whatever man does. Self-awareness, *prise de conscience*, is but an ontic and therefore essentially inadequate expression of the ontological truth that man is the being for whom, in his Being, there is concern for Being.

The concern for Being generates the meaning-perfused edifice of the *Bildendwelt*, a reality which unfolds continually for each and every human being. The persistent realization of this *Bildendwelt* is the authentic realization of *Dasein*; more than merely aware of oneself as Being-in-the-world (as having self-awareness), *Dasein* is engaged with that world in such a way that by *Dasein*’s own involvement, beings in the world are educed in their possibilities. It is precisely through realizing *das Sein des Seienden*, whereby beings are grasped not merely as objects for use but things in their own right and dynamically engaged with beings around themselves, that culture can develop: in grasping the possibilities of beings, and especially cognition-dependent beings, humans develop unique – not merely patterned-after, but patterning – interpretational frameworks which are the very constitutive element of culture itself. The interplay of nature, *Dasein*, and interpretational frameworks – which frameworks, considered in themselves, are relations, a network or web – forms a dynamism unlike the objects studied in ideoscopy (Deely 1994a: 92):

The objectivity proper to culture, nonetheless, consists entirely of relations. Its “internal being”, so to speak, is nothing but relations patterned in specific ways. And these patterns, though physical nature collaborates in them and is incorporated – sometimes coerced – into them, do not exist as such apart from the human mind. They are, thus, the objective phenomenon par excellence, a pure thirdness, comparatively speaking, in which secondness has, exactly, a secondary part, not, as in the realm of “hard science”, a primary role in revealing the being of things.

³¹ In a personal remark of 2014, John Deely once told me over breakfast that, were he to rewrite this passage, “Comprehendor of Being” would be changed into “semiotic animal”.

If we are to understand how the cultural and the natural – the purely relational and the primarily cognition-independent – can be understood cohesively and thus avoid a dualism wherein the two are irreconcilable, then, we need to understand the common basis of both and the priority of one to the other. On the one hand, therefore, we have the priority of the natural as giving rise through intuition to the possibility of understanding and interpretation which Dasein produces; on the other, we have the priority of the mode of understanding of Dasein, as structuring that apprehension and interpretation, which issues forth through intersubjective exchange into cultural realities. What Heidegger successfully unveils in his phenomenological approach to the question of *Welt* and *Sein* is the species-specifically *Bildendwelt* of Dasein: of the intentional-constitutive behavior of human beings as inexorably dependent upon, though not constrained within, the cognition-independent realities encountered in the world. In other words, seeing the world originally through the purposive-vision of the environs (*Umsicht*) shows us that the view of cultural reality, as constituted entirely by relations, is not essentially different from the view of nature: only, whereas the view of nature is founded upon the intuitions of the discursively received environmental surroundings – the physical world – which possesses its own properties, the cultural world is itself constituted wholly through those patterns of relations.

Heidegger says: Dasein unveils the possibilities for being in projection. In *free* projection, it unveils the authentic possibilities of that thing in itself, by allowing it to be what it is, by discovering the intelligibility of the *Ding-an-sich* through its relational possibilities. In *insistent* projection unveils possibilities, it is true, but only as the thing may be made to conform to some worldly planning, turned to a context of forced readiness-to-hand. Both kinds of projection, free and insistent, unveil possibilities – the latter is concerned with use, and the former with truth – and as such, through both kinds of projection, beings, cultural and natural alike, have meaning. The provenance of meaning, however, is not “Dasein” as simply a function of the biological entity we call the human. Rather, meaning emerges in the relations *themselves* which exist only because Dasein is there as simultaneously terminus of cognitive receptivity and fundament of disclosive projection of possibility: in other words, meaning emerges in the actuality of *esse ad*, in *das Sein des Seienden*.

3.2 *Das Nichts* and possibility

The difficulty of Heidegger’s quest, however, is that the revelation of Being, as an objective light allowing the unfolding of the world and the grasping of

meaning, is not something which can be explicated simply as an intelligible object in opposition to an intellecting subject. The revelation of possibility is not attained through definitive grasping but requires instead a unique kind of negating. In Deely's words (1971b: 33), "Heidegger's Being regarded entitatively, i.e., from the standpoint of beings (entities), is Non-being (*das Nichts und das Nicht-Seiende*)." Or to put it in the words of Heidegger himself (1929a: 71/51):

An intuiting which takes things in stride can take place only in a faculty of letting-stand-against of ..., in the turning toward ... which first of all forms a pure correspondence. And what is it that we, from out of ourselves, allow to stand-against? It cannot be a being. But if not a being, then just a Nothing [*ein Nichts*]. Only if the letting-stand-against of ... is a holding oneself in the Nothing can the representing allow a not-Nothing [*ein nich Nichts*], i.e., something like a being if such a thing show itself empirically, to be encountered instead of and within the nothing. To be sure, this nothing is not the *nihil absolutum*.

To be an intelligible object as what is in opposition or contrast to an intellecting subject is to be some kind of being; *Sein* cannot be such an object, because *Sein* cannot be reduced to some objectivized part or constituent of the world in which intelligible objects are encountered. It is in some way the whole, making present every being; and consequently, considered from the perspective of beings, Being is Non-being, No-thing. Every being or thing, in its intellectual representation, can only be intellectually represented by being contracted to a determinate and particular structure. But this contraction must "stand-against" something – or rather, against *nothing*. Allowing a being to show itself requires the non-interference of other beings, which, when taken together with the intended "object", transpose limitations upon the possibilities which may be revealed for it. To conceive of the "nothing", or of *Sein*, for that matter, as something like the being which is thus grasped is to miss the point altogether.

As aforementioned (2.2.2), *Sein* not only transcends this philosophically improper dichotomy of subject and object but obviates it altogether. Instead, we recognize that (Heidegger 1949: 18/108):

because we have now specifically warded off in general any explicit, or unusually inexplicit, approach via the concept of a subject, transcendence may also no longer be determined as a "subject-object relation." In that case, transcendent Dasein (already a tautological expression) surpasses neither a "boundary" placed before the subject, forcing it in advance to remain inside (immanence), nor a "gap" separating it from the object. Yet nor are objects – the beings that are objectified – that *toward which* a surpassing occurs. *What* is surpassed is precisely and solely *beings themselves*, indeed every being that can be or become unconcealed for Dasein, thus *including precisely* that being as which "it itself" exists.

In this way, the meaning of "transcendence" is transformed: from the sense given it by the epistemological quagmire of modernity, which sought to

transcend either a wall from “internal consciousness” to “external reality” or a “gap” between what is in the mind and what is in the world, to the surpassing of merely ontic reasoning and into the domain of the ontological. The ontic mode of thinking, as a model for pursuing *Sein*, must be left behind. For, despite its ubiquity, *Sein* never shows itself directly, or even in the indirect manner of a nature. Rather, *Sein* is manifested in the revealing of others, in the phenomena which it brings to light; and in this very revealing, Being itself is hidden. Consequently, it is encountered through beings, but never as some part within any being. Again, we encounter the necessity of a self-reflexivity in the conduct of phenomenological inquiry. In order to see the *Sein* of things, or to fully see beings in their *Sein*, we must understand them not simply in the *Sein* which belongs to them in the sense of an *esse proprium*, the contracted act of *esse* discovered in some *essentia*, but the inter- and even suprasubjective dimension by which and in which they are revealed.

It is to this effect that Heidegger gives a negative account of what belongs with the occurrence of *Sein* in the inaugural 1929 lecture in Freiburg, *Was ist Metaphysik?* Here, Heidegger speaks of “the Nothing”, *das Nichts*. The Nothing, he says, is not the mere nihilation of all beings – it is not merely the result of the negation, or negative judgment, which removes the entirety of the ontically presenced beings (Heidegger 1929b: 29/86); such a concept of nothing presupposes not only *Sein*, but also beings. Rather, he says, *das Nichts* is the originary absence of beings into which *Dasein* holds itself. This holding-itself into the Nothing is, Heidegger goes so far as to claim, the very meaning of “Da-sein” (Heidegger 1929b: 35/91): “Da-sein means: being held out into the nothing.” *Das Nichts* is the “realm” of the no-thing, wherein or against which things can be realized (Heidegger 1929b: 35/91)³²:

With that the answer to the question of the Nothing is gained. The Nothing is neither an object nor any being at all. The Nothing comes forward neither for itself nor next to beings, to which it would, as it were, adhere. For human *Dasein*, the Nothing makes possible the manifestness of beings as such. The Nothing does not merely serve as the counter-concept of beings; rather, it originally belongs to their essential unfolding as such. In the Being of beings the nihilation of the Nothing occurs.

Just as something can be moved into actuality only insofar as it is in potentiality to that act, so too the intelligible content of an ontic reality can be realized only in a realm which has as its own nature an absence of intelligible content

³² We maintain, against McNeill’s English translation, the convention of capitalizing *Sein* as Being and *das Nichts* as the Nothing.

(cf. Heidegger 1929a: 55/38). It is the moment of original openness into which possibilities, and therefore meaning, can be unfolded.

Heidegger thus does, in a sense, associate as near and therefore nearly identical Being and Nothing: *Sein* as the innate possibility for the intelligibility of beings whereby Dasein unites them to itself, and *das Nichts* as the innate holding-open of Dasein of itself into the realm wherein beings can be continually discovered (Heidegger 1929b: 40/94–95):

“Pure Being and pure Nothing are therefore the same.” This proposition of Hegel’s (*Science of Logic*, book I: *Werke*, vol. III, p.74) is correct. Being and the Nothing do belong together, not because both – from the point of view of the Hegelian concept of thought – agree in their indeterminateness and immediacy, but rather because Being itself is essentially finite and manifests itself only in the transcendence of a Dasein that is held out into the Nothing.

That is, the Nothing is the essential possibility for beings to be manifest in *Sein* to Dasein; Nothing is, as it were, the primordial and potentially infinite possibility for resolution of beings into *ens primum cognitum* as the fundamental ground of all distinctively human cognition (Heidegger 1929b: 41/95):

Only because the Nothing is manifest can science make beings themselves objects of investigation. Only if science exists on the basis of metaphysics [i.e., fundamental ontology] can it fulfill in ever-renewed ways its essential task, which is not to amass and classify bits of knowledge, but to disclose in ever-renewed fashion the entire expanse of truth in nature and history.

In other words, the particulars discovered as beings, the ontic dimension of experience, are encompassed within the originary intellectual awakening and realization that is itself no-thing, what is at once itself like an emptiness seen in terms of “content”, but which, in relation to beings, is their illumination and the possibility of their cognitive realization. Being and Nothing are not simply mere concepts or merely empty predicates, but rather the condition of Dasein’s essential self-transcendence or the constitution of the “world” which is the “there” of Dasein (cf. Heidegger 1949: 20/109). To be, for Dasein, is to be through Being and Nothing (Heidegger 1929b: 41/96): “Metaphysics [i.e., fundamental ontology, care for Being] is the fundamental occurrence in our Dasein. It is that Dasein itself.”

Being and Nothing – which we might consider as the correlative dynamism of the actual (Being) and the possible (Nothing) illumination of beings – allow for what Heidegger terms the fundamental existential structure of understanding, which is further developed in interpretation and derivatively in assertion, as we discussed above (2.3; cf. Heidegger 1927a: 142–160/182–203).

It would be a profound mistake to think that because Heidegger, on the one hand, identifies Being and Nothing, and on the other, asserts that *Sein* in the intentional life of the human being is a “primordial” aspect, that *Sein* is for Heidegger an empty *a priori* concept; that is, *Sein* is certainly prior for Heidegger; but that does not make it, in the Kantian sense of the pure categories of the understanding, *a priori*; *Sein* is logically prior, but not chronologically prior, to the experience of the content of beings. To understand him otherwise is to confine Heidegger’s thought to some aspect of the history which it explicitly rejects. Rather, Heidegger sees in the identification of *Sein* and *das Nichts* the essential constitution of the human being in the species-specifically distinctive human intentionality. In other words, Being and Nothing are identified inasmuch as *Dasein*, the intentional life of human beings, is not the limited realization of beings merely as ready-to-hand in a world-poor *Umwelt* of mere objects, but the infinitely expandable realization of beings in the light of *Sein* belonging to the species-specifically rich world of *Dasein* (Heidegger 1929–30: 193):

The bee, for example, has its hive, its cells, the blossoms it seeks out, and the other bees of the swarm. The bee’s world is limited to a specific domain and is strictly circumscribed. And this is also true of the world of the frog, the world of the chaffinch and so on. But it is not merely the world of each particular animal that is limited in range – the extent and manner in which an animal is able to penetrate whatever is accessible to it is also limited. The worker bee is familiar with the blossoms it frequents, along with their colour and scent, but it does not know the stamens of the 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, constantly extendable not only in its range (we can always bring more and more beings into consideration) but also in respect to the manner in which we can penetrate ever more deeply in this penetrability.

There is, in other words, an ability for the human being to extend the species-specifically human world *ad infinitum*, not only by the encounter with new beings, but also with regard to the understanding of any individual, particular beings or sets of beings. This infinite ability for extension is allowed for by *das Nichts* and thereby the ground for the discovery, and objective constitution, of meaning.

3.3 The ontotheological critique and unfolding of the world

Though it has often been seized upon in what Heidegger himself would likely characterize as an inauthentic appropriation, an indubitably morose character permeates Heidegger’s philosophical endeavors (1929–30: 183): “As a creative

and essential activity of human Dasein, philosophy stands in the *fundamental attunement of melancholy*.” The human being stands in the world, but is not of the world: that is, something about Dasein causes a *feeling* of discontinuity, a feeling often difficult to cognitively reconcile with objects of experience. Though the human ostensibly stands higher than other animals, capable of constituting a *Bildendwelt* which subsumes the natural world and the *Umwelt*, a world capable of infinite expansion, humanity stands ever-ready to construct a perverse existence (Heidegger 1929–30: 194 [emphasis added]): “However ready we are to rank man as a higher being with respect to the animal, such an assessment is deeply questionable, especially when we consider that man can sink lower than any animal. *No animal can become depraved in the same way as man.*” What causes this depravity? What does depravity mean? To be depraved is a kind of deviance, of crookedness; a way of being contrary to how one ought to be. Whatever depravity an alloanimal experiences, it occurs outside its control.

It was a lamentable but understandable (though not excusable) shortcoming of Heidegger – unconsciously influenced perhaps by Scotus, or Suarez, or some other thinker of the late scholastic or even modern periods of philosophy – that he failed to see in Thomas Aquinas the distinction between *ens primum cognitum* as the underlying act of all specifically-human cognition and *ens inquantum ens* as the subject of the science of metaphysical inquiry (cf. Safranski 1994: 190–201). As he sees it (Heidegger 1929–30: 49):

Aquinas, in his unified orientation toward the concept of the *maxime intelligibile* and in the skillful interpretation of a threefold meaning [in the *proemium* to his commentary on Aristotle’s *Metaphysics*], attempts to bring together the traditional concepts that hold for metaphysics, so that *First Philosophy* deals with the *first causes* (*de primis causis*), *metaphysics* with *beings in general* (*de ente*) and *theology* with *God* (*de Deo*). All three together are a unified science, the *scientia regulatrix*... In other words, the concept of philosophizing or of metaphysics in this manifold ambiguity is not oriented toward the intrinsic problematic itself, but instead *disparate determinations of passing over and beyond* are here joined together.

While it is true that Aquinas often fails to distinguish his meaning in speaking of *ens*, it is false that these “determinations of passing over and beyond” are in fact disparate. Nor is it sufficient to speak of an all-encompassing *analogia entis* which comprises the different senses in which Thomas speaks of “being” – but rather, one must grapple with Aquinas’ understanding of *resolutio* (Kemple 2017: 241–46).

The more fundamental mistake of Heidegger, however, lies in his questioning after *Sein*, and falls within the same genus of error that many Thomists

make in interpreting Thomas on *ens ut primum cognitum*, although of the opposite species. That is, where the Thomists would metaphysicalize every instance of *ens*, including the *primum cognitum*, such that every mention of *ens* is one that is only towards the resolutions into *ens inquantum ens* and the highest causes, Heidegger would do the inverse: that is, he would have *Sein* be, in all cases, understood only as *ens* in the sense of the first intelligible, the revelatory dimension of what he terms the ontological. Thus it is that Heidegger holds *Sein* to at once be also *das Nichts*: Being is the Nothing, because the constitutive *esse intentionale* of every distinctively human cognitive action is infinitely expandable; there is no-thing to limit or restrict it. There is a vast and empty expanse into which that human cognition may infinitely, unrestrictedly unfold, creating incoherent, perverse interpretations, becoming not merely obstinate in our conceptual in-sistence but malicious. We are all too often the authors of our own depravity.

The difficulty – frightening and dismaying when its challenge is not met – with this possibility of infinite expanse is the grounding and orientation of the unfolding of cognition, particularly given the increasing role of socially-constituted reality in human life. How do we maintain a consistent and coherent narrative of belief – religious, scientific, literary, political, moral, personal, professional, philosophical? Whereas nature, φύσις, has evident intrinsic ordering, and thereby gives us its own rules, and demands a certain respecting for its good to be manifested, culture – though subservient in a way to human nature – seems to imply the possibility of pure self-determination, a possibility upon which many have obsessively seized; of a relative independence from or even justification of the radical altering of nature. Culture seems, as it is put in *Vom Wesen der Wahrheit*, to discover (Heidegger 1930: 9/121) “the capacity of all objects to be planned by means of a worldly reason which supplies the law for itself and thus also claims that its procedure is immediately intelligible”, rather than to follow the ordination of an innate τέλος, as in the case of nature, which strives to give things their order.

While Heidegger himself appears dismayed by this tendency, giving preference rather to the observance and cooperation with nature, his apparent belief in the lack of a distinctive teleological ordination or fulfillment for human beings in their cognitive lives and therefore for human nature as a whole undermines the hope for such a cooperative position. If the horizon of cognitive realization is itself infinite potential, infinite possibility, without some infinite actuality against which it may be compared, or to the good of which it may be subordinated, then there are no grounds to call as lies or evils the realizations of possibilities which are contrary to nature. In other words, unless human nature is not only constituted from *ens* as the *primum cognitum*, but also constituted towards and in

sense for the attainment of *ens* as the greatest actuality of being, there is no ultimate basis for human morality.

What is the Nothing for the atheist that grounds the possibility of experience without grounding an ordering-towards of that experience, without the grounding of purpose, however, is for the theist that infinite possibility for experience of beings grounded by the infinite actuality of God; whereas the theist strives to resolve to such a highest cause, the atheist can resolve only into his or her own experience (Aertsen 2005: 416–18). For Heidegger's philosophical project – whatever anecdotes may be told about deathbed conversions or late concern with the Church (cf. Safranski 1994: 432–33) – therefore, the only principle into which the objects of specifically-human experience can be resolved is *das Nichts*, a principle which does not govern the *existence* of things, but only of their intelligibility-to-humans, whereas the theist can resolve the objects of experience both to the root of their intelligibility-to-humans and, albeit inchoately, their existence-towards-God.

But this presumes a dichotomy: that either one actively disavows the existence of God or one actively affirms it, leaving no room in between. Does one find a principle of coherence between nature and culture only by a Kierkegaardian leap into the divine? Or might we find an answer elsewhere – in the growth of symbols?

Semiotics, though not yet fully established – it remains undecided, and likely will for some time, whether it will forge the path of a discipline in its own right, or that of an interdisciplinary methodically-proceeding point of view³³ – continues to bloom in the 21st century. Regardless of which direction it ultimately takes, or if it continues to vacillate between both, semiotics provides a means for bringing the whole into perspective, for wrangling into a coherent unity both the totality of experience and the objects of experience; for as Peirce named it, semiotics is the normative science of truth (1903a: *EP.2.260*; 1903m: *EP.2.199*) and the “purpose of signs – which is the purpose of thought – is to bring truth to expression” (1893d: *CP.2.244n*). As a proposal for the integration of Heideggerian phenomenology with semiotics, our goal is not to examine with any great depth the genuine developments of semiotics currently taking place – such as in biosemiotics,³⁴ cultural, media semiotics, and cybersemiotics, though we will take them into account and especially where they challenge or develop the foundational points raised and examined here – but rather to look at the foundations, especially in the thought of Charles Peirce, chief among all thinkers in the origin of the semiotic movement. As Jesper Hoffmeyer writes in his excellent *Signs of Meaning in the Universe* (1993: 131), “Scholarship is worth no more than the foundation on which it is built, and anyone who does not pay some heed, at regular intervals, to the foundations of their scholarship, is not much of a scholar.”

If we want to develop a sufficient semiotic theory of human experience, we need a strong account of how we have knowledge; for a sign is anything which determines the orientation of an interpretant towards an object, and the specifically-human mode of being an interpretant is the intellectual. Completely handing this task over to ideoscopic science – or even to supposedly philosophical endeavors which adopt the method of an information processing paradigm – ensures only a mischaracterization. Non-semiotic philosophical attempts at formulating an explanation have struck the right note with the description of consciousness (which I take as knowledge broadly construed; one might say as “awareness”), as an “emergent property”; but this single, tremulous note is not

33 My own view is that semiotics makes more sense as Peirce saw it – the normative science of truth – and its attempted application as an interdisciplinary method should more properly be seen as Heidegger’s phenomenology: that is, the method proper to all of cenoscopy.

34 Itself, I think, an ideoscopic endeavor being carried out under a cenoscopic awareness: that is, the study of sign action (semiosis) in non-human life (or even in human life beneath the species-specifically human metasemiotic use of signs) carries out its investigations in light of what semiotics generally, as the normative science of truth, makes known about how signs operate; but its object of study is not the sign as such, but the sign as used in life.

yet the rich chord we need. To bring it into harmony, we need to examine the Categories of Experience, the “characteristics that are never wanting” in any possible object of experience (Peirce 1903c: *EP.2.147*), for Peirce’s semiotics are founded entirely upon his phaneroscopy.

Moreover, to demonstrably unveil the process whereby nature and culture are integrable into some whole, one needs to arrive at an understanding of that which allows interchange of any sort to occur: namely, signification, whether this be of a wholly non-cognitive process, as occurs in the physiosemiotic interactions of subatomic particles, the zoosemiotic adaptation to one’s *Umwelt*, or the linguistically-constituted semiotic understandings of human beings. To this end, we must examine the essentially semiotic philosophy of synechism: that is, how a semiotic theory of the universe allows us to perceive a coherent wholeness to the otherwise seemingly disparate phenomena constituting the objects of our experience. As Deely writes (1994a: 7):

The semiotic web, sustained within and by the larger network of semiosis tying anthropo-semiosis itself to the biosphere (through its zoosemiotic and phytosemiotic strands) and to the physical environment at large (through its physiosemiotic strands), constitutes the reality of all that is experienced, but suchwise as to ensure that that reality cannot be divided in a final way into what is and what is not independent of the cognition.

The synechistic nature of the multi-dimensional semiotic web – more, indeed, of a cobweb than the two-dimensional production of an orb-weaver – is essential to an intelligible account of emergence, which, if it is to be any explanation of the inherent teleological structure of evolutionary development, needs itself to be intelligible. It is unfortunate but all too easy that the idea of emergence – understood as the creation of new properties from entities not themselves possessing those properties (cf. Emmeche, Køppe, and Stjernfelt 1997) – vague as it still is, becomes an “answer” that is not really an answer, but just another appeal to a principle not itself understood. If our answer to the question, “how does X come about?” is that “it emerges”, this, in itself, is no better (and possibly quite worse) an answer than “God wills it” – divine volition being at least grounded in a theory of divine omnipotence – for whether emergence is the product of *vis a tergo* accidental collisions in differing lines of efficient (*viz.* mechanical) causality or the result of “downward” causal determinations of existent wholes influencing constitutive parts, some combination of the two, or an otherwise parallel process, there are still unexplained presuppositions necessary to those operations.

All of which is not to say that human consciousness and, within that, the human cognitive capacity, is not an emergent property – but rather to say that we need to understand emergence as the description of a semiotic process unfolding in an already-teleologically-structured universe. Without such an

understanding, as we will show, the intelligibility of the universe, and especially of the human being within the universe, collapses: anthroposemiosis is tied to the universe-pervading semiotic web, which web is not only the constitutive force behind the universe's synechistic coherence, but also as what makes the coherent whole of the universe intelligible in the first place.

In the first division, therefore, we saw the elements Heidegger considered necessary to understanding the species-specifically human world, at the center of which we find the intentional life known as *Dasein*. Here, in the second division, we will discover the ingredients for grasping a cosmos, of which the key catalyst is the sign itself.

4 Categories of experience

In the history of philosophy, the categories of Aristotle and Kant stand as the principal guideposts, respectively, for realist and idealist attempts to organize the contents of experience. Each system aims at an exhaustive enumeration, but each comes up short: for neither the perspective of the realist nor that of the idealist is sufficient for explicating the entirety of our experience. It is to this end that Peirce, influenced by both but attempting synthesis with neither, developed his own system of categories.

For Aristotle, despite their posthumous positioning by his students and interpreters at the beginning of the so-called *Organon* (as a series of works through which the science of logic is structured), the categories are not ways of thinking but ways of being, belonging to the objects they classify. We do not categorize the phenomena of our cognition as substance or accident, as quality or quantity, but the beings themselves are thereby considered to exist substantially, quantitatively, etc. For Kant, the categories are, conversely, a structure on the basis of which we accomplish our thoughts. The *Ding-an-sich*, as an unknowable “out there” which never arrives phenomenally to us, may have an innate structure which is more or less comparable to the categories, but this cannot be known with certainty. Rather, what we can know is the consistency of these categorical judgements across a multitude of experiences, whereby we infer their transcendental validity.

Peirce’s approach to the categories might seem on first glance, like Kant’s, to be a subjectivized approach; for his are evidently categories of experience. But unlike Kant, Peirce conceives his categories in a framework antecedent to any division of subject and object, for their ground is Firstness, which is always undifferentiated in all ways, including the differentiating opposition of knower and known. Moreover, unlike either Kant or Aristotle – both of whom attempt to classify the intelligible nature of objects (albeit from different grounds, i.e., the nature of things themselves or the nature of thought) – Peirce’s categories deal with the nature of *experience* itself, and consequently, inasmuch as thought extends to things, comprises both things and thought. That we, following Deely (2001a: 645) term these categories of “experience” should therefore not be misconstrued as representing a subjectivist interpretation; to the contrary, though the categories can only be fully understood through the lens of species-specifically human experience, they necessarily transcend the limits of subjectivity and the false dichotomization of subject and object, and instead demonstrate the inseparability of knower and known by classifying the modalities of experience, rather than its objects. Consequently, we will sometimes refer to Peirce’s categories as *modal* Categories of Experience.

Perhaps the most unique feature of Peirce's categories, in comparison to the systems proposed by Aristotle and Kant, is their experiential inseparability. Each category, in human experience, "builds" upon the category before it. Whereas Aristotle's primary division, which sees a distinction between being which exists as a relatively-independent whole or as a characteristic residing within (and dependent upon) some such whole, and Kant's fourfold division, which structures its distinctions according to a schema of cognition-dependent organization of phenomena (quantification, qualification, relation, and modality), both provide systems where belonging to one category ensures a kind of mutual exclusivity, in the same regard, from other categories – what is a time is not also in the same regard a place, and what is problematic cannot be apodictic (and what it is to be apodictic is not of the same kind as what it is to be singular) – Peirce's categories are each universally present in every occasion that there happens to be an interpretant. A point of some contention within the semiotics community is what precisely is required to constitute an interpretant; for Peirce himself suggests that given the right circumstances – the universe being "perfused with signs" – anything can become an interpretant, living or not. If we take this suggestion of Peirce seriously, it emerges that semiosis is a potentially infinite process for which the scalable inseparability of Peirce's categorical triad accounts (Deely 2001a: 644).

Where this unique feature of Peirce's categories gives it a distinct advantage over both Aristotle's and Kant's that it allows us access not only to the content of experience, but to the very nature of experience itself.

4.1 The categorical triad

In his early "Questions Concerning Certain Faculties Claimed for Man", Peirce denies the possibility both of absolutely-determinative intuitions – that is, intuitions whereby the whole content of the object thereby thought is determined by the transcendental object itself – and of introspection, of an internal vision catching sight of our ideas (1868a: *EP*.1.11–27). Rather, he claims, thinking occurs always through signs: that is, thinking is essentially a referential activity; thinking is inescapably towards, or about, something other than the thought that is "doing" the thinking (Peirce 1868a: *EP*.1.23–24). This is by no means a new idea: the Scholastic notion of cognitive intentionality (even more so than the *Intentionalität* of Husserlian phenomenology) holds the same. Signs, constituted always on the basis of earlier cognitions, mediate all species-specifically human experience.

The action of semiosis, the signification conveyed from object to interpretant by means of some sign-vehicle (or representamen) determining how that

interpretant is related back to the object, extends beyond the range of human reason and forms the underlying basis of all continuity in the universe. We will return to this continuity in the following chapter. First, we must inquire here as to the fundamental necessities present to any semiotic occurrence, and thus to continuity. This means discovering and understanding the “characteristics that are never wanting” in the phaneron (the totality of what manifests or the process of manifesting [Peirce 1903c: *EP*.2.147]), i.e., the totality of the necessary structure for whatever is present to the mind (Peirce c.1904b: *CP*.1.284) in any given cognition. As “what is present to the mind”, Peirce means that which has been brought to awareness through the holding-towards established by the sign-relation, including whatever contributions there might be from the mind itself. Phaneroscopy, therefore (Peirce c.1904b: *CP*.1.286):

is that study which, supported by the direct observation of phanerons and generalizing its observations, signalizes very broad classes of phanerons; describes the features of each; shows that although they are so inextricably mixed together that no one can be isolated, yet it is manifest that their characters are quite disparate; then proves, beyond question, that a certain very short list comprises all of these broadest categories of phanerons there are; and finally proceeds to the difficult and laborious task of enumerating the principal subdivisions of those categories.

The short list of broadest categories is that containing the expansively-named Firstness, Secondness, and Thirdness. Attempts at describing these three categories span the entirety of Peirce’s career. Despite this fifty-year stretch of writing and thinking about the fundamental categorical triad, despite the numerous verbal formulations given in description of them, the categories remain a constant fixture with stable meaning. Briefly, let us explain each of the three.

4.1.1 Firstness

Because of its simplicity, the category of Firstness obstinately resists accurate description. As Peirce himself states (1887–88: *EP*.1.248), the First “cannot be articulately thought: assert it, and it has already lost its characteristic innocence; for assertion always implies a denial of something else. . . remember that every description of it must be false to it.” Roughly, notwithstanding this inherent and inescapable falsity, we can class Peirce’s descriptions of Firstness into three kinds: 1) those concerning the immediacy of presentness; 2) those addressing the First as positive being-itself without further reference; and 3) those which name it a “quality of feeling”. Oftentimes, these three characterizations overlap, as when Peirce states (1903d: *EP*.2.160) that “Category the First is the

Idea of that which is such as it is regardless of anything else. That is to say, it is a *Quality of Feeling*.” Frequently, Firstness is mischaracterized as being subjective or the locus of “first-person” experience, seemingly because this lattermost class, the “quality of feeling” is interpreted to mean the living of experience (e.g., Sonesson 2015: 44; Houser 2010: 99 [clarified somewhat at Houser 2014: 28]; Brier 2010: 1903, 1905, 1908–09; 2008a: 241, 243, 2441; Favareau 2008: 30; Emmeche 2006: 9). This mistaken but widespread reading fails to note that Firstness is characterized principally by possibility; the emphasis should be on the quality, as what may possibly be felt, and not the feeling, which is only a possible occurrence (cf. Short 2007: 78).

To clarify: Firstness is the mode of being itself, the modality of an experience, whereas the First is the being as conceived according to that mode of being, as within that modality.³⁵ Thus we can say that “X is a First”, but not “X is a Firstness”; likewise with Seconds/Secondness and Thirds/Thirdness. Firstness therefore belongs to what phenomenology names in human existence as lived experience, while the First belongs to the object as experienced. But already this division, if taken as describing a real separation, implies a kind of falsehood: for it separates into parts the experiencing and the experienced, which are united in the common emergence of some possibility. There is no division in Firstness, which antecedes any division into subject and object, into internal or external. Every “Firstness” is varied, vague, indefinite, or confused but undifferentiated.

Perhaps the most thorough and helpful description Peirce gives of Firstness, as clarifying species-specifically human experience, is also one of the earliest, found in the third paragraph of his seminal “On a New List of Categories” (1867). It is this text which we will take as one of our two principal lights for understanding the nature of Firstness (1867: *EP.1.1–2*):

³⁵ Peirce makes this all important distinction in an unassuming footnote, 1903e: *EP.2.271n*: “The conceptions of a *First*, improperly called an ‘object,’ and of a *Second* should be carefully distinguished from those of Firstness or Secondness, both of which are involved in the conceptions of First and Second. A First is something to which (or, more accurately, to some substitute for which, thus introducing Thirdness) attention may be directed. It thus involves Secondness as well as Firstness; while a second is a First *considered as* (here comes Thirdness) a subject of a Secondness. An *object* in the proper sense is a Second.” Without the distinction of First and Firstness, Second and Secondness, the distance between “subject” and “object” would not appear, and consequently, neither would Thirdness. We would be stuck in a monadological universe – for any dyadic universe which does not give rise to triads collapses into a concatenated monadism in which emergence is impossible.

[1] That universal conception which is nearest to sense is that of *the present, in general*. This is a conception, because it is universal. [2] But as the act of *attention* has no connotation at all, but is the pure denotative power of the mind, that is to say, the power which directs the mind to an object, in contradistinction to the power of thinking any predicate of that object, – so the conception of *what is present in general*, which is nothing but the general recognition of what is contained in attention, has no connotation, and therefore no proper unity. [3] This conception of the present in general, or IT in general, is rendered in philosophical language by the word “substance” in one of its meanings. Before any comparison or discrimination can be made between what is present, what is present must have been recognized as such, as *it*, and subsequently the metaphysical parts which are recognized by abstraction are attributed to this *it*, but the *it* cannot itself be made a predicate. This *it* is thus neither predicated of a subject, nor in a subject, and accordingly is identical with the conception of substance.

Three points require our attention for successful interpretation of this text. First [1], Peirce calls Firstness, as the awareness of “the present”, the “universal conception which is nearest to sense”; what is meant by this nearness to sense? Any conception, insofar as it is universal, is distinct from the experience proper to sensation, an experience always particularized. To universalize requires abstracting from the particularity of sense, and the degree of universality a concept has corresponds directly to its abstraction from the particularity of sense; therefore, that universal conception which is nearest to sense would be that which is least abstracted from it. In other words, the *content* of the universal conception would involve no clear distinction from the content of sense experience – there is no grasp of the distinction between formal object and material object; rather, something must be different in the manner of experiencing itself.

This difference of experience is [2] the “pure denotative power of the mind”, i.e., attention; the presence or making present of objects not to sense, but to the mind. Clearly there must be a difference in this presence, compared to the presence experienced by the sense faculties. Peirce indicates this by stating that this act results in a “conception of *what is present in general*, which is nothing but the general recognition of what is contained in attention”. Sensation does not result in a conception of what is contained in attention; rather, it results in a conception of that to which its attention is drawn. In the experiencing of the present in general as that to which the mind’s attention is drawn, there is experience of presence itself.

Such experience of pure presence, the “IT in general” [3] precedes the abstractive process whereby content is distinguished according to quiddity, essence, or nature; it is an experience which occurs before any distinct ideas are formed, and therefore before any composition or division – that is, predication – can take place. As Deely puts this (2001a: 647):

What this intelligibility consists in is the objective world presented in perception apprehended in relation to itself.

The relation of an object to itself is a mind-dependent relation. Even if the object is in one or another aspect also a thing, that is, a mind-independent element of the physical environment, as is always in part the case with an Umwelt, any given thing ‘in itself’ simply is what it is. It is not *related to* itself, it *is* itself. For a thing to be *related to* itself cognition must intervene, and cognition of a specifically intellectual type, able to construct and grasp relations independent of the related terms which, in the present case, are not even distinct mind-independently. Here, however, at the level of *primum intelligibile* [Firstness], it is not a question of any given object of perception being cognized under a relation to itself. It is rather a question of the objective world as such, the Umwelt as the totality of objectification at any given moment, being grasped in relation to itself.

Consequently, we have to say that Peirce’s identification of this “IT” with “substance” (in any sense) is mistaken (Deely 2001a: 648–50), despite IT truly being impossible of predication – for its irreducibility to the structures of substance follows from its transcending of any distinction into substance or accident, subject or object, lived experience or content of experience. In other words, the category of substance belongs to a predicative order of quidditative grasp, of what has been distinguished, whereas the “IT in general” precedes any such distinction.

To recapitulate, then: the category of Firstness, as an element present in every species-specifically human cognitive activity, is the experience of the pure presence belonging to the experiencing of an object as something not contained in the sense data but co-present with it. More generally, however, the pure presence of the category of Firstness is the mode of being of *possibility*. This identification is taken from the second of our principal textual lights on the nature of Firstness (Peirce 1903e: EP.2.268–69):

Possibility, the mode of being of Firstness, is the embryo of being. It is not nothing. It is not existence. We not only have an immediate acquaintance with Firstness in the qualities of feelings and sensations, but we attribute it to outward things. We think that a piece of iron has a quality in it that a piece of brass has not, which *consists* in the steadily continuing *possibility* of its being attracted by a magnet. In fact, it seems undeniable that there really are such possibilities, and that, though they are not existences, they are not *nothing*. They are possibilities, and nothing more. But whether this be admitted or not, it is undeniable that such elements are in the objects as we commonly conceive them[.]

The lived experience of the individual, whereby we are acquainted with objects as Firsts, acquaints us with their possibilities. Presence what allows for feelings and sensations to occur, and presence is the presence of possibility – neither

existence nor nothingness. And the presence of possibility is not from the subject alone, as the result of a subjective projection, but from the object precisely as objectivized. These possibilities are not the things themselves (which are “existences”), nor are they the happenings which occur in the subject through encountering them (which are also “existences”, i.e., actualities).³⁶ They are the unrealized vague could-be.

Perhaps it is difficult to see how “red”, the experienced sensation, is an unrealized possibility. This difficulty is because Firstness does not occur in a vacuum from Secondness and Thirdness, and when I say the word “red”, you do not conjure up the indeterminate range of possibility that word represents, but some particular determinate red. Moreover, even our sensations are not as particular and determinate as we might think. Each object sensed includes undetermined possibilities for becoming present to attention, inasmuch as no object sensed is unvarying in its sensible qualities.

4.1.2 Secondness

Peirce describes the category of Secondness as the easiest to comprehend: for it is the category of reaction or struggle, the resistance of the world which we habitually encounter. Every time we are struck by some other, we encounter a Second. But Secondness is not consciousness of two things, or two separate acts of consciousness, but rather a consciousness which is itself “two-sided” (Peirce 1903e: *EP.2.268*):

Of these three, Secondness is the easiest to comprehend, being the element that the rough-and-tumble of this world renders most prominent. We talk of *hard* facts. That hardness, that compulsiveness of experience, is Secondness. A door is slightly ajar. You try to open it. Something prevents. You put your shoulder against it, and experience a sense of effort and a sense of resistance. These are not two forms of consciousness; they are two aspects of one two-sided consciousness. It is inconceivable that there should be any effort without resistance, or any resistance without a contrary effort. This double-sided consciousness is Secondness.

³⁶ As Stjernfelt (2007: 15) observes, “The existent sensory and other qualities of experience are thus, to Peirce, only remaining, actualized fragments of a[n] original, basic continuum of possibility, uniting all possible qualia in one continuous manifold”. This is true, but does not, I think, grasp the cognitive complexity at work in the layering of “Firsts” and “Firstnesses” (which distinction seems to escape Stjernfelt’s *Diagrammatology* – see, e.g., p.16), such that *each* sensory quality is itself a First, and the experience of it the experience of a Firstness, while the sheer openness of the “one continuous manifold” is itself another First.

We experience Secondness most strongly in the resistance to acts willed. This is not an experience, as such, of “act willed” and “resistance”, as two separate beings, but rather the resistance-against-the-willed as a kind of unit – one should characterize it most aptly as the experience of struggle. Thus, Secondness as an element of conscious experience is undivided; but simultaneously, provisions the possibility of realizing a Second.

It is natural that the experience of resistance against an effort – which is not to say failure, but simply any prevention of that effort’s immediate occurrence – would introduce to awareness some conception of the other, the non-ego; of the proper sense of the object, in the sense of the Latin *obiectum* and the German *Gegenstand*. Thus, we can safely summarize Secondness, as a category of experience, as the experiencing of the relatedness of the other, the other’s reference to self, of not *mere* presence, but presence of some other as opposed to oneself (see Peirce 1887–88: *EP.1.248*; 1891: *EP.1.296*; 1903c: *EP.2.150*; and 1903d: *EP.2.160*). Secondness, in other words, is the experience of worldly interruption in the otherwise smooth continuum of subjectivity.

4.1.3 Thirdness

Although relied upon in every act of communication, Thirdness – the category of mediation – more easily disappears into the warp and weft of human thinking than the other two categories, which are familiar to us in the notions of “ideas” and “others”: for despite Thirdness being manifestly present in perception – (Peirce 1903f: *EP.2.223–24*): “it is necessary to recognize. . . that perceptual judgments contain elements of generality, so that Thirdness is directly perceived” – Thirdness is often absent from the products of conceptualization. The conventional languages of the Western world, with their bifurcation into subjects and objects, deemphasize the relativity binding the two together (or binding each in itself). Such constrictive thinking, in terms of substantial units, results almost inevitably in calcified systems of thought; to which awareness of the essential reality of Thirdness serves as a life-giving remedy.

To explain this third category, Peirce employs arguments³⁷ for the operative reality of general principles in physical existence. General principles are taken to be Thirds, i.e., mediators between any two Firsts, casting them into a

³⁷ An argument, notably, in the distinctly Peircean sense, wherein it is distinguished from an *argumentation*. (Peirce 1908: *EP.2.435*): “An ‘Argument’ is any process of thought reasonably tending to produce a definite belief. An ‘Argumentation’ is an Argument proceeding upon definitely formulated premisses.”

relationship such that at least one is a Second to the other.³⁸ That generality stands crucial to the operations of thought cannot be denied with any logical consistency; were it not the case, thought as actually experienced could not occur (cf. Peirce 1877a: *EP.1.106–7*; 1903f: *EP.2.208–11*). That these general principles are not merely fictions of the mind, however, fabricated to compensate for a lack of completeness in sensory understanding, but rather real principles in the things themselves, requires a deeper analysis upon which the whole question of inductive validity hinges (Peirce 1903f: *EP.2.216*).

We can class Peirce's arguments for the operative reality of Thirds or general principles in physical nature, into, first, those whereby this generality *in re* is shown to be generative of generality *in mente* and, second, those whereby generality is shown to be governing of *res* in themselves. This division is not for the sake of showing some real distinction between what exists *in mente* and *in re*, but for our own understanding, since the true nature of Thirdness underlies both such arguments equally. Of the first class, arguments showing generality *in mente* to originate from generality *in re*, the best instance is to be found in the last two of the 1903 Harvard Lectures, "The Nature of Meaning" and "Pragmatism as the Logic of Abduction". Here, Peirce enumerates his three "cotary" propositions (1903f: *EP.223–24* and 1903g: *EP.2.226–27*):

- 1) *Nihil est in intellectu quin prius fuerit in sensu* – that is, nothing is contained in the meaning of any kind of cognition which is not found first in a perceptual judgment.
- 2) Perceptual judgments contain general elements, such that universal propositions can be deduced from them.
- 3) Abductive inference "shades" into perceptual judgment, such that, despite a true distinction of kind, there is no "gap" between the two.

The subsequent pages of "Pragmatism as the Logic of Abduction" elucidate the truth of these propositions at length. To adumbrate Peirce's arguments: all of our perceptual experience is filtered through often-unconscious interpretation. We do not simply receive, but we receive-as. This "interpretativeness of the perceptive judgment", Peirce (1903g: *EP.2.229*) says, "is plainly nothing but the

³⁸ Note that, when we are talking about the relation as between Firsts, Seconds, and Thirds, we can look at this two ways: one, as Peirce says in "Sundry Logical Conceptions" (1903e: *EP.2.272–3*) signs are Firsts, objects are Seconds, and interpretants are Thirds – for in the action of semiosis, the sign is primary, causing the Third to be determined by the Second. But here, we are talking about the substantial existence of the beings as ontologically prior to the action of semiosis; in which case, the sign is, as a mediator between two relatively-independent beings, a Third.

extremest case of Abductive Judgment.” Interpretation perfuses perception, rendering it more than mere reception by an otherwise inert vessel. Because every interpretation involves a predication – not mere conjunction of the general and the particular or subsumption of the particular into some classification by the general, but assertion of the more general as being really present in the more particular – perception, insofar as it is interpretative, is perfused with generality. But perception occurs only in the presence of an object to be perceived. Thus, though the generality is not handed over by the object as though something contained in the object perceived as such, as an aspect innate in it, nevertheless generality is found immediately in perception itself (cf. Stjernfelt 2007: 9), for in the relation between the object and the one perceiving there is to be found a determining rule: interpretation, as the provision of an *as* structure to the objects of perception, is the implicit assertion of a rule’s presence in the revelation of the object to the knower. The natural relation between the perceiver and the perceived inescapably (cf. Peirce 1903g: *EP.2.240*) involves generality.

Put otherwise, the content of universal propositions is found directly in the perceptual content of sense-originating experience. Thus we can derive universal propositions necessarily from particular ones which contain general elements (Peirce 1903f: *EP.2.210*):

But as from the particular proposition that “There is some woman whom any Catholic you can find will adore,” we can with certainty infer the universal proposition that “Any Catholic you can find will adore some woman or other,” so if a perceptual judgment involves any general elements, as it certainly does, the presumption is that a universal proposition can be necessarily deduced from it.

This possible deduction of universal propositions pervades all our perceptual judgments, for our perceptual judgments always entail some degree or another of connection between one and another, which connection is itself found to contain realities that can be grasped as general (Peirce 1903f: *EP.2.211*):

from that proposition that one event *Z* is subsequent to another event, *Y*, I can at once deduce by necessary reasoning a universal proposition. Namely, the definition of the relation of apparent subsequence is well known, or sufficiently so for our purpose. *Z* will appear to be subsequent to *Y* if and only if *Z* appears to stand in a peculiar relation, *R*, to *Y* such that nothing can stand in the relation *R* to itself, and if, furthermore, whatever event, *X*, there may be to which *Y* stands in the relation *R* to that same *X*, *Z* also stands in the relation *R*. This being implied in the meaning of subsequence, concerning which there is no room for doubt, it easily follows that whatever is subsequent to *C* is subsequent to anything, *A*, to which *C* is subsequent, which is a universal proposition.

The appearance of subsequence (Z following Y) requires the appearance of a relation (R), such that if Y stands in the same (kind of) relation R to X , Z also stands in the same relation R to X , for whatever is subsequent to an intermediary is also subsequent to what is primary. Although this rule is deduced by reason, the relation itself of subsequence nevertheless appears in our perception of one thing following another. Peirce, after delivering the above two quotes, claims (1903f: *EP.2.211*) that “Thirdness pours in upon us through every avenue of sense.” Precisely what this ubiquity of Thirdness in perception means, however, remains to be shown.

The second class of arguments, those claiming that general principles govern *res ipsae*, follow from those demonstrating the immediate grasp of general principles within perception. That things appear to us with simultaneous singularity (i.e., as in at least some respects unlike any other) and uniformity (as in some respects precisely alike to others) is difficult to deny. Every accounting which we can give for things, however – such accounts invariably delivered by the linguistic faculty – is constituted entirely by generality. This generality of discourse derives from the uniformity present to sense. As Peirce states, this uniformity present to sense suggests to us the reality of general principles (1903h: *EP.2.183*):

With overwhelming uniformity, in our past experience, direct and indirect, stones left free to fall have fallen. Thereupon two hypotheses only are open to us. Either: first, the uniformity with which those stones have fallen has been due to mere chance and affords no ground whatever, not the slightest, for any expectation that the next stone that shall be let go will fall; or, second, the uniformity with which stones have fallen has been due to *some active general principle*, in which case it would be a strange coincidence that it should cease to act at the moment my predication was based upon it.

The connection of this active, general principle to Thirdness, which Peirce uses (1903e: *EP.2.269*) as “a synonym for Representation”, hides in the obscurity of our everyday use of language. Thirdness, as representation, as mediation, as betweenness, “is found wherever one thing brings about a Secondness between two things.” In other words, the defining character of Thirdness is the relating of two – which is to say, the bringing of one into a connection with the other. “In all such cases,” Peirce goes on, “it will be found that Thought plays a part. By thought is meant something like the meaning of a word, which may be ‘embodied in,’ that is, may govern, this or that, but is not confined to any existent.” Here again we have the perfusion of the general through the individual: thought, which Peirce rightly does not relegate to a sphere separate from matter (which is conceived of by Peirce as

“effete mind”³⁹ (1891: *EP.1.293*) – and dualism as “the philosophy which performs its analyses with an axe, leaving, as the ultimate elements, unrelated chunks of being” (1893: *EP.2.2*), mediately governs the reaction occurring in one thing by importing the action of another.

But thought, as such, is not confined to this or that existent. Rather (Peirce 1878: *EP.1.131*), “the whole function of thought is to produce habits of action”. Thought intermediates between states of doubt and states of belief: doubt being that state (Peirce 1877b: *EP.1.114*) which “stimulates us to action until it is [itself] destroyed”, and belief that wherein “we shall behave in a certain way, when the occasion arises” – which is to say, thought governs actions by habits, by regularities which transcend the multitudes found to abide by those regularities (Peirce 1903e: *EP.2.269*):

Thought is rather of the nature of a habit, which determines the suchness of that which may come into existence, when it does come into existence. . . Thirdness consists in the formation of a habit. In any succession of events that have occurred there must be some kind of regularity. Nay, there must be regularities strictly exceeding all multitude. . . If, however, there be a regularity that never will be and never would be broken, that has a mode of being consisting in this destiny or determination of the nature of things that the endless future shall conform to it, that is what we call a *law*. . . To deny reality to such laws [i.e., real governing regularities in nature by which we may accurately predict future events] is to quibble about words. Many philosophers say they are “mere symbols.” Take away the word *mere*, and this is true. They are symbols; and symbols being the only things in the universe that have any importance, the word “mere” is a great impertinence. In short, wherever there is thought there is Thirdness. It is genuine Thirdness that gives thought its characteristic, although Thirdness consists in nothing but one thing’s bringing two into a Secondness.

Peirce distinguishes genuine Thirdness from two degenerate forms: the most degenerate Thirdness (1903d: *EP.2.161*) “is where we conceive a mere Quality of Feeling, or Firstness, to represent itself to itself as Representation. Such, for example, would be Pure Self-Consciousness, which might be roughly described as a mere feeling that has a dark instinct of being a germ of thought.” In other words, the degenerate Thirdness of “Pure Self-Consciousness” is the irreducible experience of oneself as a subject. The lesser degenerate Thirdness is exhibited in an “irrational plurality”, which is to say a chain of secondarity, wherein

³⁹ This claim has been taken to indicate that Peirce held, at least for a time, a theory of panpsychism (cf. Stjernfelt 2007: 29, 43; Deely 2015: 352n19). As we will see in 5.3, however, the understanding of *mind* which belongs to Peirce is not defined by hard and fast boundaries and cannot always be taken to indicate mind in the strict sense, i.e., as possessing awareness in first-person subjectivity.

there is Secondness and a second Secondness, such that one stands in a mediating role.⁴⁰

In contrast, therefore, genuine Thirdness consists not in self-referentiality nor in intermediate secondarity, but rather in the *relating itself*,⁴¹ which relating consists in the formation of habits – which habits, governing their possessors (cf. Stjernfelt 2007: 38), are responsible for the perceived uniformity of behavior such as both the falling of dropped stones and praying of rosaries by Catholic women. Whether these habits are as universally perfused throughout the universe as Peirce (and Deely) claim requires further investigation; as we will see (c.5), it is a pivotal question in the inquiry after emergence.

4.1.4 Appearance and connectedness

We attain a proper understanding of the categories, however, and especially as structuring our own lives, only when they are seen as a whole. For all three together are essential to the constitution of human experience, and indeed, to anything to which we can attribute an experience. To take a felicitous term from Jesper Hoffmeyer (1992: 101–24 and 1993: 61–62), the *semiotic freedom* of every individual – the ability to use and produce significance and meaning correlative to the depth of meaning present in experience (cf. Hoffmeyer 2010: 34) – depends upon the modes of appearance of the categories to each individual. To quote Peirce (1903e: *EP.2.272*):

In the ideas of Firstness, Secondness, and Thirdness, the three elements, or *Universal Categories* appear under their forms of Firstness [cf. Peirce 1903i: *CP.1.530–544*]. They appear under their forms of Secondness in the ideas of Facts of Firstness, or *Qualia*, Facts of Secondness, or Relations, and Facts of Thirdness, or Signs; and under their forms of Thirdness in the ideas of Signs of Firstness, or Feeling, i.e., things of beauty; Signs of Secondness, or Action, i.e., modes of conduct; and Signs of Thirdness, or Thought, i.e., forms of thought.

⁴⁰ As if we were to take, from (Peirce 1903f: *EP.2.211*) above, the *Y* as between the *X* and the *Z* to be performing the connection between the two, it thereby exhibits a degenerate Thirdness, though properly it is as itself involved in two relationships of Secondness (*X:Y* and *Y:Z*). We find this kind of thirdness operative primarily in the operations of physiosemiosis.

⁴¹ This particular articulation – that Thirdness is not some *thing* in the classical sense, but *relation* – is one with which Peirce seemed consistently to struggle throughout his career. I am indebted to the inestimably valuable work of John Deely in understanding the difference, and the importance. See below, 5.2 and 6.3, for more.

The ideas of this passage do not appear explicitly anywhere else in the Peircean corpus, to the best of my knowledge. Yet their profundity as a tool for understanding the phaneroscopic breadth of the categories, and especially the perfusion of signs throughout the universe, is not to be underestimated. Exploring the full significance of these nine *presentative forms* of the categories intimated in this brief passage would take a chapter, if not a book, unto itself (see Appendix 1). Consequently, I wish only to explain in brief the distinctions in the modes of appearance of belonging to the categories, as it is essential to understanding the role of semiosis in human cenoscopic understanding.

Of important note, before such explanation, is that our focus in this chapter concerning Firstness is primarily upon the species-specifically human experience of Firstness. The universal character of Firstness, as the fundament of experience for *all* beings and not just the semiotic animal, eludes accurate depiction even more successfully than description of it as the fundament of human experience. Nevertheless –

Firstness is the fundamental opening of a being to its own possibilities of experience. While attributable to the objects experienced, Firstness belongs properly to the being experiencing alone. Thus, for a human being, Firstness entails the present itself, as such; the opening to experiencing a First in its Firstness, or the experience of all three of the categories in their forms of Firstness. “When you strive to get the purest conceptions you can of Firstness, Secondness, and Thirdness, thinking of quality, reaction, and mediation – what you are striving to apprehend is pure Firstness, the Firstness of Secondness – that is, what Secondness is, of itself – and the Firstness of Thirdness.” (Peirce 1903i: CP.1.530). For a dog, contrariwise, the experience of Firstness does not involve any possibility of the awareness of Firstness itself, Secondness itself, or Thirdness itself. Nothing may ever appear to the dog under a pure form, nor may the dog purify the forms it receives into their naked Firstnesses. Consequently, the indeterminacy of a dog’s cognitive life – or that of any other non-human animal – is restricted to the indeterminacy provided through the particulars encountered in its Umwelt. Because *possibility itself* eludes the cognitive grasp of the dog, the possibilities giving birth to its cognitive indeterminacy are only the possibilities of its species-specifically-confined world of environmental utility (broad conceived).

The categories do appear to the alloanimal, however, in their forms of Secondness and Thirdness. Because the categories are not hypostratified layers of reality, but cohesively integrated one with another, this brings the alloanimal – particularly the more sophisticated kinds – close to the awareness of Firstness as such and subsequently to the precise grasping of Firsts. The dog indubitably forms a concept of its master that includes a pseudo-identity; a concept which

occasionally functions as though representing an in-itself, inasmuch as the congeries informing the perceptual totality occur in a consistent pattern interrupting the dog's subjectivity, thereby granting a kind of haecceity to the individual object (cf. Stjernfelt 2007: 19). The dog has perceptual judgment, and, as such, shades towards (though not into) abductive inference. Non-cognitive life, however, experiences only the Second Universe – though its experience depends upon Firstness and Thirdness, the objects experienced are experienced only in their forms of Secondness, under brute action. That is to say, a plant's whole existence appears for that plant (as we may infer from observation of the plant's actions) as one of reaction and struggle.

Inorganic matter, though dependent upon the categories, has no experience under any form. The rock, though it may undergo action, does not experience (or *have* experience). That being said, even the rock, in its own being, depends upon the dynamism we observe through the Universal Categories (cf. 4.2.1, 4.2.3, and 5.1.2 below).

Whatever appears in its form of Secondness appears as forcing itself upon, against, the interpretant. Thus, the appearance of Firstness in its form of Secondness consists in qualia, that is, the experiencing of a something by a something. The appearance of Secondness in its form of Secondness is the object related, the other, the object of resistance. The appearance of Thirdness in its form of Secondness is the sign, not as such, but as delivering the “message” of the other. To appear in a form of Secondness is to appear as acting upon the interpretant – that is, the outside observer perceives an object in its secondarity by perceiving its acting-upon. It is an appearing characterized primarily by indexicality.

Whatever appears in its form of Thirdness appears as relating the interpretant to the object, especially when this relating is of a habituated pattern; such as, most especially, when the pattern itself becomes determining. Thus, the appearance of Firstness in its form of Thirdness consists in the aesthetic holding-towards of feeling (that is, habits of perceiving a thing as such on the basis of one's *Innenwelt*), of Secondness in its form of Thirdness consists in the modes of conduct (not the specific action performed, but the way in which it is performed, i.e., habits of treating the other), and of Thirdness in thought, i.e., habits of belief. Each appearance in the form of Thirdness is notably an intentional mode of appearing.

But while these forms of appearance of the categories occur differently (or not at all) to different beings, every experience, every action, every occurrence requires all three (Peirce 1887–88: *EP*.1.250):

We have seen that it is the immediate consciousness that is preeminently first, the external dead thing that is preeminently second. In like manner, it is evidently the representation

mediating between these two that is preeminently third. Other examples, however, should not be neglected. The first is agent, the second patient, the third is the action by which the former influences the latter. Between the beginning as first, and the end as last, comes the process which leads from first to last.

Our experience consists not in firsts without lasts, nor without process between the two. Every first we experience has its last, and every last its first, while every intermediary requires both. Moreover, there are never firsts nor lasts for us without also intermediaries; our relations can only ever be dyadic if we are considering them strictly in terms of the *things* related. Once it is acknowledged that the *relation* is itself an irreducible element of the whole relative structure, it becomes patently clear that *every* dyadic relation is in fact at least virtually triadic, consisting of two Firsts related as Seconds to one another by a Third (not only for us, but for all being; just as every monadic relative is a relative in principle because it is *potentially* dyadic). This has rather dramatic and controversial consequences for the dispute over physiosemiosis.

4.2 The categories and semiosis

Consequently, the integral nature of the categorical triad is indispensable for understanding any and every system, even those that appear constituted by strictly dyadic relations. Near the end of his “Architecture of Theories”, Peirce briefly accounts for the universality of these categories. He writes (1891: *EP*.1.296–97):

To illustrate these ideas [of the categories], I will show how they enter into those we have been considering. The origin of things, considered not as leading to anything, but in itself, contains the idea of First, the end of things that of Second, the process mediating between them that of Third. A philosophy which emphasizes the idea of the One, is generally a dualistic philosophy in which the conception of Second receives exaggerated attention; for this One (though of course involving the idea of First) is always the other of a manifold which is not one. The idea of the Many, because variety is arbitrariness and arbitrariness is repudiation of any Secondness, has for its principal component the conception of First. In psychology Feeling is First, Sense of reaction Second, General conception Third, or mediation. In biology, the idea of arbitrary sporting is First, heredity is Second, the process whereby accidental characters become fixed is Third. Chance is First, Law is Second, the tendency to take habits is Third. Mind is First, Matter is Second, Evolution is Third.

Here we see that cosmology, psychology, biology, tychism and synechism, and the evolutionary teleonomy of Peirce all are permeated by the triadic structure of the categories. Some have criticized Peirce for the ambition of his categories’ universality, for it results in an all-encompassing teleological prospect; that is,

if all things are governed by Thirdness, it follows that all things are governed by what is purposive, even if lacking a definitive purpose. For instance, Stjernfelt (2007: 42–43) writes that:

there is a tendency in Peirce to let real possibilities [i.e., properties belonging to something regardless of whether or not that property is actualized, such as the hardness of a diamond] incarnate all the very different metaphysical issues which the category of Thirdness is expected to solve. This includes no less than habit, symbols, teleology, mind, purpose, evolution, life; sometimes even personality, love, God, etc. We should take care here to ‘cleanse’ the notion of real possibility as existing worldly dispositions from these other issues grouped together in Thirdness by Peirce’s sometimes extravagant cosmology. . .

The inclusion of such teleological processes in the concept of real possibilities alongside the hardness of a diamond and the gravity pulling a stone is unproblematic, was it not for Peirce’s tendency to claim that the *most* complex properties of a category should hold for *all* cases subsumed by that category. This is motivated, of course, by his ‘synechism’, the continuity doctrine excluding any sharp limits, but even given this doctrine, it is hard to swallow that gravity, e.g. should in any sense possess a teleological cosmological purpose. The error here seems to lie in Peirce’s cosmology where notions like teleology are taken in a global meaning and predicated on the process of evolution as a whole and the universe as such.

This criticism, however, stems from what I take to be a misunderstanding of teleology; that is, the argument against Peirce’s cosmological synechism is that it is based on “Peirce’s tendency to claim that the most complex properties of a category should hold for *all* cases subsumed by that category.” But this phrasing is inaccurate. Peirce does not claim that the “most complex properties of a category” are an ought for each and every being within that category, such that this or that individual has its fulfillment only in attaining them; but rather that the more complex way of existing is one which, in the case of material being, constitutes a better way of existing – “better” here understood along the old Aristotelian axis of act and potency, wherein the latter is for the sake of the former, and the increase of the former correlates with an increase in “goodness”. That it is misleading to speak, for instance, of subatomic particles “seeking” stability – as though they had any agency of their own – it is not inaccurate to say that their nature is such that they incline towards stability given the right circumstances. *A fortiori*, that gravity allows for complexity to emerge, as it has – even if there might be a better possible complexity were gravity’s nature other than it is, or if another such force were responsible for the emergence of complexity – demonstrates beyond the shadow of a doubt it’s teleological cosmological “purpose”; a purpose not contained in itself, but in the greater cosmological totality exemplified by the tendency towards growth.

But we are getting a bit ahead of ourselves, here. If we are to demonstrate, as is our goal, the true universality of the categories, we need to show that the

pervasiveness of the tripartite categorical structure follows from the nature of that structure itself: that is, the possibility of Thirdness, of connective mediation, as will be shown in this chapter and the following, unites all other possibilities. Thirdness is what allows for semiosis: and signs are what bring into actuality the possibility of Thirdness.

Human beings can see the categorical ubiquity because the categories appear to human beings under their forms of Firstness – the categories thus appearing in all aspects of experience and in the objects experienced. That the species-specific world of human beings includes the Firstness of each of the categories opens the door for universal semiotic inquiry. Most especially is this the case on account of perceiving the Firstness of Thirdness: the universe is a triadically-constituted whole because of the mediation of Thirdness; without Thirdness uniting beings to one another, we would have naught but atomistic, monadic, closed Firsts – at best, Pure Consciousnesses, whose whole existences would consist in nothing but singular unvarying feeling. In order to understand Thirdness, we need to understand the sign, for it is by signs that Thirdness comes into existence.

4.2.1 The notion of sign

“What is a sign?” Much of semiotics has centered around this question – in both the contemporary and protosemiotic developments (Deely 2001a provides the most thorough discussion of this question). Unfortunately, it is a question often answered wrongly, even when the answer is more or less correct. That is, oftentimes it is implied, albeit without any intention of doing so, that signs are *things* in the typical connotation of the term: that is, substances, or substance-inhering accidents of some kind or another. Such substantially-constituted realities are necessary foundations for semiosis to occur, but (Deely 2010b: 336) “the actual sign as such is not the foundation but the relation which exists over and above that foundation linking the foundation as sign-vehicle to some object signified”, which object signified “may or may not also be an existing thing”. Thus, the sign consists not in things, but in action, in signifying. This means: making some object present *to* some interpretant, and determining that interpretant in regards to that object. The preposition reveals the essence of the action. That the object does or does not exist as itself a thing, while often relevant to the interpretant, has no necessity for the action of signification.

This action occurs *through* some sign-vehicle, as it is often called. The red, octagonal sheet of metal bearing the word STOP (sign-vehicle) – a stipulated sign – immediately determines the habituated driver (interpretant) to press the

brake in accord with the conventionally-adhered-to law (object). One part per million of blood in water (sign-vehicle) – a natural sign – immediately determines the shark (interpretant) to recognize the presence of a wounded creature (object). Damaged sagebrush informs of danger (object) by releasing chemical compounds (sign-vehicle) interpreted by wild tobacco to ready its defenses (interpretant) against plant-eaters (Karbon et al.: 2003). By releasing autoinducers (sign-vehicle), multiple bacteria (object) can, among many other things, result in the activity (interpretant) of producing a biofilm, or of a swarming motility. The respective electronegativity of one atom (sign-vehicle) immediately determines the electrons of the other atom (interpretant) to be shared in a covalent bond with the first atom (object) – though this case will require more investigation to understand clearly. In each case, the sign-vehicle is itself determined by the object and then itself immediately but instrumentally determines the interpretant, such that the object mediately determines the interpretant, in relation to that object, not in a mere concatenation of dyadic relations, but in a necessarily triadic relation receiving its determination from all three terms simultaneously.⁴² Notably, the sign-vehicle itself, much like the existence of the object, can be otherwise while producing the same determination. For instance, a lone wolf appearing over the ridge is a sign-vehicle of threat to a lamb, but not to an elk. Likewise, one person may find something to be sexually-arousing which most others take to be disturbing (cf. Sebeok 2001: 117–23).

The triadicty of semiosis, therefore, consists not merely in a chain of linear events, but each element – object, vehicle, and interpretant – receiving its determination through the specifically semiotic relation itself: the nature of the interpretant determines its bearing to the sign-vehicle and to the object, which

⁴² Champagne (2015a and 2015b) advocates for the identity of pure iconic sign-vehicles with their objects in terms of the quality signified, such that intellectual concepts, for instance, would be precisely identical with the formal object signified. I agree, but for one prominent qualm: the *possibilities* of the formal object are not identical with the possibilities of the sign-vehicle, and our concepts – like every representamen – do not exist in an abstract realm of pure meaning. I believe this is the reason for Peirce's "buffer", as Champagne terms it. See also *The Four Ages* discussing the problem with "mental representation" (vs. semiotic signification) in modern epistemology, (Deely 2001a: 695): "The point is capital. Signification: the constitution of the relation proper to signs. Representation: the standing of one thing for another, where 'the other' might not really be *other* but be rather *the same* thing in a mind-dependent relation of partial self-identity (that it is one and the same thing is mind-independent, but that it is self-identical is a mind-dependent relation, as discussed above [p.647]). Whence representation is in the 'genus' of subjectivity (or 'transcendental relation'), whereas signification is in the 'genus' of suprasubjectivity (or 'ontological relation'). A representation can be of a thing by itself, but a sign must be of a thing by an other than itself." (Cf. Guagliardo 1994).

object in turn determines the appearance of the sign-vehicle and thus the effect upon the interpretant, while the nature of the sign-vehicle determines both its receptivity to the causality of the object as well as its transference to the interpretant. While the nature of the interpretant serves simultaneously with the nature of the sign and the nature of the object in determining the nature of the semiotic relation, the causality of the sign is *objective* or *specifying* causality (see Poinset 1632a: 116–221; Deely 1994a: 34–39; 1994b: 161–62; 2004: 115–20). What makes an act semiotic, therefore, is not (as some may think) the actuality of interpretation, but rather the impression of the object on the interpretant by means of the sign. This triadic determination – from object to sign-vehicle to interpretant – occurs at every level of existence: not only within biosemiosis and cultural semiosis, but what Deely has termed physiosemiosis (Deely 2001b: 27–48), i.e., what I would here call the liminal instance between the virtual semiosis of merely monadic or dyadic relations (in the respect that they can be degenerate triads; cf. Peirce c.1896: *CP*.1.473) and the actual semiosis of triadic and therefore interpreted relations which occurs ephemerally in the interaction of the inorganic.

To use exploded examples of this liminal realm of physiosemiosis – as commonly done with describing the production of a chair as an instance of Aristotle’s four causes – we will present two degenerative instances and one genuine: the concatenation of dyadic determinations which occurs in coloration, the concatenation of dyadic determinations in gravitational force, and the genuinely triadic determination possible in instances of molecular bonding.

Color (our first degenerate case), it is well known, is the differentiation of light as sensed by some creature, differentiated first by the differing oscillation of the wavelengths and second by the receptive capacities of the creature. Thus, we can produce difference in color by adding or subtracting light oscillating at different wavelengths. Overlay the light of green and red phosphors on a surface equally receptive to both, and you will produce the wavelength perceived by most humans as yellow. Produce a cyan light on a shirt which appears yellow in white light, and it will appear green. This relation is a concatenation of unidirectional dyadic relations (signified by the arrows [→]: source → light particles/waves → illumined being), dyadic relations which are *degenerately* triadic, which degeneracy is difficult to see as such because there is no “distance” between the sign action and the elements of the sign (object-vehicle-interpretant). The interpretant, comparatively simple in its own substantial structure, has a very limited range of ways in which it can be determined toward both the vehicle and the object, and none of these ways includes an agency of its own. The unliving illumined being, for instance, cannot “decide” to shine at the frequency perceived by most humans as “green” (~510nm)

rather than that perceived as “red” (~700nm). Yet it is due to properties in the surface of that being, that light is differentially reflected into a particular range of wavelengths or transformed into a different kind of energy altogether. Moreover, the bearing the interpretant has towards the object – as in the differentiation of light waves – quite often does not result in any action being taken towards that object; such that the semiosis remains merely virtual and does not come into the play of actuality.

In the second degenerate case, the action of gravity (whatever the sign-vehicle of gravitational attraction, whether wave, particle, or some duality, may turn out to be), the determination of the interpretant clearly results in some altered active bearing towards the object. Nevertheless, this determination has a very limited range of possibilities – either gravitational pull is affected, or not. Insofar as this possibility (even if its only realization is that nothing occurs) is, a virtually semiotic interaction has occurred. Given the right further conditions, a combination may occur through gravity; something, perhaps, such as the collapse of ultra-dense matter into a black hole might qualify.

Molecular bonding, in contrast, provides just the sort of liminal activity that best illustrates the nature of physiosemiosis: that is, some molecular bonds are unquestionably dyadic in their nature; the covalent bond between two hydrogen atoms or the hydrogen bonding between water molecules, for instance, being nothing more than co-bonding existential relations such that each is bound to the other in the same manner. On the other hand, the polar covalent bonding of hydrogen molecules with an oxygen atom results in a genuinely triadic combination, the result being something irreducible to the dyadic relations it comprises. It is only a passing moment – a flash of semiosis – in which the broken covalent bonds of 2H_2 and O_2 result in the relative electronegative differences cause mutual interactions of hydrogen cations (positively charged ions) and oxygen anions (negatively charged) to form the familiar $2\text{H}_2\text{O}$ molecule.

This narrowness of possibility – so narrow that it could mistakenly be understood as a dyadic and mechanistic information transfer – actually helps us to see better the “hierarchy” of semiotic freedom. But first, in order to answer objections against physiosemiosis and to defend against the accusation of a naïve pan-semiotism, we must examine the structure of semiotic action more clearly.

4.2.2 The structure of semiosis

Semiosis requires a tripartite structure; that is, there is no semiosis in the absence of any one of the three elements of object, representamen, or interpretant. But

these three, while essential to every instance of semiosis, admit of differences according to the manner of relation affected by the sign-relation.

Peirce writes, particularly in his later works, of objects considered both as immediate and as dynamic. The immediate and dynamic objects may be considered, respectively, as the object precisely as objectivized (and thus made actual to the interpretant) and the object as a possibility beyond the precise objectivization, i.e., as the thing in itself (even if that “thing” is not really a thing, but a socially-constituted object which has an intersubjectively-constituted existence beyond the objectivization it has received from one individual). The immediate object is not the sign-vehicle itself, but is the object strictly as presented by the sign-vehicle, such that, having before one’s awareness only the immediate object, one has not properly or fully distinguished between the two. It seems, indeed, that only human beings can make such a distinction and thereby attain a consideration of the dynamic object as distinct from what is immediately present.

Peirce also writes of a threefold manner of determination of the interpretant by the sign: what he calls the immediate interpretant (the presence of the object to the interpretant, whether that be cognitive or sub-cognitive); the dynamic or dynamical (the affective alteration); and the final, normal, or eventual (the habitual alteration). Sign-relations are determined by the dynamic configurations rendered by both differences of object and interpretant (cf. Peirce 1908b), and understanding the precise nature of all six distinctions is essential to understanding the process of semiosis (Peirce 1906/7: *CP.4.536*):

[1] I have already noted that a Sign has an Object and an Interpretant, the latter being that which the Sign produces in the Quasi-mind that is the Interpreter by determining the latter to a feeling, to an exertion, or to a Sign, which determination is the Interpretant. [2] But it remains to point out that there are usually two Objects, and more than two Interpretants. [3] Namely, we have to distinguish the Immediate Object, which is the Object as the Sign itself represents it, and whose Being is thus dependent upon the Representation of it in the Sign, from the Dynamical Object, which is the Reality which by some means contrives to determine the Sign to its Representation. [4] In regard to the Interpretant we have equally to distinguish, in the first place, the Immediate Interpretant, which is the interpretant as it is revealed in the right understanding of the Sign itself, and is ordinarily called the *meaning* of the sign; while in the second place, we have to take note of the Dynamical Interpretant which is the actual effect which the Sign, as a Sign, really determines. Finally there is what I provisionally term the Final Interpretant, which refers to the manner in which the Sign tends to represent itself to be related to its Object.

This dense text has been numerically divided for the sake of convenience. In the first part [1], Peirce identifies the being of the interpretant with the determination in a “Quasi-mind” rendered by the sign. Notably, a mind is not necessary, but simply something which is “mind-like”, which is inferred to mean

something which can be determined by a sign so as to result in a triadic relationship. In the second part [2], Peirce makes an off-hand observation – that there are *usually* two objects and more than two interpretants; the unsaid implication being that there are occasionally fewer than two objects and not always three interpretants, but suggesting that there are always at least two.

In the third part [3], Peirce distinguishes immediate from dynamic objects, providing the aforementioned distinction of what is explicitly present through the mediation of the sign (the immediate) and what is implicitly indicated thereby (the dynamic). What he here calls the “Reality” he notes, as will be seen in the text below, could be “altogether fictive” (1909: *EP.2.498*), showing that even purely-objective realities can be more in what they are themselves than what any individual grasps through a particular sign, i.e., in the idiosyncratic objectivization of the individual.

In the fourth part [4], we have the tripartite division of interpretants. The immediate interpretant, called the “meaning” of the sign, is said to be revealed in the “right understanding of the Sign itself”. In other words, the immediate interpretant is the impression rendered by the action of the sign in determining the interpretant considered as *prior to* any operation or reaction of the interpretant itself. Such reaction belongs to the dynamic interpretant, which is the “actual effect which the Sign, as a Sign, really determines”; in other words, such an interpretant is justly called dynamic because it exists through the play of action and passion characteristic of Secondness (cf. 1909a: *EP.2.499–500*), the category of reactivity. The final interpretant is, however, left here more obscure than the immediate and dynamic; as Peirce himself admits (1906/7: *CP.4.536*), “I confess that my own conception of this third interpretant is not yet quite free from mist.” The notion of Thirdness is implicit – in that the final interpretant is the “manner in which the Sign *tends* to represent itself to be related to its Object” – as indicating a rule, a habit, or regulatory nature to the mediating relation under consideration.

In a late letter to William James, Peirce again endeavored to explain his notion of objects and interpretants, wherein he gives examples of each of the five distinctions, which may go a long way to helping clarify the overall structure (1909: *EP.2.498*):

[1] We must distinguish between the Immediate object, – i.e. the Object as represented in the sign, – and the Real (no, because perhaps the Object is altogether fictive, I must choose a different, term, therefore), say rather the Dynamical Object, which from the nature of things, the Sign *cannot* express, which it can only *indicate* and leave the interpreter to find out by *collateral experience*. For instance, I point my finger to what I mean, but I can't make my companion know what I mean, if he can't see it, or if seeing it, it does not, to his mind, separate itself from the surrounding objects in the field of vision. It

is useless to attempt to discuss the genuineness and possession of a personality beneath the histrionic presentation of Theodore Roosevelt with a person who recently has come from Mars and never heard of Theodore before. [2] A similar distinction must be made as to the Interpretant. But in respect to *that* Interpretant, the dichotomy is not enough by any means. For instance, suppose I awake in the morning before my wife, and that afterwards she wakes up and [SV1] inquires, “What sort of a day is it?” *This* is a sign, whose Object, as expressed, is [IO1] the weather at that time, but whose Dynamical Object is [DO1] the *impression which I have presumably derived from peeping between the window-curtains*. Whose Interpretant, as expressed, is the [II1] quality of the weather, but whose Dynamical Interpretant, is [DI1] *my answering her question*. But beyond that, there is a third Interpretant. The *Immediate Interpretant* is [II1] what the Question expresses, all that it immediately expresses, which I have imperfectly restated above. The *Dynamical Interpretant* is [DI1] the actual effect that it has upon me, its interpreter. But the Significance of it, the *Ultimate, or Final, Interpretant* is [FI1] her *purpose* in asking it, what effect its answer will have as to her plans for the ensuing day. I reply, [3] let us suppose: [SV2] “It is a stormy day.” Here is another sign. Its *Immediate Object* is [IO2] the notion of the present weather so far as this is common to her mind and mine – not the *character* of it, but the *identity* of it. The *Dynamical Object* is [DO2] the *identity* of the actual or Real meteorological conditions at the moment. The *Immediate Interpretant* is [II2] the *schema* in her imagination, i.e. the vague Image or what there is in common to the different Images of a stormy day. The *Dynamical Interpretant* is [DI2] the disappointment or whatever actual effect it at once has upon her. The *Final Interpretant* is [FI2] the sum of the *Lessons* of the reply, Moral, Scientific, etc. Now it is easy to see that my attempt to draw this three-way, “trivialis” distinction, relates to a real and important three-way distinction, and yet that it is quite hazy and needs a vast deal of study before it is rendered perfect.

Again, to provide clarity, the above passage has been divided. In the first section [1], Peirce distinguishes immediate from dynamic object by stating that although the former is expressed by the sign, the latter *cannot* be, but can only be indicated; that is, the dynamic object is something which must be discovered without having direct experience of it. In other words, the immediate object, as the expression of the sign, is itself a sign-vehicle for the dynamic object, which to be ascertained must be separated from the environment in which it is encountered, whether perceptually or conceptually.

In the second part [2], Peirce introduces the distinctions of interpretants, but notes that, while the interpretant, like the object, is divided into immediate and dynamic, it also possesses a third dimension, that of the ultimate or final. To illustrate his meaning he gives all six distinctions elaboration by an example: the sign-vehicle being the question [SV1], “What sort of day is it?”; the immediate object being [IO1] the identity of the notion of the present weather common to both utterer and auditor’s minds; the dynamic object being [DO1] the impression of the weather held by the person asked; the immediate interpretant being [II1] the expression which the vehicle immediately impresses; the dynamic interpretant being [DI1] the act of answering, i.e., the reaction to the question; and the

final interpretant being [FI1] the asker's purpose, such as planning to have a hike and picnic in the afternoon contingent upon the weather.

This is followed in the third section [3] by a similar example, of answering the question with the sign-vehicle [SV2], "It is a stormy day." The immediate object of this statement is [IO2] the identity of the present weather as common to both minds; the dynamic object, on the other hand, being [DO2] the real meteorological conditions independent of a mind (although mediated by one); the immediate interpretant [II2] being the conceptual schema evoked by the phrase "stormy day" (i.e., all the things one might reasonably associate with or consider as belonging to a stormy day); the dynamic interpretant being [DI2] disappointment or whatever other reaction one might have to hearing this; and the final interpretant is the [FI2] lesson, take-away, or change in the one who possesses the interpretant which results in a perduring alteration, (as opposed to the ephemeral reaction of the dynamic interpretant) – such as, for instance, that one should not get hopes up to go hiking and have picnic in April.

Such instances of culturally-relevant semiosis are ubiquitous in our experience; every sign belonging to a conversation takes such shape. Nevertheless, the anthropic nature of these examples makes difficult extrapolation of the six-fold structure (one representamen, two objects, and three interpretants) to non-human instances of semiosis. How are we to understand these structural elements in themselves? The above explanation of immediate and dynamic objects as "the object precisely as objectivized (and thus made actual to the interpretant) and the object as a possibility beyond the precise objectivization" seems adequate, though perhaps one might confuse their distinction as parallel to that of the medievals' differentiation of formal and material objects (a false parallel, inasmuch as formal objects can be "more" than their materials, as in the case of metonymy, whereas dynamic objects are always necessarily more than what is specifically objectivized through a sign-relation – a dynamic object being an object in its as-yet-realized possibilities, and thus grasped itself through a sign-relation only as a possibility for possibilities). But immediate, dynamic, and final interpretants remain obscure for a multitude of reasons.

For one, an immediate interpretant seems not to entail any act of interpretation whatsoever; until one reaches the dynamic interpretant, there is no interpreter (cf. Nöth 1990: 43–44); for (Ibri 2014: 41) "*interpreting* requires an extraction of pragmatic meaning, namely, one that possibly determines future conduct", which meaning requires a dynamism between impression or reception and reaction. In other words, there is no predication, no "taking-as" of whatever object has been signified until a dynamism of the interpretant, a difference between merely receiving some determination and reacting to that determination, is evoked. The immediate interpretant could therefore be understood as entirely

inert; but this does not mean that it is entirely inactive, only that its action – the reception of the sign’s determination – entails no dynamic motion (cf. Short 2007: 187–88). This inert reception is a *sine qua non* of interpretation occurring, and its actualization is a virtual semiosis; that is, no alteration in the possessor of the immediate interpretant has occurred, but it is nevertheless *in terms of objective causality* a possibility inasmuch as the pertinent specification has been delivered – such causality being that which is proper to the sign (Deely 1994a: 34–39; 1994b: 161–62; 2004: 115–20).

Just as Secondness is the clearest of the categories, so too the dynamic, in which Secondness is evident, is clearest of the interpretants. The effects of disappointment, pleasure, pain, surprise, and whatever other reaction we can imagine in ourselves are easily recognized in their subjective forms, and it is not difficult to render the connection between the subjective reaction and the object; for the former is an alteration in regards not only to the action of the latter upon the subject, but an alteration also towards the object itself.

The final interpretant remains the most difficult of all. I believe this is because the nature of the final interpretant can be considered as internal or external to the interpretant-possessing subject. In other words, a final interpretant need not belong to an individual subject, but can be part of a larger system (cf. Alexander 2009). This seems evidently the case with quorum signaling in bacteria; while each individual bacterium undoubtedly interprets the signals with respect to its own actions, the purpose seems to exist primarily in the quorum itself, i.e., intersubjectively. That is, although there may be some ultimate and habitual alteration in the bacterium which proceeds through a process of quorum sensing to produce a biofilm, this alteration is attained only through and as part of the collective responding to the signal. It would be difficult to ascribe the final interpretant to the individual; the simplicity of such organic life produces little room for habituation. Rather, such lives are dominated by the activity of dynamic interpretants. The final interpretant is that (1908b: *EP*.2.482) “effect that would be produced on the mind by the Sign after sufficient development of thought” – remembering that for Peirce (cf. 4.1.3), “mind and “thought” are not synonymous with the higher development of conscious, but more broadly apply, respectively, also to all those things which take habits or abide by regularities of nature and to whatever grasp of such habits or regularities a being might attain. Anything incapable of itself sufficiently developing thought would therefore be incapable of possessing a final interpretant; but can nevertheless itself be possessed by a web of beings which, collectively, do sufficiently develop the regularities characteristic of “thought” in Peirce’s sense. Thus, bacteria seem incapable individually of producing much in the way of final interpretants, but collectively are able to act from, with, and towards

tendencies or habits. In this way, we can identify final interpretants both as internal to individual substances, insofar as the individual is capable of learning (cf. Ibrri 2014: 46–47) and external, as belonging to some adaptive system of which the individual is itself a part, whether or not that individual is itself capable of learning (e.g., in the case of multi-generational learning [Sharov et al. 2016: 2] or in endosemiosis processes [Hoffmeyer and Stjernfelt 2016: 9]).

Thus there appear to be 5 different possible configurations in the occasion of a semiotic relation: 1) virtual semiosis, involving a vehicle, object, and immediate interpretant; 2) basic actual semiosis, adding a dynamic interpretant; 3) basic actual semiosis within a system, wherein a final interpretant outside the individual collates the dynamic interpretations of the individuals in an adaptive process; 4) complex actual semiosis of an individual, wherein a learning process occurs through an intrinsic final interpretant; and 5) complex actual semiosis of an individual within a semiosis, wherein there is both learning and a systematic adaptation, such as occurs in cultural development. These different configurations can be arranged into a hierarchy of complexity (see Appendix 1).⁴³

Finally, it is important to note that just as the immediate object is a kind of sign of the dynamic object, so too the immediate interpretant is a sign, of the joint-determination rendered by the sign-vehicle and the object, for the dynamic interpretant, and both immediate and dynamic interpretants together are a sign for the final interpretant. In this way, though composed of six elements, the semiotic structure is always reducible to a triad.

Moreover, within the subjective being of an individual, the semiotic determination of the second and third levels of being an interpretant, dynamic and final, each redounds to those prior, such that determination of affection can modulate presence, i.e., immediate interpretance (especially cognitive presence) and habituation modulates both, even though presence is the *sine qua non* for both of the latter two. That is, the presence rendered by an immediate interpretant effects both the affective or dynamic and habitual or final determinations by allowing for their possibility, while how we are affected and habituated will consequently affect the attunement of our attention, e.g., will draw our focus to or away from certain things which are present. This is nothing new with Peirce – Aristotle talks of how the aulos lover will be unable to attend to speeches if he hears the aulos played well (c.349BC: 1175b) – but the distinctions

⁴³ Between each different configuration there exists the possibility for liminal cases; instances in which the structure is that of a lower level, but the behavior adducts towards that of the higher. See Appendix 3.

following the manner of semiotic determination are uniquely categorized and should help us to understand the semiotic nature of systems.

4.2.3 Semiosis and systems

Hoffmeyer defines semiotic freedom (2010: 34) as “the capacity of a system (a cell, organism, species, etc.) to distinguish relevant sensible parameters in its surroundings or its own interior states and use them to produce signification and meaning.” We would emend this by removing the term “sensible”, as many of the relevant parameters in a being’s operations concerned with signification and meaning are, strictly speaking, not *sensible* – though they are, as Peirce would maintain, given in *perception*. But what is a system? The term covers an extremely broad range of uses; yet all are united in signifying the connection of parts subordinately organized for the sake of some whole. Systems are distinguished in kind from one another by the differences of causality in their organization. Some systems are constituted systematic solely by external causes (i.e., the wholeness of their orientation is determined entirely by another, as the parts of a clock require a clockmaker, as well as a clock-reader, to become a systematic device for time-measuring and telling). Others are involved in the continuation and modification of their own development; and others still are near wholly responsible for determining their directedness (though not their structure). These differences in causal relations in systematic structuring correspond to equal differences in semiotic freedom.

The interaction of inorganic matter for instance, though virtual sign-actions facilitate every change in the system, directly entails no semiotic freedom, for the power of any one object as mediated by the sign-vehicle determining the interpretant is *nearly* absolute, depending upon the structure of the interpretant. External efficient causes assemble the structure of the inorganic entirely, *except insofar as the parts were already determined to be receptive in certain ways*. In other words, there exists little dynamism in the interpretant structure of the inorganic, such that there is no evident distinction between immediate and dynamic interpretants; nevertheless, insofar as the objective causality of the sign-vehicle is at work, an immediate interpretant exists, for that interpretant is not *simply* the impression of the sign-vehicle, but the impression *received in a certain manner*. The proposal that order itself could be the result of an emergent process (Hoffmeyer 2008: 150; 2010: 385) is a self-defeating proposition: a process per se is an expression of order, meaning that, if order emerges, then order has been begetting order, and thus there was order before there was order – and we are reduced to absurdity. To use a metaphor: the

resources used in constructing a house become a house strictly by the agency of the house-builder; but they are capable of being used therefore only because of the structure they already had in their pre-existing separate constitutions (hence why straw makes a poor house, and wood a better). These pre-existing constitutions which make the material capable of specific receptions were themselves, of course, given their structure from external causes as well. Even if the house were constructed by no agent but by random happenstance, this would be possible only because the parts were already *in potency* to such an ordering, and their actually-being so-constituted nothing other than a consequence of their implicit and virtual order, already possessed, being realized. This is true not only of the parts of a house, but of molecular bonding and even of irruption from the quantum vacuum. The ultimate external causality constituting physical being as a whole – including the forces present in the quantum vacuum – remains a scientific mystery, inasmuch as this encompasses the entire universe and is therefore impossible to directly perceive from within it. But as determinations are made upon the individual subject said to possess the interpretant, increasing degrees of both order and complexity are produced, from which the internal affective alteration of a dynamic interpretant becomes possible thereby opening the possibility for interpretation and simultaneously semiotic freedom.

Without this opening of the inorganic to semiotic freedom, evolution would be impossible, sans intervention of some *deus ex machina*, whether that is a God of the Gaps or an inexplicable emergence. Were inorganic systems not structured by at the very least virtually triadic – (Deely 2001a: 694): “[Semiotics] presupposes nothing more than a notion of sign as one thing standing for another in a relation of ‘renvoi’, that is to say, an irreducibly triadic relation, actual or virtual, but in the case of cognitive life, it seems, always actual” – and therefore essentially semiotic activity, but by dyadic relations alone, they would be closed systems (cf. Wiener 1954: 22–27; Ashby 1956: 39–40; Brier 2008: 37–40). The origin of life would thereby require an incidental alteration from outside the inorganic universe, one which, ultimately, would have to be rationally inexplicable. While there are many who reasonably hold that the inorganic cannot be semiotic – such that wherever there is one, there is also the other (e.g., Kull et al. 2011: 27: “The semiotic – non-semiotic distinction is coextensive with the life – nonlife distinction, i.e., with the domain of general biology”, a coextension suggested by the protosemiotic work of Jakob von Uexküll and proposed doctrinally by Sebeok in e.g., 1991: 83–84 and common to the biosemiotics community) – this, as an absolute dichotomization, is at odds with Peirce’s thought, particularly with his notion of synechism, as we will see in the following discussions of physiosemosis (just below and in 5.1.2 and 5.3.3.);

for, although physiosemosis is not a clear and indisputable case of semiosis – lacking a dynamic interpretant – a synechistic philosophy recognizes that there may be an infinitesimal number of possible *intermediate* stages between what is non-semiotic and what is properly semiotic (cf. Peirce 1906/7: 4.551). Drawing hard and fast lines between the living and the non-living requires, from the synechistic perspective, an arbitrary demarcation,⁴⁴ safe to make for predicative purposes, but misleading if pretended to signify an actual absolute dissection. Likewise, while “semiotic” and “non-semiotic” remain as necessary predicates as do “living” and “non-living”, we must recognize a blurring of each at the supposed boundaries – a liminal region where a transition may occur between virtual and actual semiosis, resulting in an ephemeral, nascent flash of semiosis-driven alteration, as in the above-mentioned instances of certain molecular bondings.

The properly living system, unlike the inorganic, plays a role in its own constitution. Maturana and Varela coined the term *autopoiesis* to describe the characteristic self-structuring of living beings (1980: 16). Cell activity (Hoffmeyer 1993: 68–88), plant communication (Witzany 2008: 39–56), and animal behavior (cf. Kull et al. 2011 and Hoffmeyer 2008) all involve clear cases of internal semiotic processes: that is, the establishment of a representamen which determines the interpretant to an altered comportment towards the object; in other words, with an active dynamic interpretant and quite frequently resulting in a final interpretant as well. In every living being, we find the commonality of sign mediation not only in the functioning of each system, but in the autopoietic structuring of it. To put this in the language of Scholasticism, life incorporates signs not only for their role in mediating “ontological relations” (*relativa secundum esse*) but also “transcendental relations” (*relativa secundum dici*), or things insofar as they must be considered as related (cf. Deely 2010b: 96–104, 347–80, 385–97).

If we are to provide intelligible accounts of systems, therefore, we cannot do so adequately from the reductionistic mechanical-materialist perspective:

⁴⁴ For instance, the conventional “seven characteristics” (stimulus response, growth over time, relatively-independent offspring production, homeostasis, metabolization of energy, having one or more cells, and environmental adaptation) are somewhat arbitrary as a metric. Why something which does not grow over time or produce its own offspring does not deserve the name of “living” lacks solid argument. Were something to exhibit, say, all the qualities *except* production of offspring, but were itself undying, surely this would be a living thing – just as a donkey, although it dies, is incapable of such production. Contrariwise, given a “living” cell, a virus – widely accepted to be something that is not alive – *can* reproduce; something the donkey cannot in any known situation. A virus is certainly “more alive” than a crystal, and a crystal seems “more alive” than a lone atom, to the degree that triadic relations are occurrent in each’s existence.

every system, insofar as it is a system, entails elements for which such a perspective cannot account (Brier 2008: 21). That these elements are properties rendered emergent by the action of their physical constituents is the only cogent explanation the empiriomathematical and ideoscopic approaches to scientific knowledge can give – an insufficient explanation which not only crosses the boundary from ideoscopy into the realm of the cenoscopic but implicitly depends upon relations being triadic. For the idea of emergence, often employed (cf. Wheeler 2006: 12) but seldom truly explicated,⁴⁵ requires modes of causality aside from the efficient, which requirement shows that, whatever may be the property evidently emergent, it is not *merely* the result of the antecedent efficient forces at work (cf. Peirce 1902i: CP.1.213: “an efficient cause, detached from a final cause in the form of a law, would not even possess efficiency: it might exert itself, and something would follow *post hoc*, but not *propter hoc*; for *propter* implies potential regularity.”). If we are to account for the emergence of complex systems, we need to recover both the Aristotelian sense of matter as principle of potency – implicit in Peirce’s notion of chance – as well as the multitudinous levels of extrinsic non-efficient causes: most especially the frequently-mentioned-here extrinsic formal (objective or specificative and exemplary or ideal) and the final (cf. Matsuno 2012: 55), considered both internally and externally. Without incorporating such modes of causality, the constitutive role of relations will remain lost, and explanations of complex systems incomplete.

Consequently, true understanding of any system requires that it be seen from a semiotic perspective; for semiosis is fundamentally the relation of appearing of one thing to another, through a vehicle, at least partially determining (and thus operating causally upon) the interpretant. Considering the

⁴⁵ Jaime Gomez-Ramirez (2014), defines emergence, for instance, by saying, p.76: “Thus, one property is emergent when it cannot be observed in one system S_1 but it may be positively observed in the resulting system S_2 , which is the new structure generated through the interactions of the components inside S_1 .” This seems accurate – but it is unhelpful. It tells us nothing more than we already knew. Moreover, such a definition can be applied to anything prior to understanding its causes properly speaking – it can be an “explanatory principle” in the sense Bateson (1969) describes as, p.39, “a sort of conventional agreement between scientists to stop trying to explain things at a certain point.” Is the emergence of species-specifically human cognitive capacity from the material structures of the brain the same sort of emergence as that of liquidity in water from hydrogen and oxygen – or of interpretive portrayals of Don Quixote, drawing upon different past traditions? Does the Catholic tradition of receiving communion on the tongue “emerge” in the same way? As we will come to see in c.5–6, “emergence” signifies the phenomena of Thirdness taking shape or it signifies nothing but a *flatus vocis*.

relationship between that system and the presentative forms of the Universal Categories, as well as the triadic structure of semiosis, proffers such a semiotic perspective.

‘Physiosemosis’.⁴⁶ Consider: at the atomic and molecular levels, we observe that the relative negativity of one atom serves as a signifier to a relatively positive atom to share its electrons for the production of a more stable structure. We invoke final causality in such an explanation: that is, the tendency of atoms to form ionic and covalent bonds, for instance, appears enabled by a disposition innate to the atom in its very structure whereby it is not only open to a more stable state, but seems actively oriented towards it – stability conceived not in the thermodynamic-entropic model, wherein stability means the absence of activity, but in the Aristotelian ἐντελέχεια model, where stability means perfected and continual activity. In attributing this final causality to the actions of atoms, we are neither endowing the inorganic with minds, properly speaking, nor are we holding them in obedience to an absolute law of the universe. Rather, we are recognizing that the structures which thereby emerge indicate the ubiquity of Thirdness in producing new unities. Every habit, every tendency, every actualized inclination – which is to say a being-towards that is not merely incidental to a thing, but a part of it – is the result of Thirdness having taken hold of two Firsts and relating them as Seconds to one another.⁴⁷ The internally-inert structural character of inorganic being constitutes it as the meagerest of all possible systems, its only function being the sustenance of structural stability as an existent within the overall structure of the entire physical system inasmuch as it possesses qualities relevant to the fundamental physical forces.

The presence of Thirdness is, as such, minimal, and easily missed – it gives evidence of itself, however, in the apparent universal symmetries which have come to hold in all parts of space and time (Fernández 2014: 89; cf. Peirce 1903p: CP.1.345–46), rotational symmetries, translational symmetries, and even flavor symmetries; and in those instances wherein a developmental change occurs, such that some new pattern of beings comes to hold, such as in the formation of baryon particles; even though it readily dissolves for reasons we do not always comprehend, for instance, in some instances of spontaneous symmetry

⁴⁶ See 5.1.2 below, as well as Appendix 3.

⁴⁷ This is suggested ubiquitously by Peirce; consider 1902i: CP.1.214: “an efficient cause, detached from a final cause in the form of a law, would not even possess efficiency: it might exert itself, and something might follow *post hoc*, but not *propter hoc*; for *propter* implies potential regularity. Now without law there is no regularity; and without the influence of ideas there is no potentiality.” Cf. 1902i: CP.1.204 and 216; 1903j: CP.1.26; 1904d: CP.8.330: “so far as the idea of any law or reason comes in, Thirdness comes in”; 1904d: CP.8.331.

breaking.⁴⁸ Thus, even though the interactions are dominated by a brute Secondness, inasmuch as relational rules dictate the results of that Secondness, Thirdness is in effect – at the very least, in its lesser degenerate form (see 4.1.3). We can only speak of a liminal region of semiosis, however, at this level – for the structure of the interpretant lacks an internally-constituted ordination to an end, a necessary correlate of semiosis properly speaking (regardless of whether the ordination towards an end is conscious or merely the consequence of genetic coding). Most of what occurs in the domain of the inorganic is merely a virtual semiosis, as a concatenation of dyadic relations: A effects B effects C effects D. B and C and D are not so-constituted as to, by the effect, be re-oriented in a truly triadic relation towards some object. These relations, however, adduce towards semiosis insofar as the determinations rendered through sign-vehicles accrue upon the interpretant, such that despite the absence of interpretation – an impossibility without a dynamic interpretant – the action of the sign produces a combination of two things towards one another and therefore a triad.

Phytosemiosis. Living being, by contrast, engages in a dynamic, multi-tiered system. Every living being has both an internal systematic structure and an external systematic environment. The dynamism of this structure leads to a seemingly infinite possibility of degrees between the lowest and the highest forms of life.⁴⁹ Autopoietic inception constitutes the first foundations of an *Innenwelt*, thereby turning the environment, to whatever degree it becomes interactive with the living being, into the shadow of an *Umwelt*. Thus, a non-perceptual living being – such as a plant or single-celled organism⁵⁰ – employs semiosis, but only within

48 That is, while Peirce holds in some regard throughout his career (1891: *EP*.1.293) that “The one intelligible theory of the universe is that of objective idealism, that matter is effete mind, inveterate habits becoming physical laws”, a physical law being absolute (1891: *EP*.1.292) he also holds in a more mature position (1903q: *CP*.6.91) that these laws are subject to an evolutionary law which precludes them from being absolutely exact or unbreakable; evolutionary law, therefore, comprising a probability of departure from other laws.

49 Hoffmeyer and Stjernfelt, for instance, give eleven steps in cognitive evolution from the “most basic instrument in the semiotic toolbox” (2016: 11), molecular recognition, to the first-person subjective awareness they denominate as “consciousness” (2016: 24). My more standard demarcation of semiosis – physio-, phyto-, zoö-, and anthroposemiosis – is based not on beings’ “‘selecting’ their activity accordingly,” for I do not believe that this “exactly is what semiosis is all about” (2016: 11), but rather on the objective causality at work in the appearance of things according to the forms of the categories.

50 This assertion requires a distinction of what is perhaps an idiosyncratic position at odds with ordinary use of terminology: namely, between *sensation* and *perception*. Cells and plants have sensory capacities, but not what I would consider *perceptual* capacities; they sense but they do not perceive, for perception requires objectivization of the perceived through the formation of a percept whereby that object can be evaluated as beneficial, harmful, or neutral.

its own structural being (von Uexküll 1986: 211). In other words, the “Umwelt” of a non-perceptual life (as Jakob von Uexküll put it [1940: 34], the *Wohnhülle*, i.e., the “dwelling shell”, “living enclosure”), though shaped, influenced, and determined by the environment, in no way extends to the things constituting that environment itself. The only categorical announcement to a non-perceptual living being – the merely vegetative entity (under which category we would subsume the cellular systems), to use Aristotelian terminology – are the facts of Firstness under its form of Secondness, i.e., what we know as qualia but what to a plant could be no more than a subdued and dim vestige of experience (the presence of autonomic movements in sub-animal living creatures does not necessitate nor signify that they have an awareness of others). The system of a vegetative being possesses no means for grasping that the indexical signs constituting its *Wohnhülle* – both those of endosemiotic and exosemiotic genesis – originate in a relation of alterity, and thus, has no sense of identity, for it has no sense of the dialogic (Ponzio 2012: 23): “Identity is dialogic. Dialogism is at the very heart of the self.” Need – (Kull 2000: 340): “*a need is an expected input which regulates the output until the input reaches what it has expected*. Thus, need is a situation when lack of something regulates operation for its sake” – and apparently need alone, drives the phytosemiotic process.

Therefore, while there is truly semiosis (cf. Kull 2000), it is a very *thin* kind of semiosis: to the degree that a being’s semiotic activity is constituted by indexicality it is to the same degree restricted to a kind of internality of life – that is, since “a sign is said to be indexic insofar as its signifier is contiguous with its signified” (Sebeok 2001: 53), contiguity being understood as signifying by associative juxtaposition rather than by similarity of forms – and indexicality clearly predominates in phytosemiosis (cf. Krampen 1981: 89–90; Sharov and Vehkavaara 2015: 104–05), the non-perceptual living being’s Umwelt is bounded by the regulative limits of the plants endosemiotic processes.

Zoösemiosis. As a being encroaches upon a perceptive mode of living, though it does not attain alterity as such, it does attain an awareness of the other as in a relation to the self, as confirmed through judgments concerning the other (Deely 2007: 153–58). Thus, the alloanimal forms a genuine complex world bounded by two poles, Innenwelt and Umwelt, each structuring and determining the other on the basis of the initial internal coding structure of the DNA, unfolding through countless instances of endosemiotic and exosemiotic processes. Not only do qualia (facts of Firstness, in their form of Secondness)

Such a percept requires some sort of brain, however primitive. Creatures such as starfish, with their collected ganglion nerves, appear as a liminal case approaching perception.

appear for alloanimals, but with them, the objects of relations (facts of Secondness, in their form of Secondness); and, as a consequence of that duality (facts of both Firstness and Secondness), so too dim realizations of both Firstness in its form of Thirdness, the aesthetic holding-towards, and Secondness in its form of Thirdness, the modes of conduct indicative of habituated act-potency relations. This expanse of the alloanimal Umwelt follows from the dynamic interplay of indexicality and hypoiconicity⁵¹ in zöosemiosis operations (Sebeok 2001: 92–93, 105–07). The dynamism of the functional cycle (Kull 2010: 46–47) brings every alloanimal to the very border of semiotic consciousness – but not across it, inasmuch as the categories appear to non-human animals in neither their forms of Firstness nor in the Thirdness of Thirdness.

Anthroposemiosis. The difference between human animals and all the rest may seem, at times, rather miniscule. Biologically, the human being is far closer to advanced mammals of other species than those mammals are to, for instance, an echinoderm. Yet, despite this meager biological separation, it is typical – despite Darwin’s assertion that the difference is merely of degree and not of kind (1871: 105) – to classify the human being as fundamentally different from all other animals; to note that although there is (Sonesson 2012: 25–26) “continuity between us and the rest of the animal kingdom. . . there is also discontinuity. Why?” To ask (Deely 2010a: 99): “What, then, distinguishes the human being among the other animals?”

Most commonly, the answer to this question is said to lie in linguistic, verbal communication. In speaking of the species-specifically human anthroposemiotic ontogeny, Sebeok writes (Sebeok 2001: 135–36):

it is perfectly clear that manifold nonverbal sign systems are ‘wired into’ the behavior of every normal neonate; this initial semiosis endowment enables children to survive and to both acquire and compose a working knowledge of their world (*Umwelt*) before they acquire verbal signs. . . nonverbal sign systems by no means atrophy (though they may, of course, become impaired) in the course of reaching adulthood and old age. In other words, the two repertoires – the chronologically prior and the much, much younger – become and remain profoundly interwoven, to both complement and supplement one

51 The “hypoicon” is the material object considered apart from the indexical signs attached to it. As Peirce states, there are no pure icons except those which are by Firstness alone, (1903: *EP.2.273*): “A Representamen by Firstness alone can only have a similar Object. . . A sign by Firstness is an image of its object, and, more strictly speaking, can only be an *idea*. . . But most strictly speaking, even an idea, except in the sense of a possibility, or Firstness, cannot be an Icon. A possibility alone is an Icon purely by virtue of its quality; and its object can only be a Firstness. But a sign may be *iconic*, that is, may represent its object mainly by its similarity, no matter what its mode of being. If a substantive [term] be wanted, an iconic Representamen may be termed a *hypoicon*.”

another throughout each human individual's life. This reliance on two independent but subtly intertwined semiotic modes – sometimes dubbed zoosemiotic and anthroposemiotic – is what is distinctively hominid, rather than the mere language propensity characteristic of our species.

The pervasive employment of nonverbal signs in human beings – which is not eclipsed by the development of verbal sign systems, but rather, seemingly enhanced (cf. Sebeok 2001: 136) – illustrates the continuity of human beings with the broader base of alloanimals. Simultaneously, the dimension of verbal signification, exemplified by the symbolic communication of a specific language system, signifies the discontinuity separating human from non-human semiosis. But it is not language as such which constitutes this difference. Deely tells us (2012: 77; *italic emphasis added*):

In linguistic communication the vocal sounds (or visible gestures or marks) whereby we manifest our thoughts or opinions or deceptions to others, then, are but the vehicles employed by unique animals to convey significates which may or may not be things – 'unique' in that the animals in question are able to manipulate the sign-vehicles precisely as distinct from and independent of the 'realities' of the physical and social environments (the objective world or Umwelt) within which the sign-vehicles of linguistic communication are put into play. *Being able to deal with relations as such in their imperceptible but suprasubjective being*, and hence with objects in their being as terminus of relations in principle distinct from the being of things existing subjectively and even from the being of relations existing intersubjectively, *is precisely what makes linguistic communication as an anthroposemiotic phenomenon distinct from generically zoosemiotic communications.*

In terms of the individual human's semiotic ontogeny, the linguistic communication of others serves to evoke an inherent capacity of the human child for linguistic metasemiosis, as an ability for which the human organism (or system) is suitably adapted. But looked at in terms of the species-specific evolutionary phylogeny, the ability to deal with relations as such constitutes the human being as a metasemiotic (i.e., semiotic) animal.

From the paradigm of the forms of categorical appearance, it is obvious that human experience comprises every mode of appearance (else neither Peirce nor any other human being would be able to discuss them): the three elements appear to human beings under forms of Secondness as qualia, relations, and signs; under their forms of Thirdness as feeling (aesthetic holding-towards), action or modes of conduct, and thought; and notably, to human beings alone do the elements appear in their forms of Firstness, as in the ideas of Firstness, Secondness, and Thirdness themselves. Also distinct from the apparent experience of all other animals are the presentation of signs as forms of Secondness and thought as signs of Thirdness.

The historical and evolutionary origin of this species-specifically human distinctiveness as a whole, considered both ontogenically and phylogenically, remains as yet mysterious, though not for lack of attempts to give explanation nor plausible and informative theoretical and empirical investigation (e.g., Deacon 1997).

4.3 Semiotic awareness

Nevertheless, it is almost undeniable that, among known existents, human beings possess an unparalleled semiotic capability. This peerless facility results in what is, comparable to all others, an explosion of semiotic freedom by dozens of orders of magnitude. What appears, superficially, to be so minimal a difference – orthographically considered, a single letter! – turns out to be the single greatest difference in the known universe. That is, there is a greater difference between the least intelligent human being having attained even the slightest experience of species-specifically human cognition and the most intelligent member of any other known species. The human may be terrible in pragmatic matters, barely capable of surviving without the gratuitous beneficence of others, while a smart chimp is far better equipped to care for itself; but nevertheless, the human is *in principle* capable of more than the chimp can ever accomplish. Why is this? What is it about the *semiotic* nature of human animals that gives them such a profound intellectual capacity? We are not equipped to answer that question yet.

We are, however, capable of laying the foundation: a sign, understanding the nature of which serves as the marker of distinction between semiotic and semiotic cognitive activity, can be correctly defined as that the whole being of which consists in making another known (cf. Peirce 1632a: 25/11–13; Peirce 1902b: CP.2.303); but we could also, it appears, define it as the achievement rendered by a Third in mediating a First with some Second. Peirce states (1903f: EP.2.223–24), that Thirdness – relationality and the categorical modality proper to the action of signs – enters in to our awareness by every avenue of sense. All perceptual experience therefore entails the modality of Thirdness (cf. Deely 1982: 97). Indeed, this is true: but we become awareness of the *nature* of Thirdness only because human beings are uniquely situated to grasp it. The grasp of Thirdness itself, therefore, does not belong to acts of human *perception* – a faculty held in common with other animals – but rather to acts of species-specifically human *understanding*, which operate in continual concert with the perceptual.

What distinguishes understanding from perception? Human understanding entails a singular mode of cognition grounded in a species-specifically human

experience of the category of Firstness, such that it (Deely 1982: 103) “adds to the perception of an objective world the revelation in these same objects of the further dimension of existence in their own right independent of relations to the knower.” The ability to understand the “dimension of existence . . . independent of relations to the knower” allows us to understand objects themselves, in their own constitutions – even when those constitutions include contributions from a human mind – as in principle separable from the Umwelt in which our physical surroundings are appropriated as objects of use. Such awareness fundamentally alters the nature of human consciousness, in contrast to that of even the most highly-developed non-human animals; that is, although life has its experience mediated by signs, and it is the work of all signs to encourage a synthetic continuity between the fundamentals and termini it relates, the human experience of signs encourages a synthetic unity of the cognitive agent with the *Being* of its cognitive objects.

Consequently, the singularity and importance of human understanding – which redounds to and alters the functioning of human perception as well – and particularly its unique appropriation of Firstness, is better understood against the backdrop of the theory of synechism. That is, though it may at first blush seem paradoxical, the difference of human beings is best grasped if understood within the concept of continuity, so as not only to see clearly its mystery but to do so without glimpsing it through a distortive veil of mysticism that either exaggerates the human difference or else leaves no alternative but to ascribe its origin to direct divine intervention.

5 Synechism and the modes of existence

It is unfortunate that, in an otherwise excellent volume, *The Routledge Companion to Semiotics* (2010) lacks glossary entries on synechism, the theory of universal continuity, and tychism, the theory of universal chance or spontaneity. Winfried Nöth's expansive *Handbook of Semiotics* (1990) likewise omits these terms from its section on Peirce, and lists neither in its index. While it may be most proper to consider these interleaved theories of Peirce as belonging more to his metaphysics than to his semiotics, it is impossible to properly situate Peirce's semiotics without understanding his doctrines of continuity and chance (cf. Parker 1998; Robinson 2010). Philosophical inquiry often demands that, in the course of attempting to explain anything sufficiently we must include some explanation of everything; that is, if we are to have an ethics, or a philosophy of nature, or a semiotics, we need also a metaphysics.⁵² Perhaps, however, there is a reticence or hesitation to incorporate these more abstruse theories of Peirce into the practice of semiotics, and for good reason: for a man possessing such a scientific cast of mind, his metaphysics at times appears to border upon the mystical, and his underdeveloped notions of synechism and tychism, shading into agapism and the unbounded infinite, appear at times to reach beyond the capacities of human reason (cf. Houser 2014: 17).

Moreover, Peirce's advocations for synechism never advanced in writing beyond relatively informal argument to systematic argumentation. That is, although he played with the idea throughout his career – one sees it for instance latently present in the early “Questions Concerning Certain Faculties Claimed for Man” (1868), “Design and Chance” (1883–84), more explicitly in “A Guess at the Riddle” (1887–88), “The Law of Mind” (1892), “Laws of Nature” (1901), and indeed, almost anywhere mentioning the action of Thirdness – and although it seems crucial to understanding his thought as a whole, the idea of synechism never crystallized into so methodically-consistent a thought as, for instance, the multitudinous trichotomies of sign. Synechism is named the enemy of dualism (1893: *EP*.2.2), the corollary of fallibilism (c.1897: *CP*.1.172), the growth of reasonableness (1902a: *CP*.5.4), and the synthesis of tychism and pragmatism (1906a: *CP*.4.584). These monikers all indicate the importance of synechism to Peirce's thought, without giving it the desirable precision of a clear doctrine. More often than not, it appears as a principle – denying “that there are any immeasurable differences between phenomena” (1893: *EP*.2.3) and instead

⁵² It would be remiss of me to claim credit for this assertion: it was often repeated by my undergraduate philosophy professor, Dr. Herbert Hartmann.

promoting “the tendency to regard everything as continuous” (1893: *EP.2.1.*) – rather than an established and systematic way of understanding.

In this chapter, we will educe such a doctrine, both from the scattered mentions it receives in Peirce’s oeuvre, and through reflection upon its place in the whole purview of the philosophical endeavor.

5.1 Synechism and intelligibility

How can we achieve this: making clear synechism’s purpose and its importance, not merely as a principle, but a systematic doctrine? How even are we to grasp what synechism really is? We may begin by considering those tendencies against which Peirce contrasts it (1893: *EP.2.1.*): “*materialism* is the doctrine that matter is everything, *idealism* is the doctrine that ideas are everything, *dualism* the philosophy which splits everything in two.” In this light, the purpose is clear; synechism strives to answer (Searle 2009: 3) the “fundamental question in contemporary philosophy”: namely, how do we, should we, and can we account for the apparently disparate phenomena we encounter in our lives? How do we explain the existence of nature composed from subatomic particles and of culture composed from intangible and intentionally, intersubjectively-constituted beliefs? How do we account for these two seemingly quite-different things existing in one and the same universe – let alone the phenomena of qualia and consciousness? Are they made continuous only by their presence to human awareness? That is, does the human being live dividedly, one foot in the realm of the physical real, and the other in the imaginary cultural, the connections between the two being arbitrarily-produced fictions of the human mind?

The importance of synechism as a doctrine stems from its intended purpose of answering these questions. Humankind cannot bear very much discontinuity: for the supposedly-disparate spheres of our experience (e.g., cultural norms, the immediate Umwelt of social interaction, privately-retained thoughts, the laws of gravity and thermodynamics, cathectic reactions, and reasoned moral teachings) quite often conflict with one another, betraying that they do in fact possess some commonality and thus the possibility of continuity, as evidenced by the fact that in order for things to be opposed they must in that respect be somehow alike. This is not merely a matter of pragmatic efficiency, i.e., that we would not be well-suited to dealing with discontinuous experiences, but rather one of intrinsic necessity. In other words, the desirability of the continuous bears not only upon some subjective, internal, “private” world of experience, as the cement of our sanity, but by the very nature of our semiotic capacity bears also upon the dynamic objects of experience themselves. Without a doctrine of how phenomena

as both cognition-independent and cognition-dependent are continuously-constituted, *all* claims to intelligibility become suspect.

There are two distinct aspects of reality, therefore, that we must examine to produce this necessary doctrine of synechism. On the one hand, cognition-independent reality must be shown to unfold not as an amalgamation of discrete acts merely contiguous and accidentally ordered into cooperative wholes, but rather to unfold through an essentially teleological process of intrinsically synechistic emergence. On the other hand, it needs to be explained how cognition does not occur in a spiritual domain essentially separate from the realm of the cognition-independent – but neither does it reduce to the substantial order of things as though merely a epiphenomenal illusion; rather, the synechistic structure of the cognition-independent gives rise to a noetic synechism dependent upon the cognition-independent but irreducible to it. This irreducibility of the cognitive requires careful consideration and poses the greatest challenge in elucidating a comprehensive theory of synechism; as will be explained, however, it does not require the positing of a disparate reality.

5.1.1 Negative-entropy information theory

Before proceeding to discuss the two aspects of synechism, it is helpful to give the foil of an alternative fundamental conception of the universe: that belonging to Claude Shannon, Norbert Wiener, as well as Bertalanffy, von Neumann, and the broader tradition of (especially so-called “first-order”) cybernetics and information theory; namely, the conception of the universe as essentially tending, in all ways, towards the entropic death characterized by thermodynamics – including the eventual eradication of information, which persists as the temporary organization of diverse beings, standing in contraposition to entropy. In other words, just as heat disperses itself within a system to a point of equal distribution, and thereby prevents further exchange, so too all things in the universe, including information. Information, in this sense, is radically distinct from “meaning” as we have defined it here; “information”, rather, is the measurement of the discrete quantity of options in a situation or context, defined in scope by a logarithmic reduction (Weaver 1949: 9). As we will see momentarily, this system is extended to encompass all of what is really real and is therefore, albeit an impecunious one, a metaphysics (cf. Seife 2006), or at least a metaphysical architecture.

Information theory began as a study of communication: how messages are relayed from a source to a receiver, and what might interrupt this transmission. Shannon’s groundbreaking work in this field, initially published in 1948,

developed out of his work in codebreaking during the Second World War. The extension of what was initially a pragmatic and military application into a universal theory results from the fundamentally simple nature of mathematicised interpretation of communication functions. That is, although the algorithmic procedures necessary to translate varieties of coded communication into language intelligible to human beings (“decoding”) are frequently quite complex, the reduction of the communication’s content to Boolean algebraic symbols provides not only a simplicity but also an apparent universality; it seems as though the whole universe is capable of being mathematically described. Thus, this metaphysical paradigm of information as the negative of entropy reduces all positive phenomena to their quantifiable and therefore predictable (even if only probabilistically) possibilities.

Because of its reduction of the objects described to the quantifiable, however, explanation of true spontaneous emergence is impossible for information theory. In every communication of information, considered from the pan-informational perspective, there exist naught but dyadic relationships: an information source transitions to a message, which transitions to a signal, which transitions to a receiver, which transitions to a destination (cf. Weaver 1949: 6–8; Shannon 1948: 34). Such a system is, so to speak, two-dimensional: through informational exchange, new modalities of being can never come into existence, but only the rearrangement of pre-existing modes, arrangements calculable in terms of probabilities of future rearrangement – the sum of which is given the name of information.

Consequently, the degree of information available represents the distance between the current system and its entropic death, the point at which exchange becomes impossible. This eventual homogenization and consequent stasis appears an inevitability, against which the organization and diversification of information for every system, including the entire known universe, can only hold out for an undefined but presumably finite period of time. The consequence of this inescapable end to progress and diversification casts an almost nihilistic perspective (Wiener 1954: 31):

Sooner or later we shall die, and it is highly probable that the whole universe around us will die the heat death, in which the world shall be reduced to one vast temperature equilibrium in which nothing really new ever happens. There will be nothing left but a drab uniformity out of which we can expect only minor and insignificant local fluctuations.

Despite his exhortations to persist in the face of eventual death, Wiener’s concept of information as the negative of entropy asphyxiates any hope for a teleological purposiveness to the universe, absent a dualistic conception of spirit and the afterlife. At best, meaning in the teleological regard, for this life, exists

only indeed as the property of a local system and is thus reduced to meaning in the sense of reference (*Bedeutung*). Put dramatically (Seife 2006: 1), “The laws of information have sealed our fate, just as they have sealed the fate of the universe itself.”

It is little surprise, given such an absence in the belief of meaning as belonging to the universe itself, therefore, that Wiener adds (1954: 31) “the semantic point that such words as life, purpose, and soul are grossly inadequate to precise scientific thinking. These terms have gained their significance through our recognition of the unity of a certain group of phenomena, and do not in fact furnish us with any adequate basis to characterize this unity.” Undoubtedly it is true that these terms do not fit to “precise scientific thinking”, if Wiener means by this the empiriometric standards employed in most ideoscopic endeavors. The irreducibility of life, purpose, and soul to mathematical quanta of information precludes them from ideoscopy; that the “recognition of the unity of a certain group of phenomena” fails to “furnish us with any adequate basis to characterize this unity”, however, presupposes that the ideoscopic approach is the only valid consideration of physical being and its attendant properties. In such a view, all semantic depth, covering all possible referents – whereby, in truth, our words are signs not merely of consistently-coincident phenomena, but rather reference intelligible but non-sensible reality – can be nothing other than nominalist shorthand which obscures the quantifiable real with vague fiction.

In contrast, the imprecise Peircean notion of the universe as essentially synechistic, resulting not in an eventual and inescapable death (contrary to Nöth 2001: 23), but an emergent and teleologically-ordered cosmos, eternally open to new developments and growth, does indeed wax poetic and mystical. The idea of synechism, in fact, depends upon imprecision as an integral element; it relies upon forces essentially unquantifiable. But as Peirce himself observed (1903h: *EP.2.193*):

I hear you say: “All that is not *fact*; it is poetry.” Nonsense! Bad poetry is false, I grant; but nothing is truer than true poetry. And let me tell the scientific men that the artists are much finer and more accurate observers than they are, except of the special minutiae that the scientific man is looking for.

It is not merely that we need to account for emotion or a sense of the purely cathetic in our theories and concepts concerning the universe. We are not lacking the incorporation of an essential element of irrationality. The synechist’s objection to pan-informationalism is grounded not in its inadequate treatment of the aesthetic, of passionate love or violent hate. Rather, we are seeking, alongside Peirce, to avoid the pitfalls of what has been aptly called an epistemological monism (Simon 1970: 163–70), wherein one and only one kind

of object is admitted into the category of the knowable. The negative entropy theory of information reduces the process of signification to an ultimately binary system of communication – to what ideoscopy alone (and a limited scope, at that) can make known of it – and thereby excludes all that the broader fields of cenoscopy (as well as many fields which are properly ideoscopic themselves) can unveil.

Nevertheless, the multitudinous subjectively experiential realities for which information theory cannot account do give us a hint as to its insufficiency. As Brier states (2008: 39) it “rests on cloudy metaphysics and for that reason often results in some vague type of functionalism that does not take a clear stand on first-person experience, the qualia of perception and emotions, and the problem of free will.” Moreover, (2008: 44): “The main problem with this paradigm is that its concept of information and language does not systematically address how social and cultural dynamics determine the meaning of those words and signs” and (59): “. . . it fails in this regard because it does not address the social and phenomenological aspects of cognition”. In these quotes, Brier is referencing the application of first order cybernetic information theory to library information sciences and document mediation – but the criticism upholds more generally, as well, to any narrow constructs of “knowledge”, for there are a multitude of objects of knowledge which stand outside the grasp of a foundationally-binary concept of information.

This myopic perspective on what constitutes knowledge within pan-informational paradigms – only partially overcome by the flowering of second-order cybernetics and Bateson’s now-famous re-definition of information as “a difference that makes a difference” (an insufficiently clear definition and not one which clearly distinguishes itself from that of Shannon and Weaver) – not only puts the horse behind the cart, but loads the horse into the cart and seals it up. In the words of Brier (2008: 101): “Knowing is the prerequisite for science. How, then, can knowledge and intelligence ever be expected to be fully explained by a science based on a physicalistic or functionalistic world view?” A pan-informational paradigm is a dualism with one very small category, i.e., the empiriometrically intelligible, and one very enormous category, namely, the unintelligible everything else. If only the former deserves the name of knowledge, then knowledge does not seem a very worthwhile accomplishment.

Contrariwise to this myopia, Peirce holds (and this passage is the guiding text for us on synechism) that knowledge not only of the quantifiable but also of the aesthetic, not only of the ideoscopic but also the cenoscopic, arises as a complex but nevertheless unified monolith, relating a universe which is itself similarly continuous in its constitution (1893: *EP.2.2*):

Synechism, even in its less stalwart forms, can never abide dualism, properly so called. It does not wish to exterminate the conception of twoness, nor can any of these philosophic cranks who preach crusades against this or that fundamental conception find the slightest comfort in this doctrine. But dualism in its broadest legitimate meaning as the philosophy which performs its analyses with an axe, leaving, as the ultimate elements, unrelated chunks of being, this is most hostile to synechism. In particular, the synechist will not admit that physical and psychical phenomena are entirely distinct, – whether as belonging to different categories of substance, or as entirely separate sides of one shield, – but will insist that all phenomena are of one character, though some are more mental and spontaneous, others more material and regular. Still, all alike present that mixture of freedom and constraint, which allows them to be, nay, makes them to be teleological, or purposive.

Giving preference to Wienerian pan-informational or other epistemologically-monistic theories often coincides with an adoption (consciously or not) of a kind of Cartesian dualism. Too much of human experience cannot fit within the neatly-squared boxes of these narrow paradigms; and so they are relegated to the vague realm of psychological subjectivity. The consequence of this dualism is a bizarre separation of opinion and truth, of fact and action. The resultant conceptual framework cleaves human life into increasingly small, disjointed fragments, amounting to no purpose.

Contrariwise, synechism holds that love and logic are not divided one from another; nor reason and emotion, art and science, politics and truth, nature and culture. They may and often do come into opposition: but only because they are, in some way, already parts of the same generally purposive whole. Each constitutes a compositional element integral into our concepts, and these (Peirce 1903g: *EP.2.241*) “elements of every concept enter into logical thought at the gate of perception and make their exit at the gate of purposive action”.

5.1.2 Cognition-independent synechism

To grasp how the universe comprises a continuous and purposive while evolutionary whole – in stark contrast to the pan-informational paradigm which sees the organization which occurs through evolution as a temporary and aberration consequent to the incidental arrangement of parts – from the simplest subatomic elements to the most complex thoughts, requires understanding that necessity does not rule the universe. Ostensibly, this appears paradoxical. The evolution which has occurred heretofore, though purposive and continuous, is neither necessary nor infallible, and is no more the driving force of the universe than is wishful thinking. That is, although synechism includes as its “conclusion” the tendency towards habit-formation which reaches its zenith in

regularities that indeed act as laws, spontaneity or chance – for ill change just as readily as good – also serves as an equiprimordial element in the universal efflorescence. What is inevitable, so long as there are Firsts which exist not in mere isolation but are so intrinsically and situationally construed as to be capable of being related as Seconds to one another, is the eventual emergence of regularity and the growth of law in the form of Thirds – and therefore some but not necessarily any one form of evolution.

Chance, spontaneity, sporting, play, and musement: these words form a thread in the Peircean oeuvre hard to define, though easy to describe. In theoretical inquiry, the indeterminacy of the universe and its unfixed possibilities allow for abductive probing. In creative processes, this indeterminacy underlies the search for inspiration; but it also manifests in alloanimal curiosity, Brownian motion, and genetic mutation. That is, while much of nature *as it is now* can be described with great precision, the accuracy of such description is due to chance having given rise to the regularities currently predominant. Ontologically and often chronologically antecedent to these regularities is an indeterminate not-yet-being-towards. Though a thing, insofar as it is bounded in any regard, is determined and therefore has only certain possibilities, the future modalities of being in which it will be involved are *not* determined. Its possibilities are not constrained by its past, but remain open to occasions which are not just practically but essentially impossible to predict. This principle of chance, which Peirce calls tychism,⁵³ (1892a: EP.1.312) “must give birth to an evolutionary cosmology, in which all the regularities of nature and of mind are regarded as products of growth. . . [and] which holds matter to be mere specialized and partially deadened mind.” In other words, Peirce demands not that we believe mind to be produced by matter (contra Deacon 2012) but something closer to the reverse. This controversial claim will take some careful thinking to understand.

Although emergentism – which we believe must be understood as an implicitly synechistic perspective, or else as magic – steadily continues overtaking reductionism as the standard framework for explaining not only consciousness and life, it is, unfortunately, still conceived quite often from within a mechanistic perspective that conceives all development as the consequence of anterior forces (see O’Connor and Wong 2015; cf. Petrov 2013, Barbieri 2008). Such interpretations are inevitably necessitarian in their purview, believing that the

⁵³ Something of a misnomer – τύχη, fortune, while closely associated with the term of chance, αὐτόματον, refers specifically to events involving human agency, whereas chance is something much broader and independent of all conscious agency.

constitution of parts inescapably produces the result of a system's processes. The *vires a tergo* dominate. Despite recognition of uncertainty within quantum physics, the importance of stochastic processes, and continued experience of human behavior evidently defiant of reason, it remains true (1892b: *EP.1.299*) that “historical criticism has almost exploded the miracles, great and small; so that the doctrine of necessity has never been in so great vogue as now.” It seems a common assumption that, could we gain all the relevant information about the systems underlying our phenomenal reality – ideoscopic science having advanced far beyond the reach of historical criticism in “exploding miracles” – we could predict with absolute precision every event to ever occur, including human behavior; and, perhaps, control or improve it (cf. Bateson 1966: 484–85; Ashby 1956: 272).

Against this necessitarianism, Peirce insists that our ability to discern regularity in the universe simply shows that regularity exists, not that it governs with an invisible iron fist (1892b: *EP.1.304–05*):

Those observations which are generally adduced in favor of mechanical causation simply prove that there is an element of regularity in nature, and have no bearing whatever upon the question of whether such regularity is exact and universal, or not. Nay, in regard to this *exactitude*, all observation is directly *opposed* to it; and the most that can be said is that a good deal of this observation can be explained away. Try to verify any law of nature, and you will find that the more precise your observations, the more certain they will be to show irregular departures from the law. We are accustomed to ascribe this, and I do not say wrongly, to errors of observation; yet we cannot usually account for such errors in any antecedently probable way. Trace their causes back far enough, and you will be forced to admit they are always due to arbitrary determination, or chance.

In other words, the consistency of patterns observed suggest to us the idea of regular causation – not the other way around (cf. Hulswitt and Romanini 2014: 111–12). The conditions necessary for these patterns to emerge are often taken for granted; that the supposed cause produces the supposed effect requires a multitude of other regularities, which regularities themselves require others, and so on. The fundamental physical constants of the universe are supposed, for instance, as exact, universal, and independent of all other factors but lack extensive experimental verification, and cannot be tested from alternative frames of reference.

It might nevertheless remain a question as to whether this unavoidable inexactitude stems from the inadequacy of the human intellect to grasp all the relevant information – in which case, evolution or technology could eventually (if improbably) become adequate to unveil all the contributing factors – or rather if imprecision forms an integral part of the universe

itself.⁵⁴ Peirce suggests that it is the latter (1892b: *EP*.1.308 and 1906b: *CP*.6.496), though does not, to the author's knowledge, provide a compelling argument as to why.

Nevertheless, it is easy for us to provide such an argument here: if we look at the limitless potentiality of the universe through the Aristotelian lens of prime matter – as the ultimate principle of all potency (cf. Kemple 2017: 188–97) – it can be made clear that through our finite means of discovery, we can never comprehend all possibilities. All too often, “matter” (ύλη) is understood only to refer to *things* of a quantitative, corporeal extension; to beings having mass. This was the conception of Antiphon, who taught that the elements, which together make up matter, are that out of which reality is constituted. To argue for this theory, Antiphon noted that if a bed is planted in the ground and anything grows from it, it would not be another bed, but a tree – that is, wood, which was thought to be composed from the element of earth. A bed, as an artifact, is therefore indeed present, but only as the incidental or supervenient result – one might even say epiphenomenon – of the ordering put into it by the artificer. The ordering of the elements is not what causes the thing to perdure, but rather the elements themselves are what persist (Aristotle c.348BC: 193a9–21). Antiphon's view is little different from those today who see quantum particles as the underlying reality of the sensible universe. The ultimate causal interactions of any evident change are merely rearrangements of the particles. That upon which such causes operate is that which remains, ύλη.⁵⁵

54 A similar issue is found in discussions of “strong” vs. “weak” emergence, wherein the latter case of a higher-level emergence is merely a surprising occurrence given the known laws regulating “lower-level” beings, while the former is entirely inexplicable; that is, some might think all emergence is in fact weak emergence, perhaps unexpected given what we know about “more basic” realities, but nevertheless intelligible given their properties, once properly understood (cf. van Hateren 2015; 2017; Higuera 2016 for more discussion).

55 To hear Antiphon echoed today, consider Searle 2009: 4: “[The basic facts of the structure of the universe] are given by physics and chemistry, by evolutionary biology and the other natural sciences. We need to show how all the other parts of reality are dependent on, and in various ways derive from, the basic facts. For our purposes the two most fundamental sets of basic facts are the atomic theory of matter and the evolutionary theory of biology. Our mental life depends on the basic facts. Both conscious and unconscious mental phenomena are caused by neurobiological processes in the brain and are realized in the brain, and the neuronal processes themselves are manifestations of and dependent on even more fundamental processes at the molecular, atomic, and subatomic levels.” Though Searle is speaking of *facts* rather than ύλη, the difference is marginal, for the theories operate on the same premise: evolution occurs because matter is unfixated, capable of emerging into new forms, and the atomic theory of matter, as most view it, hold that whatever is constructed of atoms is itself incidental to their arrangement.

Contrariwise, Aristotle considers matter to be the principle of potentiality in physical beings; we do not speak of things as being of a kind – such as a thing of art or a thing of nature – until they are actually, such that they have the look or appearance, the εἶδος, which we can disclose or unconceal and thus present in speech. Without this *look*, such a thing would not be self-presenting; and mere elements or matter of themselves do not present a look or have an εἶδος. We do not identify a bed or a tree simply as being wood apart from its being made present in the μορφή of a bed or a tree. Without μορφή, we would never know matter; we would never know the elements; this truth pervades the universe from its largest structures, supermassive stars, black holes, super novae, to the most minute particles, quarks, gluons, bosons. “Prime matter”, therefore, does not refer to *any* material form, or even the sum totality of material forms, but rather the infinite possible forms that could come to inhere in any number of material substrates, and the fact that no material being, by its very nature as material, is fully fixed, but remains always open to – even though it may require innumerable transformations – an infinite number of possibilities.

Now, to comprehend an infinitude of possibilities, a being would have to be itself infinite: a being which, aside from the possibility of the divine, cannot be. No amount of evolution or technological development will allow the finite human to traverse the infinite. And so, while the inadequacy of the human intellect prohibits the attainment of exact knowledge of the whole workings of the universe, the infinitely complexifying universe, undergirded as it is by prime matter, itself also repudiates that comprehension – for a regular result to occur, in accord with laws, the elements involved in the situation must always already be themselves governed by principles of regularity; but any being, insofar as it is material in the Aristotelian sense, has a principle of *irregularity*, chance, always already at work within it.

Therefore, even were the human intellect to perfectly comprise the actual existents constituting the universe and the laws and habits present therein (that is, be intellectually co-extensive with the currently-existing universe), a perfect prediction of all future regularities would remain an impossibility; for the emergent reality, though dependent upon the antecedent elements, is itself a new being, possessing new properties. In other words, emergence can be “strong” emergence (cf. van Hateren 2017). It is a maxim of Aristotelian philosophy that no effect is greater than its cause – and that, therefore, whatever act a being possesses, it receives from its causes. Yet we may suggest a distinction between the *force* of an act and the *form* of an act; and while the received force of the act is a constant (dependent upon the nature of the receiver), the form

duced may be yet a different one, unlike what is found in any of the effect's constituent causes taken independently.⁵⁶

This non-deterministic producing, or educing, of new form is in fact what the term “emergence” signifies generally. The “how” of emergence, therefore, is not one of efficient causality's transfer of force, but the result of objective specification – the kind of causality proper to the action of a sign (cf. Hulswitt and Romanini 2014: 117–23) – and the dynamic possibilities of reaction to it. As Peirce writes (1892b: *EP*.1.308):

Everywhere the main fact is growth and increasing complexity. . . From these broad and ubiquitous facts we may fairly infer, by the most unexceptionable logic, that there is probably in nature some agency by which the complexity and diversity of things can be increased; and that consequently the rule of mechanical necessity meets in some way with interference.

In other words, the possibility of emergence stands upon the unintelligible tychism pervading the universe; which is to say that Peirce's notion of chance parallels the Aristotelian conception of the material not as “stuff”, but as the purely indeterminate principle of potency, open to an infinity of possibilities (Aristotle c.348BC: 197b23–198a14, 192a18–19, and 214a13–16). A clear example of such indeterminate potency, wherein something occurs without necessity, is found in spontaneous symmetry breaking – where a cause dictates that a symmetrical system becomes asymmetrical, but there is no evident *vis a tergo* cause determining the shape or manner of that asymmetry; there is no evident reason why it breaks in one direction or another except, evidently, that it must break somehow; the “end” of breaking determines the nature of the action, *not* any efficient cause. A less clear but still powerful example can be seen in genetic mutation: as a germline mutation may or may not affect one's progeny depending upon what other objective specifications have been rendered in the new organism produced through reproduction – which survival of the mutation is contingent upon its functional consequences in further reproduction (even a most beneficial mutation could fail to be replicate: perhaps a gene responsible for a regulative process which would kill cancer cells, for instance, was never passed on due to a man not taking a shower on a specific day and thereby

⁵⁶ In the background of this interpretation are two of Heidegger's writings on Aristotle: his commentary on *Metaphysics* 9.1–3 (1931) and his lecture on the first chapter of c.348BC: *Φυσική ἀκρόασις*, book two, chapter 1 (1939). Note that, if ever we are to have an intelligent account of “emergence” which is not merely an “explanatory principle” in Bateson's aforementioned sense, this difference between the form of the act and the force of the act must be recognized.

putting off a potential spouse with less-than-pleasant odors). The emergence of new forms, of “growth and increasing complexity”, is an emergence into this material openness of indeterminate futures (cf. Peirce 1909b: *CP*.6.322).

That this emergence is the product of a universal semiotic-inclination should appear almost obvious, despite the almost inevitable accusation of pansemiotism. For any two things to produce a third which is truly distinct in its own subjective being – whether that be a true numerical distinction from its progenitors or an entire difference in essential kind – they must do so by an action having an at least-momentarily triadic (cf. Peirce c.1896: *CP*.1.515: “combination is triadism, and triadism is combination”; more strongly, Peirce 1887–88: *EP*.1.252: “the very idea of a combination involves that of thirdness, for a combination is something which is what it is owing to the parts which it brings into mutual relationship”) and therefore at least *nascently*-semiotic nature.⁵⁷ This is strongly suggested by sexual reproduction and multigenerational genetic evolution. But it is true also below the threshold of life, and indirectly oriented towards it (Deely 2015: 349):

[Physioseiosis] is a momentary semiosis, not itself ongoing, like a struck match that in a moment goes out: but the universe in its physical condition of being is left changed from what it was, moved in the direction, the “upward” direction, of being able to support life after all, even though not yet actually supportive of it, since actual living things have not yet fully become possible.

This is a tissue of relations, imperceptible as such (for relations have no quantitative dimension whereby sense might directly apprehend them), dependent indeed upon the subjectivities interacting, and yet more than the simple offspring of physical interactions only as resulting in erection of a scaffolding moving the lifeless universe in the direction of being able to support life. It is like a match struck which almost immediately goes out; yet the brief flame of this virtual semiosis does not simply “go out” and leave nothing; what it leaves behind is a furtherance of the physical scaffolding which, slow by slow, will result in the actual possibility and then the actuality itself of a universe with living beings present, beings which earlier – at a lower stage in the development of the physioseiotic scaffolding – were not possible at all.

⁵⁷ The term “protosemiosis” (proposed by Nöth in 2001 and revived by Stanley Salthe in 2012, though rejected in Sebeok 1991: 84), while somewhat apt, might be confused with what Deely termed the “protosemiotic development” of sign-studies which culminated with Poincaré. Moreover, “proto”, as a prefix, suggests what is *first* but properly within the class or genus of which it is first; thus, physioseiosis as protosemiosis would be an insufficient distinction and could only be understood, as Sebeok asserted, as a “metaphorical expression”. By nascently-semiotic, in contrast, I want to signify the just-coming-into-existence of something more than what was before. The claim which the term “nascent” intends to clarify – that there is a valid albeit diminutive sense of semiosis outside of the scope of life – will certainly be disputed by those who see life and semiosis as perfectly co-extensive.

In other words, non-living being, while the action of the signs involved entails no interpretation, and thus is not any actual *use* of signs, is nevertheless at least virtually semiotic in its essential structure – object determining sign determining (immediate) interpretant – such that there can be liminal cases where the virtual semiosis is actualized so as to form a triad and therefore exhibit an actual albeit ephemeral and nascent semiosis (here we differ slightly from Deely, who comprised this under an as-yet virtual semiosis). Peirce, in language which suggests a panpsychic universe but which must be read with some liberality, asserts just as much (1906/7: *CP*.4.551):

Thought is not necessarily connected with a brain. It appears in the work of bees, of crystals, and throughout the purely physical world; and one can no more deny that it is really there, than that the colors, the shapes, etc., of objects are really there. Consistently adhere to that unwarrantable denial, and you will be driven to some form of idealistic nominalism akin to Fichte's. Not only is thought in the organic world, but it develops there. But as there cannot be a General without Instances embodying it, so there cannot be thought without Signs. We must here give "Sign" a very wide sense, no doubt, but not too wide a sense to come within our definition.

To begin: it seems almost out of context here, for Peirce to say that thought develops in the organic world, rather than the *inorganic* – given his statement just two sentences prior that thought “appears. . . throughout the purely physical world”. Perhaps this is an error, an editorial change, or even yet another “sop to Cerberus” (Peirce 1908a: *EP*.2.478). While a sign as conceived here – influencing the inorganic – requires some loosening from its usual application, it nevertheless does not stray outside the boundaries of what constitutes a sign. In consequence, this structure is nascently-semiotic not only as potentially interpretable by a sufficiently-cognitive living agent (as the paleontologist observing the fossil; Deely 1994a: 37), but also inasmuch as this process, despite bordering between a first-degree degenerate Thirdness and a genuine Thirdness (4.1.3), eventually enables the formation of a dynamic interpretant: that is, a living being. “According to Peirce, wherever the possibility of habit formation and change exists, minds will begin their continuous evolutionary path.” (Silveira and Gonzalez 2014: 154). Semiosis, consequently, takes on its own evolutionary agency.

This synechistic interpretation of semiosis, from the nascently-semiotic non-living up to the most sophisticated achievements of metasemiotic human life, is the controversial intended “grand vision” of Peirce (as Deely called it; 1996: 45–67), of a universe “perfused with signs” (1906c: *CP*.5.448n). This vision sees no harsh division between any two phenomena, such that even death and life are not a black and white binary, but different areas on a continuous

gradient, such that something which is not truly alive can also be considered as not wholly dead (Peirce 1898a: CP.6.201):

there is *another* class of objectors [to tychism] for whom I have more respect. They are shocked at the atheism of Lucretius and his great master. They do not perceive that that which offends them is not the Firstness in the swerving atoms, because they themselves are just as much advocates of Firstness as the ancient Atomists were. But what they cannot accept is the attribution of this firstness to things perfectly dead and material. Now I am quite with them there. I think too that whatever is First is *ipso facto* sentient. If I make atoms swerve – as I do – I make them swerve but very very little, because I conceive they are not absolutely dead. And by that I do not mean exactly that I hold them to be physically such as the materialists hold them to be, only with a small dose of sentiency super-added. For that, I grant, would be feeble enough. But what I mean is, that all that there is, is First, Feelings; Second, Efforts; Third, Habits – all of which are more familiar to us on their psychical side than on their physical side; and that dead matter would be merely the final result of the complete induration of habit reducing the free play of feeling and the brute irrationality of effort to complete death.

Perhaps the choice of the term “sentient”, here, as describing atoms being “not absolutely dead”, is a poor one; for it is this sort of writing which has opened Peirce to the critique of panpsychism (e.g., Pihlström 2012: 248; Deely 1996: 59; 2015: 352n19), and this sort of thinking more generally which has opened him to the critique of pansemiotism (cf. Nöth 1990: 41; 2001: 15–16; Stjernfelt 2007: 216–17). Unfortunate, for these critiques miss the most essential aspect to Peirce’s synechism: that the degrees of difference possible between any two distinct kinds of being are infinitesimal, and though we may recognize individuals which are truly different in kind – such as living and non-living, perceptual and non-perceptual, semiotic and merely semiosic – the individuals of higher kinds (in Aristotelian terms, “greater actuality”) today came through such small changes of degree, generation after generation. Consequently, despite the definitive differences today between one form of life and another, between living and dead, there are no historical lines of definitive demarcation (Kawade 2013: 374):

it is highly unlikely that a living thing, a cell, suddenly appeared in a complete form at a certain point in time on the earth; the process leading to life must have been continuous from the nonliving chemical world, gradually passing through intermediate stages with various degrees of lifelike features and self-sufficiency. It then appears impossible to pinpoint the step at which life was born and to draw a clear objective line that separates living from nonliving systems; i.e., life and non-life are continuous.

It is possible that the actual change from one kind of being to another happens very quickly (by the introduction of some factor which radically alters the structure of a being) or very suddenly, or at least that the results are, relatively

speaking, rapid developing; but the approach towards a form which makes such swift change possible tends to happen very slowly (such that the recipient of the “final” change necessary to the alteration in kind occurs has itself undergone an extensive developmental process enabling the emergence of the next) or very gradually, and quite continually.

That is, evolution – not merely of life here on earth, but throughout the cosmos, in every shape and form (Jämsä 2008: 73–75) – while it may manifest at times in apparent leaps and bounds, unfolds primarily through minutial changes accomplished through either actual or virtual semiotic relations and must necessarily – if the thesis of synechism is essentially true – therefore include liminal instances which border on both semiotic actuality and virtuality. The endurance of evolutionary changes is accomplished not, however, through the antecedent forces providing the specifications, but rather by the prospect of increased capacity for actual semiosis, i.e., life (Deely 2015: 355): “[the] search for ‘genuine thirdness’ in nature prior to advent of life seems to me to require that we be guided by this notion of ‘being *in futuro*’ as *momentarily* realized each time the physical interactions of finite beings (‘brute Secondness’) results in an *indirect consequence* which moves the universe in some part closer to ability to sustain biological life.” In other words, while individual inorganic beings may lack direct qualities of mindedness themselves, they nevertheless exhibit an obedience to the regularity implied by every Thirdness – the vaguest coloration in the gradient from complete death to the ever-brightening possibilities of life, the meagerest illumination of sentience through participation in its most fundamental structure – such that the complete cosmological evolution is oriented, however chaotically, towards the eventual production of the conditions which make life possible (Deely 1994c: 387): “over and above the individual interactions of bodies, there is a macroformation of the universe that takes place directionally, as it were, toward the establishment of conditions under which virtual semioses move always closer to actuality.”

Once that semiosis becomes actual – or perhaps it would be more accurate to say, once that actual and ephemeral but nascent-semiosis develops into semiosis proper, semiosis as a habit not only of the relation but of the interpretant – it becomes dynamic and interpretative, and one can ascribe approximate qualities of mind, proto-mind (cf. Kawade 2013: 369–70), to the apparent agent of semiosis. On the one hand, this change obviously introduces semiotic freedom, and thereby opens new autopoietic and autonomous pathways for semiosis. On the other hand, the structure of very simple life highly constrains the manner of interpretation possible. Elementary life could have emerged in a wide variety of other ways and subsequently given rise to very different forms of highly-evolved life, but now having taken a determinate

path, is cut off from those possibilities – at least, on Earth. There is not, strictly speaking, any semiotic freedom, which necessarily requires an interpreting agent, antecedent to the emergence of life; but there is an indeterminacy on the macroformative scale of possible interactions (i.e., the scale larger than any given potential ecosystem) which is not constrained to any one particular path and which eventually, given the right conditions, will follow some path or another. Hoffmeyer and Stjernfelt, in providing an overview of many of the forms of actual semiosis within living beings, astutely mention that (2015: 14) “*in emergent processes, freedom of possibility will always be constrained at the simpler level in order to allow an altogether new kind of freedom to appear and unfold at a more complex level.*” This insight is true not only of life, but also of the inorganic, as in autocatalytic molecular interactions (Hordijk et al. 2010; 2012). To put this in an Aristotelian maxim, form determines matter: there is a broader range of possibility in raw matter possessing little in the way of formal specification; restriction of this potentiality by the introduction of form, however, opens up *new* possibilities only available consequent to some already-existing act; such as linguistic communication (likely at the expense of other, unspecified forms of communication, and other forms of living) following from the metasemiotic capacity of human beings, or as the reduction of communicative channels in evolution from prokaryotic to eukaryotic cells (Hoffmeyer and Stjernfelt 2016: 13).

Moreover, the synechistic continuity of semiotic processes is multi-dimensional, relying upon not only concatenations of chronologically subsequent development, but often consisting in the higher containing the lower, such that lower processes of semiosis or nascent-semiosis are appropriated to enable higher and more sophisticated activities. Thus, in living beings of high complexity we find the simplest of semiotic processes often serving intermediary roles in both endosemiotic and exosemiotic functions and thereby helping to foster emergent processes. This semiotic multidimensionality can be seen at every level of semiotic organization.

For instance, we may see emergence of a higher form from the lower in the case of mammalian conception through processes which are of themselves at the very low end of what is generally considered semiosis, in subservience to processes typically considered at the higher end (mate selection, courting, etc.). In human reproduction, sperm and egg together produce a zygote, the first emergence of the human being possessing a complete genetic structure. But the sperm does not simply smash into the ovum; rather, it latches on, through a mutual protein recognition – Izumo1 on the surface of the sperm, “Juno” (formerly called “Folr4”) in the membrane of the egg – which in turn signals for the rest of the Juno proteins to be expelled from the egg membrane

to prevent polyspermy (Binachi et al. 2014: 483–87). These actions are complex and sophisticated, to be sure, but evince a rather minute degree of semiotic freedom. The reality which emerges, the germ of an individual human existence, transcends the mere complex sum of the now-united genetic code (Hoffmeyer and Emmeche 1991: 117–66; Bruni 2007: 365–407), and upon proper biological development, as a consequence of innumerable semiotic processes, will be able to employ a semiotic freedom unparalleled in the known universe. Through a semiotic chain of events – vehicles bringing objects and interpretants into mutual relations – a new unity forms, greater than the separate biological unities which preceded it on the microformative level (including the endosemiotic processes of the protein interactions), and possibly, given either genetic mutation or contributions to cultural development, greater also than its parents on the mesoformative level of culture.

This semiotic unification of a greater being from the lesser, i.e., evolution, illustrates the synechistic principle in action, including the inexorable element of tychism, so long as we understand that the objective specifying causality at work – an extrinsic formal causality – need not impress its formal causation in terms of mere replication; it is not to be understood so narrowly as a signet ring being impressed into the wax, in other words. Rather, enabled by the fact of the indeterminacy inseparable from all corporeal being, the vagueness of Aristotelian prime matter which inherently opens a being to further determination, objective specification alters the orientation of the impressed-upon being towards the possibilities for that being's interactions with others (cf. Poinset 1632a: 169–170; Deely 1994a: 36–37). In other words, the possibility of chance lays open the irregular aspect of a being to a specification irreducible to the impression itself, and therefore to producing or educing of determinate, regularized structures. The tychic principle serves the synechistic (Peirce 1892b: *EP*.1.310): “I make use of chance chiefly to make room for a principle of generalisation, or tendency to form habits, which I hold has produced all regularities.” This tendency for regularity to emerge from chance – a tendency which follows inevitably from the meagerest occurrence of regularity in the universe (cf. Nöth 2001: 20: “[the organic and inorganic have in common] a tendency towards self-control, self-reference, growth towards future states independent of initial states, but with a telos from the beginning on”) – appears pervasive throughout, and necessary to, the evolutionary history of the universe and thus to the continuity of substantial reality. But the connection between tychism and synechism does not end with the emergent generation of evolutionarily progressive cognition-independent entities.⁵⁸

⁵⁸ For those as yet unpersuaded by this admittedly controversial section, see Appendix 3.

5.1.3 Cognitive synechism

At the current apex of this continuous evolutionary history, within the universe as it is presently known to us, stands the human being. How this creature emerged as semiotically-aware remains an enigma to which we have only the dimly-seen outline of an answer.⁵⁹ The phylogenetic evolutionary conversion from beings who live within the circumscribed circumstantiality of an *Umwelt* to creatures who exist in an ever-expanding *Lebenswelt* as individuals and in an ever-complexifying *Bildendwelt* as participants in a culture remains in scientific obscurity (cf. Semenenko 2016: 506).

In terms of a general principle seen cenoscopically, however, it makes sense that cognition would emerge through the tendency of living beings to seek their own perfection – that is, to seek greater persistent actuality (Aristotle’s *ἐντελέχεια*). In other words, living beings semiosically seek out furtherance of their own actuality, whether by an internal development of intrinsically-possessed potentialities (endosemiosically-based), or by accumulation of new potency through unification with other beings (exosemiosically-based). The fertilization of an ovum serves as an example of the semiotic process whereby a new and more perfect unity is sought exosemiosically in ontogenesis, sperm and ova by themselves being relatively insignificant in contrast to the living animal body formed consequent to their union. Through their

⁵⁹ The idea of the human being – the human soul (in Aristotle’s sense of the first principle of a body potentially having life within it, cf. c.330BC: *Περὶ Ψυχῆς*, book 2, chapter 1) as including intellectual capacity – as an emergent reality developed through evolution seems superficially contrary to Christian belief, possibly explaining resistance to the idea’s acceptance. It is commonly held within Christianity that God alone can produce a subsistent reality (i.e., one that does not pass away); since the human has an operation, according to Thomas Aquinas (cf. 1266–68: q.118, a.2, especially ad.2), which does not rely on the body (namely, understanding), even though this operation does require the body for its completion (the “return to the phantasm”), it appears to be subsistent. For enmattered realities, all of which lack subsistence, to produce such a subsistent being, would be for something to give more than it has itself – an idea repugnant to the aforementioned Aristotelian maxim.

Simultaneously, however, Aquinas notes that created things are more perfect the more they are like God; and God is diffusive of good to others; therefore, the more diffusive of goodness things are, the more perfect they are. This diffusion of goodness in created beings more perfectly demonstrates the goodness of God. (Cf. i.1259/65: b.2, c.45, especially n.4.) It is therefore not unfitting for a universe created by the Divine to bring about, through secondary causes, the existence of an intellectual being. Reason does not reject, and in fact supports, sufficient force of act being produced by the confluence of causes in producing the human being so as for the semiotic human form to emerge – regardless of whether or not the human being in fact has an action which renders it subsistent. (Cf. Deely 1966: 119–45.)

communication, sperm and ovum, each an interpretant itself, there comes to exist a new interpretant; each is fundamentally changed through the interaction to the extent that neither continues to exist as the same kind of being. For the perfection of each to be attained, towards which it is inherently oriented by its internal constitution, it requires this complete entitative or substantial change: the annihilation of the old form in the production of the new. The same pattern, it stands to reason, could be responsible for whatever phylogenetic process results in the emergence of humans: a new semiotic freedom being born from the restriction of broader possibilities to more determined, specific actual modalities of substantial existence.

Cognitive beings, by contrast, precisely insofar as they are cognitive, do not require such a substantial change for attainment of the perfection of that cognitive ability (and to that extent, the orientation of their natures). That is, the perfection of the cognitive ability consists in unity with their respective objects by possessing them in some manner other than the substantial. In this regard, the possibility of cognitive synechism – the fluorescence of thought – depends upon the indeterminate principle of tychism no less than does cognition-independent synechism.

This alternative mode of possession of the object follows from the cognitive being's capacity for an intentional mode of existence (Deely 2007: 21): "every intentional form is carried by and presupposes an entitative basis: there are no purely intentional forms in the sense of purely spiritual forms which pass between existing subjects without any sustaining physical substructure at each point of the passage: without an *Innenwelt* there is no *Umwelt*." Intentional states can be described in many ways; here, we might say they consist in an interpretant attaining non-corporeal unity with the object, while remaining entirely distinct entities.

The specific nature of any cognitive being determines its fundamental possibilities for such intentional unity. The human eye, for instance, can only perceive light waves between roughly 380–750nm, while many birds can see into the ultraviolet spectrum (<380nm) but not as far into red (towards 750nm). Some snakes can detect objects via heat signatures up to a meter away (Gracheva et al. 2010); but only humans watch performances through the lenses of parody. All animals have unique possibilities for intentional unification with their objects according to the parameters setting the boundaries of their *Umwelten*. In neither humans nor other animals, however, do these intentional unities result in amalgamated series of discrete relations. We do not construct our perceptual notion of "color", for instance, by a mere collation of the roughly 10 million colors we are capable of distinguishing, nor does the boa constrictor catalog discrete degrees of its prey and competitors; rather, every intentional

unity affects a change in the continuum of the cognitive being and each relation forms a new crease in the unfolding of that continuum (cf. Kemple 2018).

Critically important for our purpose of understanding species-specifically human cognitive indeterminacy, then, is understanding something of the nature of the human being. No pretense will be made to unveil the entire complex workings of the human essence, however. Rather, we are seeking the specific fundament or fundamental structure which allows for the edification of a species-specifically human cognitive life.

In accord with the synechistic manner of emergence, it stands to reason that the principle whereby humans are specifically distinguished from other animals in cognitive ability is that closest to animal cognition, that which is “closest to sense”⁶⁰; namely, conception of “*the present, in general*” (Peirce 1867: EP.1.1). This present – the First of Firstness – is not itself any *thing*. It contains no *this* in opposition to *that*; not even some *other* in opposition to an *ego*. It is the yet-filled possibility, a phenomenological moment in every species-specifically human cognitive action, possessing no extension in time, through which species-specifically human intentional existence comes into being. That this grasp of the present, “in general”, is the distinguishing feature of human cognitive life is an interpretation that may be found controversial; many, both within and without semiotics, seem to hold that the difference of human cognition from that of other animals is one of degree, and therefore to be found in the increased complexity present in our mastery of symbolic communication (e.g., Hoffmeyer 1993; Deacon 1997; Stjernfelt 2002: 341 and 2014; Favareau 2008: 20; Hoffmeyer 2010a: 372; Filippi 2014; Berwick and Chomsky 2016; Chomsky 2016; Grishakova and Sorokin 2016: 546, etc.); or that, even if the difference is not one of degree, it manifests itself in the higher functioning of human awareness and is therefore to be found in some manifestation of Thirdness. That there exists a specifically-human modality of cognitive Firstness, in contradistinction to that of other animals or living beings, would indicate that the distinction is not one merely of complexity – at least at the level of semiosis – and is instead a radically different *kind* of cognition, a claim which might seem to be ascribing an unjustifiably privileged status to human beings and interrupting the otherwise continuous evolutionary synechism previously advocated. Moreover, this is not an assertion Peirce himself makes. Nevertheless, if it is true that human beings are distinguished from other

⁶⁰ Peirce does not elaborate on the connection between sense perception and universal conception, except, as always, to intimate the infinitesimally small distance between the two. Other philosophers have endeavored to unveil these connections of intellect and sense – those influenced by Scholasticism not the least of which (Cf. Maritain 1959; Deely 2007; Klima 2015; and Kemple 2017).

animals in their cognitive powers by engagement with the Being of beings – which is to say the irreducibility of objects’ intelligibility to their objectivization – then this distinction belongs not to a final complexification of commonly-alloanimal intelligence, but to an incipient moment.

As previously noted (4.1.1), Firstness is a mode of being, and the First is a being considered according to that mode (1887–88: *EP.1.248*): “[The First] precedes all synthesis and all differentiation: it has no unity and no parts. It cannot be articulately thought: assert it, and it has already lost its characteristic innocence; for assertion always implies a denial of something else.” In other words, Firstness, as the mode of being of experiencing something as a First and considered as primary in species-specifically human cognition, is none other than the *ens primum cognitum* of Thomas Aquinas and the *Nichts* and *Sein* of Heidegger (cf. Deely 2001a: 648); that is, the element of awareness unconstrained by the parametric boundaries of the Umwelt. This was indicated above (4.1.1), wherein Peirce denotes Firstness in cognition as the pure act of attention, as lacking any predicative determinations of its contents. Notably, however, pure Firstness never exists for us in actuality, but only in our abstraction, i.e., as the *idea* of Firstness – because our ideas never appear to us directly, Firstness never manifests in experience apart from Secondness and Thirdness, as it never appears in the absence of some First, which can appear to our cognition only by virtue of the mediation of Thirds between Seconds.

Nevertheless, Firstness is the primary fundament, and every act of species-specifically human attention is attended by *qualia* (Firstness appearing in its form of Secondness), i.e., some “*what*” which determines the boundaries of dynamic possibility and by some *feeling* (Firstness appearing in its form of Thirdness), i.e., a disposition towards that “*what*” (cf. 4.1.4) which conditions the human’s range of reactions. These pseudo-distinctions within the experience of Firstness help us to see that it is not limited to an “interior” realization (Peirce 1903e: *EP.2.268–69*):

Possibility, the mode of being of Firstness, is the embryo of being. It is not nothing. It is not existence. We not only have an **immediate acquaintance** with Firstness in the **qualities of feelings** and sensations, but we attribute it to outward things. We think that a piece of iron has a quality in it that a piece of brass has not, which *consists* in the steadily continuing *possibility* of its being attracted by a magnet. In fact, it seems undeniable that there really are such possibilities, and that, though they are not existences, they are not *nothing*. They are possibilities, and nothing more. But whether this be admitted or not, it is undeniable that such elements are in the objects as we commonly conceive them[.]

For human beings (among other animals), Firstness is experienced as conscious immediate feeling, instigated by a First (Peirce 1887–88: *EP.1.260*): “Immediate

feeling is the consciousness of the first”. It would be a mistake, however, to interpret “feeling” as signifying emotional response – a dyadic response involving Secondness – instead of the awareness of presence to one’s own subjectivity (1887–88: *EP*.1.260), or, it may even be said, the experience of subjectivity *as subjectivity* (cf. Peirce 1887–88: *EP*.1.258; Wojtyła 1978: 107–14).

Something about the way in which Firsts appear to human beings – and here we have an admittedly forceful but not necessarily violent interpretation of Peirce – however, allows an attribution of what is felt to outward things themselves, rendering it “undeniable that such elements are in the objects as we commonly conceive them” – which attribution can then be further articulated linguistically.⁶¹ This appears paradoxical: how can Firstness be the irreducibly subjective moment of awareness and yet involve an attribution to the object? It is not simply, as some might infer, that this Firstness is carried through later unfolding into the experience of Secondness and Thirdness; Peirce’s example, concerning the qualities of iron and brass, makes it clear he means something else. Rather, the species-specifically human moment of Firstness includes *within* the irreducibly subjective moment the awareness of the content’s irreducibility to the subject’s experience of it. This inherent transcendentalism of metasemiotic Firstness will be an important theme returned to in c.6. We will say, in the meanwhile, that human Firstness is the incipient phenomenological moment of human consciousness, i.e., whenever a human being is conscious of anything, including Seconds and Thirds, they are conscious (and therefore cognitively active) because of Firstness.

Consequently, the notion of Firstness as the relatively indeterminate inception of every cognitive act – indeterminacy in its form of vagueness or indefiniteness, and therefore rife with possibility – integrates with what Peirce calls (1892a: *EP*.1.313) the “one law of mind, namely, that ideas tend to spread continuously and to affect certain others which stand to them in a peculiar relation of affectability.” Why do we say that Firstness is “relatively indeterminate”? Because our attention does not operate in discrete temporal segments, but flows continuously. The attention we pay to one thing has an influence upon the attention we pay to those subsequent (Peirce 1868b: *EP*.1.46), not only regarding one and the same idea, but also in understanding new ones. For the cognition of one moment to become meaningful it must be compared to the cognition of

⁶¹ It is possible, of course, that Peirce intended this attribution to the exterior thing to be an alloanimal capacity; however, there are many things which he ascribes to Firstness which we would not properly ascribe to lower forms of life, and certainly not to the physical, to whom he evidently *does* consider as being possessed of Firstness. Therefore it seems no violence to restrict the object-attribution of Firstness to species-specifically human cognition.

moments previous; just as the finger, to discover roughness in some cloth, requires that the finger-possessor compare one moment of sensation to those previous as the finger is dragged across the surface (Peirce 1868a: *EP.1.15*). Attention – the act of focusing our cognitive capacities on an object – unfolds across the infinitesimal moments of cognitive consideration.

For comparisons of these moments to be made not only of sensory data but also of ideas or thoughts, then, consciousness, a state of awareness always grounded in Firstness (cf. Kemple 2018), must be continuous (Peirce 1892a: *EP.1.314*): “The relation [of a past idea to a current idea], being between Ideas, can only exist in some consciousness”. In other words, just as chance, the openness to being-otherwise intrinsic to materiality, serves as the basis for synechistic continuation of distinct forms of substantial reality by virtue of its potentiality, the immediate consciousness is the basis for the synechism of noetic or cognitive processes, the synthetic consciousness or thought (Peirce 1887–88: *EP.1.260*), by virtue of its innate openness to further experiential data and comparisons thereof. As Peirce goes on (1892a: *EP.1.314*):

How can a past idea be present? Not vicariously. Then, only by direct perception. In other words, to be present, it must be *ipso facto* present. That is, it cannot be wholly past; it can only be going, infinitesimally past, less past than any assignable past date. We are thus brought to the conclusion that the present is connected with the past by a series of real infinitesimal steps.

Explanation of Peirce’s related theories of the infinitesimal and the continuous are by no means settled issues, particularly not as they pertain to mathematics (cf. Burch 2014; Peirce 1900: *CP.3.569*). Our purposes demand only, however, a philosophical consideration: considered from the standpoint of immediate consciousness, any idea of the past, as Peirce says, cannot be wholly past, but needs to be diffuse by infinitesimal degrees throughout its prior occurrence into the present moment. Ideas are thus extended because the immediate feeling identifiable with the species-specifically human experience of Firstness persists diffusely throughout time because perception includes an awareness of the self to whom the objects perceived are present (Peirce 1892a: *EP.1.315*):

in this infinitesimal interval, not only is consciousness continuous in a subjective sense, that is, considered as a substance having the attribute of duration; but also, because it is immediate consciousness, its object is *ipso facto* continuous. In fact, this infinitesimally spread-out consciousness is a direct feeling of its contents as spread out. . . In an infinitesimal interval we directly perceive the temporal sequence of its beginning, middle, and end, – not, of course, in the way of recognition, for recognition is only of the past, but in the way of immediate feeling.

All of these elements are contained implicitly and vaguely as possible realizations which arrive with a First to the species-specifically human experience of Firstness: self-consciousness, awareness of an object, distinction of qualia and feeling, and attribution of qualia to the object. Through reflection on the past, what Peirce above called “the way of recognition”, we distinguish and by making explicit what was present in a First discern Seconds and Thirds as well.

Awareness of Thirds – the connections which govern between one and any other – gives rise to what Peirce terms (1887–88: *EP.1.260*) “synthetical consciousness”. This synthetical (or synthetic) consciousness, which “differs from immediate consciousness, as a melody does from one prolonged note” (1887–88: *EP.1.260*), occurs in three degrees: first, by external compulsion, such as association by contiguity, as when we cannot help but believe two objects are near to one another in their spatial relation; second, by the resemblance of one feeling of Firstness to another, as when we note a resemblance of one human being to another; third, by “a transcendental force of haecceity [i.e., realization of a *this* not directly presented by anything else]. . . in the interest of intelligibility” (1887–88: *EP.1.261–62*):

that is, in the interest of the synthetising “I think” itself; and this it does by introducing an idea not contained in the data, which gives connections which they would not otherwise have had. . . The work of the poet or novelist is not so utterly different from that of the scientific man. The artist introduces a fiction; but it is not an arbitrary one; it exhibits affinities to which the mind accords a certain approval in pronouncing them beautiful, which if it is not exactly the same as saying that the synthesis is true, is something of the same general kind. The geometer draws a diagram, which if not exactly a fiction, is at least a creation, and by means of observation of that diagram he is able to synthetise and show relations between elements which before seemed to have no necessary connection. The realities compel us to put some things into very close relation and others less so, in a highly complicated, and in the sense itself unintelligible manner; but it is the genius of the mind, that takes up all these hints of sense, adds immensely to them, makes them precise, and shows them in intelligible form in the intuitions of space and time. Intuition is the regarding of the abstract in a concrete form, by the realistic hypostatisation of relations; that is the one sole method of valuable thought. Very shallow is the prevalent notion that this is something to be avoided because it has led to so much error; quite in the same philistine line of thought would that be and so well in accord with the spirit of nominalism that I wonder some one does not put it forward. The true precept is not to abstain from hypostatisation but to do it intelligently.

These syntheses – the first two degenerate towards Secondness and Firstness, the third the “highest” or most developed synthesis – demonstrate the synechistic continuity in the production of our ideas, even those ideas having no firm or consolidated basis in extramental substantial reality. A degenerate synthetical consciousness by external compulsion might produce, for instance, the

rough idea of a distinct neighborhood, wherein there might be a plurality of houses, shops, buildings, architectural styles, and myriad other disparate objects, but which come into a synthesis by the brute force of their physical proximity. A degenerate synthetic consciousness by the resemblance of feelings can produce, for instance, the idea of the feeling of sadness by comparing the times this feeling has become present to us. The production of an idea by a true, non-degenerate synthetic consciousness, however, as stated above, requires “introducing an idea not contained in the data”. In other words, the synthetic consciousness produces an entirely new idea altogether – a strong emergence. It does this not by an act of *ex nihilo* creation, but by recognizing in or through some Third (the new idea, reached through abduction) the compatibility of two things which seen otherwise seem unrelated (and further completes this by giving them a concrete realization).

This synthesis of new ideas, both those concerning the hardcore reality independent of our cognition and those produced by that cognition itself, follows from the very nature of ideas themselves (Peirce 1892a: *EP.1.325*):

Three elements go to make up an idea. The first is its intrinsic quality as a feeling. The second is the energy with which it affects other ideas, an energy which is infinite in the here-and-nowness of immediate sensation, finite and relative in the recency of the past. The third element is the tendency of an idea to bring along other ideas with it.

Ideas are not inert; occurring in the continuity of consciousness, they cannot help but affect and connect with other ideas, and in the process thereby discover new ideas. In other words, the synechistic nature of ideation (i.e., the constituting of intellectual concepts) is a consequence of all of an idea’s intrinsic elements, but most especially by its intrinsic Thirdness.

Peirce’s “Guess at the Riddle” – describing the categorical triad’s presence, effect, and mediation in metaphysics, psychology, physiology, biology, and where he intended but never did treat of the triad in sociology (or “pneumatology”) and theology – illustrates the necessity of Thirdness as mediation to the construction of any science, cenoscopic or ideoscopic, as what enables each science to synthesize its discoveries cohesively. What Peirce does not demonstrate, but which we may infer, is the necessity of Thirdness to those sciences’ cohesion with one another in the overall development of human (both individual and societal) learning, such that they can fit within a hierarchy of knowledge (cf. Peirce 1903a: *EP.2.258–62*) and thereby engender a genuine interdisciplinarity. The cognitive discovery of the Thirds whereby any two ideas come into association, to form some idea anew, is, like the discovery of any new idea, what Peirce designates abductive inference (1903f: *EP.2.216, 224*).

5.2 Synechism and modes of existence

Before we can adequately treat of abduction, to situate its role in the synechistic structure of semiosis, we ought briefly to discuss the two **modes of existence** as they were developed in Scholastic thought.⁶² Understanding this twofold existential modality is critical to our interpretation of Peirce's theory of knowledge as inexorable from his greater metaphysics. Briefly, these two modes are the **substantial** (what has been broadly denominated *esse in*), encapsulating the way in which a thing having its own nature (i.e., internal constitution giving continual order and structure), and its inhering dependents, exists in the universe; and the **relational** (or *esse ad*), which indicates secondarily the inexorable relationality of the substantial, but primarily the relations themselves whereby beings are brought to bear upon one another either potentially or actually and therefore in an essentially suprasubjective (rather than intersubjective) framework.

Failure to grasp the dependent-but-distinct reality belonging to relations has undermined a great deal of philosophical inquiry (cf. Deely 2001a *in passim*; 2007: 115–58 and 171–84). The quite frequent relegation of relational realities to strictly cognitively-constituted existence, i.e., mental fictions – the common practice of nominalism – corrupted a great deal of modern and Scholastic philosophy alike; but more often than not, relation has simply been ignored or marginalized in importance. Even when it has not been explicitly denied as something real and existing independently of cognition, it has been left out of “reality”. Consequently, “reality” has been misunderstood, in terms of both its own constitution and how it is intelligible to us.

5.2.1 *Esse in*

Briefly stated, the realm of *esse in* comprises all those things which belong to some substance: that is, the nature and accidents existing within or stemming from some physically existent entity (Cf. Josephus Gretd 1899: 121). With the exception of relation (Deely 2001a: 73–78), the traditional Aristotelian categories – which are not primarily modes of predication, as from a Kantian *a priori*, but modes of existing and thence *derivatively* predicative (cf. Peirce 1902c: CP.2.384) – constitute the breadth of finite *esse in*. Thus, belonging to *esse in*

⁶² We have done this to considerable length elsewhere (Kemple 2017: 277–334), to which we would direct the reader for a more comprehensive and scholarly treatment.

is whatever can be called human, red, tall, hard, clothed, canine, and, indeed, the great majority of our nouns and adjectives.

While the precise nature of *esse in* provokes dispute – including, among many other controversies, its categorical divisions and the extent to which it can be known – its existence, and specifically the existence of its members as relatively independent (i.e., needing others for sustained existence as the kind of things that they are, but possessing that existence by means of their own self-possessed structures of identity) arouses little controversy from all but the most obtuse of theories (or theorists). A “common sense” realism, possessed by most people at least pragmatically, takes as given that we really interact with objects as realities independent of our own minds; that is, our common experience, with no need for critical evaluation, more often than not suggests to us the reality of the things we sense. It is only after or during the extreme cases of hallucination, vivid dreams, or other cognitive disturbance (such as profound boredom) that we tend to question the reality of our experience.

Familiarity with the domain of *esse in* to the point of unconscious presumption seems to permeate all Western languages. Most especially, the subject-object and subject-predicate structures of these languages center around substances and their accidents. The teaching of English, in particular – as opposed to, say, Latin or other inflected languages – myopically focuses upon substantial being: little attention is paid to the nature or significance of prepositions, cases are minimally employed (often today being glossed over in the teaching of English grammar, at least within the United States, if mentioned at all), and are limited to the subjective, objective, and possessive, placing little explicit emphasis on the dynamic or relational (as do, say, dative or ablative cases in Latin) as integral elements of the linguistic structure.

5.2.2 *Esse ad*

Contrariwise, the realm of *esse ad* remains elusive to the perception of many. It possesses no perceptible quality of its own; that is, there is no sensible object to which we can point, which we may touch, and say, “Here is relation!” And unlike natures or substances (which likewise lack a directly perceptible quality) relation never exclusively *belongs* to one individual, but subsists only between a multitude. We may not be able to point to the equinity of a horse, but we can point to many horses all possessing more or less the same characteristics. Likewise, we can point to many fathers or sons to indicate the relativity of the individuals as paternal or filial – but there is no object to which we can direct the

eyes to indicate paternity as such. There being no subject, therefore, to which the predicate of “relation” can be applied, the misconception often obtains that the relation itself does not exist independently of our cognition, but only as a fiction we invent for ourselves to explain the connections whereby one being affects another.

Of course, this relational nominalism occurs because of a painfully myopic conception of existence as occurring in one and only one mode, which can be ascertained through the senses; in other words, those who deny the real existence of relation try to smash the square peg through the round hole, and finding it will not fit, chuck it into the trash. If they were to step back for a moment, they could perhaps see that existence contains also a square hole. Whereas the existence belonging to substantial reality consists in a thing being itself, relational existence is “that whose whole being [*esse*] is towards another” (Poinset 1632a: 81). To be a relation stands as a mode of existence entirely distinct from the mode of existence proper to a substance, but which is equally deserving of the name “existence”, for which our standard ought not to be our sense experience alone, but *all* our experience. If we accept that reality can be communicated to us only by sensation, and that whatever cannot be reduced to sensation cannot be designated real, we enervate even that which is attained through sensation, for a few moments’ reflection can easily show how much the web of our experience is constituted through strands of relation – including every act of sensation, for relation is the modality of communication.⁶³

Thus, although it is often the case that we speak of things related by the imposition of a name which precisely signifies neither what belongs to the thing in its own substantial constitution nor the relation itself, but rather the thing considered as relative (e.g., “mover”, “the one farthest to the left”, “his head”; what are best designated as *relata*), it is *not* the case that relations are themselves therefore mere nominal fictions. This kind of relational-predication signifies only the inherent capacity of relativity belonging to every *esse in*. In such considerations of substantial or accidental things as relative, we are noting the relational dependency either in the thing’s actual constitution (e.g., a mobile being) or in the manner of its conceptualization (e.g., “to the left”, as relative to one’s perspective). Consequently, the relation itself, though

63 This is not to suggest that every aspect of our experience is equally real, or that we do not misjudge the contents of our experience. But as Peirce says, (1904a: *EP.2.324*): “A sign cannot even be false without being a sign and so far as it is a sign it must be true.” In other words, a falsehood may be false as to what it is taken to portray, but it is nevertheless real as a constituent of our experience.

peripherally, stands within the conceptual totality signified by these terms (cf. Aquinas i.1256–59; Kemple 2017: 315–17).

On the contrary, when we use terms that principally signify relations themselves, we are sometimes but far from always signifying mere illusory fictions of the mind. Far more often, we signify things which are real in themselves: as paternity, professorship, or marriage. “Reality,” Deely says (2009: 116), “as we experience it is neither purely objective nor purely subjective nor purely intersubjective, but rather a constantly shifting mixture and proportion of all three not at all easy (perhaps not even fully possible) to keep complete track of.” (cf. Deely 2010a: 53–80; 2009: 17–53 and 69–83; 2007: 115–36, 143–46, 156–63, and 171–84; and 2014: 593–604, but especially 594–96.) In other words, reality comprises not merely those things which exist independently of cognitive action, but includes, albeit under a different modality, also those things which affect (mediately or immediately) such cognition-independent being (cf. Aquinas: 1266–68: q.29) – including the locus of experience, the semiotic animal.

5.2.3 Existential continuity

It would, therefore, be a mistake to think that these modes of existence, relational and substantial, are therefore mutually exclusive – as though whatever exists in a relational mode cannot exist simultaneously in a substantial mode, and vice versa. Quite to the contrary, apart from the possibility of a divine being, every substantial existence depends upon its relations and is consequently constituted in some specific manner of existing through its relations. Likewise, the relations themselves are dependent upon the substantial things related for their determination (cf. Deely 2001a: 696). This is true not only of entitative relations (*relationes realis*), like that between a dropped stone and the force of gravity, but also mixed relations (involving a cognition-independent fundament and cognition-dependent terminus), such as the relation between a knower and the known, and purely cognition-dependent relations (*relationes rationis*), such as between subject and direct object in a grammatical construction. Thus, we can talk about any substance precisely insofar as it is related – as when we say “father”, a name deserved only on the basis of a relation, or when we say “that thing” (which decidedly means “not that *other* thing”; cf. Aquinas i.1256–59: q.1, a.1, c.) – and when we talk about a relation, we do so in reference to the things related – as when we say “paternity”, or “increase”. This is the distinction of “transcendental” and “ontological” relations, or the *relativum secundum dici* and the

relativum secundum esse.⁶⁴ We could just as well call the meanings intended by these two terms – *secundum dici* and *secundum esse* (which afford no easily-intelligible literal translation) – the relativity of beings and the being of relation, respectively. The first follows from the fact that, in describing any being, we inevitably invoke relational terms – thus it is *secundum dici* as following from the nature of discourse, from the way in which we must talk about things as constituted through relations. The second, the *secundum esse*, refers to the mode of existence belonging to relations themselves, rather than the things related.

Substance and relation, *esse in* and *esse ad*, are therefore weaved together throughout our every facet of our experience. Moreover, and more importantly, relations themselves can come to be objects of thought – not merely the things related as related. While no relation as existing is entirely separable from substantial beings (even *relationes rationis* require a really-existent cognitive substance for their subsistence, even if the *relata* are themselves purely objective, they exist as *termini* of some cognitive agent really existing in itself which constitutes the whole triad of their relationship), relations themselves, *relativa secundum esse*, form the warp and weft of our cultural realities, not only as bringing together individuals and their actions, but as themselves *fundamenta* provenating new relations to further *termini* by virtue of the suprasubjectivity essentially characterizing every relation (Deely 2007: 144):

The later appropriation of the expression *relatio secundum esse* – first by Aquinas to make rational sense of a triune communion of relative persons as the inner life of God, then by Poinsoot as *point de départ* for the *doctrina signorum* – to express the fact that the whole order of *ens reale*, and that consequently even *relationes rationis*, notwithstanding their mind-dependent character of existence, cannot be reduced to subjectivity; so that *all* relations, whether *realis* or *rationis*, are irreducibly suprasubjective whether or not they are also intersubjective; and that this irreducibly characterizing feature of relation is **both** what makes possible the objectivization of subjectivity and intersubjectivity within experience and knowledge through objective relations which, according to circumstance, are also *entia realia*, **and** enables – at the same time and for the same reason – the possibility of *pure objectivity* as well as awareness of objects having a physical existence but not immediately present in the sense-perceptibly accessible physical surroundings here and now: this is what is intended in the English translation of Poinsoot’s *relatio secundum esse* as “ontological relation”.

⁶⁴ That is, as Boethius first pointed out, we can speak of the relative *secundum dici* or the relative *secundum esse* – i.e., respectively relation said of what is primarily a thing in itself and secondarily what is related (like “father”) and of what is the relation itself, (as “paternity”). (Cf. Deely 2010b: 96–104.)

It is difficult to say how familiar Peirce was with these Scholastic notions concerning *esse ad* and its continuity with *esse in*: for one thing, our sources here are primarily Thomistic (though the terms *secundum dici* and *secundum esse* originate with Boethius) while Peirce was better versed in Scotism. Nevertheless, although the latter school of thought tends more towards nominalism than those following the thought of St. Thomas, it nevertheless shares much more in common with Thomism than either does with any modern approach, and especially with any dualist approach. It is not unreasonable to believe that this continuity in the modes of existence, *esse in* and *esse ad*, implicit in much of Scholastic thought, had some influence upon Peirce's synechistic philosophy (especially the interleaved reality of the three elements of the phaneron, Firstness, Secondness, and Thirdness [cf. Peirce 1903j: CP.1.23–26), whether or not Peirce himself was explicitly aware of it (cf. Pini 2015: 101–03; Poinset 1632a: 60). At the very least, we propose that the Thomistic, Scholastic notions here outlined are themselves compatible, as we will show, with Peirce's thought.

5.3 Synechism and semiotic awareness

That substantial and relational existences are continuous with one another also helps us understand the breadth and potential of species-specifically human metasemiotic processes. Specifically, the twofold modal reality of *esse in* and *esse ad* will allow us to better understand the operations of the logic of reasoning (5.3.1) – abduction, deduction, and induction – by showing that their collective concern, as Peirce presents it, is primarily with the proper mode of relating one significante to others, but recursively with the emergence into new domains of knowledge. Further, we will be able to show that the process of human reasoning is itself an instance of tychically-open yet teleological synechism (5.3.2), as exemplified in the open-ended process of musement. Finally, we will show how the process of species-specifically human metasemiosis coheres seamlessly with the greater teleological synechistic metaphysics of Peirce (5.3.3).

5.3.1 Abduction, deduction, induction

We stated above (at the end of 5.1.3) that the discovery of governing Thirds whereby any two ideas are found to be in a relationship to one another is

through the process of abductive inference.⁶⁵ This act, Peirce states, is first in the three stages of inquiry, or of logical reasoning. Briefly, we describe the whole of the process, drawing upon the stages' description in "A Neglected Argument for the Reality of God" (1908: *EP.2.434–50*), in order to provide some contextual clarity, and then return to a more detailed discussion of abduction.

Concisely, we can define abduction as the act of ordinary logical inference, whereby a general object is either discovered in itself or discovered to explain some surprising set of phenomena, resulting in the formation of a new concept. This is the logical movement wherein a governing Third, the governance of which rules perceptual judgment – which "shades into" abduction (1903g: *EP.2.227*) – as immersed in the *Umwelt*, can be experienced also as a First. Understanding these Thirds which govern our perceptual world as Firsts opens the *Umwelt* into the *Lebenswelt*. Thus, Peirce says that the *suadisign* (an argument) is understood as a *symbolic sumisign* (a simple, substitutive sign; 1903e: *EP.2.287*; cf. Stjernfelt 2007: 77–78). Abduction opens the door for deductive inference and is concluded by inductive verification.

Deduction is the process of logical inference whereby we discover, within a concept discovered by abduction, the relations that concept intrinsically possesses by necessity, whether those relations are necessarily attendant or only probably so. Deduction is both explicative, consisting in rendering as distinct as possible the hypothesis arrived at through abduction, and demonstrative, which collects the consequences of the hypothesis, in either a corollarial argumentation (i.e., dealing with the considerations following intrinsically from the hypothesis by a kind of verbal process) or in a theorematic argumentation which proceeds by mathematical schemata.

Induction is that phase of logical reasoning whereby we ascertain how far the consequents deduced from the hypothesis (whether they be one or many) accord with experience, and thereby judge whether the hypothesis is correct, requires an inessential modification, or ought to be rejected wholesale. This phase proceeds in three stages: classification, attaching ideas found within the hypothesis and its consequents to objects of experience; probations, wherein the hypothesis is tested either crudely (as with a falsifiable universal proposition) or gradually, wherein the "proportion of truth in the hypothesis" is newly-estimated with every instance in which a test occurs; and finally, the sentential,

65 In one of the more thorough texts employing the trio of abduction, deduction, and induction – "A Neglected Argument for the Reality of God" (1908: *EP.2.434–50*) – Peirce uses, instead of the term "abduction", the potentially misleading "retroduction". An unwary reader might take this latter term to indicate a return to something prior to our experience, i.e., some *a priori* realm of Platonic ideas. This seems highly unlikely.

wherein each of the probations, their combinations, and a final judgment on the whole of the hypothesis is made.

The process is not linear, however, but recursive. Quite often, we will have to reject or revise our hypotheses as unsuited to what induction unveils. But even when the inductive phase verifies our hypothesis, we often discover in the process of that verification newly-surprising phenomena, calling out for further abductive searching.

To return to this initial phase of logical reasoning or inquiry, abduction: what does it mean to say, (Peirce 1903g: *EP.2.227*) that “abductive inference shades into perceptual judgment without any sharp line of demarcation between them”? Or that “our first premises, the perceptual judgments, are to be regarded as an extreme case of abductive inferences, from which they differ in being absolutely beyond criticism”? And why do we say that this action specifically opens the *Umwelt* into a *Lebenswelt*?⁶⁶

To begin with, we must understand (Peirce 1903g: *EP.2.227*) that “perceptual judgments contain general elements [cf. 4.1.3 above], so that universal propositions are deducible from them in the manner in which the logic of relations shows that particular propositions usually, not to say invariably, allow universal propositions to be necessarily inferred from them.” Perceptual judgments, however, as Peirce says (1903g: *EP.2.227*), are produced by a process “not controllable and therefore not fully conscious”; that is, we cannot help but make the perceptual judgments we do, such that, given the same percepts as other creatures, we would make the same perceptual judgments concerning them (cf. da Silveira and Gonzalez 2014: 157). The hypothesis suggested by abductive inference, however, (Peirce 1903g: *EP.2.230*) “is something whose truth *can* be questioned or even denied.” The reason for this difference is that, whereas the perceptual judgment is simply *taken*, the abductive suggestion is *proposed* (Peirce 1903e: *EP.2.287*):

The whole operation of reasoning begins with *Abduction*, which is now to be described. Its occasion is a *surprise*. That is, some belief, active or passive, formulated or unformulated, has just been broken up. It may be in real experience or it may equally be in pure mathematics, which has its marvels, as nature has. The mind seeks to bring the facts, as modified by the new discovery, into order; that is, to form a general conception embracing them. In some cases, it does this by an act of *generalization*. In other cases, no new

66 Here, we run the risk of considerable terminological confusion (cf. Hookway 1985: 104–05; Nöth 1990: 45; Short 2007: 232; Houser 2010: 93–94), as Peirce used a variety of terms to signify the same structures, and one can only vaguely begin to grasp their meaning by looking a wide swath of texts. So as not to distract from the argument, we have treated these confusions in Appendices 2 and 3.

law is suggested, but only a peculiar state of facts that will “explain” the surprising phenomenon; and a law already known is recognized applicable to the suggested hypothesis, so that the phenomenon, under that assumption, would not be surprising, but quite likely, or even would be a necessary result. This synthesis suggesting a new conception or hypothesis, is the Abduction.

In short, a new concept is proposed as possibly explaining some phenomena. Where does this new concept – which, we must always remember, is itself a sign rendering present at least one of the three universes, i.e., categories, of experience – come from? Peirce gives two alternatives: either it is generated by an act of generalization, which seems to be not the turning of what is itself particular into a general notion but rather the inference of a general law from particular instances; or it is generated by a recognizing the possible relation of an already-possessed general concept to the phenomena in question. The result, regardless of the means by which it is achieved, is a complex of relations between the general and the particular; as Peirce continues (1903e: *EP.2.287*):

It is recognized that the phenomena are *like*, i.e. constitute an Icon of, a replica of a general conception, or Symbol. This is not accepted as shown to be *true*, nor even *probable* in the technical sense, – i.e., not probably in such a sense that underwriters could safely make it the basis of business, however multitudinous the cases might be; – but it is shown to be *likely*, in the sense of being some sort of approach to the truth, in an indefinite sense. The conclusion is drawn in the interrogative mood (there is such a mood in Speculative Grammar, whether it occur in any human language or not). This conclusion, which is the Interpretant of the Abduction, represents the Abduction to be a Symbol, – to convey a general concept of the truth, – but not to *assert* it in any measure. The Interpretant represents the Suadisign [argument] as a Symbolical Sumisign [rheme].

Sumisigns, or rhemes, are simple signs intended to signify a whole without including (but implicitly not excluding) any further distinctions. A symbolic rheme (Peirce 1903k: *EP.2.295*):

is a sign connected with its Object by an association of general ideas in such a way that its Replica calls up an image in the mind which image, owing to certain habits or dispositions of that mind, tends to produce a general concept, and the Replica is interpreted as a sign of an Object that is an instance of that concept.

Thus, the representation of the conclusion of abductive inference is symbolic in reference to its replicas (the individual phenomena classified under the law-like prescription of the symbol), i.e., the immediate objects of its significate triad, which are themselves iconic in relation to the symbol; but the conclusion of the inference is also rhematic in reference to the interpretant. Symbolic referentiality is characterized by Thirdness, but rhematic referentiality by Firstness (cf. 1903k: *EP.2.292*; Nöth 1990: 45; Stjernfelt 2007: 87; Houser 2010: 93). In

other words, through abductive inference, we produce a conceptual sign which can relate the knower to the known in the modal categories of both Thirdness and Firstness.

Therein lies the causal difference between perceptual judgment and abductive inference: for perceptual judgment, at its highest levels, operates within the governing dictates of a general element but makes no separate acts of inference whereby the generalized element as such is cognized. What is a practical argument for the behavior instigated by perceptual judgment is coalesced from the perceptually-observed reality into a distinct potentially-explanatory concept by abductive inference, on the basis of three intellectual acts.

Prior to abduction proper – and this is a point which Peirce never makes explicit or seems even to recognize as necessary⁶⁷ – there is a grasp that the whole of some event or object has an existence independent of the self. No distinction of formal and material objects is made, such that the explanatory hypothesis remains suffused in the grasp of the whole, with the sole distinction from perceptual judgment being the recognition that the object possesses its own being, dimly-grasped though that being is. Maritain describes this act under the name of “extensive visualisation”, wherein (1934: 76) contact “has been made with the intelligible order, the order of the universal in general; but nothing more. The first step has been taken by which we leave the world of sensible experience and enter the intellectual world.” Aquinas names this discovery, of “matter and form” altogether at once without any distinct separation of the two but an intellectual appreciation of the whole, the *abstractio totius* (c.1257/58: q.5, a.3, c.). Though this intellectual act antecedes the proper scientific investigation which abduction initiates, it is a necessary condition for it. Seeking for the nature of a cause requires recognition of the existence of it.

To begin abduction proper, first there is an abstraction of the Third, which abstraction can happen in either one or both of two ways: on the one hand, there, the cognitive separation of a Third from its context, so as to consider it in isolation from all other beings. This is separation by what Aquinas terms abstraction by simple and absolute consideration (*per modum simplices et absolutae considerationis*; 1266–68: q.85, a.1, ad.1), Heidegger a “simple intuition” (*schlichten Anschauung*; Heidegger 1925: 91/67) or “understanding” (*Verstehen*; cf. 3.1.1 and 3.1.2), and Peirce “precission” or “precise abstraction”, wherein we suppress from attention everything but that Third itself, thereby rendering it

⁶⁷ Though there is *perhaps* a hint of this in Peirce’s statement (1903e: EP.2.231) that “A cannot be abductively inferred, or if you prefer the expression, cannot be abductively conjectured, until its entire contents is already present in the premiss, ‘If A were true, C would be a matter of course.’”

a First (Peirce 1903e: *EP.2.270n*). There is no truth or falsity in such a separation; that is, if in contemplating the night sky I arrive at the idea that the darkness of the heavens is due to a cosmic ink emitted from an ethereal squid, there is nothing false in the *idea* itself; only if I subsequently judge that causation to be truly the case. On the other hand, there is the act of hypostatic abstraction, which renders the Third an *ens rationis* such that its very Thirdness can be an object of consideration (Peirce 1906c: *CP.5.449*)⁶⁸ – what for Aquinas is abstraction by composition and division (*per modum compositionis et divisionis*; 1266–68: q.85, a.1, ad.1), and for Heidegger an act of categorial intuition (*kategoriale Anschauung*; Heidegger 1925: 93–97/68–71). This is the abstraction which separates the elements of our observation specifically as elements, rather than as some whole, dividing them from one another precisely so that they may be composed in an attempt to reflect reality. The prescissive abstraction is a possible but not necessary step in the procedure of abductive inference, while the hypostatic abstraction is its *sine qua non*.

This process of coalescence, the ideation which cognitively disassembles the confused whole so as to perceive the causal relations, is the operative threshold – which nevertheless is not an absolute line of demarcation, but still an expanse, albeit a narrow one – at which we find a distinction between interpretation in the mere animal Umwelt and in the human Lebenswelt; in the coalescence of the argument into a symbolic rheme, a distinct objective specification is impressed in the human interpretant, which is itself a kind of First.⁶⁹

The occasion of abductive inference, noted above in the lengthy quote from Peirce (1903e), is a surprise; which instigates some search, an interpretative pursuit of some principle. A similar search occurs in the continual process of perceptual judgment, wherein the degree of interpretation employed edges it ever closer to abductive inference (Peirce 1903g: 229): “the interpretativeness of the perceptive judgment. . . is plainly nothing but the extremest case of Abductive Judgment”. We can see something like this in experiments with higher-cognitively developed mammals, such as chimpanzees (Deacon 1997: 94), who will

⁶⁸ I would suggest that hypostatic abstraction is neither deductive nor abductive in character (cf. Stjernfelt 2012: 52–53; Caterina and Gangle 2016: 44), but indifferently applicable in any “play” of the mind’s activities which abstains from making a judgment about the existential reality of its terms.

⁶⁹ We suspect, moreover (see 6.2 below) that a unique act of abductive inference, which entails no hypostatic abstraction, is responsible for the ontogenic origin of the Lebenswelt. This unique act begins as a perceptual interpretation but opens the door to the much wider world of intellection.

“play” with an object possibly in order to interpret its purpose or usefulness. With the difference that non-human animals (though they may be edging closer to this capacity) do not perform abductive inference, a similar sort of play is responsible for much human discovery, particularly of a synechistic continuity in the universe.

5.3.2 Logic and musement

This play is what Peirce designates musement (1908: *EP.2.436*): “a *petite bouchee* with the Universes [i.e., the Categories of Experience], – may take either the form of esthetic contemplation, or that of distant castle-building (whether in Spain or within one’s own moral training), or that of considering some wonder in one of the Universes or some connection between two of the three, with speculation concerning its cause.” In some regards, this playful engagement, wherein one is seeking no practical purpose, not even a better understanding, seems far removed from the systematic structures of logical inquiry prescribed above: indeed, quite contrary are the rigors of deductive inference and inductive experimentation.

Yet abduction arises, as aforementioned, with a surprise; with the discovery of some as-yet-unexplained phenomena, which can be discovered not only as the genesis for the process of logical inquiry, but within it as well. Musement, by detaching oneself from the pursuit of an already-determined goal, opens the mind to new sources of wonder and therefore new paths of reasoning. Most especially does it allow us to discover new relations – which, being themselves directly imperceptible (although contained implicitly within the purview of perception), can only be discovered as such by activities of thought – as we ponder the connections between the modes of our experience. Moreover, given that all three stages of logical inquiry require the drawing of connections between one thought and its possible corollaries, consequences, antecedents, and oppositions, it seems that musement may be profitable even in the most rigorous of scientific endeavors.

To give an instance in the play of musement: I first read Aristotle in a small, pocket-sized, cloth-bound English translation of the *Nicomachean Ethics* by W.D. Ross some three years before encountering any other edition or translation. The fact concerning Ross’ translation which resonates with me most strongly today stems from its contrast to the translation by Joe Sachs; where Ross translated ἀκρασία by “incontinence”, Sachs did so by “lack of self-control”. The first translation misleads for a reader of contemporary English by indicating that ἀκρασία is an involuntary state; that an effort at restraint would

result in failure. The consequences of being introduced to the latter translation are still unfolding today. Not least among these, I have since found the increasingly distraction-fraught technologically-infused Umwelt – wherein correspondence via email, SMS messaging, online collaboration tools, and social media, not to mention news services, entertainment options, or even just the rabbit-hole of internet connectivity all stand near-at-hand, ready within seconds – to undermine focus in myself and others, not because it thrusts itself upon us, but because we have failed to control its integration into our lives. Put succinctly, a “lack of self-control” is the explanatory hypothesis for the struggle against technologically-driven distraction; not, as was previously presupposed, technology itself.

As a corollary of this uncontrolled technologically-driven intrusion, in lacking control over ourselves, and consequently the media of their introduction, we lack control over the messages we receive. While the short-term consequences may be minor, it seems possible that many of our contemporary neuroses are caused at least in part by an unabated stream of negative news, or by being in constant contact with a wide circle of people and being recruited to share the burden (at least emotionally) of their difficulties; or, conversely, by being overexposed to curated images of others’ lives which make them seem far more perfect than ones’ own. Though not yet extensively conducted, some empirical research (Burke et al. 2010; Kross et al. 2013; Feinstein et al. 2014) has inductively verified these deductively-associated corollaries independently of the abductively-inferred hypothesis concerning a lack of self-control. Given the lack of a standard measure of “self-control” other than self-reporting, it would be difficult for this hypothesis to be tested through quantitative probations; which suggests the need for thorough qualitative studies.

There are two sides to this coin which musement has discovered, however. Peirce states that the coordination of our thoughts – discovering not only the two sides, but that they belong to the same coin – “implies a teleological harmony in ideas” (1892a: *EP*.1.331). On the one side of the coin, the translation of ἀκρασία as “lack of self-control” harmonizes better with my experience, not only individually and in those that I know personally, but also in the limited research heretofore available, than does “incontinence”: specifically, the ability to self-determine against imminent desire shows that capitulations to distraction, as made ubiquitously available by technology, are not inevitable or outside control; it is not a matter of some natural constitution, but one of habituation. The fitness of the phrase “lack of self-control” to the multitude of instances is grasped as a likely explanation for why I, and many others, behave poorly in managing the use of technologies which open us to distractions and to detrimental patterns of thinking. Here, I observe the truth of a thought in the

process of experience: the general (a kind of Thirdness) is seen to govern particulars. The human state which we call ἀκρασία is genuinely a guiding disposition for behavior, such that the replicas or instances of it – whether they are instances of capitulating to lust, gluttony, cowardice, mockery, selfishness or any other such moral failing, including distractedness – iconically represent the tendency symbolized by the word.

On the other side of the coin, succumbing to the distractions of smartphone, social media, and news has the potential to create disharmony in thought – not because the ideas are utterly discontinuous, but because the continuity of thought is not allowed to develop; endless new data prohibits synthetic consciousness of the third and highest degree, as though interjecting random, chaotic notes into the melody. There are, moreover, innumerable poorly-made distinctions when we think too hastily, as our distinctively-human process of semiosis becomes interrupted. We may, for instance, abductively infer some hypothesis and, distracted by a new thought, proceed to no deductive considerations or inductive verifications, yet retain a supposition of the hypothesis' applicability. Or worse, we may appropriate what has been presented to us by another as though it were sufficient without subjecting it to any critical scrutiny – as, for instance, in reading a headline which libels an individual as a sexual offender without pursuing the account of the supposed and ultimately spuriously-attributed offenses. We become captives to our environment and its limited and limiting channels, allowing ourselves to be shaped by that environment often to our own detriment. It is somewhat ironic, therefore, that only with sufficiently focused and isolated attention, broadly construed, can our endeavors of the play of musement attain their desired fecundity.

This play of musement, which wends its way through abduction, deduction, and induction, is itself an instance of the synechistic doctrine of Peirce, producing no absolute and determined certainty (however necessary might be the process of deductive reasoning) in the relations between mental activity and the “extramental” world – and therefore tyctic – but always resulting in a spread of ideas and their mutual fecundation (cf. Peirce 1892a: *EP*.1.327–30).

5.3.3 Modal semiotic continuity

Much has been made, over the past several years, of neuroplasticity – the capacity of the brain to become rewired and thereby form new habits (Liou 2010; Hampton 2015; Sur et al. 1999). A lot of the hype has been just that; mere hype. Erasing long-established tendencies and forming new synaptic patterns regarding high-level functioning in the adult brain does not happen overnight,

automatically, or without significant struggle. The determinations rendered on our neurological patterns by the environments of their development, especially those reinforced from early youth onward, are often near-permanent. The concept of neuroplasticity does, however, hit upon an important truth: namely, that the mind is highly adaptable, albeit by infinitesimal degrees. Genuinely erasing some habits, those most deeply ingrained, may be a practical impossibility for many if not most of us – but not a theoretical one. So long as the mind continues to work, we are never condemned to remain precisely as we are.

We students of philosophy cannot help but shake our heads a little, however – for Aristotle recognized very nearly the same thing over 2300 years ago. Nevertheless: “In many subject-matters, to think correctly, is to think like Aristotle” (Newman 1852: 110), even if we come back to that thinking by a round-about series of errors.

Neuroplasticity and its latent Aristotelianism (cf. De Haan and Meadows 2014: 213–30) cohere with Peirce’s synechism – but if and only if we retain the intrinsically tychic nature of material being discussed in 5.1.2, lest we enervate the possibility rendered by “material” causality (e.g., De Haan 2017, 2018; contrast with Deely 2001a: 67–70).⁷⁰ This compatibility should be no surprise: for Peirce, plasticity, the ability not only to change but to cohere to a multitude of causal factors, is a characteristic of the whole universe. Matter stands open to the greatest variety of *eventual* determinations within its plasticity; but because it is “partially deadened” (Peirce 1892a: *EP*.1.312) or “effete” mind (Peirce 1891: *EP*.1.293), it possesses little *proximate* determinability. Contrariwise, the mind – which is neither the brain nor “what the brain does” (Pinker 1997: 24), as though software to hardware – has an innumerable quantity of potential proximate determinations in the material structure of the brain, all of which contribute to the regularity or habituation possessed by the mind, including not only bodily tendencies, physical reactions to environmental stimuli, addictions, and other such observable and quantifiable phenomena, but also beliefs, ideas, loves, hates, and so on.

What enables this plasticity, not only “in” the mind but also “in” matter, is the intentional being-towards of relation, *esse ad* (cf. Maritain 1959: 114–15). That is, while the earliest forms emergent out of the milliseconds-long primordial quark soup immediately following the Big Bang may have blindly

⁷⁰ De Haan (2017: 18n9) seems to admit that emergentism is a possible fit with “Aristotelian hylomorphism” (of which the privation intrinsic to all material being is a necessary correlate principle) if one understands “downward causality” in terms of formal rather than efficient cause. I would suggest, further, as we have indicated above, that the primary causal motivator in emergence is indeed formal, but extrinsic, in the form of objective specifying causality.

smashed into one another with only the briefest flash of virtual, proto-nascent-semiotic interaction, matter eventually coalesced into discrete and relatively stable, regulated entities through the relation of one part or one form to another, a coalescence enabled by the factual properties of particulate matter which enable it to form unions. Eventually, sufficient collision of such beings, possessing such properties, results in a life-enabling *Wohnhülle*, which in turn enables a perceptual-life, and thereby the emergence of Umwelt-dwelling entities. The environment – not as a collection of objects inhabiting physical space, but as entities dynamically, self-transcendently forming an Umwelt – itself results in the emergence of increasingly cognitively-capable entities, to the point that the Umwelt itself is transcended in species-specifically human metasemiosis. Each element in this complex process of scaffolding is both an “in-itself” and on the basis of its “in-itself” also a “potentially-toward-others”. *Esse ad* and *esse in* are ubiquitously interleaved. But how?

Answered simply: signs. Recall that (Deely 2010a: 91) “the *being* of the sign is the triadic relation itself, not the elements related or structured according to their respective roles”. In other words, signs are to relational existence what Aristotle’s categories are to substantial existence. But relation, unlike substance, possesses a fleeting, ephemeral, and highly fluid existence. As John Deely never tired of pointing out, one and the same relation, under different circumstances, can be either cognition-independent relation (between two actually-existent beings as mutual *termini* and *fundamenta*) or a mixed relation (between one actually-existent being as *fundamentum* and one being which exists as *terminus* only on the basis of cognitive activity), or even a purely cognition-dependent relation (as when we think of inviting that “charming couple, Jim and Sarah” over for dinner, who are in fact both quite dead and therefore related as a couple only cognitively). Relations, being dependent upon the beings related, change with those beings; and in the case of sign-relations, they may change – while resulting in essentially the same specification – coincident to a change in the representamen, which is attempted, for instance, in every case of behavioral therapy that strives to sublimate a harmful action, such as smoking, with a less harmful one, such as chewing gum. Moreover, even the sign-vehicle, without changing itself, given a shift in the interpretant, can become a different kind of vehicle: for example, an arrow may have the particular shape and size to remind a person of the road-sign on a street outside of her home as a child, and thereby serve as an icon – before she realizes it signifies to her the direction of her exit, at which point it serves as both an index (by means of a *different* icon – one indicating the direction) and a symbol. As

we have seen, what is itself a symbol can also be a rheme; or it could be a dicent, or an argument.

There is a kind of multivariate possibility of signification in every representamen, dependent upon context, habit, and the tendencies prevalent in any given semiotic entity at any given time; every relation is given its determination by the entities related. Most especially is this multivariate possibility for signification's determination true of human beings, who possess not only a capacious memory, but also a wider range of semiotic possibility on the basis of the species-specific human cognitive Firstness which is able abductively to infer ideas not directly present in the data of perception. Exploring the potential variations in representamens and the sign-relations wherein they are effected and whereby they affect is a near-endless task. The classifications of signs which Peirce gives (1903k: *EP.2.289–99*; 1908b: 483–91) indicate the essential complexity of accounting for the ways in which relation can signify.

What expands this complexity by orders of magnitude is the ability of minds to create new relations – all minds by the free associations of iconicity and indexicality, but human minds especially by the ability to produce symbols – not only symbolic rhemes, but also dicents and arguments. This capacity for symbolic creation – especially when the synthetic consciousness becomes aware of such symbols, allowing them to become objects themselves beyond whatever governance they signify, and thus bloom into that which makes-up social reality – is a double-edged sword. The same ability which allows for us to create new, true, and beneficial symbols also allows for us to lie: that is, the portrayal of some relation as either cognition-independent or cognition-dependent when it is the opposite.

But this interruption in continuity – the lie – is not really an interruption in the essential continuity of the universe; it still emerges as a reality essentially continuous with its sources (Peirce 1904a: *EP.2.324*): “A sign cannot even be false without being a sign and so far as it is a sign it must be true.” A lie is a false Thirdness; and a Third can be discovered as false when its grounds, what are considered in themselves as Firsts, are discovered not really to either found or terminate such a relationship. What the Third then signifies is, instead, the *lack* of some such relationship between two others. If it is an interruption in the continuity of the universe, therefore, it is only a *moral* interruption, which is a topic into which we will not go here. Our point is, rather, this: every unity which results in something new – an instance of emergence – especially the cognitive-intentional, is accomplished through an inexorably semiotic structure; virtually in the cases of physiosemiosis and actually in the cases of living semiosis. The transition from one state to another

is open to an infinitesimal number of degrees; there are and could perhaps be still discovered instances of physiosemissis much more alike to living semiosis than others, and some acts of phytosemiosis are rather close to those of zoösemiosis, which may encroach continually upon anthroposemissis; between each supposed division there seems to be a likely liminal region which falls squarely into neither.

Division II attempted to demonstrate that the actions of signs constitute every world. Even the non-world of the unliving has an apparent nascently-semiotic structure, being rendered into its particular form of actuality by a virtual semiosis of objects, vehicles, and immediate but not dynamic interpretants, which allows eventually for the emergence of more complex, autopoietic and therefore (at least partially) self-constituting systems. A non-living substance is what it is (i.e., it has its “nature”) through its mediately-constituted relations to others, such that whatever exists within the material universe is constituted a system inasmuch as it exhibits an orderedness on the macroformative scale, a system in which the prevalent tyctic possibility encompassing each of its members is open to synechistic and evolutionary purposiveness.

But although a system, this does not yet result in there being a **world** for such entities; for the constitution of worlds, it is required that there be some being *for whom* there is a world, as was shown in Division I. Unless there is some recipient of possibility, *possessing* its own possibilities, in the exchange of “information” (if conceived as Bateson’s “difference that makes a difference”), unless there is a “dative of manifestation” – a felicitous phrase taken from Sokolowski (2008: 171) – there cannot be a world. This is why a plant, imbued with the incipient faculties of perception (though *not* with perception itself), as exhibited by its self-directed action in regards to environment, has the vestiges of a world, while a stone has none, and, further, why the world of an animal (an Umwelt) is so much richer than that of a plant (a *Wohnhülle*).

Meanwhile, the human Bildendwelt embraces an expansive and incomprehensibly complex reality in stark contrast to the primitive dwelling-shells of plants and environing worlds of alloanimals. Our grasp of symbols – not merely the governance by generality which symbols signify, but the grasp of symbolic sign-relations themselves – enables communication of our species-specifically human experience of Firstness: of an intellectual insight which perceives things as they are in and of themselves, in their own possibilities. We noted earlier that Heidegger describes Dasein as an ontico-ontological unity: that the ontic structure of the human being entails an essentially ontological mode of being, that the substantial structure inescapably provenates intentional relations. Likewise, we might say that the natural being of humankind inescapably provenates cultural realities; insofar as it is of our nature to be social and semiotic animals, we form culture. These cultural formations are neither arbitrary nor determinate, but rather, culture may be either conducive to or diverting from the naturally-constituted teleological ordination of human nature.

This possibility and indeterminacy of culture – leaving it open to the development of structures, institutions, technologies, and attitudes characterized by either coherence with nature or immiscibility – follows from the indeterminacy

of human cognition. The *Bildendwelt* either integrates itself with a natural teleology or rejects it, either in part or in whole, and attempts to produce its own.

In this third division, we will examine the semiotic architecture of this world, weaving together the many strands of our previous chapters into a common fabric. This weaving will take place in two chapters: the first examines the parallels in Heidegger's notion of *Sein* and Peirce's notion of the modal Categories of Experience. Here, we will hone these tools in fully addressing the nature of human cognitive indeterminacy. The second chapter unites the notions of world and sign as essential to understanding the human knower within the broad confines of an essentially synechistic and teleological perspective.

6 *Sein* and the categories of experience

It is a cornerstone of this book's thesis that Heidegger's *Sein* primarily signifies neither the substantial nor the relational, but rather the intelligibility of both inasmuch as they are constituted by relations both *relativum secundum esse* and *relativum secundum dici*. In one sense this is no different than saying Heidegger's *Sein* more or less equates to the Scholastic notion of *esse intentionale* – which is true – but we wish to avoid a misconception which may be attached to that term: namely, that it signifies solely being-towards itself (the strictly *secundum esse* sense), and someone might therefore miss that it carries in its wake the being-towardness of beings (the *secundum dici*). As what Heidegger terms a *priori* – that is, a fundamental structure not belonging to the psychological faculty of the mind as a pre-determined conceptual apparatus, but as a *sine qua non* of intellectual realization – *Sein* both underlies and pervasively emerges throughout the life of the human being, in every experience.

When we examine these experiences, we find that they universally depend upon a triad of categories: Firstness (or the quality of experience), Secondness (the struggle of experience), and Thirdness (the mediation whereby one thing is brought to bear upon another and thus become an experience), which manifest themselves most clearly (to us) through the semiotic triad of interpretant, object, and representamen. Looked at in different ways, and in different situations, each member of the sign-relation can be considered as a First (or what a thing is antecedent to its being related), Second (what a thing is such that it becomes related to the other), or Third (being a mediator). For instance, a finger (a First, as an extremity of sensory input), which is smooth, detects a surface (a First), which is rough to the finger (Second) by the friction caused when the finger is drawn across it (Third). Likewise, the smoothness of the finger can be a Second to the roughness of the surface (if, say, it belongs to a calloused heel), and the drawing of a finger across a surface can be a First in, for instance, a romantic moment. Friction, grasped as an idea, can be a First. This shifting of perspective and situation resulting in the members of a relation falling under the auspices of different categories does not indicate a reality so ambiguous as to be unintelligible, but rather shows the flexible possibility inseparable from relationally-constituted being – and that whatever we mean by “intelligible” (as applied to the real rather than the abstract ideal), we cannot mean a fixed and static existence determined once and for all (Peirce 1898b: EP.2.48–56), but rather, something open to an infinity of possible cognitive realizations. Indeed, the entire possibility of emergence hinges upon the possibility of Thirds being taken as Firsts. Moreover, it shows that if we are to make sense of our

experiences, we have to consider the objects of those experiences precisely as related – both on the basis of their own relatedness (or as *relativum secundum dici*) and through the relations themselves (through the *relativum secundum esse*). Only by including the observation of relation can we understand the nature of human knowledge.

In what follows, therefore, it will be shown how *Sein* as conceived by Heidegger (and interpreted here) dovetails with Peirce's Categories of Experience in explaining the infinite possibilities for human intellectual realization, and thereby explains the indeterminacy of human thought.

6.1 *Das Sein des Seienden* and experience

As explored above (3.1), we can understand Heidegger's concept of *Sein* through the threefold exercise of illumination, unfolding, and the attainment of meaning. *Sein* constitutes the objective light of the species-specifically human world, the *Lebenswelt* or *Bildendwelt* of human experience, by rendering its horizons cognitively present to us. But as truth is the "sheltering that lightens" and *Sein* is always *das Sein des Seienden*, one may easily misperceive (despite his assertion otherwise [Heidegger 1930: 28/153]) the "specter of paradox" in Heidegger's fundamental ontology: that is, what is itself limitless, *Sein* (the "essence of truth"), always appears corralled within some limits, *des Seienden* (the "truth of essence"; cf. 3.1.1); *Sein* constitutes, but is itself confined. To resolve such an illusory paradox, one may be easily tempted into nominalism, relegating intentionality or relationality to a fiction of the mind. To dispel this phantom, we must first examine the twofold signification of relation contained within the phrase "*das Sein des Seienden*" – which depends upon but does not identify precisely the same notion as the word "*Sein*" alone – and subsequently show how signs, focusing upon Peirce's frequently-used trichotomy of icons, indices, and symbols, constitute such relations.

6.1.1 *Sein* and *esse ad*

The phrase *das Sein des Seienden* contains two parts: *das Sein* and *des Seienden*. But this grammatical pseudo-predication does not signify two *things*, nor, even properly speaking, any two *objects*. Instead, I interpret this twofold phrase to signify the two aspects neither of any object nor thing, but rather to indicate the double-sidedness to relation – namely, the aspects of the relatedness of a being and the relation itself – as specifically open to human beings' cognitive

capacities. Consequently, when we say *das Sein des Seienden*, this latter part signifies primarily the intelligible *secundum dici* relativity which transcends the Aristotelian categories (and thus translated at times as “transcendental relation”): substance, quantity, quality, time, place, action, passion, vestition, and posture all are ways of denominating things; but such denomination always, when referencing the real, connotes the necessary relativity constituting the thing in the first place (Deely 2007: 135–36). Even discussion of these ideas in the abstract tends to rely upon contextualization of these ideas by comparison, contrast, subalternation, superalternation, opposition, contrariety, etc., such that we gain access to the idea’s intelligible meaning through its intrinsic relativity. We know things, even in their most “secret” substantial natures, only through the innate relativity through which they communicate with others and by which they signify themselves to us.

Contrariwise, when we say *das Sein des Seienden*, this former part signifies primarily the intelligible-illuminating function of the *secundum esse* relativity of relations themselves (“ontological relation”), separable from the *relativum secundum dici* belonging to things, but only in a peculiar way: what the medieval philosophers called a modal distinction – that is, not as a different *what*, but as a different *how*. In discussing *relativum secundum esse*’s contrast to *esse in*, John Poinset defended the thesis that there stands a modal distinction between the two (1632: q.17, a.4), and specifically in the mode of existence. The simplest possible description says that both what is *esse in* and what is *esse ad* has an existence proper to it, but only one of these members possesses the kind of existence which is self-maintaining. While this is true of all accidents as related to their respective substances, the distinction between inherent accidents and substances is between *esse in se* and *esse in alio*. In other words, an inherent accident possesses the same generic mode of being as that of a substance, having its constitution from principles internal to the being in which it resides. Relation, on the other hand, is distinct from the substance(s) it relates (*esse in*), as what is *esse ad*. Thus, inherent accidents have less of a distinction from substances than do relations themselves, for the existence of the inherent accident is swallowed by the existence of the substance, whereas the existence of the relation, despite its dependence upon them, extends beyond any of the substances or accidents related.⁷¹

What is dependent in a modal distinction cannot be dissociated from the modally independent member (cf. Peirce 1867: *EP*.1.4–6). We can have an idea

⁷¹ Many finer points and arguments would need to be advanced to explain fully a theory of distinction and relation. For some further reading, see (Henninger 1989; Tomarchio 2001; Deely 2001a: 639; Deely 2007: 115–146; Kemple 2017: 279–325).

of *Sein* as separated from *des Seienden*, but only through an act of prescindion. Conversely, the modally independent can be conceptualized as separate from the dependent through an act of dissociation: such that we cannot have a dissociated idea (“the consciousness of one thing, without the necessary simultaneous consciousness of the other”; Peirce 1867: *EP*.1.3) of red without simultaneously being conscious of color, but can be conscious of color without necessarily being conscious of red. Likewise, we cannot think of maternity separate from a consciousness of femininity but can have an awareness of femininity without necessitating maternity. This follows inasmuch as we can suppose an existence of femininity that entails no maternity, but any possible existence of maternity presupposes the existence of femininity – even in a metaphorical predication. Furthermore, we can prescind the idea of femininity from ideas of females, but not dissociate it.⁷² This asymmetrical separability is true of all relations and their *relata*, including *das Sein* and *des Seienden*, such that we can think of the relation but never without being at least somewhat conscious of its *relata*, for relations are determined in their essence, and thus in their intelligibility, by their *relata*.

Notably, Heidegger does often speak of investigating *das Sein selbst*, “Being itself” (1927a: 12/32, 18/40, and 84/117), and that in two distinct ways: first, as in and of itself, the specific relativity connecting an object to a human mind, and thus that whereby a knower is related to a known (1927a: 12/32); and second as the *Anwesenlassen* (Heidegger 1969: 5/5; cf. Sheehan 2015: 18–20), the letting-come-to-presence, which is to say the fundamental character of intentionality as pervading both substantial existence and relational existence to a cognitive being (Heidegger 1953a: 17/15; cf. Sheehan 78–79, 90–93; Wrathall 2010: 11–39). This twofold notion of *das Sein selbst* is not an equivocation, but recognition of one and the same character as it belongs in a particular act of disclosure and as the properly-human disclosive character itself (Heidegger 1949: 15/105); that is, *das Sein selbst*, as the principle of intentional life, indicates that cognition-enabling intentionality is itself twofold.

Heidegger, despite his Scotistically-inspired pursuit of univocal terminology (cf. Tonner 2010: 27–64), strays here into the realm of analogy – that is, his use of the term *Sein* applies in a multitude of distinguishable though related ways. Perhaps it was his firm belief in the univocity of Being that prevented him from apparent satisfaction with his ever-changing accounts of how it must

72 Naturally, the *idea* of “female”, as an abstract object, includes femininity; but the conceptual-perceptual complex whereby we know this or that particular female (be it a woman, a cat, a dog, or a bird) need not include necessarily the notion of femininity.

be approached. Conversely, there is indeed something truly univocal about even the most analogical of terms: for although analogical terms apply with varying degrees of intensional valence, valid application is always due to the genuine reality of the meaning. “Good”, for instance, is said truly of both a puppy and a newborn human being, but with a different intensity, just as it is of dropping spare change in the poor box and of sacrificing one’s life to save the innocent; yet were there not something the same meant in calling each “good”, all meaning beyond the *Umwelt* would likely disappear from human experience. Likewise, when Heidegger states that *das Sein selbst* is both a *hinc et nunc* relativity between known and knower and the fundamental character of *esse ad*, i.e., the *relativum secundum esse*, there is a certain primacy belonging to the latter, though a common and deciding sense which belongs to both: namely, the revelation of some meaning within a field of possible meaningfulness.

Species-specifically human experience – *Dasein* – is made up of just such revelations, the particular acts of disclosure whereby knower is related to known. What we signify by *Sein*, then, refers most properly to the dynamic and therefore relational actualization of human experience constituted through the revelatory structure of not only the human being, but also the revealed things themselves, so that the meaning which exists in things is experienced as known by the mind. All experience (see 4.2), is mediated through signs. But species-specifically human experience is mediated through *awareness of signs*; thus, it is *semiotically* rather than *semiosically* mediated. We stated above, (4.3), that:

A sign, understanding of which serves as the marker of distinction between semiotic and semiosic, can be correctly defined as that the whole being of which consists in making another known; but we could also, it appears, define it as the achievement rendered by a Third in mediating a First with some Second.

That is, opposed to nascently-semiosic relations – wherein Thirdness is always merely *possible* or *virtual* (cf. Deely 2015: 350) – semiosic relations are ubiquitously governed by actual Thirds. Triadic relations constitute the action of every sign, and the modal Categories of Experience underlie every triadic relation – which relations are composed by Thirdness through its mediating between Firsts, making at least one, if not both, into a Second and thereby ordering each to the other. Whichever is a First to some Second is ordered as an experienter to an experienced; and if that which is made into a Second is not itself a First to the other as a Second, nevertheless has a real suprasubjective ordination, such that its innate capacity for determining a sign so as to determine an interpretant which is in turn actually ordered to the object has

been rendered actual. For example, a rock against which a toe is stubbed becomes a Second to the human owner of the toe; but the toe is not a Second to the rock. Nevertheless, the hardness of the rock is communicated to the toe and therefore the person, such that the Third – hardness – governs the relation between the two.

Human beings are uniquely situated by being aware of these Thirds, such that they become in our conceptualization certain Firsts (cf. 5.3.1). The experience of Thirdness in cenoscopic semiotic awareness, in other words, is the experience of letting-come-to-presence, the *Anwesenlassen* belonging to engagement with *das Sein selbst*.

6.1.2 Icon, index, symbol

In its particular instances, i.e., the *hinc et nunc* relations between known and knower, Thirdness can produce almost innumerable forms of significative relation (“I base a recognition of ten respects in which Signs may be divided. . . since every one of them turns out to be a trichotomy, it follows that in order to decide what classes of Signs result from them, I have 3^{10} , or 59,049, difficult questions to carefully consider”, Peirce 1908b: EP.2.482). Consequently, we will limit our focus to the familiar trichotomy of icon, index, and symbol. To be as clear and precise as possible, we need first to remind against a possible confusion. What is an icon, index, or symbol, as with any sign, is never the *thing* itself; as with all signs, it is the relation which constitutes the signification. What is in one relation an icon can in another be a symbol, or an index, and vice versa. Nevertheless, we unavoidably use the sign-relation terms to speak of the sign-vehicles themselves by synecdotal metonymy. This is because the relation, by altering the *context* of the thing, alters its status as an object – though not as a thing. Consideration of a thing in its context of signification opposes consideration of the *Ding an sich* in some isolated and abstracted mental separation; a sign-relation, as an instantiation of a Third. Thus, a thing becomes an icon precisely insofar as it is engaged in a relation of iconicity; an index in a relation of indexicality; and a symbol in a relation of symbolicity.⁷³

Icons demonstrate an intrinsic property of relatedness: that is, they come to be related, and are capable of being related in the first place, because of the

73 While “symbolism” is a ready-made abstract term, it has received a great deal of common use, and therefore, according to Peirce’s second rule for an ethics of terminology (1903o: EP.2.266: “to avoid using words and phrases of vernacular origin as technical terms of philosophy”), is unsuitable.

nature of that which becomes a representamen. In other words, something becomes an icon, or becomes engaged in an iconic relation, because of what belongs to its *esse in* constitution being recognized as similar to what belongs (or belonged) to the *esse in* constitution of another entity. The thing-become-icon in no way depends upon the object signified for the possession of the character whereby it comes into a relationship of iconicity.

In such cases of resemblance-based iconicity, there is only a *participation* in signifying by Firstness; that is, in one thing being what it is, and that being entailing or including its relation to the other evokes a similarity in its Firstness for the cognitive agent to the Firstness experienced with the other. Peirce is adamant that such iconicity is impure (1903e: *EP.2.273–74*):

a sign may be *iconic*, that is, may represent its object mainly by its similarity, no matter what its mode of being. If a substantive be wanted, an iconic Representamen may be termed a *hypoicon*. Any material image, as a painting, is largely conventional in its mode of representation; but in itself, without legend or label, it may be called a *hypoicon*. Hypoicons may roughly [be] divided according to the mode of Firstness which they partake. Those which partake the simple qualities, or First Firstnesses, are *images*; those which represent the relations, mainly dyadic, or so regarded, of the parts of one thing by analogous relations in their own parts, are *diagrams*; those which represent the representative character of a representamen by representing a parallelism in something else, are *metaphors*.

As usual, Peirce gives us many degrees: first, images, which represent the object by similarity of the Firstness of a First; e.g., the similarity of a painting to its subject arises on account of the sameness in experiencing each. Thus, a painted image does not signify by a pure Firstness, but by a comparison of two distinct Firstnesses (Peirce 1885: *CP.3.362*): “in contemplating a painting, there is a moment when we lose the consciousness that it is not the thing, the distinction of the real and the copy disappears, and it is for the moment a pure dream – not any particular existence, and yet not general. At that moment we are contemplating an icon.” We experience this melting distinction between original and copy more poignantly with photographs, where we look not at the copy as what it is in itself, as a representation, and instead see it as a presentation of the original. Second, diagrams, where we employ a representamen which conveys a similarity of relations of a particular, focused kind – as, for instance, if we diagram [father→son],⁷⁴

⁷⁴ There are near infinite complexities in the possibilities of such seemingly simple diagrams. E.g., [woman+man→child], [x+y→male], [x+x→female], [x+x+y→intersex]; [woman+woman/→child], and so on. Add the vertical dimension and the possibilities exponentially increase.

the arrow suggests the generative relation and is thereby a hypoicon for it. And, third, metaphors, which convey a similarity of action, often involving some cathectic experience, whereby one image, despite possessing no direct relation, is invoked to convey another. For instance, in saying, “She is the light of my life,” the experience of sharper awareness of one’s environment in the presence of light is analogized to the “brightening” of one’s experiences in the presence of another person. Thus (Nöth 1990: 133), “the metaphor contains only an indirect icon which is not shown but only described.” But in none of these cases is the iconic similarity pure, and, indeed, the purity of each decreases with each degree (cf. 6.2).

In the meanwhile, Peirce says of an index that (1903e: *EP*.2.274) its “Representative character consists in its being an individual Second.” In other words (cf. 3.1.2), the sign-vehicle of an index is itself some individual, an object itself, taken as an “other”, which indicates some other object by virtue of a property it possesses only because of the object indicated. A weather-vane serves as an index only insofar as the wind is acting upon it; just as steam indicates the temperature of the coffee insofar as it is sufficiently hot to cause vaporization. The interpretant need not grasp this existential relation between the object and representamen for the indexicality to be latently present; it holds even, for instance with the steaming coffee, if the understanding of how an H₂O bond is broken by heat is lacking (cf. Peirce 1903d: *EP*.2.163). In the case of a genuine index, the representamen depends upon some real causality in the object whereby the representamen comes to possess its indexicality, such as the heat in the coffee (cause) produces its steam (index). In the case of a degenerate index, the representamen becomes an index by means of some association – as proper names, “a pointing finger”, or any such thing which becomes related to another through non-causal means (as Hume put it [1748: §3], “by continuity in time or place”) such that in encountering the representamen the mind naturally directs itself to the object (Peirce 1903d: *EP*.2.163). For the genuine index, there is a real relation (*relatio realis* – what Peirce habitually calls [1903l: *CP*.3.578] an “existential relation”) between the object and representamen, which, when correctly discerned by the interpretant (on the basis of the relation between representamen and interpretant) produces a similarly real relation between object and interpretant. Each real relation, constituted by the *relativum secundum esse*, depends upon the transcendental relativity of the existent individuals for its provenation. For the degenerate index, there is no real relation (at least, not in the manner of their association), but one imposed by the cognitive agent: something becomes indexically related because of the knower’s subjectively-constituted attribution of an extrinsic property of

relatedness.⁷⁵ Whereas icons possess their iconicity primarily through their intrinsic properties, however, the indexical representamen, whether genuine or degenerate, possesses its indexicality primarily through the extrinsic relation, whether real or mental.

Where both icons and indices, even as degenerate, attach to some intrinsically-possessed properties of objects incidental to the actual semiosis for their engagement in the sign-relation, symbols are themselves pure relations. That is, while we often use corporeal things (sounds, pictures, shapes, etc.) which we *call* symbols to determinate interpretants – as with words, for instance – these things are purely conventionally-chosen vehicles (Peirce 1903d: *EP*.2.163): “A *symbol* is a representamen which fulfills its function regardless of any similarity or analogy with its object and equally regardless of any *factual* connection therewith, but solely and simply because it will be interpreted to be a representamen.” Peirce goes on to assert that the symbol divides into terms (or rhemes, or sumisigns), propositions (or dicents, or dicsigns), and arguments (or suadisigns; this threefold division of symbols he later termed [c.1895: *CP*.2.340] “not so much wrong, as it is unimportant”), each containing elements of iconicity and indexicality; but by no means should we reduce symbols to these three forms (nor any other set of more-particular forms) – rather, they serve as instances of representamens employed to convey rules intended to determine their interpretants. Neither should we interpret symbols to be constituted “out of” icons and indices (as, e.g., Deacon 1997: 75, Figure 3.1, and 87, Figure 3.3; Filippi 2014: 120–21; Favareau 2015). This implies a mechanicism of symbolic formation which fails to recognize the constitutive nature of the mind’s acts of conceptualization, achieved through interpretative coordination of what has been extrinsically specified. The icons and indices symbols entail provide the necessary particularity for the human mind to grasp the general rule which is the symbol itself.⁷⁶

⁷⁵ Extrinsic impositions of indexical meaning are essential, therefore, to the functioning of culturally-significant objects in the Umwelt: for instance, a wedding ring.

⁷⁶ When Peirce says (1903d: *EP*.2.164) that “The term . . . excite[s] an icon in the imagination”, one cannot but help hearing the resounding echo of Thomas Aquinas (1266–68: q.84, a.7, c.), “quod impossibile est intellectum nostrum, secundum praesentis vitae statum, quo passibili corpori coniungitur, aliquid intelligere in actu, nisi convertendo se ad phantasmata” – “it is impossible for our intellects, according to the present state of life in which they are conjoined with a corruptible body, to understand something in actuality without turning to the phantasms.” (Cf. Peirce c.1902: *CP*.2.292–302, especially 301): “A symbol, as we have seen, cannot indicate any particular thing; it denotes a kind of thing.” And 2.302: “We think only in signs. These mental signs are of mixed nature; the symbol-parts of them are called concepts.”

A possible confusion ought to be here sorted out, to avoid the ever-present dangers of both nominalism and the minimization of human uniqueness among alloanimals. One could mistakenly think that the symbol *as such*, and not merely its conventional representation through terms, propositions, or arguments, is a fictive construct of the mind absent from the extramentally-real and merely imposed upon the figures signified by the entailed icons and indices. One might believe iconicity and indexicality to be the primary significant modes of the universe, relegating symbolicity to an artificial veneer of intelligibility placed by human minds atop the swirling chaos of endlessly changing particularity. Believing that what our symbols convey are not to be found “out there” in the tangible matter of sense perception, to be pointed at in distinction from the accidental properties available to sense, we would perhaps be inclined to believe that the generalities conveyed by symbolic representation exist only “in here”, in the mind of the symbolically-conscious animal – which is the error of every nominalist.

On the other hand, one might mistakenly believe that symbols are not unique to human beings, but are accessible by other animals (Deacon 1997: 82–92; Queiroz and Ribeiro, 2002: 69–78; Ribeiro et al. 2007, and Loula et al. 2010: 131–47; Queiroz 2011: 319–29). To dispel this, we need to note that Peirce regularly insists that “general rules”, which can only be represented symbolically, govern reality (CP.1.26, 1.341, 2.292, 6.20, 7.349–50, 7.355, 7.358).⁷⁷ They do indeed govern animal behavior – as they also govern plant behavior, as well as the actions of unliving matter. That these rules are encountered in the Umwelt of animals – at times exerting an influence on the conscious activity of alloanimal activity – and even in the *Wohnhülle* of plants, by no means makes symbols any less uniquely human.⁷⁸ For although a symbol is a general rule, and general rules can be encountered ubiquitously, the conventionally-chosen sign-vehicle which we call a “symbol” is a general rule *signifying* some *other* general rule than itself, namely the symbol properly speaking. Only when we are dealing with the general rule itself, *understood as such*, and not simply making use of or obeying the general rule which we signify (and which governs behavior other than thought) are we dealing with a symbol.⁷⁹ There is a world

⁷⁷ This is the meaning of the oft-applied term “legisign” (e.g., Peirce 1903k: EP.2.296).

⁷⁸ Even the physical constants are, evidently, general rules which are represented symbolically. It is doubtful, however, that someone would attribute symbolic possession to the earth’s gravity pulling a heavy book from my hands.

⁷⁹ Thus, while vervet monkeys may very well exhibit an on-going development through their behavior of the general rules whereby they are determined, they do not exhibit a consciousness of the symbol “as such” (cf. Deacon 1997: 55–57), crucial to the often-invoked definition of a symbol (1902d: CP.2.307 emphasis added) as: “A Sign (q.v.) which is constituted

of difference between recognizing that the symbolic word “and” signifies “more to come” and understanding the rule of conjunction itself.

The ability to understand objects themselves, over and above their functional and practical applications in our environments, is what enables human beings to engage with the truth of things. Other animals may have their lives governed by true and false – accuracy and deception – but the true and the false are not as such concerns for them, but rather are worrisome only insofar as being accurate or being deceived in their judgments results in good or bad practical results. Heidegger describes the inability of non-human animals to attain truth in his usual cryptic but insightful manner (1933–34: 242/185):

Truth is not simply openness; rather, it is the openness and unconcealment of *beings*.

We can clarify the distinction by way of an example. A stone that lies on the ground clearly stands in a spatial relationship with the ground, in that it lies upon it. But the ground upon which the stone lies is not given to the stone. The stone does not encounter the ground; it is not accessible to the stone. Things are different for the dog running on the ground. The dog can feel the ground in its paws. Something is given to the dog. But *what* is given to the dog is not accessible to it (as street, hot surface, and so on), it is not revealed to the dog. Something is revealed – the relationship between the dog and the ground – but not as a being that is so and so and is understood as such and such. There is an openness, but not an openness of *beings*.

Thus, were someone to consider the monkey’s playful snap, the one that says, “This is *not* a bite” (Bateson 1954: 177–93; Hoffmeyer 1993: 6–10) to be the *use* of what we recognize as a symbol, this would be correct; the calls of African vervet monkeys, and countless other animal behaviors, also involve the use of what we recognize as symbols, signs which have no direct iconic or indexical association with their significates. Nevertheless, *use* of a sign does not meet Peirce’s criteria for a symbolic signification – which he notes he *mistakenly* identified at one point as a “conventional sign”⁸⁰ (c.1895: CP.2.340) – as a symbolic relation signifies not the behavior governed by the concept, but the governing concept itself. In other words, what makes a symbol is not merely

a sign merely or mainly by the fact that it is used and *understood as such*, whether the habit is natural or conventional, and without regard to the motives which originally governed its selection.”

80 That is, the necessary conventionality of the representamen in the symbolic sign follows from there being no connection, either intrinsically or by association, between any physical sign-vehicle and the relation which is the object it signifies.

determining the interpretant in accord with some general rule (in a sense, every sign does this), and especially *not* the determination to act in a particular fashion in accordance with a general rule (what every sign-relation as an instantiation of Thirdness does), but rather that the interpretant is determined to awareness of the general itself, as such, thereby an awareness of the unconcealment of beings, an awareness of the inherently indeterminate *Being* of beings (in other words, we are fully aware of the symbol itself only when it is subject to a critical – one might say phenomenological – analysis; otherwise, it diffuses itself into the post-linguistic structure of our experience. Cf. 7.1.3.). The determination rendered upon an interpretant through a symbol, therefore, though it truly specifies the interpretant in some way, is of an object which is itself indeterminate (Peirce 1904a: *EP*.2.322–23; cf. 6.3 below).

6.1.3 Signs and *Sein*

In order to grasp fully the indeterminacy of human cognition, we need to make a distinction concerning that indeterminacy: namely, that our cognition experiences in its objects two kinds of indeterminacy: the indefinite or vague indeterminate, and the general indeterminate. The latter is easier understood, being any such decided or definite “what” which remains open, and therefore indeterminate, as to its particulars. We see such an indetermination clearly in our concepts and percepts, wherein general rules govern particular instances. The other indeterminacy, the indefinite or vague, is that which is an *undecided* “what”, which is open and indeterminate in the sense that it lacks boundaries (Peirce 1906c: *CP*.4.447–48).

The ability to be determined by a sign which is itself indeterminate, such that the indeterminacy itself can be made a part of the object as object, is evidently unique to human semiosis. But why – and how? We noted earlier (5.3.1) that abductive inference is the threshold between the animal Umwelt and the human Lebenswelt. This inference provides us with signs that are not merely *themselves* open to further determination (as every sign is), but which include both kinds of indeterminacy, in potency at least, in the *object* they signify. Whatever is indeterminate, precisely insofar as it remains indeterminate, is undivided in itself (Peirce 1902e: *CP*.6.376). Whatever is undivided in itself is simply what it is, regardless of anything else – which is to say that the concept, even when considered in a symbolic function as a governing Third, is always to the human interpretant also a potential First (Peirce 1888: *EP*.1.280): “Firstness or freshness may have manifold varieties, or rather arbitrariness and variety is its essence, but it is absolute and unsusceptible of differences of degree. It may

be present more or less, but it has no different orders of complication in itself". Perhaps this is at the root of Peirce's apparent confusion concerning the function of the symbol: for it is, superficially considered, bizarre that the archetypal instance of Thirdness, the symbol, would attain its function in anthroposemiosis precisely inasmuch as it determines the interpretant with regard to a First. But as an object of cognition, what is general with respect to others, when considered in *itself* is always a First; only when it is seen to be determining others do we recognize it as a Third. In other words, the *formal* object of an intellectual concept can be considered in regards to its material particulars – in which case, we find diverse instantiations of the general kind which further the determination, such that we are not considering the formal object itself, but rather the *relation* between formal object and material object(s) – or it can be considered in itself, in which case it always lacks at least *some* definition, and is therefore continually indeterminate. Thus Aquinas (c.1273: proem.): "our cognition is so debilitated that no philosopher is able to investigate perfectly the nature of even a single fly." In considering the formal object, we recognize a disproportion between our grasp of the object in its immediacy to us and the dynamic object, the object itself as it exists in its own right – whether or not it is itself a thing or merely an object – such that we never know it completely, in all of its possible determinations.

This twofold indeterminacy of the intellectual concept proximately answers both folds of the cognitive indeterminacy question posed in the general introduction to the book. That is, to the question, "why are our concepts not fully determined by the particular models in which we instantiate them?", we can now reply: because the formal object of the concept, considered with respect to those models, is itself general. The concept, as it exists in the mind, founds one and the same relation with any number of particulars. Although the particulars may differ one from another, as one man from another, each is equally the same in regard to the concept by which they are known, and indeed, an infinity of potential differences can differentiate one particular from another without interrupting its relation of sameness to the generality of the concept. But the indeterminacy of the intellectual concept consists not merely in the innate indeterminacy of the relation it founds; rather, the conceptual object is itself indeterminate. Failure to recognize the indeterminacy of the object results in the (2.2.1) aforementioned obstinate errant conceptual in-sistency (2.2.1) which diverts one from the pursuit of truth, shutting off beings from Being. Because of this indeterminacy of the concept, it remains perpetually open to new possibilities – and if one is at least dimly aware of this, so too does the cognitive life of the human person remain perpetually open. And so we can answer also the question "Why are we ourselves not fully determined by the concepts, models,

etc., whereby our cognition is directed?” by pointing to conceptual object having the indeterminate character of a First.

Set aside for a moment whether this distinction, that the formal object of our intellectual conceptualization by a symbolic sign-relation is, when considered in itself, a First, was Peirce’s intent. I do not think the texts of Peirce – at least those widely available as of now – can tell us with absolute certainty. Regardless: it makes sense. In the experience of a symbolic sign, we grasp first the general (or universal) and within it we grasp the particular. The Firstness of specifically anthroposemiotic experience, considered insofar as the sign is symbolic, is the grasping of a First by the mind (Peirce 1904a: *EP.2.323*) indeterminate both in itself and in its relation to others. The Secondness is the recognition of the particular other, and the Thirdness is the realization of the relation between the defining general and the determining particulars. Thus, when I see the word “sycophant”, the concept of obsequious behavior springs to mind, the partially-indefinite meaning of which decidedly governs the interpretation and application of the particular word. The process of symbolic development – how it is that the word “sycophant”, for instance, comes to mean what it does, and how that meaning is grasped by anyone – is another issue altogether.

6.2 Anthroposemiotic firstness and *das Nichts*

More importantly for our purpose here is that which precedes and allows for the grasp of *any* symbolic determination: that species-specifically human Firstness itself. As aforementioned (3.1.1), the guiding text on this issue is Peirce’s 1867 depiction in “On a New List of Categories”. Peirce’s consideration of the “universal conception nearest to sense”, what he terms “*the present, in general*” seems a foreshadowing of Heidegger’s notion of *Sein* as lost in its nearness (Heidegger 1947: 252). It is something of which we are all aware, but which seems always just out of reach, always at the corner of our eyes. Let us present the relevant text again in full (Peirce 1867: *EP.1.1–2*):

This is a conception, because it is universal. But as the act of *attention* has no connotation at all, but is the pure denotative power of the mind, that is to say, the power which directs the mind to an object, in contradistinction to the power of thinking any predicate of that object, – so the conception of *what is present in general*, which is nothing but the general recognition of what is contained in attention, has no connotation, and therefore no proper unity. This conception of the present in general, or Π in general, is rendered in philosophical language by the word “substance” in one of its meanings. Before any comparison or discrimination can be made between what is present, what is present must

have been recognized as such, as *it*, and subsequently the metaphysical parts which are recognized by abstraction are attributed to this *it*, but the *it* cannot itself be made a predicate. This *it* is thus neither predicated of a subject, nor in a subject, and accordingly is identical with the conception of substance.

This recognition of “IT”, or “*what is present in general*” repudiates identification with any particular object, discerned in its individual, special, or generic degree of specificity; it is the awareness of mere presence, the fundamental ontological presence of *Sein*, as Heidegger would have it. Peirce, more than two decades before Heidegger was born, recognized the truth at which Heidegger wonders on the final page of *Sein und Zeit* (1927a: 437/487): “Why does Being get ‘conceived’ ‘proximally’ in terms of the present-at-hand *and not* in terms of the ready-to-hand, which indeed lies *closer* to us?” As Peirce would likely say, and as Heidegger himself ubiquitously intimates though never explicitly articulates (cf. Heidegger 1927a: 71/101), *Sein* is conceived proximally in terms of the present-at-hand because *Sein* is that in which beings are presented: *Sein* does not belong strictly to *esse in*, but primarily though not exclusively to *esse ad*.

The answer to Heidegger’s question, therefore, is that the present-at-hand is the dimension of the object’s realization that essentially distinguishes human cognition from the common alloanimal awareness. Or, as Deely writes (2001a: 651):

Whence, to Heidegger’s question, “Why does Being get ‘conceived’ ‘proximally’ in terms of the present-at-hand *and not* in terms of the ready-to-hand which indeed lies *closer* to us?”, the answer lies in the difference between zoösemiosis as common to animals and anthroposemiosis as unique to linguistic animals. *Ens ut primum cognitum*, “Firstness”, which constitutes the species-specifically human mode of apprehension underlying the exaptation of language for communicative purposes and at the root of the transformation of Umwelt into Lebenswelt, does no more than establish the foundation for the eventual arising thematically of questions of the form, “What is that?”. Ready-to-handness neither requires nor admits of any such thematic development, for it contains no apprehension of otherness in the required sense.

Certainly, otherness is apprehended by non-human animals, but it is not apprehended “in the required sense.” Non-human animals apprehend the other but always only as beneficial to the self, harmful to the self, or of no consequence to the self; the identity of the other is present in the animal objectivization but as inseparable, attaining neither prescission nor discrimination, from the objects perceived relation to the self. Though every animal Innenwelt is unique, none but the human’s is capable of genuine self-transcendence. The threefold (+/-/Ø) perceptually-judgmental faculty of apprehension is the common framework of every alloanimal Umwelt. Consequently, anything apprehended within the Umwelt is always taken as “other” than the self, by a kind of mere contrast – as a

“lump” felt against the otherwise smooth continuum of one’s subjectivity. This lump of the other “stands-against” the subject.

Now, the other is always “taken in stride” (*hinnehmen*, see 2.1.2) by any cognitive being – an essential move for cognition of any sort to begin – but for human beings, the “taking in stride” involves the other “standing-against” in a way explicitly different from the “standing-against” which occurs for non-human animals (Heidegger 1929a: 71/51):

An intuiting which takes things in stride can take place only in a faculty of letting-stand-against of . . . , in the turning-toward . . . which first of all forms a pure correspondence. And what is it that we, from out of ourselves, allow to stand-against? It cannot be a being. But if not a being, then just a Nothing [*ein Nichts*]. Only if the letting-stand-against of . . . is a holding oneself in the Nothing can the representing allow a not-nothing [*ein nicht Nichts*], i.e., something like a being if such a thing shows itself empirically, to be encountered instead of and within the Nothing. To be sure, this Nothing is not the *nihil absolutum*.

Note well: only by “holding oneself in the Nothing” can the letting-stand-against (*Entgegenlassen*) allow “something like a being. . . to be encountered instead of and within the Nothing.” What does this say, other than that the faculty whereby humans objectivize in a species-specific manner is one which recuses the framework of judgment and simply receives? The alloanimal lets-stand-against the beneficial-harmful-neutral background of the Umwelt; the human being lets-stand-against *das Nichts*, and thereby allows the thing to be simply present-at-hand.

But how does this occur in the first place? The answer, I think, is a kind of *sui generis* act of abductive inference; that is, the ontogenic inception of that threshold from Umwelt to Lebenswelt, where control over the cognitive process begins, thereby shifting consciousness from the periphery towards the center of experience. (We run the risk of easily misconstruing this moment – phenomenological, rather than chronological – with any verbal formulation, since language is formed consequent to the actions in question.) Our perceptual interpretations often result in judgments according to a general principle itself not sensed, such that we recognize the governance of this principle even when the particulars are different. Further, through the act of abduction itself, provided we have the prior recognition of the independent existence of the objects in question, we can both prescissively and hypostatically abstract that principle, rendering one and the same object both a First and a Third. But how do we attain the cognition of the objects’ independent existence? By this *sui generis* act of abductive inference; that is, an act so minimally abductive in its character it stands as barely distinguishable from the acts of perceptual judgment, but

which nevertheless attains some dim realization that the “reasons why” things appear as they do belongs to a reality beyond our objectivization, and that there is, correlatively, a being independent of our evaluation; in other words, a concept of being which is unlimited both by the framework of perceptual judgment and by attachment to any particular objects.

The result of this originary abductive inference, seemingly unique to human beings, is the original explanatory hypothesis at the uttermost extreme of indetermination, both indefinitely and therefore generally. It is, in other words, being as first known which opens the doors to the correspondent *Nichts* (cf. Guagliardo 1994: 51; Deely 2001a: 348–49; Kemple 2017: 340–51), the nothing against which beings are allowed to come to presence.

Could anyone doubt, though the language differs, that Peirce means almost precisely the same by his concept of Firstness – not any particular experience of something as a First, or the “Firstness of . . .”, but a universal, primal Firstness – as referred to the species-specifically human experience? It “precedes all synthesis and all differentiation” (*EP*.1.248); it is that which “consists in its subject’s being positively such as it is regardless of aught else” (*CP*.1.25); it is “the conception of being or existing independent of anything else” (*EP*.1.296); “the mode of being of itself” (*CP*.1.531); and “the Idea of that which is such as it is regardless of anything else” (*EP*.2.160). Heidegger’s description of species-specifically human awareness as the allowing to come to presence (*Anwesenlassen*) by holding into the Nothing (*das Nichts*) seems to delineate the possibility common to **every** intellectual grasp. The aforementioned explanation of Firstness as the element of awareness that is “*the present, in general*”, as distinguished from the *qualities* consequent thereto – of Firstness as distinct from the First – offers the same sense. We might even fairly split, by an act of mind alone, Firstness itself in two: the possibility it allows *as such* (what is *das Nichts*), and the possibility it allows *with some “this”* (*das Sein des Seiendes*).⁸¹

81 We ought, all along in reading both Peirce and Heidegger, hear the echoes of Scotus’ *haecceitas*. (Peirce 1887–88: *EP*.1.275): “What Scotus calls the haecceities of things, the hereness and nowness of them, are indeed ultimate. . . If we were to find that all the grains of sand on a certain beach separated themselves into two or more sharply discrete classes, as spherical and cubical ones, there would be something to be explained, but that they are of various sizes and shapes, of no definable character, can only be referred to the general manifoldness of nature. Indeterminacy, then, or pure firstness, and haecceity, or pure secondness, are facts not calling for and not capable of explanation.” Note that Firstness is the *possibility* for a quality to be found in a *this*, in the haecceity of a Second; as Peirce says elsewhere, however, (Peirce c.1903i: *CP*.1.531), “The word *possibility* fits [the very being of Firstness], except that possibility implies a relation to what exists, while universal Firstness is the mode of being of itself.” (Cf. McGrath 2006: 100–01 and Tonner 2010: 35). Also see (Deely 2001a: 649): “We can say, then,

Naturally, however, the possibility with “some ‘this’”, to become in any way an actuality, involves judgment and representation – Secondness and Thirdness. Though we may conceive of a being whose whole experience consists in nothing else but a single unvarying feeling (Peirce 1903e: *EP.2.270*), ours inexorably consists in the triad. It is for this reason that we speak more properly of *hypoicons* of our experience than *icons* as such; for most things recognized as signs by a kind of Firstness do so by the similarity of the things experienced rather than by an identity of the experience with the experienced. Nevertheless, there are true iconic significative mediations in our lives, though we are aware of them only indirectly. While Peirce disavows the pure iconicity of most iconic sign-vehicles, he claims that (emphasis mine [1903e: *EP.2.273*]):

A sign by Firstness is an image of its object, and, more strictly speaking, can only be an **idea**. For it must produce an Interpretant idea; and an external object excites an idea by a reaction upon the brain. But most strictly speaking, even an idea, **except in the sense of a possibility, or Firstness**, cannot be an Icon. A possibility alone is an Icon purely by virtue of its quality; and its object can only be a Firstness.

Some may interpret this passage as banishing true iconicity to the realm of impossibility (Nöth 1990: 121–22; cf. Hookway 1985: 96). But this would be to ignore the emphasized words: ideas, or concepts (Peirce 1903d: *EP.2.160*), are *possibilities*, making known Firstnesses – that is, things as experienced prior to any judgment: “the Idea of that which is such as it is regardless of anything else.” Because we lack any power of introspection whereby we can observe our ideas directly, however, we employ the use of individual, particularized models to exemplify the notions conveyed by these ideas (cf. Deely 2007: 171–97; Stjernfelt 2007: 28, 87, 435n86; Short 2007: 218). The use of such models may obscure the very real sameness between the idea and the signified (Peirce 1902f: *CP.2.90*). But if we conceive of an idea as constituted by a pattern of relations, it is easy to see how such a pattern, existing *in mente*, could match (albeit never with complete detail) the pattern existing *in re*, i.e., the pattern of relations constituting the thing itself. Our ideas are **conceptual icons**.

That is, despite the inevitable threefold modality of our experience, we may isolate the elements which constitute those experiences, and even in that separation see that Firstness, despite its primordiality, consists itself of two further distinguishable aspects: its original possibility and the quality (itself a

that that which is first apprehended intellectually, insofar as intellection differs from perception, is the objective world in relation to itself.” One should hear in this lattermost phrase an echo of the indeterminately-possible *this* perceived in separation from all else, i.e., illumined against the utterly indeterminate background of *das Nichts*.

possibility) whereby the original possibility is brought to light. Peirce's writings, though the distinction is hinted at and suggested (1903e: *EP.2.271*), consistently conflate these two senses. As rightly observed along with Heidegger earlier (2.3 and 3.1.1), the dichotomization of "subject" (wherein the realization occurs) and "object" (that which is realized) does not sufficiently apply in the awakening of the *primum cognitum*; the category of Firstness in species-specifically human experience is essentially undifferentiated with regard to either supposed extreme. It is nevertheless crucial that, though in reality the two "sides" are simultaneous and so finely intertwined as to be co-present phenomenological moments, we distinguish *in mente* the possibility itself, "presence, in general", from the thing rendered present. Only with such a distinction can we provide an *ultimate* answer (as opposed to the proximate answer given in 6.1.3) to the essential indeterminacy – the openness to every possibility which can be thought – of human cognition.

Recall the twofold difficulty in understanding human cognition's indeterminacy; that is: "Why is it that our concepts are not fully determined by the particular models in which we instantiate them?" and "Why is it that we *ourselves* are not fully determined by the concepts, models, etc., whereby our cognition is directed?" Because our concepts are constituted by an iconic patterning-after of the objects conceived, and because this pattern, though filtered through the individual *Innenwelt* of the knower, has as its primordial element the grasp of undifferentiated existence – that is, the incapable-of-being-named merest possibility which, while not a *nihil absolutum*, is *no-thing* and which is first in *every* conception – they are limited neither in themselves nor in their possible relations to other concepts. In other words, concepts are pure *media* (Deely 1968: 293–306), pure signs. They are able to be pure signs because, within human cognition alone among animals, they are realized against *das Nichts* rather than against the essentially constrained subjectivity of the individual cognitive agent.

Put in the terms of Heidegger: allowing beings to stand-against *das Nichts* posits in Dasein's experience the illumination of *Sein*, whereby Dasein is determined by the beings (*Seiendes*) but indeterminately – Dasein, in the experience of Firstness as the pure and absolutely possibility of a reality which extends beyond oneself, remains essentially free. The non-human alloanimal, poor in its world, is unable to attain this transcendence and incapable of attaining species-specifically human cognitive freedom (Buchanan 2008: 5): "In the end, we learn that animals do not exist, so to speak, insofar as they are unable to transcend their captivation by things. Animals admittedly have relations with things in their midst... but they are said to lack an access to the things in themselves, to the being of these beings." Contrariwise, it is part

and parcel of the nature of the human being that, as possessing species-specifically human cognitive intentionality, each human is this transcendence (Heidegger 1949: 19/108):

transcendent Dasein (already a tautological expression) surpasses neither a “boundary” placed before the subject, forcing it in advance to remain inside (immanence), nor a “gap” separating it from the object. Yet nor are objects – the beings that are objectified – that *toward which* a surpassing occurs. *What* is surpassed is precisely and solely *beings themselves*, indeed every being that can be or become unconcealed for Dasein, thus *including precisely* that being as which “it itself” exists.

In this surpassing Dasein for the first time comes toward that being that *it* is, and comes toward it *as* it “itself.” Transcendence constitutes selfhood. Yet once again, it never in the first instance constitutes only selfhood; rather, the surpassing in each case intrinsically concerns also beings that Dasein “itself” *is not*.

Crucially, the transcendence of Dasein surpasses even the being which it is itself. Capable of letting the self stand-against *das Nichts*, we are not bound by some percept-limiting judgmental framework. It is in this sense that Heidegger’s *das Nichts* best conveys, albeit imperfectly – a Nothing which is not *nihil absolutum*, but which is not at the same time a *this something* – (Peirce 1903e: EP2.2.68–9): “Possibility, the mode of being of Firstness, is the embryo of being. It is not nothing. It is not existence”; “assert it, and it has already lost its characteristic innocence” (Peirce 1887–88: EP.1.248) – the essentially indeterminate “possibility” within which all further realizations are founded. It is this indeterminacy as such – the grasp of the undifferentiated fact of existence – which allows the metasemiotic development of species-specifically human cognition to unfold.

6.3 The hermeneutic circle and thirdness

And unfold is precisely what human cognition does. Our ideas, our experiences of Firstness, do not remain inert, nor do they constitute the totality of our knowledge by a mere amalgam of unrelated, discrete intentions; they are not files (nor even folders) in a computer system. Rather, human Firstness blossoms simultaneously with consciousness of Seconds and Thirds, whereby new Firstnesses themselves fluoresce into further processes of awareness (Deely 2010a: 96–97). We may be struck, for instance, by the experience of the color red, realize that red is presented by a stop-light (itself a First, but in regard to the red, a Second), realize that red belongs (mediation, a Third) to the stop-light, and thereby be further struck with awareness of a rule (a Third, but capable of being realized in a distinctive Firstness, through prescissive abstraction). Every such awareness of some First, or of something as within a Firstness, is

what Peirce terms a *ground* (1867: EP.1.4), from which subsequent awareness of Seconds and Thirds can never be prescinded (1867: EP.1.5–6); just as the “a priori” can be separated from the content of an intuition only by discrimination (cf. 2.1.2).

Though evidently without knowledge of Peirce, it is no coincidence that Heidegger also speaks extensively of “ground” (*des Grundes*) and “grounding” (*Gründen* and *Be-gründen*). But whereas Peirce restricts his use of “ground” to the abstracted referent of a quality, a First, Heidegger extends the meaning to the full range of what enables species-specific human cognitive transcendence – that is, the intentionality of consciousness (cf. 3.1.2 above). At the root of this transcendence is what Heidegger terms “freedom”: the allowing things to come to presence in such a way that they are intelligible as what they are in themselves (cf. 2.2.1 and 3.1.1). At its blossom, transcendence is the continually blooming realization of truth. As Heidegger says in *Vom Wesen des Grundes* (1949: 44/127), “Freedom as transcendence, however, is not only a unique ‘kind’ of ground, but the *origin of ground in general. Freedom is freedom for ground.*”

6.3.1 Grounding and transcendence

The freedom which allows for grounding is the primal cognitive absence into which entities are projected for Dasein in order that they may be properly disclosed. That is, the root of transcendence which is freedom is also *das Nichts*. Dasein allows beings to stand against this background which is itself “no-thing” through a three-dimensional act of grounding (Heidegger 1949: 49–50/131):

Transcendence explicitly unveils itself as the origin of grounding, however, when such grounding is brought to *spring forth* in its threefold character. In accordance with this, ground means: *possibility, basis, account*. Strewn in this threefold manner, the grounding that is transcendence first brings about in an originarily unifying manner that whole within which a Dasein must be able to exist in each case. Freedom in this threefold manner is freedom for ground.

The three-dimensional grounding – translated here by William McNeill as *possibility (Möglichkeit)*, *basis (Boden)* and *account (Ausweis)* – requires some explanation. On the one hand, the latter two terms seem ill-translated; on the other, the original German terms seem lacking in clarity themselves and therefore making an accurate translation difficult.

Possibility is familiar to us. The first element of cognitive experience which Peirce recognizes, Firstness, likewise receives the name of “possibility”.

Heidegger further describes the dimension of possibility as both (1949: 44/127) “establishing” (*Stiften*, which could also mean “to found”, “to cause”, “to make”, etc.) and the (1949: 47/129) “projection of world” (*Weltentwurf*). Projection, for Heidegger, does not mean the cheap pop-psychology notion of interpreting the world through one’s own problems, but rather he always means the projection of possibilities – on the one hand, the possibilities belonging to the object understood, insofar as it is understood, and on the other hand, the possibilities for Dasein itself in the dynamism of understanding (cf. 2.3.2, 2.3.3, 3.1.2 and 3.1.3). The two senses of possibility are intertwined: the former, possibilities of the object, signifies the possibility conceived in the Firstness of an object – the possibilities for how we may interpret any object of our cognition, the openness of the object to further determinations and connections – while the latter, the possibility for Dasein, indicates the essential possibility of clearing attained by the openness of holding-into or letting stand-against *das Nichts* (cf. Sheehan 2015: 206–07), the primordial species-specific human Firstness. This second sense of possibility is nothing other than the *Verstehen*, understanding, of the hermeneutic circle as discussed in *Sein und Zeit* (1927a: 142–48/182–88). But this twofold projection of possibility is, as we will see momentarily, ordered beyond itself, beyond the experience of the one experiencing.

Basis (*Boden*) is a difficult term to translate: on the one hand, it seems to mean something like “ground”, or “floor”, or the “foundation” – but Heidegger often forms a compound and writes (1949: 44/127) *Bodennehmen*, “taking a basis” which recalls *hinnehmen*, “taking in stride”. Further, Heidegger describes this form of grounding as (1949: 45/128) “being in the midst of . . .” and “absorption” (*Eingenommenheit*) into beings to be “pervasively attuned by them” (Heidegger 1949: 47/129). Thus, to translate *Boden* by “basis” seems inadequate. Rather, the concept appears to correspond more closely to the *Um-* of the *Umwelt*; that is, the environmental surroundings whereby one is in part determined. A close parallel, if not identification, can be found in *Sein und Zeit*’s notion of “thrownness” (1927a: 135/174). We could then perhaps convey the meaning better by translating *Bodennehmen* as “accepting or receiving one’s environment” and *Boden* as “**surroundedness**”. Thus Heidegger can say that the common alloanimal form of absorption is a kind of “captivation” (cf. McNeill 2006: 25–27), (*Benommenheit*), as such animals are incapable of transcending the “pervasive attunements” of their *Umwelten*.

Together, possibility and surroundedness constitute a crucial unified thread of Dasein’s transcendence (Heidegger 1949: 45/128): “*Transcendence means projection of world in such a way that those beings that are surpassed also already pervade and attune that which projects.*” Projection of world and

the absorption into beings occurs simultaneously, such that human beings live in a network of related possibilities, which possibilities are partly determined and limited by the beings surrounding each individual person.

Possibility and surroundedness are joined (Heidegger 1949: 47/129) by “a *third* manner of grounding: *grounding as the grounding of . . .*”⁸² This form of grounding is the **pointing-out** (*Ausweisen*), translated by McNeill as “account”, wherein Heidegger brings our attention not to the thing pointed out, or even that a thing is pointed out, but rather the dimension of “pointing-out” itself (*Ausweis*).⁸³ When we point out, we distinguish from surroundings and give an interpretation; that is, in every occasion that we objectivize, we do so by establishing a relation between a *thing* and some measure in which it is taken as an *object*. Pointing-out involves a taking-as. It is no coincidence that Heidegger, in *Sein und Zeit*, describes the second act of the hermeneutic circle as “*Auslegung*” – translated as “interpretation”, but most literally as “laying-out” (1927a: 148/188). Pointing-out is the structure of consciousness which manifests itself in laying-out; that is, the dimension of our cognition which enables the “taking-as” simultaneously enables setting one part of the whole object into a relation with another. Consequently, Heidegger asserts, that (1949: 48/129) such grounding signifies “*making possible the why-question in general.*”⁸⁴ Pointing-out allows us to notice objects in the context of their relations, and thereby question the relation itself (Heidegger 1949: 48/130).

82 German text: “daß sie dabei als Weisen des Grundes eine *dritte* mitzeigen: *das Gründen als Be-gründen.*” The hyphen emphasizes the prefix “Be-”; McNeill interprets this prefix as indicating a transformation of the intransitive *Gründen* into the transitive *Be-gründen* and thus translates “*grounding as the grounding of something*”. While the transformation from intransitive to transitive is correct, I believe the interpretative interpolation of the words “of something” to inaccurately shift the emphasis; as Heidegger continues (47–48/129): “In this form of grounding, the transcendence of Dasein assumes the role of making possible the manifestation of beings in themselves, the possibility of ontic truth.

“The grounding of . . .’ should here not be taken in the restricted and limited sense of proving ontical-theoretical propositions, but in a fundamental originary meaning.” It is the *possibility* of truth about beings that is grounded in the comportment (*Verhalten*) which Dasein achieves with this grounding, including that they are beings themselves.

83 McNeill translates *Ausweis* as “account”, which, given the frequency this term is used to translate the Greek λόγος and the Latin *ratio* (albeit questionably in both cases), seems misleading. Consequently, we have chosen to translate in accord with the roots of the word, *weisen*, meaning to point or show, and *aus*, meaning “out” in the sense of excluding all else.

84 Presumably, this sense of asking “why” questions is why McNeill translates *Ausweis* as “account”; as in answering a question “why”, we are seeking an explanation or an “accounting for the fact that . . .” However, *giving an account* is quite different from *asking why* in the first place.

Because Dasein – despite pervasive attunement by the beings in which it is absorbed – experiences in grounding a conceptual possibility which exceeds the given attunement by those beings, this “why” question inevitably emerges (1949: 48/130): “In the projection of world an excess of possibility is given with respect to which, in our being pervaded by those (actual) beings that press around us as we find ourselves, the ‘why’ springs forth.” We may just as well say that in the pointing-out dimension of grounding, we discover that *reasons* pervade the objects of our experience – that there is a real element of governance in the objects we discover through projection and absorption.

It seems patently clear to the author that Heidegger’s possibility and projection, surroundedness and absorption, and pointing-out or grounding of . . . express the dynamism of the species-specifically experience of human Firstness, Secondness, and Thirdness unfolding across their modes of presentation (4.1.4; appendix 1.1). These ideas do not map on to one another perfectly: Peirce’s categories are more widely-applicable to a scalable scaffolding of semiosis, while Heidegger’s notions are subsumed into the overall framework of ontico-ontological transcendent grounding which is specific to the human being. Nevertheless, it appears evident that, if we restrict consideration of Peirce’s categories to human experience, he has in mind the same three elements of every cognitive experience as Heidegger does in his notion of the grounding of transcendence. Together, given the nature of anthroposemiotic cognitive Firstness, these three elements allow for the unfold of cenoscopic understanding into cultural edifices: for while it is true that all animals interpret, only human beings are structured to grasp the mediating “as”, the Third, which itself constitutes the governing relationship of the interpretation.

6.3.2 The unending expansion of thought

In other words, relations, including those relations by which our thoughts are structured – the relations out of which each thought, conceived as a pattern, is made up – can become themselves objects of consideration. When we separate the relation from those things it relates, a new First obtrudes into our awareness. To communicatively signify such relations as objects, we utilize a symbolic rheme. We could track every movement necessary in every moment for a man to become a father and represent these movements through concrete iconic signs (cf. Stjernfelt 2007: 435n86); but a hypoicon, such as a diagrammatic arrow or an image, cannot represent paternity in the sense of protective-educating-rearing fatherhood (rather than mere biological generation). At best, a hypoicon can serve indexically by presenting behavior subsumed under the

umbrella of paternal activity – as in depictions of fathers playing catch with their sons or helping with studies – for someone who already possesses a symbolic concept of paternity; for the concept of paternity itself is open to association with such behaviors while irreducible to any of them. No quantity of icons or indices will signify paternity itself. Fatherhood is itself an indeterminate pattern of relations, inasmuch as its core, rearing (caring for and supporting to the age of maturity) is itself indeterminate.

This cognitive indeterminacy – particularly the generally indeterminate valence of specific concepts, conceptual indeterminacy – follows naturally from the relational element in the objects of perception, separated out by a process of abductive ideation, for relations are in themselves always indeterminate. Thus (Peirce 1903e: *EP.2.269*): “By thought is meant something like the meaning of a word, which may be ‘embodied in,’ that is, may govern, this or that, but is not confined to any existent.” Whoever can perceive relations – even in the life of someone who never once realizes in actuality the reality of the relational element pervading all extramental objects of perception – can consequently be said to have an indeterminate cognitive capacity, for what is generally indeterminate in relation to particulars is, considered in itself, also always at least potentially indefinitely indeterminate – and consequently, so too the one who at least potentially knows that indeterminate object as indefinite.

This indeterminacy of the knower enables not only the variegated application of specific concepts to multitudes of particular individuals, but also the free association of concepts (in, for example, the practice of musement) the contents of which are not present in any objects of sensation, so long as the result can be considered in some reality. This latter capacity, the free association which enables the discovery of new ideas and possibly new truths – or what we have called developmental indeterminacy – ensues less on account of the relations perceived themselves as much as by the capacity to perceive relation. As Peirce describes a person entering the “third state of mind”, after feeling and reacting to a whistle being blown and its coincidence with the shutting of the door (1894: *EP.2.5*): “he is *Thinking* [i.e., whether or not the door’s closing caused the whistle’s blowing]. That is, he is aware of learning, or of going through a process by which a phenomenon is found to be governed by a rule, or has a general knowable way of behaving. He finds that one action is the means, or middle, for bringing about another result.” For the befuddled whistle-hearing door-observing thinker, the “why” question has sprung forth and abductive inference has begun.

Now it remains a question as to why human beings are capable of such a cognition in the first place. Is this indeterminacy a consequence of the material structure of the brain and its eons of evolutionary development? Is it an

immaterial principle of life, a spiritual soul infused by the beneficence of a divine creator? Or is it both – and neither? That is, it seems, based upon our present ideoscopic understanding subsumed under a properly cenoscopic perspective, that the material structure of the brain, as residing in the human body, results in an emergent reality irreducible to that material structure, which immaterial reality *can* be identified with some accounts of the spiritual soul.

It may yet turn out that a spiritual soul can only be infused by the direct and strictly-miraculous intervention of a divine power, as many religions have often claimed. There could come a day where the possibility of replicating a human being, gene for gene, cell for cell, becomes an actuality – but the replicant nevertheless lacks true humanity, and fails to achieve the powers of its natural peers, attaining no more than the intelligence we find attributable to highly developed non-human animals. But this seems unlikely. At the same time, this does not denigrate religious faith in the divine creation of spiritual souls, nor in the divine power, but can rather be seen as highlighting the magnificence of the creative power which produces a universe itself capable of such development through its processes resulting in emergent realities. If God is believed the author of nature, then any of nature’s workings demonstrate the brilliance of God (cf. Aquinas c.1259/65: lib.2, c.43 and c.55 n.14).

At the same time, it seems unlikely that an artificially-produced human replicant could be precisely the same as the person replicated: for the relations governing the thoughts of the person (and therefore the critical mass of what we call “personality”) are themselves impossible to directly perceive and cannot be quantified. There are, unquestionably, *relata* in the brain – the patterns in which synapses fire, for instance – correlative to the thoughts a person has,⁸⁵ but there is no guarantee that replicating these patterns will replicate thoughts in precisely the same way – nor that those specific patterns are necessary for having that thought – for the very simple reason that imprecision, vagueness, is a hallmark of the conceptual element present in every thought. That the generality of thought undergoes attachment to particular representations may result in its presence being masked, and it may be missed that even

⁸⁵ E.g., Ghio, Vaghi, and Tettamanti state that consideration of concrete, sensible objects results in consistently-similar neural patterns, most especially in those (2013: 2) “specific neural systems that mediate the experience with the concept’s referents.” Shallice and Cooper (2013: 1) make the claim that “Neuroimaging evidence suggests that left lateral inferior frontal cortex supports those processes responsible for the representation of abstract words.” It should be noted, however, that there is not consensus concerning the neural correlates for the representation of abstract words, and oftentimes “amodal” or “supra-modal” regions of the brain are invoked (cf. Jouen et al. 2015).

the most so-called “concrete” conceptual objects necessarily involve an “abstract” generality inexhaustible by any number of instances.

But even beyond the generality intrinsic to every conceptual reference, the developmental indeterminacy of human cognition makes each individual not only *unique* but *singular in his or her own indeterminacy* and therefore incapable of being adequately described in terms of quantifiable or material presence, let alone precisely replicated, however close such replication might come in some or another regard. Heidegger intimates this singularity of the individual Dasein in the horizontal-temporal schema of transcendence: that is, the horizons of every Dasein’s world, constituted by the threefold grounding of transcendence (which is to say the intentionality of consciousness), form a whole which cannot possibly be reduced to the material constituents upon which it relies. This follows from the human person being the interpretant, the act of which constitutes Thirdness in semiosis, *par excellence*: that is, as capable of actively interpreting signs as regards their function in every regard of a semiotic relation – from immediate to dynamic object, from representamen to immediate interpretant, and dynamic interpretant to final, both internal and external – so as to synthesize the infinitely-expansible personal world in thought. Thirdness, Peirce asserts, is the habit-forming mediation characteristic of thinking, i.e., the indeterminate principles governing reality so as to produce combinations (1891: *EP.1.296*; 1903d: *EP.2.160* and 177; 1903h: *EP.2.183*; 1903f: *EP.2.223–24*; and 1903e: *EP.2.269*), and any relation which performs this function is a Third (c.1905: *CP.1.297*).

Peirce further claims Thirdness to be responsible for all combination (1887–88: *EP.1.251–52*): “The fact that A presents B with a gift C, is a triple relation, and as such cannot possibly be resolved into any combination of dual relations. Indeed, the very idea of a combination involves that of thirdness, for a combination is something which is what it is owing to the parts which it brings into mutual relationship.” This is no less true of thought than it is of ionic bonding, gift giving, or sexual copulation. In realizing the reality of Thirdness – of the generality governing beings – we realize the same principle found enabling the hermeneutical act of interpretation as a development of understanding: the emergence of the “why” question as a fundamental structure of the species-specifically human intentionality which constitutes the totality of our consciousness. Because we are absorbed but not captivated by our environments, and remain always at least somewhat free in the associations we form between the objects of our experience, we are not determined to the realities presented us by cognition-independent realities, but may engage meaningfully with the cognition-dependent realm: both for good and for ill.

6.3.3 Meaning and the continued question of world

At the outset of the chapter, I asserted that Heidegger's notion of *Sein* comprises both the *relativum secundum dici* and the *relativum secundum esse* dimensions of relation. In the introduction, I quoted John Deely as making the identification between Heidegger's *Sein* and Peirce's Firstness, (as well as Thomas Aquinas' *ens primum cognitum*). I maintain this identification as essentially accurate, but believe it needs clarification. For although *Sein* embraces the same element of experience as Peirce's Firstness, as central, it encompasses a broader and more dynamic range of meaning. As the fundamental element of all species-specifically human intentional experience – Dasein – Heidegger considers the presence of *Sein* in every aspect of that experience, as pervasive and ubiquitous. Consequently, the experience of Firstness is never considered by Heidegger as prescinded from the other two elements – and thus as in any way an element common to other beings' experience – but always coincident with its fulfillment in the realizations of Secondness and Thirdness; hence his characterization of Firstness as both possibility *and* projection. Whether questioning after *das Sein des Seiendes* or *das Sein selbst*, Heidegger is always seeking the totality of those elements responsible for disclosure.

Yet constituted as they are against the cognitive background of *das Nichts*, the potential infinitude of the world's horizons (including the “temporal”), and the springing-forth of the “why” question as an integral element of experience, human beings find themselves possessing the capacity for continual development of thought. That is, the Categories of Experience, i.e., the disclosive nature of the totality of *Sein*, continually press us to engage not only Seconds, but Thirds; and engaging Thirds, we find that the realm of meaning extends beyond what can be found in the physical reality of nature, that even sensation as experienced within the species-specifically human *Lebenswelt* entails the real presence of what is strictly itself insensible (cf. Deely 2007: 148–49). Ideas – the concepts whereby a human individual is related to objects as possessors of meaning (*Sinn*, an intelligible structure) – are capable of redounding to any object of human experience (cf. Deely 1982: 111), regardless of whether that is an exterior object sensed, perceived, or interiorly felt. The realization of this possibility is what transforms the merely perceptual *Umwelt* into the human *Lebenswelt*. But because we are social and linguistically communicative animals who thereby bring our ideas into the realm of intersubjectivity, we exist also in a dynamic and continually-changing *sociosphere* that shapes our referential-meaning-acts. Given social consistency, the dynamic alteration of our ideas develops into linguistic codification (i.e., a codification concerned specifically with means of communicating *ideas* and thus making common stipulable

rather than perceptual connections; cf. Deely 1994a: 65). Thus the individual human being's world is not only a *Lebenswelt* rather than an *Umwelt*, but because of the dynamic intersubjectivity in which that *Lebenswelt* is contextualized it becomes more than a *Lebenswelt*: a *Bildendwelt*, a culturing-world. Mirrored here is not only the categorical triad of Firstness, Secondness, and Thirdness, but also the multitudinous sign trichotomies, including that of icon, index, and symbol – such that we can characterize the *Lebenswelt* by the species-specifically human experience of iconicity, the *sociosphere* by its experience of indexicality, and the *Bildendwelt* by its experience of symbolicity.

The definition of each of these three levels is constituted by human engagement with meaning: for ideas are, as it were, icons of intelligible meaning, referentiality is exhibited through indices, and purpose is realized through the development of symbols. Yet *necessity* never rules this increasingly complexified structure which remains essentially *tychic* no matter how much success thought has in its function of synthesis; indeed, the farther one gets from the simple elements – the more complicated the synthesis at stake – the more opportunity for error and, specifically in human existence, for distance from the truth. Thus, although essentially open to contributing to the fulfillment of the life of an individual human being, the *Bildendwelt*, which emerges from the level of consciousness where there is no external compulsion but only a pursuit of intelligibility (Peirce 1887–88: *EP*.1.260–62; cf. Colapietro 2014: 132), is fraught with many possibilities for discordance, particularly in its positing and pursuit of purpose. Explaining the essential possibility for continuity and coherent development and very frequent occurrence of discontinuity and incoherent action which become present in this culturing-world through the collective efforts of individuals in their respective synthetic consciousnesses is the task of our seventh and final chapter.

7 Semiotic continuity of the world

“Expressed in Christian terms,” Heidegger says (1929–30: 176–77), the “world” signifies the totality of beings apart from God; “And man in turn is also a part of the world understood in this sense. Yet man is not simply regarded as a part of the world within which he appears and which he makes up in part. Man also stands over against the world.” This difference from the world – said here not in the sense of the *Welt* characteristic of experience, but as the totality of entities other than human beings – roots the Christian designation of the human being as made in the image and likeness of the Divine. In the capacity for intellectual self-reflection, the semiotic animal possesses a latent consciousness of discontinuity from the mundane: though Firstness and Secondness are always mediated by a Third, it is often the case that the mediation does not provide a smooth and harmonious reality: the attempt at melody quite often results in dissonance; our synthetic consciousness makes us aware not only of the continuities of our thoughtful experience, but its discontinuities as well.

Consider the loud, unpleasant and unexpected noise that hurtles someone from restful sleep; the pain of stepping barefooted on something sharp and jagged; the emotional distress consequent to discovering a beloved’s infidelity; the struggle against all manner of addiction; news of great tragedy or the continual bombardment of terrible threats and global instability; feelings of isolation and being misunderstood, ignored, or personally mitigated. The make-up of our lives’ experience includes much opposition and suffering. We are creatures of passion – understood by its Latin root of *pati*: to suffer – thrown about by a world which does not cohere with the aims or desires of the person.

By the jarring intrusion of such feelings, the consciousness of synthesis withdraws and the consciousness of polarity dominates our awareness, exposing us to “an intense reality... a sharp sundering of subject and object” (Peirce 1887–88: *EP*.1.260). In other words, we are overwhelmed – captivated, even – by the experience of Secondness, by the difference between oneself and the other, by the dissonance of discontinuous alterity. This dissonance may resonate into radicalized discontinuity – a complete and utter break – between the conceptions of oneself as a psychological subject and the supposedly extra-mental (including the body), as we find in Cartesian dualism, in the claims of transgendered individuals,⁸⁶ in the experiences of the depressed or otherwise socially isolated, in the disparaging of any non-subjective

⁸⁶ With no intent to disparage, I cannot but question the grounds for claim of psychological gender which emerges as entirely distinct from the biology present. It seems a movement rife

grounds for ethical claims (e.g., Mackie 1977), and in nominalism generally. Whenever Secondness dominates human consciousness, the *Lebenswelt* of human cognition undergoes fragmentation: the sundering of subject and object not only divides oneself from the other, but further undermines the unifying process of life for that subject. Uniting the content of our experiences into an intelligible whole when they are perceived as discontinuous from our selves, becomes a near impossibility.

But even the experience of inharmonious relations between the self and the environment, the frustrations of encounter within the *Umwelt* wherein the person encounters opposition, and the resultant feelings of discontinuity, are material for the properly-semiotic constitution of the properly human world, considered as both *Lebenswelt* and *Bildendwelt*. It is true that the semiotic difference of the human person – what makes the human distinct among animals – is the reason that radicalized discontinuity can prevail in the first place, by becoming the primary focusing lens of our self-understanding. A dog does not wonder *why* his master is angry with him; he seeks only to avoid the negative consequences, either by skulking to an innocent corner or with gestures of appeasement. But the teenage girl may believe her mother's disapproval indicates genuine hatred (despite mere frustration on the mother's part), dwell on *why* they do not get along, fictionally intensify the discontinuity felt by their personal opposition, and withdraw from the relationship altogether. The indeterminacy of human cognition allows the human being (Heidegger 1949: 49/131) "in its factual accounting and justification" to "cast 'grounds' aside, suppress any demand for them, pervert them, and cover them over."

While the animal is a captive to its circumstantial *Umwelt*, the human attempts to comprehend the relations whereby it is constituted; the "why" question springs-forth into our awareness and becomes an object of inquiry. Our experience always includes the element of "why"; Thirdness permeates our lives, and through our process of abductive conjecture we attempt to identify it. Indeed, it manifests even in the breaks or fractures where we find ourselves at odds with the world: "why does she appear angry with me?", "why does no one pay any attention to me?", "why am I the only one who sees things this way?", and even, "why do I feel this way?"

In order that these and other such questions be answered coherently – which is to say, not only without contradiction, but with an essential continuity – we require a teleology. For (Hulswitt and Romanini 2014: 124) "interpretation is a

with inconsistencies and contradictions. My perspective is that such experience is the result of profound developmental confusions.

teleological process of production of effects through the action of signs” and attempts at answering the inevitably-appearing “why” questions of our experience are attempts at interpreting the purpose of our worldly existences. The fibers of a coherent world wilt in the absence of purpose, and purposes become tools for abuse in the absence of their clear conception, both for what they are themselves and how they relate to some sense of the whole. The Third Reich usurped the Weimar Republic because the former possessed a vigorous sense of direction that the latter lacked, and convinced millions to become, at the very least, silent to if not complicit in a project of genocide; while Viktor Frankl, for one, survived that genocide largely because of his keen attachment to purpose, an attachment echoed in Solzhenitsyn’s accounts, both personal and fictional, of the gulag. For both individuals and groups, purpose serves to unify, to hold-together parts that would otherwise fragment. In order for such purpose to produce genuine coherence in the lives and worlds of human beings, however, it cannot omit or deny any elements integral to the good – that is, the fulfillment – of the human constitution. Error-prone and myopic as we human beings are, the proclamation of purpose, and especially of grand or life-directing purpose, should always be attended by humility: for what belongs to the human good is not always clear, and true goods often become entangled in flawed proposals.

Among the tools necessary to disentangling those true goods is an understanding of what makes the coherence of human life possible at all. We have attempted to provide the theoretical framework in the antecedent chapters. That is, by considering the world from the standpoint of Heidegger’s phenomenology – which is to say, from the essential intentionality of human life concerned with the disclosure of what truly is – and the semiotic perspective engendered by Peirce’s Categories of Experience (cf. Colapietro 2014: 144–45), we can see that the superficially disparate spheres of human experience can be resolved to a common domain: in which “meaning” is reduced neither to the referential meaning-for (*Bedeutung*) of the local system or individual nor to the intrinsic qualities belonging to objects (*Sinn*) independently of cognition, intelligible being, but rather where the truth-disclosing domain of purposeful meaning (teleology) unifies the intrinsic qualities of what is with the referential frameworks of beings not just within a local system but on a universal scale (cf. Houser 2014; Colapietro 2014). In this chapter, we hope to show further how this resolution can be undertaken.

7.1 Semiotic constitution of the world

The world of human experience differs dramatically from that – by all available evidence – of every other living being. As aforementioned, there is an explosion

of semiotic freedom for the human over and above what is available to the generic class of alloanimal ability, such that our experience is subject to a limited but conscious control over not only our pragmatic actions but within that even the development of our involvement in the disclosures themselves through which that experience is further constituted. Fundamental to this distinctive massive expanse of semiotic freedom is the realization, as Deely has repeatedly asserted, of the *existence* of signs (Deely 2010a: 99–100):

While every animal of necessity *makes use* of signs, yet because signs themselves consist in relations, and because every relation, real or unreal, is *as relation* – as a suprasubjective orientation towards something other than the one oriented, be that “other” purely objective or subjective as well – invisible to sense (and hence can be directly *understood* in its difference from related objects or things, but can never be directly *perceived* as such), what distinguishes the human being from the other animals is that *only human animals* come to realize that *there are* signs distinct from and superordinate to every particular thing that serves to constitute an individual (include the material structure of an individual sign-vehicle) in its distinctness from its surroundings.

This lengthy sentence, first quoted in the introduction, points out the distinctiveness of human metasemiosis. A sign, as Deely states, consists in relations: that is, the sign is that which obtains between object, vehicle, and interpretant. From a cognitive perspective, therefore, realization of the existence of relations is ontologically (not chronologically) prior to the realization of the existence of signs. Ontologically prior to either, however, is the realization of the undifferentiated fact of existence. In other words, the categories of human experience – Firstness, Secondness, and Thirdness; or intentional possibility, surroundedness, and pointing-out – are elements present in the objects of our cognition, recognized as belonging to some reality independent of what we make of it, prior even to their explicit recognition or separation. They are not mere abstractions given to explain the nature of our cognition, but elements which belong to its essential constitution. The human being is a semiotic animal not by means of some emergent *act* – we do not become semiotic animals through the awakening of our capacity for explicit realization of the existence of signs – but by virtue of even the *implicit* presence of Thirdness in our awareness, so long as that awareness includes the undifferentiated fact of existence.

But were the presence to remain implicit, humankind would not advance very far. The presence of semiotic mediation to human awareness leaves us on the threshold of semiotic consciousness – neither truly in nor entirely out – but it is only when we realize that the sign-vehicle is *not* the signified, and is indeed something entirely distinct from it, that a properly semiotic awareness blooms. When the act of a sign is grasped by the understanding, it no longer merely

protrudes as a lump felt against one's subjectivity but emerges as an entity, allowed to stand-against *das Nichts*, into the explicit awareness of the knower. That is, one can be mistaken about what a sign actually is, in itself as a sign, and yet still have realized that there exists in fact a reality responsible for the mediation between one and another and have entered into semiotic consciousness (Deely 2001a: 193–94):

Better to follow the saying of Augustine: 'We are blessed not by seeing angels but by seeing truth'; and the truth is that the role of nonbeing in the Latin sense in the shaping of the affairs of human civilization would not be easily overestimated, nor is civilization itself understandable, if we are not critically to evaluate the factors that go into the ongoing process of transforming the Umwelt of the human *animal* into the Lebenswelt of the *human animal*.

Through those processes of abductive inference which elevate us from mere perception, by attributing reality to objects themselves, the human Umwelt, always already in some sense more than a mere Umwelt, transforms into a Lebenswelt: we are no longer merely the determined interpretants of an inescapable context, but living members possessing a full practical and responsibility-laden agency within that context. Every alloanimal is a modifier of its world; but the *human animal* is a co-creator, and therefore given the *responsibility* that goes along with creation.

This co-creative faculty inspires the term "Bildendwelt". That is, whereas the Umwelt is a semiosically-constituted region of intentionality characterized by a fore-theoretical involvement, the Lebenswelt is constituted by semiosis but under the purview of semiotic awareness. Such escalation into a metasemiotic perspective results in cognitive production which is not merely an interpretive re-ordering of the objects within the Umwelt, but also often the constitution of entirely new, emergent realities. If the term Lebenswelt designates the species-specifically human world as distinguished by the explosion of semiotic freedom – that is, where the "center" of that world, human Dasein or the semiotic animal no longer subsists as a captive of the world but exhibits a living and self-determining freedom – then the Bildendwelt is what inevitably follows as the fruit of that semiotic freedom when tilled by intersubjective human communication, in the sociosphere of not-yet-necessarily cultural but nevertheless social interaction. The nature of the human animal emerges into culture, which culture then conversely contributes to the extension and restriction of each human being's horizons (cf. Winner 1982: 183). The forces responsible for animal captivation are still at work: indeed, we call the ones possessing typical structural functions "nature" (using this term in the broad

sense of “what is not the product of artifice”). But natural processes possess their own innate teleological tendencies, whereas human beings can grasp these natural processes while either refraining from following their innate tendencies, or exceeding the limits of those innate *τέλει*, or perhaps even both. Through interpretation, meanings not given over by the physical environment alone may augment,⁸⁷ extend, or denigrate the hardcore natural reality with either idiosyncratic or socially-constituted cognition-dependent reality (cf. Deely 2009: 119 and 126). Philosophy, science, history, literature, morality, as well as technology and everything else which belongs to culture, result from this species-specifically human interpretive *Bildendwelt*, mediated through the physically-given but not reducibly-physical use of language (cf. Deely 2001a: 348 and 162). Clear evidence of such interpretive augmentation, for better and for worse, can be found anywhere that one finds a society sufficiently developed enough to call a culture.

The connectivity of human nature and culture is constituted through multidimensional chains of semiosis, much like the multidimensional chains of endosemiosis and exosemiosis processes which enable higher functions in complex natural processes. In the simple exchange of a single sentence, we could identify many different semiotic functions unfolding; saying “I love you” to one’s spouse invokes signs of possibles, concretives, in a categorical, usual, indicative pheme which could serve purposes of gratification, production of action, or of self-control – and so on, insofar as all the possible intentions and effects of objects, vehicles, and interpretants are considered. A fully comprehensive analysis of the semiotic possibilities entailed by cultural forms, particularly in their relation to the structures of human nature, would therefore proceed to an unimaginable length.

Consequently, in looking to understand the semiotic constitution of the world – here, meaning both *Lebenswelt* and *Bildendwelt* – we will restrict our analysis to the role of a familiar trichotomy: icon, index, and symbol. This analysis is far from exhaustive but should serve to give a skeletal idea of how semiosis is at work in the species-specifically human experience of a world.

⁸⁷ “Augmented reality” has become, in recent years, a term used to designate the filtering of or addition to the perceptual environment through technological means, primarily through wearable and, less commonly, implantable devices. At a less obvious, more fundamental level, the effects of inculturation already serve to “augment” our experience of reality by influencing the formation of the conceptual and perceptual means by which we perceive and understand the world.

7.1.1 Iconicity and the *Lebenswelt*

The term “*Lebenswelt*”, as it has been used by John Deely and here in this book, is not an ideal term. It is laden with both the history of its use by Edmund Husserl as well as an etymology – the root of *Leben*, life – which does not convey a precise sense of what we mean. Nevertheless, given that Husserl’s own usage failed to attain precise clarity, perhaps we can understand the *Lebenswelt* as the mutual opening of individual and the environmental surroundings perceptually grasped as an *Umwelt* to a mutual life; not just one of mutual dependencies, but of mutual fecundity, inasmuch as, through our iconic concepts, things are seen in their possibilities themselves – including the self.

This mutually fruitful opening of the world is predicated upon attaining an access to the intelligible meaning of things. This does *not* mean that, a la naïve realism, we gain a direct access to unfiltered intelligible structures which deliver themselves into our intellects; but rather that, in our ability to form iconic concepts through abduction which are not reducible to the structures of mere perceptual judgment and interpretation but which include *essentially* the element of twofold indeterminacy, and therefore of possibilities which belong to things as they are in themselves (both what things *could be* but are not and also the inexhaustibility of that “what” by that individual thing, i.e., the) and not merely as they are to us, an “open field of opposedness” is revealed such that intelligible meaning – which consists in both what belongs to the thing itself in its properties *and* through its relations, including the culturally-constitutive ones which arise only with human interaction – can be discovered.

The discovery of the intelligible itself is made possible because the conceptual signs whereby it is made present to us are themselves icons; not hypoi-cons, which approximate their objects by being alike to them, but true, pure icons, rendering present to the interpretant a genuine sameness of the object. No icons are, however, adequate and full representations of the dynamic object, which possesses a potential infinity of relations, and is consequently never exhausted. Rather, each iconic concept is itself a presencing sign of some aspect or another of a dynamic object.

This does not mean, however, that our knowledge of objects aggregates from atomically-compounded iconic concepts. Rather, one and a single icon can comprise within the signification of a single object a host of potential others without compromising its iconic function. The iconic concept signified by the term “human”, for instance, does not signify “semiotic” and “animal” as the accumulation of separate specific difference and genus, but rather the whole in which they are unified; it does, however, contain *virtually* those separable significations, including all their semantic depth. In consideration of the

human being, one can hold the whole in mind without specific attention to one or another part, just as one can isolate focus on that specific part, perhaps prescinded, perhaps discriminated, from consideration of the rest of the whole. Each concept stands intrinsically capable of elaboration; and also, relation to others. In maintaining the openness of our iconic conceptualizations, we engage in what Heidegger termed phenomenological construction (cf. 2.1; 1927b: 29–30/22) in holding beings conceptually in their Being. Thus, iconic concepts not only open the intelligible meaning of objects within the *Umwelt*, but, through their own adaptability, turn that *Umwelt* into a true *Lebenswelt*, a personal living world of knowledge and capable of growth – both good and ill.

7.1.2 Indexicality and the sociosphere

But although dependent upon our individual persons, our worlds do not exist in isolation. Rather, we are typically social, and exist in a social sphere populated by other persons. By the term “socosphere”, therefore, we mean specifically that level of interaction at which an organism interacts with one’s peers. Our pets, consequently, do not belong to our sociosphere, nor any other non-human animals. This restriction to one’s common species follows from the foundation of all social relations upon a fundament of sameness; that is, what we mean by “social relations” require at least an approximate equanimity between the participants. With human beings specifically, this entails the possession of the intelligence which manifests itself in the use of language, by means of which we communicate that which personally is made known through iconic conceptualization. The inability to engage in linguistic communication consequently separates an individual from human society, for without language the personal *Lebenswelt* cannot be made in any way common.

This commonality, and specifically the customary codification (Deely 1994a: 83–84) which is proper to culture, does not come without effort, nor can it be communicated through purely iconic means. That is, iconicity is essential to species-specifically human conceptualization and is in a certain sense the goal of species-specifically human communication – i.e., that more or less the same iconic concept be present in each human individual – but indexicality serves a more proximate role in the means of social communication themselves, specifically in that dynamism of communication’s social but-not-yet-cultural aspect. An index, we recall (6.1.2) must necessarily be an “individual Second”, which requires therefore that it be taken as an “other” and that it signifies by some interruption of the interpretant’s current attention in order to bring that attention to some other object. In other words, social communication is

primarily ordered through referring attention elsewhere: “Would you like *this?*”, “Yes”, “No”, “Look out!”, “Stop”, “Go”, and nearly every sentence ordered to pragmatic considerations relies upon a degenerate index (i.e., one which has its signifying power through a conventional association). Likewise, our acts of post-linguistic⁸⁸ social communication, through bodily cues, postures, tones, etc., rely upon either genuine or degenerate indices: fidgeting indicating an excess of energy, or discomfort; leaning in and playing with hair as indicating romantic interest; a deep breath prior to a sigh indicating exasperation, or an attempt at self-control; expanding one’s hands while lecturing to indicate the expansiveness of the idea under discussion, and so on.

In each case, whether genuine or degenerate, our indices signify by referring to something else. The meaning conveyed by signs in the sociosphere, considered below the level of cultural codification, is necessarily referential meaning which does not stand on its own. This referentiality is indicated in Heidegger’s treatment of *Zeichen*, which he takes as consisting not in iconicity or symbolicity, but indexicality: (1927a: 77/108, translation altered): “But signs [*Zeichen*], in the first instance, are themselves items of equipment [*Zeug*] whose specific character as equipment consists in *indicating* [*Zeigen*].” (Cf. 2.1.3 above). The referential signification (*Bedeutsamkeit*) of equipment is determined by the context of its existence, which, in species-specifically human communication, is a context grounded in understanding (*Verstehen*), which engages with beings fundamentally (if seldom explicitly) in the disclosure of their Being. Consequently, even when belonging to a post-linguistic sign-vehicle, such as hand-gestures accompanying speech, the indexical signs of the sociosphere have their meaning by referral to other meanings – either those conveyed by iconic concepts or those conveyed by symbols, which have their codified meaning themselves ultimately by comprising iconic concepts. On the one hand, therefore, social indices, as signs by referral, reduce to the intelligible meanings conveyed through iconic conceptualization. On the other hand, they serve as tools for the intersubjective codification of meaning in symbols. Social indices are therefore essentially contributions to the dynamism of both individual *Lebenswelt* and cultural *Bildendwelt*.

88 Deely 1982: 111: “systems that come into existence on the basis of language and can only be understood in what is proper to them on that basis, but are not themselves linguistic; and once they have come into existence, they *re-descend*, so to say, into the purely perceptual to become assimilated in a behavioral way to the society of non-linguistic animals. ... they always depend upon language for their *proper* existence, which transcends the modalities of simple perception and zoosemiotic signaling. Post-linguistic structures exist beside, alongside, aside from, language – yet based on and derivative from it.”

Consequently, while the proximate goal of social communication might be pragmatic, these referential meanings, considered in the overall context of the world of human beings, are themselves ordered either to meaning as intelligibility or meaning as purpose; or as it may turn out, quite frequently to both at once (even if one's purpose is to obscure intelligibility).

7.1.3 Symbolicity and the *Bildendwelt*

This orientation of the social by being embedded in a context of both intelligible and purposive meaning enables the development of human culture. By “culture” we intend the totality of relations – cognition-dependent and cognition-independent alike – by which specifically-human meaning is communicated, preserved, and developed, from one individual to another and one generation to the next, such that, to know culture, we must know the relations out of which it is constituted (Deely 1994a: 92):

The objectivity proper to culture, nonetheless, consists entirely of relations. Its “internal being”, so to speak, is nothing but relations patterned in specific ways. And these patterns, though physical nature collaborates in them and is incorporated – sometimes coerced – into them, do not exist as such apart from the human mind. They are, thus, the objective phenomenon par excellence, a pure thirdness, comparatively speaking, in which secondness has, exactly, a secondary part, not, as in the realm of “hard science”, a primary role in revealing the being of things. The firstness of culture has not the finite-mind-independent depth of physical nature in which an anchor can be cast in process of explanation.

In other words, the cognition-independent relations which exist within the boundaries of culture are elevated to cultural status only through the transformative embrace of cognitive action. The birth of a child or death of a parent may have deep cultural importance; but this importance, while it requires the cognition-independent relation, can only be recognized and granted that importance by a mind – and specifically by a mind endowed with the species-specific Firstness possessed by humankind which is able to grasp the possibilities of things in themselves and thereby fittingly elaborate their intrinsic meaning into a cultural meaning. Moreover, what is itself not at all present in things themselves may nevertheless bear a relation of fitness to those things themselves, such that somethings which are purely cultural, purely objective, are better or worse than others. Questions of propriety and morality often hinge upon this fittingness, or lack thereof.

In order that we signify these relations, we need symbols: that is, signs of the relations themselves. A relation itself, as we noted above (5.2.2.) does not

exist independently of at least the fundament grounding it. Nevertheless, we can consider the pattern which such a relation creates, independently of both terminus and fundament: such as what is signified by “paternity”, “justice”, and indeed, anything at all which exists in the world of culture – “book”, “library”, “classroom”, and so on. No quantity of iconic or indexical signs can ever amount to the same signification contained in the symbol, and icons and indices can receive symbolic significations over and above their intrinsic or associative significations as well – such as the way in which a crucifix, while iconically signifying the crucifixion of Christ, symbolically signifies the religion of Catholicism. Likewise, a wedding band is an indexical signification (associatively correlated with marriage both by habitual convention and by its metaphorical representation of unity) of a strictly cultural relation, and which therefore has even its indexical meaning by virtue of the symbolic codification of that relation first in linguistic structures (in this case, specifically the noun “marriage”) and later in post-linguistic structures through the transformative recapitulation of merely perceptual sign-vehicles into culturally-laden symbols.

This ability to codify, both in linguistic and derivatively in post-linguistic structures is necessary for conscious cultural development (Deely 1994a: 83):

The coding of the Umwelt through the play of stipulated elements as such in patterns of communication and habits of social interaction is, in the first place, presupposed to critical activity. For, as we have seen, until such coding is introduced into the world which is objective as Umwelt, there is not yet *culture* in its distinction from and difference respecting (a purely perceptual) Umwelt, a *social* world (yet not a socio-cultural world) such as can be found in many nonhuman species of animal. In the most general sense, criticism begins at that unique moment when a sign, experienced as *stipulable* and seized upon as such, is further deployed under a communicative intention which transforms, or attempts to transform (for the outcome of the effort is by no means certain), that sign into a vehicle such as it would not otherwise be. At that moment, something arbitrary is made to function in a prospectively natural way, by serving as ground for a relationship transporting a subjective idea into a conception intersubjectively shared with a conspecific and thereby *codified* as a node of public access to an objective world no longer tied to the perceptual level as such of biological heritage.

By perceiving that we imbue objects with meanings either as an elaboration of their natural, intrinsic properties – whether those objects are also things or merely objects – or as an addition over and above those properties, with either a good or an ill fit, brings those meanings into a conscious control – thereby opening our iconic concepts whereby these objects are presented to us to *critical* consideration (Cf. Lotman 1990: 28–30).

It is in this sense – *precisely* in this sense, of critical consideration – that we speak of the Bildendwelt as that domain in which the individual actively

takes part in the forming of a world; a world which “cultures”, wherein ideas grow not merely spontaneously but through deliberate effort to elaborate and correlate in the pursuit of a coherent understanding of the world, so as to expand our horizons without compromising their integrity. That our cultural edifices so often go awry is all the more reason we need critical consideration: that is, we need always to maintain an attitude of phenomenological “destruction” of those cultural traditions we have uncritically appropriated, and simultaneously to hold on to a genuine phenomenological reduction – a turning all things back to the primordial possibilities which make them intelligible in the first place. For through the culturing-world, the human being, too, is transformatively recapitulated, for better or worse, and, indeed, recursively, such that in the production of our cultural artifacts – music, sculpture, painting, literature, philosophy, and all the other grand elements of our suprasubjectively accessible cultural symbolization – we are aimed always at the development of the human being (Wojtyla 1977: 265): “Culture is basically oriented not so much toward the creation of human *products* as toward the creation of the human *self*, which then radiates out into the world of products.”

7.2 The human symbol

Despite tendencies away from belief in human uniqueness in recent decades – away from any anthropocentrism – the human person nevertheless can easily be considered as preeminent in the known universe; particularly, if we, in an act of phenomenological destruction, retrieve the questions of human nature as considered by both Heidegger and Peirce. To the best of our demonstrative knowledge, human beings alone engage not only with beings, but with the truth of beings – or as Heidegger was so fond of saying, at issue for Dasein is *das Sein des Seienden*, and thus, *Sein selbst*: not only the revelation of beings but the revelatory dimension itself wherein meaning – always present but submerged in all experience – becomes explicit. In an uncharacteristically terse formulation, Deely writes (2007: 185) that “we are semiotic animals, that is to say, animals capable of understanding what is and what is not, distinguishing however haplessly truth from falsity and the real from the fictive.”

Such a being, a semiotic animal, cannot help but repudiate reduction to the mere ontic structure of an object for scientific inquiry. No amount of precision in understanding the architecture of the brain, of neural processes, or of any ideoscopic inquiry – or cenoscopic inquiry turned lifeless by an obstinate in-sistence in its conceptual framework – can adequately depict the dynamic reality of human life; even the definition of human being as a semiotic animal,

though as true a formulation as language can ever provide, shows that *what* a human is does not comprise *who* a human is, inasmuch as the grasp of possibilities entailed by fully semiotic awareness is irreducible to any de-finition.

This book has been an inquiry into the fundamental structures of disclosure, not only belonging to the species-specifically intentional semiotic life of human beings, but as pervading the entire semiotic universe. All along, we have attempted resolution of those semiotic-constitutions back into the fundamental principles of intelligibility. But no object of possible disclosure presents so great a challenge to our understanding as does another human being. For only with human beings does *falsity* enter into existence at all; other creatures may employ *deception*, but this only in a purely practical ordination, to attain or avoid being attained – falsity as such does not enter their *Umwelten*. Yet enormous swaths of human history are constituted by the presence of falsity in the *Bildendwelt*: in the Carthaginian sacrifice of infants or Mayan massacres as necessary to appease bloodthirsty deities; in the Aryan mythos of the Third Reich; in the supposed divine origin of Japanese emperors; and today in the new cultic devotion to the oracle of neuroscience and the possibilities of practical mastery over nature, the *Ge-stell*.

Our cultures develop from within the interpretational constitution (*Bildend-*) of a world (*Welt*) rendered by each individual acting in a societal manner – i.e., by those performing significant linguistic and post-linguistic acts. Through the inevitable interpretative consequent to understanding, we *produce*, and often with falsity; but also, often with truth. As Danesi writes (2012: 91–92):

Cultures are thus both restrictive and liberating. They are restrictive because they impose upon individuals born into them an already-fixed system of signification, and thereby condition how people come to understand the world around them – in terms of the language, music, myths, rituals, technological systems, and other codes that they learn in context. But cultures are also liberating because they allow for the same codes to be used creatively. The artistic, religious, scientific, and philosophical texts to which individuals are exposed in social contexts, moreover, open up the mind, stimulate creativity, and engender freedom of thought.

This simultaneous restriction and creativity are not merely juxtaposed coincidental consequences, but often go hand-in-hand. For instance, in the traditional Christian conception of marriage, in which the matter and form of the sacrament of matrimony are, respectively, the offering and the acceptance of the marital right, which entails not merely the explicit meanings of the words of the vows which are publicly exchanged, but a promise of fidelity in an interpersonal unity. The man does not become his wife just as the woman does not become her husband; but the man becomes a husband and the woman

becomes a wife, which words denote not merely extrinsic denominations, but which through their indication of the promises made in the sacrament comprise the whole of each individual and the good of the union as well – which union is therefore both restrictive (excluding all others) and creative (transforming the individual into part of a greater whole which ought, at least, to recursively perfect the individual). Yet the vows are also significant of the understanding attained by each individual, and thus, the meaning signified by those words depends upon each partner’s interpretations as well as the interpretation generally held in their culture. One could persuasively argue that such a cultural edifice, if properly maintained and itself revised whenever it is discovered necessary, improves the lives of the human beings involved within it; that such an edifice is an example of culture producing an emergent augmentative reality dependent upon but irreducible to and beneficent of the individuals from which it is constituted.

Interpretation – whether simply “taking in stride” the things before us “as” or actively attempting to make intelligible their being through taking them “as” – therefore, changes not only how we view objects, but even how we are ourselves constituted as entities in the world. In some sense, therefore, we are what we think. Peirce, at his most dualist, wrote that (1868b: *EP.2.54*):

there is no element whatever of man’s consciousness which has not something corresponding to it in the word; and the reason is obvious. It is that the word or sign which man uses is the man himself. For, as the fact that every thought is a sign, taken in conjunction with the fact that life is a train of thought, proves that man is a sign; so, that every thought is an *external* sign, proves that man is an external sign. That is to say, the man and the external sign are identical, in the same sense in which the words *homo* and *man* are identical. Thus my language is the sum total of myself; for the man is the thought.

This passage could easily be taken too far: especially the assertion that “my language is the **sum total** of myself”; yet even in his later writing, Peirce stayed true to some identification of the human being with a reality irreducible to the constituent parts, and consisting more properly in the constituting pattern (1902g: *EP.2.124*):

I do not think that the relation of the idea to the members of the natural class is simply that it is applicable to them as a predicate, as it is to every class equally. What I mean by the idea’s conferring existence upon the individual members of the class is that it confers upon them the power of working out results in this world, that it confers upon them, that is to say, organic existence, or in one word, life. The existence of an individual man is a totally different thing from the existence of the matter which at any given instant happens to compose him, and which is incessantly passing in and out. A man is a wave, but not a vortex.

That is: the biological (and indeed, every biological element except the genetic [digital] code which persists throughout but which nevertheless relies upon exchange from one cell to the next) undergoes constant flux; each molecule really becoming a part of the human being, and yet, passing on, the human remains. The pattern of the human being is one which moves through multitudes of material structures without losing its own identity.

As a pattern, therefore, the identity of any given human being can be said to be, or at the very least to be represented as, a **symbol** (1904a: *EP.2.324*):

Different men, so far as they can have any ideas in common, are the same symbol. Judgment is the determination of the man-symbol to have whatever interpretant the judged proposition has. Assertion is the determination of the man-symbol to determining the interpreter, so far as he is interpreter, in the same way.

That is, though each is a singular pattern, each human being can nevertheless come to share in the same symbolic life of others through the commonalities of the encultured world. We are in some sense the judgments and assertions, which are always interpretations, that we make, inasmuch as these structure not only the Lebenswelt of our personal worlds but the Bildendwelt which develops out of the world of intellectual life. Such cognitive acts constituting and shaping our conceptions do not directly alter reality, but do alter both our perceptions, inasmuch as our perceptions are partly dependent upon our conceptions (e.g., in observation of post-linguistic structures), as well as our actions, which depend upon our perceptions – and thus the conception of good may structure the perception which directs the action in pursuit of it. For instance, the one who truly and habitually believes, through persistently making the judgment, that extra-marital sex is detrimental to his well-being will perceive its opportunity as a negative (even if the particular situation is arousing or sexually appealing), and therefore act against its realization. Thus, he can be characterized, if married, as a faithful husband; if unmarried, as a chaste individual; if adhering to this belief because he holds sex to be inherently evil and only situationally obligatory, as a prude.

Each term – faithful, chaste, prude – signifies a rule which determines the particular by means of a regularity. When we talk about the identity of a real individual human being, we are referring to the totality of not only the biological patterns comprising the particulate matter, but also these culturally-suffused symbolic regularities (Peirce 1904a: *EP.2.323*): “The reality only exists as an element of the regularity. And the regularity is the symbol. Reality, therefore, can only be regarded as the limit of the endless series of symbols.” The individual human being is, therefore, itself a symbol comprising a multitude of other symbols: a reality defined by an endless series of symbols, under the umbrella of a metasemiotic regularity which emerges from all the rest.

Yet emergence is a two-way street, and when one thing emerges, it never leaves behind that which it moves beyond. As such, although really different in kind, human beings are not an anomalous *ex machina* aberration whose existence is explicable strictly by divine intervention. This would be to conceive of the universe as lacking coherence and to adopt the aforementioned criticism Heidegger levels at the Christian view of the world as against the human being. Put simply: is the human being an inexplicable anomaly, or the heretofore highest emergent being in the known universe? One cannot have it both ways.

Ironically, Heidegger's conception of Da-sein and emphasis on the mystery of dwelling linguistically, suggests a position of the human being as again apart from the world – as dwelling in a *Bildendwelt* or *Lebenswelt* which does not have a causative connection with the physical totality, to be either totally absorbed or totally free. Under such a consideration, the particular shape which a culture takes not only is but cannot help being arbitrary, inasmuch as its genesis lacks grounding in a teleological structure greater than itself. If the ontological difference remains an unbridged gap, human beings will always stand outside any discernible cosmic coherence.

Contrariwise, the Peirce-cum-Deely conception of the human being, the semiotic animal, is one where species-specifically human existence unfolds continuously with the rest of the universe (Deely 2007: 183–84):

the *esse intentionale* of the other present in the soul of the knower (including the physical or entitative being of the self as a substantial subjectivity) and present as shaped in and through the *species expressae*, moreover, which make that presence as including the physical surroundings something meaningful for me (or for you) as an animal, albeit rational, is present as founding a network of ontological relations whose multiple termini sometimes exist only objectively (as patterns principally of *relationes rationis*) and sometimes subjectively (as *entia realia*) and intersubjectively (as *relationes reales*) as well as in presenting the *known* world and the *known* self, that is to say, the world as and insofar as we are aware of it and are part of that awareness. Yet none of this objective world, as such, is, simply speaking, “external” to our awareness, for it is wholly the content of that awareness, quite within it, yet not wholly within it inasmuch as even the *entia realia* (both the *absoluta* or “*relativa transcendentaliter*” and the *pure relativa* or “*relationes praedicamentales*”) within it do not reduce to it[.]

To understand the semiotic animal, therefore, we need incorporate not only the intrinsic formal and material causal structures of the substantial human entity, but also the objective specifying causality whereby (Deely 2001a: 633) “attention is focused on this rather than that” in order that we can grasp the formation of the relational *Bildendwelt* that substantial entity inhabits. From such a perspective alone can we discover the proper unity to human life; wherein we can reconcile nature and culture. But this perspective requires the sort of

critical awareness which comes through the phenomenological method described by Heidegger – consisting in the destruction, construction, and reduction which allows to come to present the reality of what is, not least of which are the relations which constitute our experiences. A failure of critical control of our enculturating processes leads to careless augmentation of the natural by the anti-resolute, inauthentic errancy which obstinately obscures truth through the cultural enshrinement of in-sistence.

To demonstrate the interpretative augmentation of nature by culture, we will examine two prominent instances in which the cultural has augmented, possibly improving and possibly damaging, the innate teleological orientation of human nature and thereby developed the human symbol: sexuality and technology.

7.2.1 Sexuality

The common natural process of sexuality in all animals possessing sexual characteristics consists in the innately teleological process of biological reproduction. Ubiquitously, in alloanimal behavior, we find activity governed by this teleological tendency. The vast majority of sexual animals seek reproduction. The occurrence of non-reproductive non-human animal sexual behavior (e.g., homosexual action), being the exception to the rule, demonstrates only that the teleological governance of innate tendencies in material being is, on the one hand, malleable, and on the other, fallible. In every case, the end – the good *unconsciously* sought, or at least not fully consciously sought, by all animals but humans – is the successful production of a new generation, carried forwards as far as necessary into the rearing of the progeny until it is sufficiently mature to be (or at least become on its own) a similarly reproductively-capable individual. Attraction begins by sensory exposure leading to biological – chemical and neurological – interpretations which result in arousal, prompting attempts to attain release. It is a reasonable speculation that much of the emotional attachment found in sexually-intimate relationships among humans (and some other mammals) results from evolutionary selection: that those more likely to remain paired were more likely to procreate and rear, and that those who develop emotional attachments are more likely to remain paired.

Viewed within the personal *Lebenswelt* of a human being in the twenty-first century, sexuality is much more than mere biology; it is, instead, a pattern of relations existing within a broader cultural context, a pattern in which the biological is merely one of many nexus points for a multitude of threads. Many of the elements constituting the pattern of this sexuality are, in themselves,

entirely irrelevant to the natural process and yet become necessary for, or at least conducive to, its fulfillment. The sexual act itself is viewed not as intended only towards biological reproduction, but as either towards the strengthened intimacy and unity of a couple or as a means of pleasurable release. The former may include the latter, but if pleasurable release becomes the end, intimacy and unity are undermined; it violates the essential possibilities of any human being to be seen as a mere means. Sexual liaison with another than one's regular partner, consequently, not infrequently acquires the label of infidelity, of betrayal, and often precipitates the end of a relationship and likely the absence of any future sexual intimacy. Exclusivity, and particularly its permanent promise, therefore can become part of the pattern of sexuality for some individual.

Contrariwise, exclusivity can also be seen as the death knell of sexual arousal. Variation in sexual experience has been promoted – intentionally or not – in many popular depictions of modern life as part of the desirable object. It is therefore not uncommon today for the frisson of a new partner to be considered necessary for sufficient excitement and therefore everlasting exclusivity its suffocation. Consequently, promiscuity rises dramatically as “new and exciting” is uncritically folded into the cultural portrayal of the purpose of sexuality.

This tendency towards promiscuity, however, opposes other phenomena surrounding the cultural interpretation of sexuality: its association with vulnerability, intimacy, and commitment, over and above the pattern of rearing progeny which encourages parental union. In other words, the closeness and mutual exposure of sexual copulation seems bound up with issues of trust and security. As a result, our culture today experiences a schizophrenic desire, as M.C. Dillon adeptly summarizes (2001: 9):

New and forever cannot coexist: you just can't have both; you have to decide, and both choices involve regret. To make eternal vows in the height of romantic bliss is to indulge in wistful self-mystification. To make the same vows based on a calculation of lifelong security is to embrace an economy that deprives us of *poiesis*, the creative poetry of life.

One could quibble (and I think rightfully so) about the possibilities of *new* and *forever* in the dynamism of a lifelong relationship for which sexuality forms only one thread. But that is not the point, here; we are only investigating the constitution of sexuality as such. For some, commitment and the promise of forever are more important to the contextualization of the sexual act, such that it may fulfill its purposes of intimacy, unity, and even pleasure; for others, it is the that frisson of anticipation, the realization of some fantasy, or the thought of being found irresistible; and for others still, all too often, it is a combination of both tendencies, resulting perhaps in a continual spiral of disappointment wherein attaining one goal precludes attaining the other.

But where, and how, do these complex and often contradictory patterns arise? The complicated structure can only be explained by the dynamic relationality of culture and individual; of signs determining interpretants both from sources outside and within the errant freedom of human interpretation. The new and exciting is a common element of desire, but its centrality to the pattern of sexuality in many today stems no doubt from the ubiquity of such portrayal in every form of media: television, movies, music, and literature. In turn, private fantasy enshrines the association. For others, nerves stimulated (or, perhaps, paralyzed) by the possibility of abandonment, rejection, or dissatisfying one's partner can undermine sexual intimacy due to the ephemerality of past pleasures, liaisons, and emotions, whether within one's own sexual history or due to abandonment by, for instance, a mother or father. The two desires, for the new and the continual, arise in concert when the desire for certainty of commitment entails an expectation of the frisson to continue.⁸⁹

More specifically than overall expectations for sexual intimacy, which operate at a more general and common level throughout cultures, the idiosyncrasy of arousal often entails nuance as to one's individualized expectations in sexual situations, especially for the other as a sexual partner. Through indexical semi-osis, both genuine and degenerate (the two often, in some way, becoming conflated, inasmuch as the objective causes of arousal share a dynamic reciprocity with the interpretant), inanimate things, shapes, attitudes, demeanors, voices, smells, and nearly anything, can become vehicles for the interpretation of arousal in reference to an object (the other person). When these vehicles are omitted or fail to appear as anticipated, oftentimes arousal is either lessened or fails to occur entirely.

Sebeok notes that the fetish sign, as the extreme case wherein this vehicle becomes the object itself, entails a metonymic indexicality wherein the vehicle is taken *pars pro toto* (2001: 123). In some cases, another person (perhaps anyone at all, perhaps someone meeting a certain set of criteria – height, weight, clothing, etc.) may be a necessary part of the fetish, but the person *as person* falls into irrelevance; he or she becomes a mere vehicle for the object. In other cases, the fetishized object alone suffices and requires only presence – either to sense or to imagination – to produce arousal.

Fetishes may germinate through abnormal imprinting (Sebeok 2001: 126), but they undoubtedly develop over time through other means, not the least of

⁸⁹ This is the primary thesis of Dillon's *Beyond Romance*, a book which suffers many flaws but nevertheless contains profound insight into the contemporary situation of *eros* and romance in Western society.

which is continued dwelling-upon or fantasizing-about the fetishized object. Non-fetishistic idiosyncratic elements of sexual arousal, as well as culturally-promoted elements of norms for attraction (e.g., parts of human anatomy, attire, demeanor, etc.) develop in a similar fashion albeit without the deeply-rooted foundation.

Oftentimes these developments contribute to an irresolvable frustration: the resulting idiosyncratic-cultural construct of sexuality produces a framework seeking objects which do not exist. What sexuality “means” for the individual becomes something incoherent. It is possible that this incoherence arises from the incompatibility of one’s patterns for arousal with the innate biological tendencies; or from idiosyncratic desires which are culturally taboo; or from cultural mores which instill desires for unrealistic “perfections” of appearance; or, quite prevalently, for the end being pleasure itself and naught else. Ultimately, however, these proximate causes of incoherence occur due to the lack of a unifying teleological conception of sexuality in the first place. When our idiosyncratic-cultural concepts diverge from the natural – which includes but does not reduce to the biological – disunity prevails. In other words, when we “cast ‘grounds’ aside, suppress any demand for them, pervert them, and cover them over” (Heidegger 1949: 49/131) we divert from the species-specifically human nature which requires that the meaning of any concept include its authentic, resolute disclosure (cf. 2.3.3 and 3.1.3). Limiting the pattern of relations which constitutes sexuality to indexical associations of arousal or constraining its role in life to the production of pleasure is to ignore the essential sexuality of the human species and to become captives of a cognition-dependent Umwelt.

Yet we are not condemned to captivity by such sexual, or any other, idiosyncratic-cultural conceptual development. Both idiosyncratic and cultural frameworks of interpretation are inevitable products of human cognition and social interaction which can be conducive to fulfillment of human nature. Thus, neither personal nor societal history enforces captivity by incoherent frameworks (Deely 2001a: 162):

The transcendent, yet historical, possibility distinctive of human understanding is the capacity to envision the Umwelt in the light of alternative ways of connecting the past with the future. This is what makes the difference ultimately between the Lebenswelt as species-specifically human and the objective lifeworld or Umwelt as a generally common construct essential for the social life of any animal.

The phrase “alternative ways of connecting the past with the future” might sound like historical revisionism; indeed, the metasemiotic capacity of human thought allows for this pernicious trend to read into and judge the past with interpretations formed in the present. But simultaneously, it allows for viewing

the events of the past as they really were – or as near to their actual existence as our memories, recorded texts, and other forensic evidence can provide – such that we are not *determined* on a set course by those events and instead enabled better to face difficulties of the future. For seeing things as they actually are – in their naked *Vorhandenheit* presence to ourselves, instead of their *Zuhandenheit* usefulness in context – makes known to us the possibilities for those things in the possibilities for ourselves; which is to say that they are opened up to the freedom of interpretation which belongs exclusively to the semiotic animal.

7.2.2 Technology

The distance between the biological *τέλος* and idiosyncratic-cultural patterning of sexuality increases contemporaneously with the ability to control the biological; the “ability to control the biological”, notably, involving more than just mere technologically-enhanced intervention – as, for instance, naturally contraceptive substances (e.g., acacia gum) or abortifacients (such as Silphium), withdrawal, or even the cultural acceptance or toleration of infanticide. This control may either take the form of circumvention (as with contraceptive devices preventing insemination) or of dominating-alteration (as with any form of hormone-level adjustment, such as the combined oral contraceptive pill). It would be a mistake, however, to see mastery over biology as the proper cause (the confluence of efficient, formal, and final causes, broadly speaking) of this distance between biology and culture. At most, it is a material cause, insofar as it makes the possibility of that distance more easily realized. The proper cause is, instead, one of diverging ends, caused by pursuit of a goal at odds with the biological: namely, the goal of mastery itself. Heidegger describes this attitude as (1953b: 23/22 and 25/24) the “challenging gathering-together into ordering revealing” “through which the real everywhere, more or less distinctly, becomes standing-reserve.” He names this challenging to a standing-reserve “Enframing”, *das Ge-stell*; that is, a looking at beings according to a pre-determined and Procrustean framework of subservient use which is the essence of modern technology.

Since Heidegger wrote his *Die Frage nach der Technik*, there has been a considerable change in attitudes towards technological devices: more people are acutely conscientious today about the use of the “standing-reserves” of energy, of the dangers of myopically-perceived technological progress and the unforeseen consequences of environmental exploitation. Yet this change does not represent a shift in the mode of thinking; only a more careful development of the

same. When the dangers of technology threaten to obliterate the person, this entails an obliteration of the person's planning – consequently, to preserve that planning, one must be cautious with the technology. Such caution is not a break from the pattern, but a continuation of a long-standing and unconsciously adopted perspective. To recall (2.2.1), Heidegger notes that the essence of this modern technological thinking was rooted in the theory of classical physics (1953b: 22/21):

It remains true, nonetheless, that man in the technological age is, in a particularly striking way, challenged forth into revealing. That revealing concerns nature, above all, as the chief storehouse of the standing energy reserve. Accordingly, man's ordering attitude and behavior display themselves first in the rise of modern physics as an exact science. Modern science's way of representing pursues and entraps nature as a calculable coherence of forces. Modern physics is not experimental physics because it applies apparatus to the questioning of nature. The reverse is true. Because physics, indeed already as pure theory, sets nature up to exhibit itself as a coherence of forces calculable in advance, it orders its experiments precisely for the purpose of asking whether and how nature reports itself when set up in this way.

Since the advent of modern physics – the empiriometric pre-determination of the process of investigation which for centuries dominated ideoscopic science, and which still exerts an undue influence today – the eye of human inquiry has developed a tendency to see in its objects of inquiry not what eye brings means of seeing, but rather only what the eye has planned to see. This tendency, taken to its extremes, results not only in confirmation bias, but in blindness to all but that which can be construed as confirmatory. As a consequence, truth about the reality which falls outside the predetermined schema of inquiry receives no integration into the resulting *Bildendwelt*. And while it is certainly not the case that the entirety of Western civilization, or the currently developing global civilization, has adopted the *Ge-stell Weltanschauung* rooted in empiriometric physics, its subtle pervasion of culture – unattended by proportionate cenoscopic insight – has undoubtedly contributed to the fragmentation of that civilization and thereby, quite often, the world of the individual.

This fragmentation is clearly illustrated by the phenomenon of withdrawal into what could be called one's own world of practical solipsism: the implicit attitude of treating the whole world around oneself as no more than a means to self-determined ends. This practically-solipsistic phenomenon appears in multitudinous ways, from the abuse of a significant other to inconsiderate public behavior or the tendency to isolate from objects, noises, or intrusions found bothersome or uncomfortable – evinced in constant headphone usage, heavy filtration of social media streams, and the development of new technologies aimed at providing control over every aspect of one's environment: we control our temperature, our

lighting, have every convenience delivered to our doorsteps, nearly limitless selection of news media, popular culture, and entertainment, while drowning out all else. Countless resources are spent on appearance-alteration, be it by cosmetic surgery or exercise routines aimed at visible results. We have not developed the means for producing Nozick's hypothesized "experience machine" (1974: 42–45) but strive nevertheless to manufacture the same effect, to script the narratives of our lives. . . . and perhaps all the more insidiously, since the structuring of our environment through technological development produces a world more "real" than the manipulation of our neurochemistry, even if the end-result is no less narrow. As Nozick asks (1974: 43): "What else can matter to us, other than how our lives feel from the inside?"

Yet we are not condemned by technological progress or the enframing tendency of thought it engenders nor to the practical solipsism of satisfying naught but our own feelings. We may yet attain the authentic resolution necessary for a coherent and fulfilling human life. As Heidegger brings his *Die Frage nach der Technik* to a close, he recognizes that modern technological advancement "threatens revealing, threatens it with the possibility that all revealing will be consumed in ordering and that everything will present itself only in the unconcealedness of standing-reserve" (1953b: 34/33), but also that (1953b: 35/34) "there was a time when the bringing-forth of the true into the beautiful was called τέχνη."

That is: technology can be a means of avoiding sight of those things we find unpleasant, unwanted, or uncomfortable, often by suppressing, eliminating, or altering those things; or a means of better seeing that which is, as it is, and in accord with the way it ought to be – "ought" said not as demanding conformity to the laws of an invisible realm, but "ought" said as recognizing that there exist ways of being which are more fulfilling, as better accomplishing the coherent τέλος provided by both nature and culture. "Ought" said in this sense is the demand that we recognize a Thirdness come to presence, i.e., a relation between a being and its end, the defining Secondness belonging to a being, which governs the means necessary to that being attaining the proper fulfillment contained in its possibility as a Firstness (cf. Peirce 1903m: EP.2.197; Eberl 2014: 218).

The use of technology to further the *Ge-stell*, however, is a means for ignoring or attempting to circumvent these properly teleological relations; to impose, instead, a new "ought", an "ought" which presupposes the limitless right to self-determination as the fundamental good of human existence (cf. Jensen 2014: 162–81). Contrariwise, technology may be used in concert, coherently, with the governing relations of beings' genuine fulfillment. It may be used, as Heidegger suggests, to help bring forth the true into the beautiful.

For instance, technologically-derived knowledge of the function, behavior, and effects of different naturally-produced human hormones can allow for self-determination in regards to reproduction without resorting to self-domination, opening the door both for improved fertility when desired and improved means of avoiding conception when it is unsuitable or contrary to the overall good of life, while maintaining the benefits of sexual intimacy. Wireless communication technologies can not only provide crucial information in timely manners, but also allows for greater flexibility to accommodate a wider range of working environments and approaches. Someone with a strong ability to manage data but an aversion to corporate environments can or soon will be able to produce work of just as high a quality, easily integrable into the workflow of the company, from home or elsewhere – freeing the individual from the troubles of commuting and of cubicle life. Simultaneously, we may produce adaptive and energy-efficient lighting which rivals the economic benefit of fluorescent illumination without its attendant buzzing noises or visual harshness, allowing for the development of more pleasing work environments. We may develop medical technology which need not replace defective organs or body parts with mechanical substitutes, but which prevent the need for replacement by enhancing the ability of the body to repair itself. We may find ways to assist the evolutionary process without Procrustean genetic modification. We may find ways to exist through our natures that harmonize the goals that are genuine goods for both the biological and the cultural, for both the genetically-instigated and the culturally-developed teleological orientations. We may find, contra David Hume, the *ought* which emerges from every *is*; in short, we may, through the discovery of truth, allow for the emergence of the beautiful.

But the experience of what is beautiful, even when rendered through human actions, is always the experience of a Firstness, attaining to its proper end – attaining a fit Secondness – due to the mediation of Thirdness: which is to say that the experience of beauty is never a **product** of human action as such, but the result of human metasemiosis unfolding within the already-present semiotic framework of the universe. What requires recognition, above all else, is the reality of the governing relations by which we are, in our species-specifically human Firstness, united to our proper and fitting ends. We must clear the way for species-specific human Firstness to envelope in its grasp the reality of rules, laws, habits, and regularity, not as steps serving a plan of human order, but as an ever-emerging bulwark of knowledge defending what is true, for which edifice human agency is responsible. If we are to live coherently – that is, with a unity of the various in ordination to a greater end – we must recognize that this truth, in its own self-defining landscape, and not our will, governs the shape that our actions ought to take.

7.3 The cenoscopic discovery of purpose

Every world – every Umwelt, Lebenswelt, Bildendwelt – fragments unless it exists purposively. This purpose cannot be discovered by any ideoscopic science or empiriometric method – no amount of information will ever unveil for us the τέλος of human life. Rather, we can discover this only in light of the possibilities for ἐντελέχεια based upon the species-defining characteristics of human nature. As Aristotle put it, to discover the good life, we need to know what the *work*, the ἔργον of a human being is (c.349BC: 1097b22–33). Thus there is need for resolution to the *primum cognitum* – to species-specifically human Firstness, as the essential moment of metasemiosis, to *Sein* as the originary unfolding of all meaning (the culmination of the phenomenological process) – – and the structures enabling it; to the species-specifically human attributes (understanding our brain architecture and chemistry, the habituation of the entire nervous system, the development of our perceptual apparatuses, our culturally-shaped perceptual frameworks), as well as the universal, Categorical Triad which underlies every experience; a resolution back to the foundations from-which, is the first necessity for producing a coherent world.

But there is also need of a goal towards-which, for the purpose of continued coherent resolution. We can see the dangers of unresolved errancy in the human mistakes of sexual behavior and technology-usage. Knowing where we come from, how we are constituted, is beneficial not as a means to planning control over our environments and ourselves, but rather only insofar as it unveils to us truths about where we ought to go. To quote Peirce (1902g: *EP.2.124*):

Efficient causation is that kind of causation whereby the parts compose the whole; final causation is that kind of causation whereby the whole calls out its parts. Final causation without efficient causation is helpless: mere calling for parts is what a Hotspur, or any man, may do; but they will not come without efficient causation. Efficient causation without final causation, however, is worse than helpless, by far; it is mere chaos; and chaos is not even so much as chaos, without final causation: it is blank nothing.

Note well the phrase “the whole calls out its parts”; almost a colloquialism, yet it seems curiously parallel to the notion of emergence. The product of evolution from, say, phytosemiotic life to zoosemiotic life, while it moves step by step, degree by degree, is a real change wherein the reorganization of parts is for the sake of some higher whole, a whole which “calls out” those parts and orders them to its purpose. Likewise the product of complex brain activity is their final cause, what calls out and orders them to some purpose: namely, not the recognition of *X* as *Y*, but the ability to grasp what it means to be *Y* in

the first place – and what it means to be *X*, and for *X* to be *Y*, and so on, ad infinitum, in an infinitely spiraling pattern of discovery, resolution, re-discovery, abduction, deduction, induction, and ever onwards (cf. Deely 2010a: 96–98). While the “mechanism”, if we may steal this term, of emergence is the objective specification rendered through acts of semiosis – both virtual and actual – which allow for increasing degrees of interpretative capacity and thereby semiotic freedom, this objective specification itself depends upon a prior purposiveness, of a reason *why* the parts should be ordered to one another so as to result in an emergent reality.

This calling out of the whole to its parts for the sake of discovery, of knowledge, prevails not only in the intellectual achievement of the human being, but throughout the entirety of existence, through the very semiotic structure of reality. In other words (Peirce 1904a: *EP.2.324*):

It is of the nature of a sign to be an individual replica and to be in that replica a living general. By virtue of this, the interpretant is animated by the original replica, or by the sign it contains, with the power of representing the true character of the object. That the object has at all a character can only consist in a representation that it has so, – a representation having power to live down all opposition. In these two steps, of determination and of correction, the interpretant aims at the object more than at the original replica and may be truer and fuller than the latter. The very entelechy of being lies in being representable. A sign cannot even be false without being a sign and so far as it is a sign it must be true. A symbol is an embryonic reality endowed with power of growth into the very truth, the very entelechy of reality. This appears mystical and mysterious simply because we insist on remaining blind to what is plain, that there can be no reality which has not the life of a symbol.

“The very entelechy of being lies in being representable.” We should not misunderstand the word “representable”, here, to mean strictly that one thing can stand in place of another; no, rather, representation is best understood in the sense of re-presenting, of being a medium through which one thing is made present to another. The final cause, the ἐντελέχεια of being is its being representable and therefore capable of being known; thus the “very entelechy of reality” is growth into truth. And truth, as Heidegger shows so adeptly throughout his oeuvre, and as we have attempted to adumbrate here, is a tree whose root is ἀλήθεια: the unconcealing disclosure of what *is* through an everlastingly-recursive process. Where Heidegger was not so adept was in showing that this revelation of what *is* carries with it also the revelation of what *ought to be*, if we have mind enough to see with clarity the signs through which the disclosure is made.

Indeed, it is very hard to see the ἐντελέχεια of the whole: how we understand the rules governing an individual whole does not seem rightly applicable

to the whole of the universe (Martin 1997: 179–206 and 2004: 61–72). Thus while it is easy to see how a semiotic or intentional being-towards-being-known permeates the universe, why this is or ought to be the case seems, perhaps, clouded. Nevertheless, we know that purpose does indeed exist, at least in ourselves, and that we ourselves are called out to a truth greater than the confines of the self.

Conclusion: *Viae inventionis et resolutionis*

This book opened with three questions – why do we know, what do we know, and how do we know – and set for its aim to contribute some part of the answer to the lattermost of these. More specifically, it has aimed at two questions which perennially confound an understanding of how human knowledge is or can be attained: first, the indeterminacy of our cognition which leaves us always searching for some greater understanding, which leaves our understanding always incomplete; and second, the difficulty – following this ever-unsatisfied conceptualization – of resolving our various undetermined thoughts into some coherent whole. Rather than surrender the pursuit of these questions to ideoscopy, it has been here argued that only a cenoscopic approach can resolve the difficulty: for resolving both the questions of indeterminacy and coherence requires consideration of phenomena outside the purview of all ideoscopic science. The contemporary picture of knowledge acquisition suffers from a profound fragmentation: into ideoscopy and cenoscopy, and within each. While there have been efforts to resolve these pieces into a whole, something has been missing from our current cenoscopic endeavor.

With the aim of providing what cenoscopy has been missing, we sought to re-tread the paths already-worn by Martin Heidegger and Charles Sanders Peirce, whose phenomenological method and phaneroscopic science, respectively, provide a rich opportunity for a complementary insight into the nature of species-specifically human conceptualization and inferential cognitive progress in a suprasubjective intelligible world. Though they employ radically different language, we have shown that each seeks a theory of knowledge which evades the traps of dualism, materialism, and idealism and which, rather than finding a standpoint from which to “transcend” the internal-external divide of knowledge and objects, exposes that human beings are always already and invariably engaged with things of the world.

Heidegger’s phenomenological method – comprising destruction, construction, and reduction – brings beings into a context of disclosure unlike that found in any specialized science: namely, to the light of Being essential to the human disclosive capacity. This characteristic, often occluded in more conventional approaches to the study of human existence, Heidegger designates as “Dasein”: the *essentially* intentional dimension of human life. Awareness of humans as Dasein – that is, as essentially constituted by being-towards – leads us to the question of *Sein*: the Being without which we could understand no being, but irreducible to and incomprehensible by any quantity of beings. Pursuing this question draws us into a consideration of the *Welt* – the context of beings wherein a given Dasein lives and experiences *Sein* as the unifying, uniting

factor which allows for the disclosive illumination of beings. We are always-already-in this *Welt*; the world we experience is the relationally-constituted total structure of disclosive possibility including the cultural growth into which we have been born. Thus the human world is not only a *Welt* comprising the realities of nature, but a *Bildendwelt* which augments and improves or hinders and deters the development of nature.

These relational possibilities of human worldhood are infinite and can always continue to unfold farther – which revelation hints at an explanation for the species-specifically human conceptual indeterminacy; namely, its inherent relationality. For Heidegger, this is seen in his recognition that meaning is an always-unfolding-discovery of what things are and could be, which unfolds against what is itself no-thing at all; the realization that outside possibility is *das Nichts*, which is not *nihil*, but neither is it something which can be grasped, held, identified or articulated. With this realization, the question of our experiences' coherence arises more sharply: that is, our experiences of the world as mediated naturally and as mediated culturally seem potentially at odds with one another, since the cultural may veer in any direction with no guidance, no limitation; and it may seem that, to resolve this difficulty, we either surrender into nihilistic despair or we leap into theistic teleology.

Against this dichotomization, we note that the species-specifically human cognitive experience of what Peirce named Firstness – as what belongs to the “intellect” – enables a unique semiotic capacity: the ability to understand the (Deely 1982: 103) “dimension of existence. . . independent of relations to the knower” and thus allowing us to realize objects themselves, in this independent dimension of existence, as possessing a constitution to which we ourselves are not necessarily relevant and on which we may but need not have any influence. This capacity of self-transcending realizations, the species-specifically-identifying characteristic of our cognitive capacity – i.e., which defines the understanding of humans and thus distinguishes humans from all other animals – which ensures we are already-always-in-the-world not merely as practical agents but as intellectual ones, is demonstrated through the Categories of Experience. For the triadic structure of Firstness, Secondness, and Thirdness shows the inherent possibility for the growth not only of thought, which proceeds from vague indeterminacy to general indeterminacy, but also the growth of cognition-independent being, which proceeds from raw indeterminate potential to structured indeterminate governance.⁹⁰ In other words, not

⁹⁰ Objections that this claim of the triad transcending to other beings strays into an anthropocentric or even anthropomorphic view of the universe fail to grasp the significance of Peirce's

only is our knowledge constituted by a continuous process, but so too the world. That is, evolutionary growth of the universe is the product not primarily of *vis a tergo* efficient causal forces but of *vis a prospecto* Thirdness which ensures a synechistic order of being. The species-specifically human capacity for abductively inferring Thirds not only as laws to be followed but as objects in and of themselves for intellectual consideration – objects of intelligible and not merely referential meaning, objects which exist in the dimension of existence independent of their relation to ourselves – explains the growth of human knowledge, for the idea generated by the abductive inference of a Third is itself also a First, open to further determinations of its innate vagueness.

What we see, therefore, is an unexpected complementarity between Peirce and Heidegger in their treatments of species-specifically human experience and the unfolding of knowledge: complementarity, namely, in their treatments of *das Sein des Seienden* and the Categories of Experience; between anthroposemiotic Firstness and *das Nichts*, and between Thirdness and the hermeneutic circle. These complementary treatments unveil a truth central to resolving the difficulties of *how* we know: namely, that human conceptualization's indeterminacy is not an impediment but rather a *necessity* to the grasp of meaning: meaning not only as intelligible but including within that intelligibility the referential and teleological aspects which go to forming the whole of the supra-subjective semiotic web, i.e., the semiotic constitution of the world.

Moreover, recognizing the semiotic constitution of the world – and especially of the species-specifically human *Bildendwelt* – shows the possibility of a continuous growth of human thought from icons, through indices, and into symbols: of resolving nature and culture into a coherent whole. Specifically, the ability to directly engage symbols as in-themselves-Thirdnesses – and not just laws to be followed, but real generalities capable of governing our engagement of meaning – can elevate our merely individualistic and localized understanding of meaning from private *Lebenswelt* and *sociosphere* into a trans-generational world of genuine culture. For too long, our cultures have been separated by gulfs of misunderstanding: between East and West, between one country and its neighbor, between religious divides, between academic disciplines, between local traditions and practices, and so on. But with a revised understanding of how human beings attain and shape their knowledge, we are capable of finding truly universal truths which not only evitate the needless

account of species-specifically human cognitive Firstness, which is not a feeling as an occurrence of raw subjectivity, but rather the experience of unadulterated presence and intelligible possibility. Cf. 4.1.1.

misunderstandings of intercultural opposition, but which can embrace the distinct goods found in disparate traditions without compromise.

To close these gaps requires reflection and a process of semiotically-mediated inquiry conducted in the phenomenological method. We hinted at this with two inquiries into two prominent difficulties faced in the current global *Bildendwelt*, technology and sexuality; but this approach could expand into education, physical and psychological health, economics, politics, and so on, for the growth of the human symbol can never be completed.

For ours is an *a priori* evolutionary universe; that is, the beings comprised by the universe possess an innate possibility for evolutionary unfolding, and given their actual conditions, inevitably unfolded into this evolution (cf. Jämsä 2008). Some see in this the continual manifestation of purpose: not a Laplacian inevitability of progress, but the pursuit by every individual of its own betterment: what Peirce named *agapastic evolution* (1893c). We could also call this pursuit of purpose the growth into Thirdness. The emergence of autopoietic systems capable of varying degrees of semiotic freedom from matter possessing no semiotic capacities of its own, though determined by a structure which can be described semiotically, cannot help but produce wonder in the humble mind of a genuine inquirer. Progress may not be inevitable, shot-through as all material being is by the tychic principle, but the universe nevertheless inherently possesses a structure which makes progress capable. While many may deny that the universe has an intrinsic teleologically ordering, the fact that it is capable of having an emergent teleological ordering *is itself an order* (cf. 4.2.3). In other words, (contra Hoffmeyer 2010a: 385), if human science – cenoscopic and ideoscopic alike – is able to explain any lawfulness of the world, it is only because there is a law there to explain; including the law of a tendency toward emergently-increasing lawfulness, i.e., the *vis a prospecto* law of Peirce's agapastic evolution (1893c). Moreover, the inseparability of tychism from synechism leaves indeterminate also the path of human beings; for the same structure common to all the universe is common also to all human persons, including human thought, leaving a wide open (though not infinitely malleable and limited by the availability of resources) field for autopoietic constitution of both individual lives and cultures. Indeed, with the control over consciousness possessed by human beings, we are not only capable but also responsible for our continued development.

Correlatively, this indeterminacy allows not only for progress towards genuinely bettered modes of existence. It allows for cruelty, for selfishness, for solipsism; for blatant and unintelligent disregard of what it means to be human; for manipulation of one's own body contrary to the holistic good of the human person, and for manipulation of the minds of others to serve one's own goals or

ideologies. The institutions we create to serve as channels of cultural development – government, political movements and parties, artistic ideologies, scientific endeavors, religious and educational institutions – not infrequently come to be used against the true human good, often by coming to believe that they alone are capable of providing it. These institutions diverge from their purpose by discovering something true and perhaps even beautiful and subsequently interpreting it in a way incoherent with the whole of truth and beauty. In short, the indeterminacy of human understanding allows for falsehood to triumph over truth.

How then are we to progress without error? It is unlikely that we can. But we may nevertheless seek to correct the errors we make, and to minimize their number, by seeking to rectify the interpretations of our discoveries through resolution to the principles which govern our existence. Chief among these is the principle of non-contradiction. What else could underlie the process of cognitive synechism? So long as we can grasp the manner of a thing's being, we may reconcile it with the principles of our understanding, a process which in Thomas Aquinas was termed the *vía resolutionis*.

But similarly we need a principle of resolution towards-which, lest we meander aimlessly. Scholasticism said that goal was knowledge of metaphysics, and thus, although beyond the ken of human cognition's natural powers, ultimately of God. The basis of this claim was not a fideistic proclamation or a mere derivation from Scripture, but the Aristotelian conception of *ἐντελέχεια*: a fullness of actuality – God conceived of not primarily as father, or savior, not as law-maker or the mysterious force beyond the veil, but as ultimate perfection of actuality, as the simultaneous and atemporal identity of all good. Summarily, the argument states that, if a knower becomes in some way its known, it attains something of the known's perfection; if we may attain knowledge of God, we would attain an ultimate perfection. Though our discovery, the *vía inventionis*, always depends upon the first moments of realization, it is "called out" by a final, purposive cause.

But if it turn out that we are such as can know God, as God is, it cannot occur in this life. The travails of the temporal, including the absence of a divine conclusion in the researches of the academy, has thieved the world of belief in the infinite and eternal, and thereby denuded our world of a consistent, coherent ordering teleology (Martin 2004).

Yet I do not believe this default position, the Godless and the ateleological universe, need persist. We see in the human being an innate yearning for something more. As Frankl wrote (1946: 73), "It is a peculiarity of man that he can only live by looking to the future – *sub specie aeternitatis*." We yearn for the unitive Thirdness which collects the signs perfuse throughout our existence into a

coherent and pointed whole. This is not a theological claim and I do not think one need believe in God to pursue this yearning; rather, it is a recognition that *order* perfuses our experience, even of the universe as it exists far beyond our own limited human Umwelt and that this inherent orderliness of the universe opens the doors to human lives having a definite and innate purposiveness.

Thus, even though we may disagree on its particulars, we can commonly find the principle of that coherence – a perfused orderliness of the universe – in the continual discovery and unfolding of the collective human intellectual *ἐντελέχεια*, in the symbolically-progressing growth into truth through which we may discover infinitely more beauty and goodness. We concluded our general introduction by a consideration of “meaning” – that often-amorphously used phrase which conflates the intelligibility of an object, the reference of a sign, and the purpose or importance of a belief – and have throughout this book attempted to point to the primacy of the intelligible. This interpretation of meaning has itself been an attempt to clarify and elaborate the symbolic concept of “meaning”, to the pursuit of which we hopefully exhort the reader.

I believe that this pursuit of a continuously-unfolding, developing, growing, and improving grasp of meaning was the goal of Peirce himself in his pragmatic formulations (1905: *EP*.2.343–44 and 345):

...the pragmatist does not make the *summum bonum* to consist in action, but makes it to consist in that process of evolution whereby the existent comes more and more to embody those generals which were just now said to be *destined*, which is what we strive to express in calling them *reasonable*. In its higher stages, evolution takes place more and more largely through self-control, and this gives the pragmatist a sort of justification for making the rational purport to be general.

...continuity is an indispensable element of reality, and that continuity is simply what generality becomes in the logic of relatives, and thus, like generality, and more than generality, is an affair of thought, and is the essence of thought. Yet even in its truncated condition, an extra-intelligent reader might discern that the theory of those cosmological articles [in *The Monist* from 1891–93] made reality to consist in something more than feeling and action could supply, inasmuch as the primeval chaos, where those two elements were present, was explicitly shown to be pure nothing. Now, the motive for alluding to that theory just here is that in this way one can put in a strong light a position which the pragmatist holds and must hold, whether that cosmological theory be ultimately sustained or exploded, namely, that the third category, – the category of thought, representation, triadic relation, mediation, genuine Thirdness, Thirdness as such – is an essential ingredient of reality, yet does not by itself constitute reality, since this category (which in that cosmology appears as the element of habit) can have no concrete being without action, as a separate object on which to work its government, just as action cannot exist without the immediate being of feeling on which to act.

Appendices

These appendices are intended to clarify parts of the main text which might appear obscure. The first appendix provides some clarifications regarding certain “structures” of phanerescopy, phenomenology, and semiotics, which were not explained fully in the main text for the sake of flow and concision. The second appendix provides a glossary of key terms, both as a reference and as an attempt to clarify the terms’ meanings in sharper relief.

Appendix 1: Structural clarifications

There are three main difficulties which I think it would be helpful here to clarify. The first is the alluded to connection between the nine presentative forms of the Categories of Experience and the dynamic connections of Heidegger’s *Möglichkeit*, *Boden*, and *Ausweisen*. The second is what we have termed the “semiotic ladder”, demonstrating various configurations of interpretant structure, and the explanation of its interpretative possibilities in terms of the “phenomenological process” – destruction, construction, reduction. The third is the twofold nature of the intellectual concept as symbol and as icon.

Appendix 1.1: Presentative forms and the grounding of transcendence

In his “Sundry Logical Conceptions”, Peirce makes the following pivotal observation concerning the modes of appearance of the Categories of Experience (1903e: *EP.2.272*):

In the ideas of Firstness, Secondness, and Thirdness, the three elements, or *Universal Categories* appear under their forms of Firstness [cf. Peirce 1903i: *CP.1.530–544*]. They appear under their forms of Secondness in the ideas of Facts of Firstness, or *Qualia*, Facts of Secondness, or Relations, and Facts of Thirdness, or Signs; and under their forms of Thirdness in the ideas of Signs of Firstness, or Feeling, i.e., things of beauty; Signs of Secondness, or Action, i.e., modes of conduct; and Signs of Thirdness, or Thought, i.e., forms of thought.

These nine presentative forms (a term borrowed from Jacques Maritain’s *Degrees of Knowledge*, 1959: 119–20) are considered by Peirce only insofar as they appear to us, as human beings. However, I believe they are useful tools for understanding the various scaffolds of semiotic freedom which belong to differing kinds of life. They can help us to distinguish what it is and why it is that there are profound differences in environmental interaction and awareness between plants,

animals, and human beings. I discussed this at some length in 4.1.4. Here, however, I want to elaborate upon an observation given in 6.3.1, namely that the three grounds of species-specifically human transcendence – which is not from “subjective” to “objective” but rather from “ontic” to “ontological” awareness – which Heidegger names *Möglichkeit*, *Boden*, and *Ausweisen*, and which we have translated as possibility, surroundedness, and pointing-out, can be understood as the dynamic human experience of the categories in these nine presentative forms.

In other words, the specific comportment of human intentional consciousness, its being of our about something, is grounded in Dasein’s characteristics of possibility, surroundedness, and pointing-out, which three terms signify the progression through and unification of the appearances of the world in the presentative forms of the categories. “Possibility” signifies not just the idea of Firstness, the experience of qualia, or the experience of feeling, but their essential unity in the “there” of Dasein’s ontologically-constituted world. To help illustrate both the presentative forms themselves as well as their connections, let us lay them out (Table 2):

Table 2: Presentative forms of the Categories of Experience.

	Forms of Firstness	Forms of Secondness	Forms of Thirdness
Firsts	Idea of Firstness	Qualia [Facts of Firstness]	Feelings (Things of Beauty) [Signs of Firstness]
Seconds	Idea of Secondness	Relations [Facts of Secondness]	Actions (Modes of Conduct) [Signs of Secondness]
Thirds	Idea of Thirdness	Signs [Facts of Thirdness]	Thought(s) (Forms of Thought) [Signs of Thirdness]

Firsts, instances in which we experience Firstnesses, come as ideas, qualia, or feelings. Seconds come as ideas, relations, or actions. Thirds come as ideas, signs, or thoughts. Forms of Secondness are attended by the postulation of their factual condition – that is, indicating that qualia, relations, and signs are experienced not merely as possibilities, but also as actual existences. These actual existences, in the forms of Thirdness, are experienced as signs, in which the experienced – feelings, actions, and thoughts – are experienced within the governing Thirdnesses of beauty, modes of conduct, and the forms of thought (contemplation, musement, abduction, deduction, induction, judgment, composition, division, etc., etc.).

Only human beings are able to access the Categories in their forms of Firstness, i.e., as ideas. While Firstness occurs in any being which can be said to experience, Firstness *itself* is accessible only to a being capable of grasping things themselves, in themselves. This is the world-projecting possibility of understanding, which is itself intimately connected to the experience of the forms of Secondness and of Thirdness, as the sources from which those ideas are grasped in their primordially as possibilities.

The Categories in their forms of Secondness constitute the environmental surroundedness from which Dasein takes its factual basis: thus qualia, relations, and signs are all *facts* of Firstness, Secondness, and Thirdness. Further, the Categories in their forms of Thirdness are each modes of “taking-as”: that something is a thing of beauty, a way of acting, or a way of thinking – each is constituted such by a *relation* between one and another (even if, in the feeling of beauty [or revulsion, or any other such feeling for that matter], it is the relation as an undivided whole which appears to us).

But because the Categories in their forms of Secondness and Thirdness are understood by human beings inasmuch as those appearances can be resolved into their forms of Firstness and thus comprised under the *ideas* of them as possible, each form is open to being understood in itself, as what it is in itself. This openness of the objects of our experience to understanding produces, as Heidegger says, an *excess of possibility*, which draws us into the fully-transcendental question, that of “why” (1949: 48/130): “In the projection of world an excess of possibility is given with respect to which, in our being pervaded by those (actual) beings that press around us as we find ourselves, the ‘why’ springs forth.”

Appendix 1.2: The semiotic ladder, interpretation, and phenomenological process

Figure 1 demonstrates what we have termed the “semiotic ladder”. It consists of five different possible configurations of semiosis structure: 1) virtual semiosis, involving a vehicle, object, and immediate interpretant; 2) basic actual semiosis, adding a dynamic interpretant; 3) basic actual semiosis within a system, with a final interpretant outside the individual, or external final interpretant; 4) complex actual semiosis of an individual, wherein a learning process occurs through an intrinsic final interpretant; and 5) complex actual semiosis of an individual within a semiosis, wherein there is both learning and a systematic adaptation, such as occurs in cultural development.

Though some would deny it is semiosis at all, virtual semiosis (case 1) involves a representamen or sign-vehicle (SV), immediate object (IO), and immediate

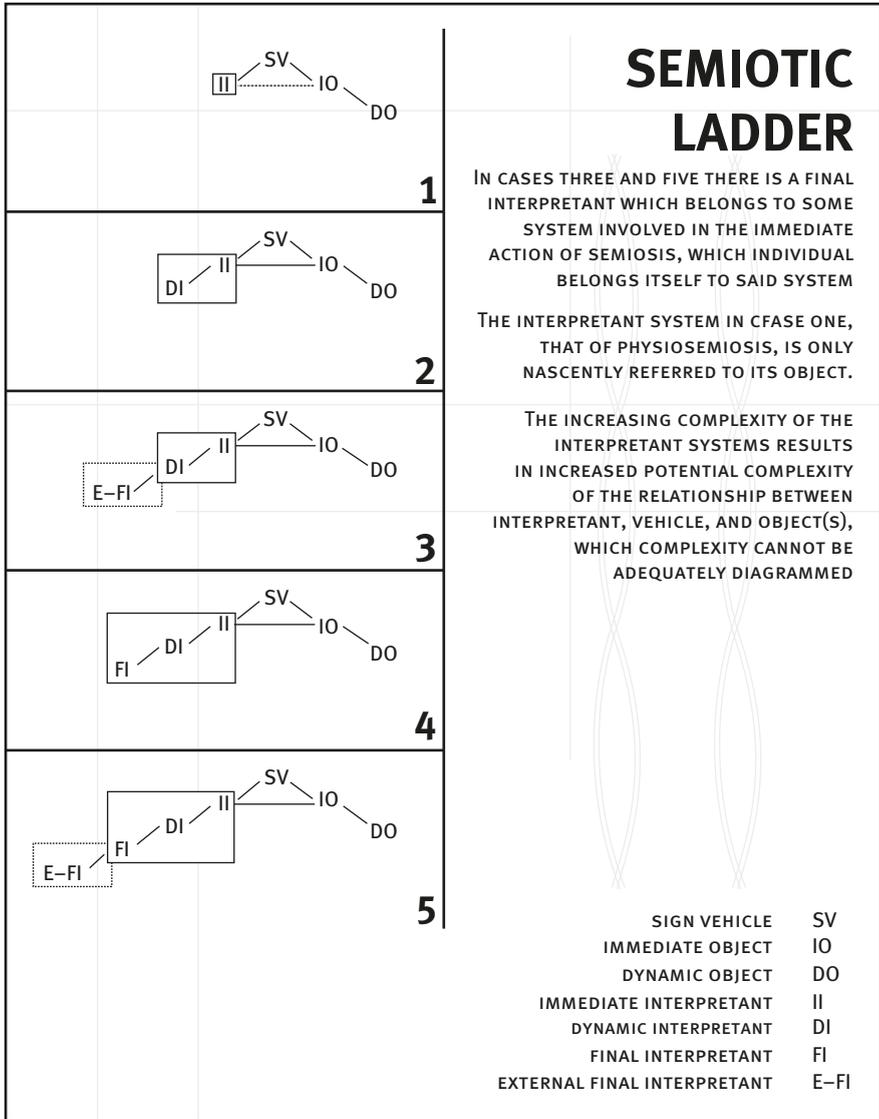


Figure 1: Semiotic Ladder.

interpretant (II). This basic triad is the essential structure of semiosis. By necessity, a dynamic object (DO) is also involved, but since the relation between immediate interpretant and immediate object is only virtual, the dynamic object is left entirely obscure and produces no actual effect. This is the structure present in all

dyadic relations: a determination is made upon an interpretant but does not alter that interpretant's orientation back to the immediate object in a meaningful way. The likelihood of the interpretant developing to the degree that its orientation *can* change, however, increases proportionate to the number of determinations made upon it. When this occurs, albeit only a momentary alteration which ceases as soon as it begins, there exists for a moment the thinnest nascent semiosis.

At such a point, we encounter an instance of actual basic semiosis (case 2). That is, the interpretant has developed sufficiently to the point that it receives the determination rendered by the sign-vehicle and subsequently acts in accord with that determination. Thus, there is a distinction between immediate and dynamic interpretant (DI) – in addition to the essential structure present even in virtual semiosis – rendering the relation back to the immediate object actual in an act of interpretation. In other words, the effect of the sign-relation is that the immediate object is somehow “taken-as”. In this case, the dynamic object has an actual effect and therefore can properly be considered a part of the semiotic system.

But quite often, actual basic semiosis itself takes part in a larger system (case 3), such that, outside of the twofold interpretant structure of immediacy and dynamism, there exists a cause or a purpose which both drives the interpretation process and which itself learns from it by collating the dynamic interpretations of the individuals in an adaptive process. This is the external final interpretant (E-FI), which need not exist in any individual but may exist among them intersubjectively. It is behavior which is “mindful” but not in any “mind”. In this regard, dynamic objects can have a profound effect (think of the process wherein weather and growth conditions trigger locust swarms, for instance).

Final interpretants can, however, and often are, inside the individuals performing the interpretative acts (FI). This is the structure of complex actual semiosis (case 4), where the relation between object, vehicle, and interpretant becomes itself a residual part of the interpretant structure. That is, the individual itself possesses the means of self-alteration and development of its interpretant structure, such that through a collation of its dynamic interpretive acts, it changes how it will interpret in the future. This is the process of learning within a mind. Any being which exhibits the presence of an internal final interpretant would, I think, have to be considered as a cognitive agent.

Finally, there can be (case 5) semiosis in which all seven elements are present: dynamic and immediate objects, a sign-vehicle, immediate, dynamic, internal *and* external final interpretants. Such a system occurs, I think, in evolution; but also in culture.

What should be patently clear in this system is the central role of interpretation in the constitution and behavior of interpretant systems. Without

interpretation, semiosis can only ever be virtual. With interpretation, the object can be taken-as not only in the immediate situation, but in the development of learning: not only of the individual, but also of the group. Upon interpretation hinges the accuracy of the interpretant's relating back to the object. For human beings, where this accuracy is particularly important is in not only ascertaining the proper immediate object but in pursuing the dynamic object.

That is, while we may and often do, out of necessity, interpret things according to the immediate practical concerns which dominate us in the here and now, our possibility for interpretation extends to making an identity of immediate and dynamic objects, *even though the dynamic object is in itself inaccessible*. That is, through our acts of understanding and interpretation we take the immediate object as itself a sign of the dynamic object and infer from that sign the nature or the reality of the dynamic object itself, despite its never appearing in itself. All the more crucial is it, therefore, that we do this critically and carefully. To this end, the phenomenological process of Heidegger is immensely valuable. We must *destroy* the uncritical appropriations which we have adopted that shape our interpretations; we must *hold ourselves* as equiprimordial with the objects considered (and thus, 2.1: "see that we ourselves are equiprimordial with beings in the revelatory reality of Being") in order that we may know what is of ourselves, what meaning those objects have in the totality of our experiential context; and we must also bring that object back into the originary possibility of disclosure, *das Nichts*, to see the truth of the relations whereby the dynamic object is in fact disclosed to us.

Appendix 1.3: The sign-vehicle as symbol and as icon

A major proposition of chapter six was that the intellectual concept, attained through a species-specific process of intellection, can be seen both as a symbol and as an icon. Here we have attempt to illustrate this diagrammatically. The X to the left of the diagram (Figure 2) is the concept. As a symbol, it is seen to govern 1–5, at right of the diagram, as the X which is present in all of them. As an icon, it is seen to be replicated with identity equally in all five instances. This twofold functionality of the concept is essential for understanding how it is that we can know things as they are in themselves while still grasping them in their diversity from one another. Most importantly of all, understanding the intellectual concept as both symbol and icon shows it as the essential connection between the indeterminacy of the general and the indeterminacy of the indefinite.

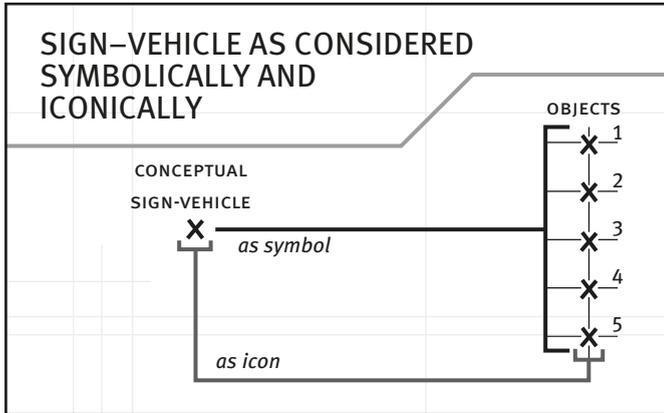


Figure 2: Intellectual concept as symbol and as icon.

Appendix 2: Language

John Deely often said to me that the greatest difficulty in saying something new was finding the right words: use neologisms or even new formulations of existent words and no one will grasp your meaning; use old words with new intended meanings, and you can be certain that no matter how much you try to clarify your use, old meanings will inevitably creep into the interpretation of your assertions.

This anecdote aptly characterizes the lifelong verbal struggles contorting the written oeuvre of Martin Heidegger, who saw language – as a tool, as any recorded and regulated system of communication; language as particular, historical reality – for the double-edged sword that it is. That is, Heidegger saw language as differentiated in its essence (as a kind of possibility-for-Being) and in its historical reality (as it is actually experienced). Heidegger acknowledged that language as experienced is the only way of access to *Sein*, but is also that which covers up *Sein* (1936–38: 83/66): “Every saying of being is couched in words and namings which, as expressions of being, are liable to be misunderstood when taken in the sense of the everyday view of beings and thought exclusively in that sense. . . the word itself already reveals something (something familiar) and thereby conceals that which is supposed to be brought into the open in thoughtful saying”. His “stratagem” for dealing with this was that any treatment of a saying: (1936–38: 83–84/67): “within certain limits must always accommodate itself at first to the ordinary meaning and must proceed in company with that meaning for a while, in order then to call up at the right moment an inversion of thinking”.

This is a valid stratagem for dealing with students in the classroom, with whom a teacher interacts day in and day out, so that the inversion may be explored in its manifold consequences, so that the word may be *spoken* in the sense that Heidegger meant, where language may be (1947: 326/249) “the clearing-concealing advent of being” that lets beings be. To think through language in this fashion is the task of every individual, every thinker; to see how language is not an *a priori* determinative system for the expression of valid meaning, but rather the originary unveiling of what is. Indeed, it seems that Heidegger abandons Husserl’s pure grammar not because “grammar” does not belong with the essence of language, but because a pure grammar as *antecedent* to speaking – no less than a historical grammar – inverts the order of disclosure, making the determined structure prior to the being within which that structure can be disclosed. If we are to have a grammar pertaining to the essence of language, it needs to be a grammar of disclosure for what is, rather than a science which

determines what is “proper” to speaking – just as a logic which determines the “proper” way of thinking mistakes the nature of the λόγος (cf. Heidegger 1934: 169/145). I do not know whether Heidegger thought that such a “grammar” was unobtainable – though, certainly, he thought a “logic” of the essence of language was possible (cf. *ibid*), so it stands to reason that such a “grammar” would be as well.

But this stratagem of inversion concerning the meaning of words, while sound for the individual and in the individual’s immediate sphere, is a terrible approach to writing, where the context of a word’s disclosive capacity may be misappropriated through a concatenation of misunderstood words – words which are never clarified in their meaning, words which receive no inversion, which receive no re-entry into the openness that the writer intended. Such is evidenced even by Heidegger’s very vocabulary: *Verfallen*, *Geworfenheit*, *Destruktion*, *Welt*, *Sein*, *Seyn*, *Lichtung*, *Wahrheit*, *Nichts*, *Ereignis*, and so on. This difficulty is amplified tenfold with a translation. Take *Lichtung*, for instance: lighting? Clearing? Opening? Do we gain or lose by the ambiguity? Does the associable imagery assist or hinder? Do the disputes about the imagery and the translation aid us or harm us? Or consider the treatment of ἀλήθεια and the meaning of *Wahrheit*. Does not the oeuvre of Heidegger, across generations, suggest some ambivalence or equivocation with their usage – an obscurity that he never himself clarified?

On the contrary: there is great value attained in digging into the vernacular, into its use, its meaning, its history, and even in the inversion, the revelation of a deeper history, of a deeper disclosure which may be rendered through the common word. But this provides us, nevertheless, no philosophically-scientific vocabulary that may be used to any satisfaction. Loosening the contortions of common semantic misappropriations and malapropisms ploughs the field but does not sow the seeds. We need to re-vitalize our particular languages continually, to be sure; but that does not mean we should not develop them with some rigor, clarity, and precision as well (Peirce 1903o: 263): “the woof and warp of all thought and all research is symbols, and the life of thought and science is the life inherent in symbols; so that it is wrong to say that a good [particular] language is *important* to good thought, merely; for it is of the essence of it.”

That is: I believe Heidegger is right that the *original* language – the essence of language – is the poetic where *Sein* comes to disclosure: not only the λόγος ἀποφαντικός (1925: 116/85), “das Sehen-lassen des Gesprochen an ihm Selbst” as a method of θεωρεῖν, as “discoursing in the sense of communicating the apprehension of a subject matter”, but as (1934: 170/141) the “world-forming [weltbildende] power. . . where it in advance preforms and brings into jointure the being of beings [*das Sein die Seienden*]”; that (1947: 319/243) “if the human being is to find his way once again into the nearness of being he must first

learn to exist in the nameless. . . Before he speaks the human being must first let himself be claimed again by being, taking the risk that under this claim he will seldom have much to say”; that (1947: 326/248–49) “In its essence, language is not the utterance of an organism; nor is it the expression of a living thing. Nor can it ever be thought in an essentially correct way in terms of its token character [*Zeichencharakter*], perhaps not even in terms of the character of signification [*Bedeutungscharakter*].”

But I also believe that we need the λόγος ἀποφαντικός as a means whereby we may communicate the Being of beings, and that it requires, as Peirce would have it, a good language of symbols. The destruction of our linguistically-calcified conceptualizations through destruction serves an aborted purpose if we do not build up something anew from the ruins; and it appears that Heidegger – even as one who stood against the then-dominant paradigms of grammar and logic as thought-determining to be “*a monstrous violation of what language accomplishes*” (1933–34: 102–04/81–83) – seems himself to have left open if never to have himself advanced (1933–34: 106/83–84, emphasis mine): “First a real insight into the essence of language must be gained through more originary contexts of experience, and *then science can build upon this ground.*”

Appendix 3: Synechism and semiosis

This issue – the extent of semiosis within the cosmos as understood through a synechistic perspective – causes a considerable degree of disagreement. On the one hand, there is the difficulty of how from mere “matter” there can emerge through continuous processes something like “mind” (cf. Deacon 2012; Copley 2016: 4); on the other hand, there is the difficulty of whether the inorganic acts in a way which can be described as “semiotic” without using the term equivocally. I will attempt to answer the second difficulty. While this attempt makes no explicit statement on the evolution of mind from matter, it nevertheless stands obliquely related.

There are two key points where the interpretation presented in this book – interpretation both of Peirce and of nature – concerning a synechistic understanding of the semiotic label as applied to the inorganic which deserve some elaboration, inasmuch as they will rightly be contested. Advocacy for the reality of physiosemiosis puts my interpretation in the minority, and against the general consensus held throughout much of the semiotics (and especially the biosemiotics) community that life and semiosis are strictly coextensive. **First** of these issues is the extension of “mind”, “thinking/thought”, and “life”, into mindless, unthinking, and unliving being. Though it does not seem Peirce ever in fact intended this as a panpsychism – he often qualified his ascription of “mind” to atoms, etc. – it uses such a language. I believe this psychic extension arose because Peirce struggled with reconciling two observations – one, that irregularity pervades the entire universe and two, that irregularity implies something at least life-like. To steal a phrase from G.K. Chesterton (1925: 256), “A dead thing can go with the stream, but only a living thing can go against it.” If there is deviation from regularity which either is itself or else leads to something more than mere chaos – if that deviation results in a greater degree of organization or actuality in the Aristotelian sense – this increase implies a non-mechanistic cause of change. It would be a mistake, however, to think that this implied vitality belongs to the things so-departing *in se*, as though they did not exist in a relational context through which and only through which their “vital activity” can occur; that is, were there naught in existence but a single atom, it would be in no sense “alive”. The implication is ultimately, therefore, not that life is constituted from a bottom-up part-to-part emergence, such that “slightly living” things go piecemeal towards making up life proper, but rather that all inorganic beings are directed towards life as towards a final cause, a cause which governs even the most lifeless and inert beings. Because the universe consists not only in firsts, but also seconds, and not only in firsts and seconds, but also in thirds, the

atomic – even the subatomic – is always-already in a context which is virtually and in irregular irruptions actually albeit nascently towards life.

It may be objected: this “final cause” directing the activity of the inorganic sounds like theistic handwaving or, even worse, an “intelligent design” argument; that, because the evolution of the universe has taken this particular course, it must have been ordained to do so. Attributing final causality to the operation of the inorganic seems to require a mind – and not merely the effete mind which Peirce claimed, but, as architect of the entire cosmic correspondence which directs beings towards evolution, a strong mind; divine, even. It is not a God of the Gaps argument, but a masked occasionalism.

On the contrary, “final cause” is said in two different but connected ways: external and internal. Neither is said with absolute univocity, but admits of degrees, much as is found in life and semiosis. An external final cause is some good outside that on which it has an effect and for the sake of which the effect is “moved” towards it. Examples would be the hierarchy of arts that Aristotle describes in *Nicomachean Ethics* I.2, or the victory of the army which guides the individual actions of each soldier. An internal final cause is some good which by nature the effect is always-already ordered towards and which therefore always has its effect. Examples include biological reproduction, the acquisition of knowledge by humans, and – an instance of the point debated, but only in a near-equivocal sense – covalent bonding. While none of these examples are always *actually* pursued, they are always orientations of the being in question; orientations which may be interrupted, frustrated, or damaged, but orientations nonetheless. Given the right conditions, it is of the nature of living being to reproduce, of human being to attain knowledge, and of an oxygen atom to covalently bond with a hydrogen molecule. This lattermost “final causality” is *thin*, to say the most of it that could be said; it is more of a semblance of an internal final cause than a true instance, for there is no internal direction-towards, only internal possibility or openness-for. Nevertheless, just as every other internal final cause, so too that belonging to the inorganic may be enveloped in the system of an external final cause: one which comprises the semblances in the individuals resulting in a *cosmic* ordering.

In any case, the “right conditions” act upon the beings in question – bring them towards the fulfillment of their internal final causes – by a kind of causality which Peirce did not explicitly recognize and somewhat clumsily included by implication under the term “ideal causality” (much as he confusedly described himself as an “objective idealist”, a notion conflated with this “ideal causality”, as cause of all psychological phenomena, visible at 1891: *EP*.1.293): namely, the extrinsic formal causality (cf. Deely 2001a: 630–34; 2013: 494) which is proper to

a sign-relation: the objective or specifying causality which whereby a sign relates object and interpretant in an irreducibly triadic relation.

Deely has done much to unearth this lost sense of causality, prominent in the protosemiotic of John Poinot (see Deely 2013 and Poinot 1632a; cf. Deely 1994b: 161–62, 170–78). Given the obscurity of Poinot in the time of Peirce, the latter’s conflation of ideal and final causality – where it is better to speak of extrinsic formal, objective, or specifying causality – is understandable. More poignantly, it is also excusable, insofar as the notions of ideal, final, and objective causality all play a role in the constitution of meaning – intelligible, referential, and teleological – and can thus be seen in a common enterprise.

This leads us into our **second** key point, which must be treated with the first in order to resolve both: namely, the ubiquity of Thirdness. This is not to say that Thirdness is everything and everything is Thirdness; at least, not exactly. There are dyadic relations. There are monadic relatives. There are dualities and singularities. But it is to say that Thirdness, the central element of Peirce’s semiotic approach, extends beyond the boundaries of life, for Thirdness appears not only in the more restricted senses of “mind” – as belonging to animals or even plants – but anywhere that intelligible meaning appears. Peirce himself was quite adamant about this, identifying genuine triadic relations necessary not only to the sign but also to any law of nature, and, indeed, in every combination that there could ever be (1890: *EP*.1.251–52):

why stop at three? . . . while it is impossible to form a genuine three by any modification of the pair, without introducing something of a different nature from the unit and the pair, four, five, and every higher number can be formed by mere complications of threes.⁹¹ To make this clear, I will first show it in an example. The fact that A presents B with a gift C, is a triple relation, and as such cannot possibly be resolved into any combination of dual relations. Indeed, the very idea of a combination involves that of thirdness, for a combination is something which is what it is owing to the parts which it brings into mutual relationship. But we may waive that consideration, and still we cannot build up the fact that A presents C to B by any aggregate of dual relations between A and B, B and C, and C and A. A may enrich B, B may receive C, and A may part with C, and yet, A need not necessarily give C to B. For that, it would be necessary that these three dual relations should not only coexist, but be welded into one fact. Thus, we see that a triad cannot be analyzed into dyads.

And (1904d: *CP*.8.331):

the inadequacy of Secondness to cover all that is in our minds is so evident that I scarce know how to begin to persuade any person of it who is not already convinced of it. Yet

⁹¹ As, for instance, the necessary number of straight lines to make an enclosed shape is three. Any other straight-line-bounded shape can be divided into triangles.

I see a great many thinkers who are trying to construct a system without putting any thirdness into it. . . . It is highly proper that Secondness should be searched to its very bottom. Thus only can the indispensableness and irreducibility of thirdness be made out, although for him who has the mind to grasp it, it is sufficient to say that no branching of a line can result from putting one line on the end of another. My friend Schröder fell in love with my algebra of dyadic relations. The few pages I gave to it in my Note B in the ‘Studies in Logic by Members of the Johns Hopkins University’ were proportionate to its importance. His book is profound, but its profundity only makes it more clear that Secondness cannot compass Thirdness. (He is careful to avoid ever saying that it can, but he does go so far as to say that Secondness is the more important. So it is, considering that Thirdness cannot be understood without Secondness. But as to its application, it is so inferior to Thirdness as to be in that aspect quite in a different world.) Even in the most degenerate form of Thirdness, and thirdness has two grades of degeneracy, something may be detected which is not mere secondness. If you take any ordinary triadic relation, you will always find a *mental* element in it. Brute action is secondness, any mentality involves thirdness. Analyze for instance the relation involved in ‘A gives B to C’. Now what is giving? It does not consist [in] A’s putting B away from him and C’s subsequently taking B up. It is not necessary that any material transfer should take place. It consists in A’s making C the possessor according to *Law*. There must be some kind of law before there can be any kind of giving. . . . every combination of relatives to make a new relative is a triadic relation irreducible to dyadic relations.

This is not to say there are no passages in Peirce which suggest Thirdness occurs only where life does, for example (1909b: CP.6.322): “In short, the problem of how genuine triadic relationships first arose in the world is a better, because more definite, formulation of the problem of how life first came about”. Yet, even here, Peirce suggests an extension of “life” beyond its ordinary sense: “no explanation [for the origin of life or of genuine triadic relations] has ever been offered except that of pure chance, which we must suspect to be no explanation, owing to the suspicion that pure chance may itself be a vital phenomenon. In that case, life in the physiological sense would be due to life in the metaphysical sense.”

As to the “metaphysical sense” of life, I cannot say fully what Peirce meant, for I know of no other place in which he speaks explicitly of such; and even if I did, I could likely only continue to guess. But to make such an effort to read a mind – I believe that this analogical sense of life is one which consists in being-towards-actuality. The more a thing is actual and the more it brings itself or others towards actuality, the more it can be said to be metaphysically-alive. This ubiquity of Thirdness, therefore, stands parallel to the extension of “mind” and “life” beyond the boundaries of their ordinary application. Certainly, Thirdness is recognized (Cobley 2016: 13) as the fiber holding together the synechistic web. And yet the ubiquity of Thirdness has not yet, I think, been either understood or accepted in its full import. I suspect that musement upon its prevalence would bring most earnest thinkers to at least accept the possibility that a truly

synechistic philosophy would embrace a universe perfuse with semiosis – however latent and merely virtual it may be for the most part, and ephemeral or nascent it may be outside “physiological life” when that liminal region is in fact traversed. However, I also suspect that acceptance of this thesis will come slowly, if at all. At the last, I will leave a list of texts which I think not only show Peirce’s inclination in this regard, but also – it is to be hoped – will provide stepping stones for the musement of the reader:

CP.1.26 – the facts of Secondness take on a determinate general character by a *vis a prospecto* force, Thirdness.

1.204 – final causes in nature;

1.211 – broad division of causation into efficient or forceful and ideal or final;

1.213 – no efficient causation without final causation;

1.214 – “an efficient cause, detached from a final cause in the form of a law, would not even possess efficiency: it might exert itself, and something might follow *post hoc*, but not *propter hoc*; for *propter* implies potential regularity. Now without law there is no regularity; and without the influence of ideas there is no potentiality”;

1.216 – erroneous to think the only final cause is a purpose;

1.265 – “nonsense and utter confusion to treat [final causes] as forces in the material sense”; “To ask whether a given fact is due to psychical or physical causes is absurd. Every fact has a physical side; perhaps every fact has a psychical side”;

1.269 – states that final causation is “the very essence of the psychical phenomenon”; 1.392 – conflation of final causation with mental causation;

5.538 – “Habits are understood to apply to man, animal, plant, crystallizable chemical substance or to anything else”; 8.330: “so far as the idea of any law or reason comes in, Thirdness comes in”. 8.330: “so far as the idea of any law or reason comes in, Thirdness comes in”.

Appendix 4: Glossary of terms

- **Abduction:** the act of originary logical inference, whereby a generalization is either discovered in itself or discovered to explain some surprising set of phenomena, resulting in the formation of a new concept. This is the logical movement wherein a Third, grasped in perceptual judgement and as immersed in the Umwelt, can be understood as also a First. Thus, Peirce says that the Suadisign (an argument) is understood as a Symbolic Suadisign (a simple, substitutive sign). Abduction opens the door for deductive inference and is concluded by inductive verification.
- **Being-in-the-World:** *In-der-Welt-Sein*, the fundamental condition of Dasein's experiential-intentional possibilities for projection, understanding, interpretation, and assertion. Only a living, perceptive being can possess, or be possessed by, a *Welt*. Below the lowest threshold of worldhood there is the "dwelling-shell" of the *Wohnhülle*, the environment which determines the existence of plant life. With perception—however minimal—the environment becomes a surrounding world of objects, an Umwelt. The horizons of the Umwelt are determined coextensively with the capacities of the animal (the animal's Innenwelt) which it enfolds. Human beings are species-specifically singular, among all alloanimals, in that the Innenwelt's capacities transcend the objective-defining horizons of mere Umwelt, so as to reach the possibilities of things in themselves; living its world (Lebenswelt), not merely within it; and, as Heidegger states, *forming* its world (Bildendwelt) through a cognitive intentionality which knows what is. These latter three, as intimately interconnected, are the *Welt* of Dasein's *Sein*.
- **Bildendwelt:** a neologism drawing on the tradition of Jakob von Uexküll's Umwelt, "Bildendwelt" is taken from the German text of Heidegger's *Die Grundbegriffe der Metaphysik*, as he elaborates the thesis that "Humans are world-forming," i.e., "der Mensch ist weltbindend" (1929–30: 401/287), the "-bindend" sharing for its etymological root *Bildung*, one of the meanings of which is "culture". I think this term adequately captures the species-specifically different "world" belonging to human beings, permeated as it is not only by *entia naturae*, but also by intersubjectively constituted *entia rationis*: that is, not only beings which are presented on the basis of some subjectively-constituted and cognition-independent reality, but also those beings which are presented inter- and suprasubjectively through the cognitive and linguistically-communicative acts of human beings which we ascribe to culture. The culturing world of the Bildendwelt subsumes and in many cases elevates the environmental world of the Umwelt.
 - See also *Lebenswelt; Umwelt*.
- **Categories:** the idea of categories within philosophical thinking sees three main figures: Aristotle, Kant, and Peirce. Hegel, too, and Husserl, likewise attempted contributions to the notion, but three distinct and historically important understandings belong to the aforementioned trio. For Aristotle, despite their posthumous positioning by his students and interpreters at the beginning of the so-called *Organon* (as a series of works through which the science of logic is structured), the categories are not ways of thinking but ways of being. We do not categorize the phenomena of our lives as substance or accident, as quality or quantity, but those beings are themselves thus categorized.

For Kant, the categories are, inversely, a structure on the basis of which we accomplish our thoughts. The *Ding-an-sich*, as an unknowable "out there" which never arrives phenomenally to us, may have an innate structure which is more or less

comparable to the categories, but this cannot be known with certainty. Rather, what we can know is the consistency of these categorical judgements across a multitude of experiences, whereby we infer their transcendental validity.

Peirce's approach to the categories might seem on first glance, like Kant's, to be a subjectivized approach; his are categories of "experience". But unlike Kant, Peirce's categories are conceived in a framework which antecedes any division of subject and object, for their ground is Firstness, which is always undifferentiated in all ways.

- **Firstness:** Because of its simplicity, the category of Firstness obstinately resists accurate description. As Peirce himself states (1887–88: EP.1.248), the First "cannot be articulately thought: assert it, and it has already lost its characteristic innocence; for assertion always implies a denial of something else. . . remember that every description of it must be false to it." Roughly, notwithstanding this inherent and inescapable falsity, we can class Peirce's descriptions of Firstness into three kinds: 1) those concerning the immediacy of presentness; 2) those addressing the First as positive being-itself without further reference; and 3) those which name it a "quality of feeling". Frequently, Firstness is *mischaracterized* as being subjective or the locus of "first-person" experience because of this lattermost class, the "quality of feeling". This egregious reading fails to note that Firstness is characterized by *possibility*; the emphasis should be on the *quality*, as what may possibly be felt, and not the *feeling*, which is only a possible occurrence. Firsts are characterized by vagueness, i.e., indeterminacy.
- **Secondness:** Peirce describes the category of Secondness as the easiest to comprehend: for it is the category of reaction or struggle, the resistance of the world which we habitually encounter. Every time we are struck by some other, we encounter a Second. But Secondness is not consciousness of two things, or two separate acts of consciousness, but rather a consciousness which is itself "two-sided".
- **Thirdness:** Although relied upon in every act of communication, Thirdness – the category of mediation – more easily disappears into the warp and weft of human thinking than the other two categories: for despite being manifestly present in perception – (Peirce 1903f: EP.2.223–24): "it is necessary to recognize. . . that perceptual judgments contain elements of generality, so that Thirdness is directly perceived" – Thirdness is often absent from the products of conceptualization. The conventional languages of the Western world, with their bifurcation into subjects and objects, deemphasize the relativity binding the two together (or binding each in itself). Such constrictive thinking, in terms of substantial units, results almost inevitably in calcified systems of thought; to which awareness of the essential reality of Thirdness serves as a life-giving remedy.

Peirce distinguishes genuine Thirdness from two forms of degeneracy: the most degenerate Thirdness (1903d: EP.2.161) "is where we conceive a mere Quality of Feeling, or Firstness, to represent itself to itself as Representation. Such, for example, would be Pure Self-Consciousness, which might be roughly described as a mere feeling that has a dark instinct of being a germ of thought." In other words, the degenerate Thirdness of "Pure Self-Consciousness" is the irreducible experience of oneself as a subject. The lesser degenerate Thirdness is exhibited in an "irrational plurality", which is to say a chain of secondarity, wherein there is Secondness and a second Secondness, such that one stands in a mediating role.

In contrast, therefore, genuine Thirdness consists not in self-referentiality nor in intermediate secondarity, but rather in the relating itself, which relating consists in the formation of habits – which habits, governing their possessors, are responsible for the perceived uniformity of behavior such as both the falling of dropped stones and praying of rosaries by Catholic women. Thirdness is thus characterized by generality.

- **Causality:** there are two dominant models of causality in Western philosophy. The first, and more prevalent today notion of cause, is that adopted by modern philosophy, wherein causation is reduced (at least primarily, if not exclusively) to the mode of the efficient, such that whatever effects there are, they have been preceded in time by some efficient cause, which causes by brute force arrangement and re-arrangement of parts. The second, and much older model is that of Aristotle, who divided causation into internal, matter and form, and external, agent (or efficient) and final.

We here employ an expanded form of the Aristotelian causal model, in which formal causality is considered to include also two external modes: the exemplar or ideal (as the plan in the mind of an architect) and the objective specifying, which exists in the object of a sign relation but determines, through the sign-vehicle's mediation, the interpretant. Final cause is also divided into internal and external, inasmuch as the final interpretant may belong to the individual or to a greater system of which it is a part.

- See also *objective specifying cause*.

- **Cenoscopy** – see *science, Cenoscopy*
- **Construction** (phenomenology) – see *phenomenology, Heidegger*
- **Dasein:** the intentional life of the human being, as specifically constituted by a factual “there” – not a specific place, as such, but a surrounding environment of not only physical and perceptual realities (an Umwelt), but also of conceptual (Lebenswelt) and cultural (Bildendwelt) realities.
- **Deduction:** the process of logical inference whereby we discover within a concept discovered by abduction the relations that concept intrinsically possesses by necessity, whether those relations are necessarily attendant or only probably so. Deduction therefore unveils necessary corollary truths to that hypothesized in abduction, thereby strengthening (or, in coming up empty, weakening) the strength of that hypothesis.
- **Destruction** (phenomenology) – see *phenomenology, Heidegger*
- **Distinction:** distinctions are ways of cognitively separating the objects we encounter. Systematically describing the varied kinds of distinction was a common practice of Scholastic thinkers, including Duns Scotus, Francisco Suarez, and John Poinsett. Their influence was clearly evident upon Peirce, who put his own names and elaborations on the Scholastic distinctions:
 - **Discrimination** / *distinctio rationis*: that the Scholastics called a *distinctio rationis*, i.e., a distinction which can be made in reason only and never in things, Peirce called discrimination. His common example was color from space; that is, although one can *conceive* of color without conceiving of space, one cannot *imagine* color without coextensively imagining space. The most that one can do is mentally “block out” what is essential to the existence of the aspect on which the discrimination focuses. Each category can be discriminated from the others.
 - **Precission** / *distinctio formalis*: sometimes called abstraction by Peirce, precission is the Scholastics *distinctio formalis* – something of a midway distinction between what can be separated in reason alone and what can be

separated in reality. That is, the objects distinguished in an act of prescission are such that one can survive the separation but not the other; for instance, matter and this or that particular quantity, and space from this or that particular color. Peirce notably (CP.1.353) describes the categories in terms of prescission, such that first can be prescinded from second and third, and second from third, but not from first, and third cannot be prescinded from either.

- **Dissociation** / *distinctio realis*: real distinction (a somewhat misleading name), called dissociation by Peirce, is often said to be distinction between *res et res*, between one thing, whole and complete in itself, and another, likewise whole and complete in itself: as Tom and Dick, red and blue, peace and violence. The categories cannot be dissociated from one another.
- **Emergence**: the process whereby from less-ordered, more broadly-potential realities come more-ordered, less broadly-potential (and thus more particularly-actual) realities. Emergence is typically considered as either weak or strong. Weak emergence indicates the production of a new form considered unlikely but nevertheless explicable by the properties of the prior entities. Strong emergence indicates the production of a new form entirely inexplicable by the properties of the prior entities. We hold emergence to be an essentially semiotic process, wherein the strength of the emergent reality is correlatively possible with the semiotic freedom of the interpretant involved.
- **Expression** (*Ausdruck*): the vehicle of semantic depth and consequently the only method of a meaningful signification, according to Husserl.
- **Firstness** – see *categories*, *Firstness*
- **Grounding**: Peirce restricts his use of “ground” to the abstracted referent of a quality, a First, Heidegger extends the meaning (*Gründen*, *Be-gründen*) to the full range of what enables species-specific human cognitive transcendence. Heidegger considers grounding three-dimensionally: as possibility (*Möglichkeit*), surroundedness (*Boden*), and pointing-out (*Ausweisen*). These three dimensions parallel, but only in species-specifically human cognition, the modal categories of Firstness, Secondness, and Thirdness in their connected dynamism.
- **Hermeneutic circle**: the process of intellection according to Heidegger, proceeding through stages of understanding (a conceptual grasp of a reality in its possibilities), interpretation (a working out of the possibilities such that things are understood “as”), and assertion (the derivative form of interpretation which functions as a “pointing-out” which communicates). The stages of interpretation and assertion often—always, perhaps, if correct—in a new act of understanding. Thus the interpretation-driven process is circular, but not viciously.
- **Ideoscopy** – see *science*, *Ideoscopy*
- **Illumination**: a disputed translation of Heidegger’s use of *die Lichtung*, more commonly translated the “clearing”, “the lighting” or “the illumination” connects his use to the tradition of Scholasticism. Following Augustine of Hippo, who spoke extensively of knowledge as through “divine illumination”, the metaphor of illumination for making known was employed by many Scholastics. Thomas Aquinas, for one, described *illuminare* as an act of the *intellectus agens* whereby phantasmal percepts are made intelligible. For Heidegger, illumination consists in that letting-be of beings, such that they are disclosed across an open field of opposedness (and thus, indeed, it is a “clearing” as well). This allows for understanding to occur, unfold, and recur in the hermeneutic circle.

- **Indeterminacy:** both etymologically and as it is used by Peirce, the term indeterminacy entails the absence or removal of limits. This limitlessness can be taken in either one of two intimately related senses which parallel the senses of **meaning:** i.e., what we call the conceptual and the developmental.
 - **Conceptual:** what we call conceptual indeterminacy is the fact which raises the question, “Why is it that our concepts are not fully determined by the models in which we instantiate them?” The meaning of any concept is inexhaustible. This does not mean that the concept is imprecise or “fuzzy”, as though we simply have not yet found the boundaries of it; it means that the concept is by nature incapable of being so determined. The indeterminacy here is not one of extrinsic relation—such that by addition of new information the concept could be changed—but rather one of intrinsic infinity: that is, whereas other animals possess a semiotic conceptual or perceptual indeterminacy, which is, in fact, a developmental indeterminacy, human beings alone seem to possess conceptual indeterminacy, in that the species-specifically human metasemiotic primary modelling system is unable to be fully determined by any number of actual models.
 - **Developmental:** what we call developmental indeterminacy is the fact which raises the question, “Why is it that we ourselves are not fully determined by the concepts, models, etc., whereby our cognition is directed?” More broadly conceived, this question applies to *every* being in known existence; that is, the determinants upon any being never seem to attain absolutely finality. This is especially true of the species-specifically human characteristic of being metasemiotic, i.e., being the semiotic animal. Whereas other beings are indeterminate as regards their particular relations to the world around themselves, but determinate in regards to being the things they are (such that their species-specifically developmental possibilities are determinate and any alteration which exceeds such alters the species of that animal), human beings are indeterminate in the developmental possibilities for their species-specific characteristic.
- **Indication (*Anzeichen*):** one of two divisions Husserl makes concerning the class of *Zeichen*, i.e., signs, indications are signs which are themselves “meaningless”. Such an interpretation takes a narrow view of “meaning” as what belongs only to the realm of semantic-linguistic depth.
- **Induction:** the stage of logical inquiry which returns the conclusions of abduction (and possibly deduction) to experimental testing, in order to verify, refine, or reject the proposed hypothesis unveiled through abductive inference. John Deely has suggested appropriating Peirce’s alternate term for abduction, “retroduction”, for this stage, since it leads back to the primary objects from which cognition begins.
- **Interpretation:** as a generic term, interpretation refers to any act of taking some object of thought *as* in some way or under some “predicate”, as the sheep interprets the dog’s growl as threatening. As a technical term used by Heidegger, it refers specifically to the taking-as of possibilities initially grasped in understanding. It is through interpretation that we are able to work out what a thing is in itself both by discursive consideration of its own properties and its properties as exhibited in relation to others.
 - See also *hermeneutic circle*.
- **Lebenswelt:** the term *Lebenswelt* is used in the sense given it by John Deely, the “modeling system rendering physical surroundings ‘meaningful’ as objective world”; the

“subjective correlate of Umwelt as objective world” (2010a: 155), i.e., the ability in perceiving the objects present in one’s environment, the objects of consciousness, not merely in the objective dimension whereby they are considered in light of their relation to the self, but the penetrative insight which considers them as subjects in their own right.

– See also *Bildendwelt; Umwelt*.

- **Meaning:** when we say the word “meaning”, we typically mean one of three things: either we are indicating how something is to be understood, as when I ask about the meaning of a word; or we are asking about what a word or other sign indicates, about the object of reference; or we are indicating why something is important for something, as when I ask about what an item or an action means to you. These three senses – respectively, termed the intelligibility, referential, and the teleological senses (the first two being indicated by the German terms of *Sinn* and *Bedeutung*, respectively) – are related to one another: if we are going to say that something is important to us, it has to be because of what we believe that thing is, in itself; if we have strong beliefs about what something is or what it means in itself, that strongly suggests it has some importance to us; and the entire framework our experience of intelligibility and importance alike is constituted by references..
- **Modes:** a mode is not a “what”, but a “how”. Something could exist in different modes without changing its “whats”; for instance, what exists in itself can exist also in the mind while identical in its “what”
 - **Esse (existence/modus essendi):** this is the mode in which some “what” exists in itself independently of any foreign actions. Note that this mode of existence can be itself a wholly dependent one, as in the case of all purely objective beings (fictional characters, fantasies, etc.) while still retaining the existential character.
 - **Esse in:** within existence itself, one of two primary modalities is that of existence within a subject. This can be divided as by Aristotle’s categories, which renders the primary division between substance and accident (and further, accident into many other categories, although the number is open to dispute). This mode of existence is relatively independent, such that, while the entity may require many environmental surrounding factors to maintain its existence, its subjectivity will remain so long as its internal principles do.
 - **Esse ad:** equiprimodal with *esse in* is the kind of existence which belongs to relation; a modality which is not itself in anything, but between subjectivities. This further subdivides:
 - **Relativum secundum dici:** while properly itself belonging to something which is “in” some mode of *esse in*, the way in which we conceptualize subjectivities and their inherent accidents requires a relative mode of expression. Since no subjects are what they are, as they are, wholly independently of all else, we know them in no small part by their relations and therefore come to understand what is *esse in* by virtue of its *esse ad*. Because this sort of relativity permeates all the categories, it is sometimes translated into English as “transcendental relation”.
 - **Relativum secundum esse:** this is the mode of existence which belongs to the relation itself, considered as modally separate from its *relata* (though a relation never exists in fact without at least some fundament). Though ubiquitous in the universe, relations are the most contingent existence. Nevertheless, they are distinguishable from their *relata* as really existent

by virtue of the fact that one and the same relation, without changing its nature, can exist either as being a “real” relation, between two actually existent things which mutually affect one another, a “mixed” relation, where only one of the two things affects the other (and thus is only “partially real”), or a purely “logical” relation, where neither of the two things related has any actual affect on the other.

- **Intelligendi:** what exists as either *esse in* or *esse ad*, considered with respect to the limits of its *modus essendi*, can also be understood with the same precise grasp of those limits, separately from its actual *modus essendi*. In other words, the *modus intelligendi* is the way in which what exists in its own right (whether in itself, in another, or between two others) exists in the mind.
- **Significandi:** just as what exists in itself, in another, or between two others can also exist in the mind, so too can it exist in a sign, a specific mode of existing between two others. Thus, signification can replicate and transmit what exists in understanding as it is independently of that understanding.
 - **Consigificandi:** because of the innate relativity of all that we experience, most acts of signification include implicitly and by relation more than is contained in the supposed confines of the words themselves. Thus there are attendant possible significations, including the syncategorematic indications of grammar.
- **Nichts, das:** the Nothing, Heidegger says, is not the mere nihilation of all beings – it is not merely the result of the negation, or negative judgment, which removes the entirety of the ontically presenced beings (Heidegger 1929b: 29/86); such a concept of nothing presupposes not only *Sein*, but also beings. Rather, he says, *das Nichts* is the originary absence of beings into which Dasein holds itself. Being and Nothing – which we might consider as the correlative dynamism of the actual (Being) and the possible (Nothing) illumination of beings – allow for what Heidegger terms the fundamental existential structure of understanding, which is further developed in interpretation and derivatively in assertion, as we discussed above (2.3; cf. Heidegger 1927a: 142–160/182–203).
- **Objective:** that which is precisely as in relation to a power. The most prominent use of this term is with regards to cognition, wherein objectivization requires no alteration or activity on the part of the object. This is the typical use of the term. Consequently, when we speak of “objectivity”, we speak of a thing precisely in the regard it has been made an object by a relation to a power. Peirce, in particular, denominates objects as one third of a sign-relation’s triad, i.e., as that which determines a sign to determine an interpretant in regard to the original object. The object itself is therefore twofold.
 - **Immediate object:** the object precisely as objectivized. The immediate object is not the sign-vehicle itself, but is the object strictly as presented by the sign-vehicle, such that, having before one’s awareness only the immediate object, one has not properly or fully distinguished between the two.
 - **Dynamic object:** the object as beyond its objectivization. This object is inaccessible to all but human beings; that is, through the awareness of the fact of existence itself, we can abductively infer to awareness of what potentially belongs to the object beyond the way in which it has been objectivized as something in itself over and above our environmental concern with it.
- **Objective specifying cause:** an extrinsic formal cause which is the message of every communicative act. While belonging to the object, it determines or specifies the interpretant in a semiotic relation to be disposed in a certain way towards the object. This

differs from the activity whereby an efficient cause impresses a form on a material recipient, for the end result is not a sameness in form, but an alteration in intentionality.

- **Objectivity** – see *objective*
- **Ontic**: Heidegger uses the term ontic, derived from the Greek for “being”, ὄν, ὄντος (the genitive form), to signify our understanding of beings in their individual substantial constitution. A common mistake is the presupposition of the ontic as hypostatically divided from the ontological. While we may focus our attention on the ontic qualities possessed by a being, that being is itself inexorable from the ontological. Hence, we refer to the ontic as a dimension, i.e., as a part of what constitutes human understanding upon which we can *focus* separately from the ontological, but which *exists* inseparably from the whole of that understanding, and therefore includes an implicit connection to the ontological dimension of thought. That is, the ontic can be prescinded but never dissociated from the ontological.
- **Ontological**: stemming from the Greek λογία, the theory or study of, along with ὄντος, the genitive form of “being”. The term “ontology” captures a distinctive aspect of the human mode of relating to beings, and to Being, which capturing Heidegger (in his early work) seeks to preserve: namely, that human relation to beings and Being is characterized primarily by thought – thinking, logic, reasoning, understanding, and the provision of an intelligible account, all of which is suggested by the suffix, λογία, λόγος, which Heidegger understands to mean, primarily, “discourse”, i.e., the letting-be-seen through unveiling, which is to say, a kind of disclosive articulation. Consequently, to distance his account from the tradition while preserving the essential relationality, he often terms his inquiry in early works (1919–1929) an effort of *fundamental ontology*: that is, a seeking of the foundational relationality of *das Sein des Seienden*. We can therefore describe Heidegger’s use of the term *ontological* as referencing the dimension of beings whereby they are related, especially the relation to understanding. The ontological dimension refers, however, not only to relations as such, but to relatedness as pervasive; not just as an element belonging to beings in their subjective constitutions, but as pervading and enveloping them in their intrinsic relationality.
- **Ontological Difference**: in the foreword to the third edition of *Vom Wesen des Grundes*, Heidegger enigmatically states (1949: 5/97) that “the ontological difference is the nothing between beings and Being”. This “nothing” of the ontological difference is compared and contrasted with the equally-enigmatic *das Nichts* (the Nothing) which is identical with *Sein* (Being) – *Sein* from the perspective of beings being considered as *das Nichts* (Heidegger 1949: 5/97). The “nothing” of which Heidegger speaks, referring equally to both *das Nichts* and the ontological difference, is not the absence of *Sein* or even the absence of beings, but rather “not being a being.” The ontological difference, specifically, refers to the distinction between the ontic and ontological dimensions of human understanding when made explicit in a thematic consideration: the ontological can never be reduced to the ontic, such that the relational consists in nothing more than properties of the substantial, and, vice versa, the ontic constitution of a being can never be identified with the ontological dimension whereby it is engaged in web of relations.
- **Phaneroscopy**: the study that discerns the universal categories which are always present in experience and through which we are able to understand the constitution of experience, including especially our own. This discernment occurs through direct observation (rather than any “introspection” or “critical turn”); it sees in all phenomena, the appearances which constitute our experience, these categories. Consequently,

phaneroscopy is the foundation of all sciences of discovery, for its objects are never wanting in any other investigation, and, indeed, can help us to classify and understand any other discovery that we make.

- **Phenomenology:** a method of investigating meaning as the product of correlation between the knower and known. There are wide varieties in the conception of phenomenology beyond this basic agreement; here, we are concerned with the opposition between Husserl's and Heidegger's conceptions. Each includes a notion of categorial intuition and intentionality as crucial to the attainment of phenomenological vision, as well as some reflexive process, or a "turn" away from the "natural attitude" and into the phenomenological proper, as inexorable from the method. But these turns are to different objects, and so cannot be said to be the same at all; one turns left, the other right.
 - **Husserl:** beneath categorial intuition and intentionality (as the essential nature of consciousness), Husserl founds his phenomenology on the phenomenological reduction—that is, the suspension of judgment about the reality of the extramental and the turn to the contents of cognitive apprehension. This allows a further investigation into the nature of the subject, thereby revealed as transcendental inasmuch as the structures of consciousness are always intentional, i.e., always "of" or "about" something else, and specifically about the meanings found in the objects of the world.

Yet it is a difficulty, which ultimately lodges Husserl's phenomenology into the quagmire of transcendental idealism, that he gives the constitution of meaning entirely over to the subject; while the meaning cannot help but be intentional, its origin is with none other than the subject. Language and its universal grammar lack the necessary transcendental capacities which would connect them with the world as independent of the individual.

- **Heidegger:** although Heidegger too involves a reduction in his phenomenological method, the direction of the reduction is not into the subject, but rather from the product of phenomenological vision (constituted by categorial intuition and the intentionality of the knower) into *das Sein des Seiende*. The reduction is not, therefore, an *eliminative* reduction, as is Husserl's, but a *grounding* reduction—a leading back to the roots, to what is primary.

Subsequently, Heidegger postulates a phenomenological construction; that is, a bringing oneself forward into *Sein*—since *Sein* is not given in the way as are *Seiendes*—in order that we can bring *Sein* into view. This is accomplished through an investigation of *Dasein*, the human being considered specifically as having an intentional life, as Being-in-the-World (*In-der-Welt-Sein*), wherein the structures of "care" and "temporality" are unveiled as the disclosive possibilities of *Sein*.

Further, Heidegger considers it a necessity, in order that we are capable of this phenomenological construction, that we first perform a "destruction" of the histories which obfuscate the truth of being—that is, the uncritical appropriations of traditions whereby we presume some "knowledge" as true; wherein we take the truth of our beliefs for granted. The traditions themselves are not destroyed, but rather the uncritical approach to them.

This phenomenological trio – destruction, construction, and reduction – begins with destruction; for only if we can liberate ourselves from those uncritical approaches can we legitimately take up the questions asked by the tradition and thereby investigate what we mean by Being—and only by grasping what we mean by

Being can we reduce the beings of our encounter into Being. Yet this process moves cyclically; we never cease “de-constructing”, constructing, and reducing.

- **Peirce** – see *phaneroscopy*
- **Pointing-out** (*Ausweisen*): translated by McNeill as “account”, wherein Heidegger brings our attention not to the thing pointed out, or even that a thing is pointed out, but rather the dimension of “pointing-out” itself (*Ausweis*). When we point out, we distinguish from surroundings and give an interpretation; that is, in every occasion that we objectivize, we do so by establishing a relation between a *thing* and some measure in which it is taken as an *object*. Pointing-out involves a taking-as. It is no coincidence that Heidegger, in *Sein und Zeit*, describes the second act of the hermeneutic circle as “*Auslegung*” – translated as “interpretation”, but most literally as “laying-out” (1927a: 148/188). Pointing-out is the structure of consciousness which manifests itself in laying-out; that is, the dimension of our cognition which enables the “taking-as” simultaneously enables setting one part of the whole object into a relation with another. Consequently, Heidegger asserts, that (1949: 48/129) such grounding signifies “*making possible the why-question in general.*” Pointing-out allows us to notice objects in the context of their relations, and thereby question the relation itself (Heidegger 1949: 48/130). Because Dasein – despite pervasive attunement by the beings in which it is absorbed – experiences in grounding a conceptual possibility which exceeds the given attunement by those beings, this “why” question inevitably emerges (1949: 48/130): “In the projection of world an excess of possibility is given with respect to which, in our being pervaded by those (actual) beings that press around us as we find ourselves, the ‘why’ springs forth.” We may just as well say that in the pointing-out dimension of grounding, we discover that *reasons* pervade the objects of our experience – that there is a real element of governance in the objects we discover through projection and absorption.
- **Possibility** (*Möglichkeit*): the first element of cognitive experience which Peirce recognizes, Firstness, likewise receives the name of “possibility”. Heidegger further describes the dimension of possibility as both (1949: 44/127) “establishing” (*Stiften*) and the (1949: 47/129) “projection of world” (*Weltentwurf*). Projection, for Heidegger, does not mean the cheap pop-psychology notion of interpreting the world through one’s own problems, but rather he always means the projection of possibilities – on the one hand, the possibilities belonging to the object understood, insofar as it is understood, and on the other hand, the possibilities for Dasein itself in the dynamism of understanding (cf. 2.3.2, 2.3.3, 3.1.2 and 3.1.3). The two senses of possibility are intertwined: the former, possibilities of the object, signifies the possibility conceived in the Firstness of an object – the possibilities for how we may interpret any object of our cognition, the openness of the object to further determinations and connections – while the latter, the possibility for Dasein, indicates the essential possibility of clearing attained by the openness of holding-into or letting stand-against *das Nichts* (cf. Sheehan 2015: 206–07), the primordial species-specific human Firstness. This second sense of possibility is nothing other than the *Verstehen*, understanding, of the hermeneutic circle as discussed in *Sein und Zeit* (1927a: 142–48/182–88). But this twofold projection of possibility is ordered beyond itself, beyond the experience of the one experiencing.
- **Presence-at-hand** (*Vorhandenheit*): the modality of objective being wherein Dasein’s comportment is solely towards the existence and/or nature of the *Ding-an-sich*, as its own possibilities insofar as they are understood by Dasein, rather than the objectivity of use characteristic of readiness-to-hand. This can either be a pre-critical, simple presence,

where the thing is present but not understood; or it can be in a contemplative, critical perspective.

- **Psychological subjectivity:** the in-itself constitution of a cognitive-agent’s cognitive totality: thoughts, feelings, beliefs, etc. Since Descartes, this has been often considered the primary if not exclusive locus of subjective identity.
- **Psychologism:** not only the empirical study of minds and brains but also any *a priori* such study, so long as that study places the principle of experience exclusively or originally in the mind or its actions.
- **Readiness-to-hand (*Zuhandenheit*):** the modality of objective being wherein Dasein’s comportment is towards the utility in accordance with predetermined contexts for those beings which are enveloped in the environing world (*Umwelt*). This modality of comportment can be pre- or post-linguistic.
- **Reduction / resolution:** the term “reduction” implies two different things. On the one hand, the literal etymology evokes the image of being led back to the source—it is in this sense that Heidegger employs the term in his “phenomenological reduction”, as leading back into *Sein* in the disclosive field of meaningfulness. On the other hand, its usage has often meant explanation by elimination, by cutting off all but the principles (and thus operating in an anti-emergent paradigm). This is the sense in which Husserl uses his “phenomenological reduction”, just as, say, Patricia Churchland is a material reductionist.
- The similar and more robust principle, employed by Thomas Aquinas, which does not entail the ambiguity of reduction but does contain its sense of leading-back to the source, is that of resolution. The sharpest contrast with Heidegger’s phenomenological reduction is that, whereas the latter leads back only to *Sein* and therefore towards the principle of cognition and intellectual coherence, Aquinas’ resolution leads also towards a highest first principle of existence, and therefore not only to intellectual but also existential coherence.
- **Reflexion:** by this, we mean the second movement of the mind: the consideration not of what is made known by concepts, nor the concepts themselves (an impossibility), but the relation between the concept and the known, whereby both concept and object become available to critical reflection. Thus, this move, which is not that critical reflection itself, we name “reflexion”, the turning of the mind back upon its own activity. This movement is the essential initiating step in all scientific consideration, including *cenoscopic*.
- **Science:** the critical process of discovery, review (or appraisal), and practice. Primarily, we are concerned with the sciences of discovery, which Peirce (1903a: *EP.2.259*) divides into mathematics, philosophy (or *cenoscopy*), and “*ideoscopy*”, here spelled “*ideoscopy*”. Our concern is primarily with *cenoscopy* and *ideoscopy*; for, in our present time, the *ideoscopic* sciences have been accorded a disproportionate prestige and the *cenoscopy* relegated to a subordinate role. However, while the sciences ought to retain their respective autonomies, this relationship is inverted as to how it ought to be: for only through *cenoscopic* means can any discovery, mathematic or *ideoscopic* as well be rendered meaningful.
 - **Cenoscopic:** the critical process whereby we attend to the facts of life without specialized instrumentation or experience, but which involves a reflexive awareness that compares the results of our conceptual processes with the objects of observation. Through this process we are able to discern, interpret, and elaborate upon the meaning of the world.
 - **Ideoscopic:** the critical process whereby we hypothesize and test using specialized instruments or experiential witness to discern new facts concerning the observable

world itself. This process is unable to produce or clarify the meaning of any of its discoveries, although those discoveries may stand in need of no further explanation (or appear so) if the presently-available cenoscopic status renders them immediately meaningful.

- **Sein:** the principle of all species-specifically human intentional life; that is, the principle of every revelation of some meaning within a field of possible meaningfulness. We encounter *Sein* as *das Sein des Seienden*; that is, we encounter *das Sein selbst*, but always as it is of, through, and in encounter with *die Seienden*, with beings. In this way, we experience being both as a relation itself (*relativum secundum esse*; see *modes*), *das Sein*, but also as it is the relativity of beings (*relativum secundum dici*), *des Seienden*.
- **Semiosis:** the action of a sign. In order for this action to be completed, and thus actual, the interpretant needs to be not only immediately effected but also dynamically; this enables the “taking-as”, such that by the mediation of the sign-vehicle, the object is “taken as such or such”, the interpretant thereby altering itself (or being altered) in respect to that object. Prior to such dynamic actualization, semiosis is structurally present, but only virtually.
- **Semiotics:** the normative science of truth, also often called logic, which studies the various ways in which thought can occur, and thereby attain or fail to attain the truth. Peirce considered this to consist of a “speculative trivium”: speculative grammar, critic (or formal logic), and speculative rhetoric (or methodetic). Only human beings possess the capacity for this science (or any science, for that matter), and therefore, in accord with the redefinition of human beings as semiotic animals, we have reserved the use of the term “semiotic” as an adjective to species-specifically human activities or considerations, excepting the established appellation of “semiotic freedom”, which seems to us as good a use as any – for what is typically meant by “freedom” in our cultural context is, in fact, exemplified in the semiotic (rather than any other) animal.
- **Sign:** the irreducibly triadic mediation accomplished by a relation through a representamen between a fundament and a terminus; that is, not one thing standing for or in relation to another, but the completed actuality of mediated relating between two beings through a third. For the sign-vehicle, or representamen, which is frequently called the “sign”, does not actually do what a sign does – produce an object for some interpretant – without the sign relation. Considered separately, but as potentially signifying, we call it a “vehicle”. The semiotic action depends upon the actuality of the relation; it is the relation which turns three things (which need not be physical) into their respective semiotically-defined functions of object, sign-vehicle, and interpretant.
 - See also *indication*; *expression*.
- **Signification:** the act of an object determining a sign which in turn determines an interpretant to be oriented somehow towards the object. This can be as simple as altering a direction or as complex as a multi-volume textual argument.
- **Speculative grammar:** enshrined in the Scholastic school of the Modistae, including Thomas Erfurt, whose *Modis significandi seu grammatica speculativa* was read by both Heidegger and Peirce (both of whom believed, at the time, it being a treatise of Duns Scotus), a speculative grammar is one which observes the rules of signification over and above any particular language. While the Modistae tended to treat language (albeit conventional) as a primordial human phenomenon, Peirce, in his development of the principles evident in Erfurt’s treatise, treated signification as a more fundamental reality of the universe. Heidegger limited his speculation to the specifically human world. Both,

however, saw that philosophy needed its disclosive practices understood in terms of a more fundamental grammar than was had. For Peirce, “speculative grammar” therefore formed the basis of his semiotics, the normative science of truth; for Heidegger, the hermeneutic circle and the dynamism of grounding and transcendence likewise echoed the inspiration of Erfurt and the Modistae.

- **Subjective:** contra the tendency of modernity, “subjective” here does not mean “based in one’s personal opinions” or “without objective validation”. Rather, what is “subjective” is that which belongs to a subject, considered as a whole, *including* but not limited to the psychological subjective. Thus when something is said to be subjective, it simply means that it belongs to an *esse in* substantial reality, i.e., something having its own internal principles of substantial constitution.
 - See also *psychological subjectivity; objective*.
- **Subjectivity** – see *subjective* and *psychological subjectivity*
- **Surroundedness** (*Boden*): a difficult term to translate: on the one hand, it seems to mean something like “ground”, or “floor”, or the “foundation” – but Heidegger often forms a compound and writes (1949: 44/127) *Bodennehmen*, “taking a basis” which recalls *hinnehmend*, “taking in stride”. Further, Heidegger describes this form of grounding as (1949: 45/128) “being in the midst of . . .” and “absorption” (*Eingenommenheit*) into beings to be “pervasively attuned by them” (Heidegger 1949: 47/129). Thus, to translate *Boden* by “basis” seems inadequate. Rather, the concept appears to correspond more closely to the *Um-* of the *Umwelt*; that is, the environmental surroundings whereby one is in part determined. A close parallel, if not identification, can be found in *Sein und Zeit*’s notion of “thrownness” (1927a: 135/174). We could then perhaps convey the meaning better by translating *Bodennehmen* as “accepting or receiving one’s environment” and *Boden* as “surroundedness”. Thus Heidegger can say that the common alloanimal form of absorption is a kind of “captivation” (cf. McNeill 2006: 25–27), (*Benommenheit*), as such animals are incapable of transcending the “pervasive attunements” of their *Umwelten*.
- **Synechism:** Peirce’s theory of essential and pervasive universal continuity—that there exist, in short, no hard and fast distinctions between at least *possible* realities, such that all things are connected by infinitesimal degrees. This theory is essentially teleological: synechism holds that love and logic are not divided one from another; nor reason and emotion, art and science, politics and truth, nature and culture. They may and often do come into opposition: but only because they are, in some way, already parts of the same generally purposive whole.
 - See also *tychism*.
- **[τέλος] / Teleology:** the end of action or actions considered as a final cause, and the characteristic effects of those causes. Such causes are external to their effects, and may exist only *in futuro*, as objective beings belonging to the mind. To speak of teleology is to speak of purpose, either of the individual who cognitively grasps the end in question, to the less-than-fully conscious animal orientations towards survival-enhancing actions (of both self and species), the vaguest hints of nociceptive behavior, and even of the action-for-ends which does not belong to the individuals acting but within the system to which they belong.
- **Temporality** (*Zeitlichkeit*): the factual-existential sense of time (as opposed to *Temporalität*, a term Heidegger uses to designate time considered thematically, through abstraction) which gathers up the history of oneself by orientation towards what one

- could or can be. Temporality, as Heidegger says (1927a: 326/374) is the authentic meaning of care, of self-involvement with the Being of oneself in the disclosure of beings.
- **Thematizing:** the process whereby the reflexive activity turns into critical process in regards to some or another specific being. We “make such and such our theme”, as the pattern of relations we consider in attempting to understand what some object itself really is. One can thematize well or poorly.
 - See also *reflexion* and *science*.
 - **Transcendence:** conventionally understood as either something which is irreducible to a categorical system (e.g., being, good, true) or as the movement beyond one’s psychological subjectivity into engagement with the world at large, “transcendence” receives a transformed meaning in Heidegger, such that consciousness is limited not to consideration of the ontic but opens to the ontological; such that, we could say, awareness is attained of *das Sein des Seienden* over and above the Umwelt of practical consideration.
 - **Tychism:** corollary of synechism, tychism is Peirce’s theory of universal chance or possibility; his theory, so to speak, that co-equal with the universe’s continuity is its indeterminacy. In one way, this parallel’s Aristotle’s theory of prime matter: that no sublunary material being is so determined in its form as for that form to be permanent. But Peirce’s theory extends beyond the material to the cognitive as well; no idea, thought, or belief is so determined as to be permanent or unchangeable by its nature, but is always essentially open to further relations. In this essential openness to change, the essential indeterminacy of being, Peirce’s tychism serves his synechism: all things are continuous because all things are innately open to continuity, to change.
 - See also *synechism*.
 - **Umwelt:** the physical environmental surrounds turned into a total pattern of potential relations by virtue of the objectivizing capacity of some living being. Every being possessing perception has an Umwelt. Objects as they appear in the Umwelt of a non-human animal are categorized according to their relation to the self by either being beneficial to the self, harmful to the self, or neutral to the self (and by extension, any of those concerns which are identified with the self, such as found in pack or herd behaviors). The horizons of such a world ever extend to the critically-enriched presence of objects and instead comprise only the ready-to-hand.
 - See also *Being-in-the-World*, *Bildendwelt*, and *Lebenswelt*.
 - **Understanding** – see *hermeneutical circle*
 - **Unfolding:** by “unfolding” here is meant the developmental of the specifically-human symbol, through the elaborative processes of intellectual consideration, considered either methodologically (the hermeneutic circle, phenomenologically) or scientifically (abduction, deduction, induction).
 - **World [Welt]** – see *Being-in-the-World*, *Bildendwelt*, *Lebenswelt*, and *Umwelt*.

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