Philosophy Study, November 2020, Vol. 10, No. 11, 713-754
doi: 10.17265/2159-5313/2020.11.006

Heidegger's Metaphysics, a Theory of Human Perception:

Neuroscience Anticipated, Thesis of Violent Man, Doctrine of the Logos

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In this essay, our goal is to discover science in Martin Heidegger's *Introduction to Metaphysics,* lecture notes for his 1935 summer semester course, because, after all, his subject is metaphysica generalis, or ontology, and this could be construed as a theory of the human brain. Here, by means of verbatim quotes from his text, we attempt to show that indeed these lectures can be viewed as suggestion for an objective scientific theory of human perception, the human capacity for deciphering phenomena, *i.e.* hermeneutics in its broadest sense. His added notes from the 1953 edition, all of which are comments, not corrections, imply that he never abandoned these thoughts on metaphysics, despite all of his utterances about a need to overcome it, and their popular interpretations to that effect. In his presentation, he further develops the colorful and intuitive style, an hermeneutic language, that he had created in his earlier work *Being and Time.* The logical functions of Dasein's anatomical brain are performed by the logos machine, formerly the *human soul,* using top-down processing based on a global context, the noumenal cosmos which humans maintain internally. Heidegger's 1942/43 winter semester lectures *Parmenides* extend in unbroken fashion his 1935 work, proving that he never abandoned, as is widely claimed, his metaphysical avenue of thought.

Keywords: Cognitive gap, Perception, phenomena, transcendental Ego or Self, Prefrontal cortex PFC, parietal cortex PC, top-down processing, default mode network DMN, Language L, Universe U, Language System (or Machine) LS, Logos Machine, Noumenal Cosmos NK, Conceptual-Categorical Apparatus CCA, pre-linguistic structure pLs, internal structural-historical records ISHR, Formal Linguistic Dualism LD

Guiding Thoughts—Our Mottos

σήμηνε δὲ τέρματ΄ Ἀχιλλεὺς
τηλόθεν ἐν λείῳ πεδίῳ παρα δὲ σκοπὸν εἵσεν
ἀντίθειον Φοίνικα, ὀπάονα πατρὸς ἑοῖο,
ὡς μεμνέῳτο δρόμους καὶ ἀληθείην ἀποείποι

Achilles signs the limits,
far off in the level plain, yet at the finish he lets
be divine Phoenix, war companion of his father,
to watch the races and put into words, his
awareness.

I can find nothing with which to compare the great beauty of a soul and its great capacity it is made in His image means that we can hardly form any conception of the soul's great dignity and beauty.

-- Saint Teresa of Avila

ΦΥΣΙΣ = ΛΟΓΟΣ ᾽ΑΝΘΡΩΠΟΝ ᾽ΕΧΩΝ[1]

-- Martin Heidegger

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[1] *Nature = The Logos Owning A Human*

Introduction: Science and Philosophy

In this essay, our goal is to discover science in Martin Heidegger's textbook *Einführung in die Metaphysik* (EM) (Heidegger, 1935, 1953, 1998), fully worked out lecture notes for his 1935 summer semester course that he taught at Freiburg University, because, after all, his subject is metaphysica generalis, or ontology, and this could be construed as a theory of the brain. Here, by means of verbatim quotes from his text, we attempt to show that indeed these lectures can be viewed as suggestion for an objective scientific theory of human perception, the human capacity for deciphering phenomena, *i.e.* hermeneutics in its broadest sense. His added notes from the 1953 edition, all of which are comments, not corrections, imply that he never abandoned these thoughts on metaphysics, despite all of his utterances about a need to overcome it, and their popular interpretations to that effect. As we here attempt to show, EM can be viewed as a suggestion in outline for an objective scientific theory of human perception, the human capacity for deciphering phenomena, *i.e.* hermeneutics in the broadest sense. Heidegger in EM is offering his own new theory of human perception, issuing from acceptance of man's free choice of his path in life, good or bad. This new theory we are able to underline and supplement based on recent scientific advances. In his presentation, he further develops the colorful and intuitive style, an hermeneutic language, that he had created in his earlier work *Sein und Zeit* (SZ) (Heidegger, 1926, 1979), his fundamental ontology, still widely considered to be his major work. Of human existence he speaks in such expressions as *being-there—"Dasein"*—and *being-in-the-world,* the latter term no longer explicit in the 1935 lectures. The lectures can be read as a pre-scientific analysis of how man, *being-there,* perceives his environment, artfully managing to deal with the manifold challenges posed by the phenomenal structures of the universe. Man attentively recognizes and deciphers their pre-linguistic contents and, while trying to make sense of it all, puts into words his awareness. There are numerous passages in Heidegger's work where he in fairly concrete terms provides us with hints for a perceptive science that, as it turns out and is demonstrated below in this essay, can be explained in terms of recent advances in neuroscience. It would be implausible, even unthinkable, unimaginable, for there not to be found essential agreement between on one hand his philosophical insights gained by hermeneutics of Dasein, into how our brain functions to let us know what's happening &, on the other hand, scientific discoveries obtained through anatomy, EEG, fMRI, TMS, electrode implants, *etc.*, of brain structures & functions employed in perception of the momentary scene.

Much of what we have to say is similar to Trish Glazebrook's work (Glazebrook, 2001), except she, in line with philosophers generally, seems ignorant of her NK, global context, where she is rearranging the deck chairs.

A nexus between science and philosophy is provided in Heidegger's definitive treatment of the Logos, here interpreted as a structural version of Platonic forms (Burchard, 2014). This allows for neurolinguistic brain functions to serve as meta-context[2] for Heidegger's being-in-the-world.

Trish Glazebrook (2001), in her paper entitled "Heidegger and Scientific Realism" stated that:[3] "As early as Being and Time, then, Heidegger is a committed realist who nonetheless recognizes the antirealist thesis that all human understanding is projective" (p. 366).

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[2] Similar to …*the wholesale change of reference required by a Kuhnian paradigm shift. Likewise, Heidegger holds that the basic concepts of a science can undergo radical revision in moments of crisis (SZ, 9/29),* in the words of Trish Glazebrook (Glazebrook, 2001).

[3] Her journal article: Continental Philosophy Review 34: 361–401. ©2001 Kluwer Academic Publishers. Printed in the Netherlands.

The Importance of Global Context

The logical functions of Dasein's anatomical brain are performed by the logos machine, formerly the *human soul*, using top-down processing based on a global context, the noumenal cosmos which we humans maintain internally.

Heidegger's *Parmenides* (P) lectures from the winter semester 1942/43 published posthumously (Heidegger, 1942/43, 1982) extend in unbroken fashion his 1935 work, proving that he never abandoned, as is widely claimed, his metaphysical avenue of thought. The cognitive gap (Burchard, 2014) is closely related to Heidegger's discussion of the *separation of being and thought* in EM, this amazing and profound work.

Among several of his other works on metaphysics very close to EM is P, read eight years later, an elaboration, amplification, or extension of certain central parts of EM, and we might think of it as volume II. The purpose of the present essay is to illustrate the unity of science & Heidegger's metaphysics, as the theme from my recent article on the cognitive gap (Burchard, 2014). This basic theme also has been subject matter of two earlier papers (Burchard, 2005, 2011), with a principal thesis that mathematics is a proper foundation for philosophy, not the other way around (as is more commonly thought).

The claim put forward in the title is proved from EM by a large number of verbatim quotes, based on the frame work of (Burchard, 2011) which itself covers neuroscience and perception. A large literature exists dealing with topics from EM, seldom dealing with unity of science and philosophy, which allows me the unique opportunity of revisiting these topics. Much of what Heidegger had to say more than three fourth of a century ago, nowadays after much progress in neuroscience becomes understandable as neural processes that are occurring as we hermeneutically engage in world-discovery, or more commonly perception of our human world, the immediate environment.

We note immediately that his metaphysics text becomes a treatise on psychology under our interpretation, a scheme that might appear off-beat but a matter of fact has several important precedents to recommend it. First, Immanuel Kant issued his 2nd edition B-version of the *Critique of Pure Reason* (Kant, 1782, 1789) after his 1st edition A-version was criticized for having confused psychology with metaphysics. Under duress Kant labored to produce the B-edition seeking to extirpate the psychological aspects from the core part, the justly famous *Transcendental Deduction.* He refrained from any attempt to defend himself, as he might have, with the obvious remark that all of psychology is a science that is grounded on the special metaphysics of the human soul. Second, regarding Heidegger's EM, as to what it attempts to accomplish along with most of the rest of the philosopher's literary legacy, we owe the explanation to Thomas Sheehan (Sheehan, 1999, pp. 288-297): "Contrary to popular accounts of his philosophy, Heidegger's central topic is not 'being' (at least not in any of the usual meanings of the term) but rather the disclosure of being within human understanding". Each one of us continually, for him or herself, is forming disclosure of being. This helpful remark by Sheehan is roughly identical with our own "naive rule of thumb," to the effect that we find that Heidegger's EM treatise to amount to a theory of human perception, prime territory of cognition (Burchard, 2014).

In pursuit of such goals we desire to represent his thoughts accurately and truthfully, but at the same time to adduce today's neuroscience.

The Role of the Meta-Context

Meta-context is needed to discuss coherently such diverse and difficult topics as neuroscience and Heidegger's metaphysics of the gathering function of λόγος. Note that meta-context is not a new context, but

fully remains a part of NK, our (overall) global context.

In this interpretation, ἀλήθεια works to bring phenomna into existence, in perfection with the unity with the cosmos, our private universe. The *Parmenides*, p. 123, quote now takes on a more rounded meaning.

Going along in the text, ever more fully explaining ἀλήθεια, what we read as a cognitive process. He is quoting Homer's Iliad, the mock battle on the occasion of the funeral of Patroklos, slain friend of Achilles, who is making the arrangements and wants the outcome of the war game to be unambiguous, truthful, "unconcealed."

Heiddeger, *Parmenides*, p. 129:

This holding [of the unconcealed] is, however, not a mere be-holding or taking notice but is letting oneself be held by unconcealedness, dwelling in it as that which secures the unconcealed against the withdrawal of concealment.

What he is expressing here is the subjective experience of world-discovery as the neural mechanisms work to update the global context of NK, we humans dwelling in the crow's nest of the orbito-frontal cortex (OFC) experience to *be-held-by unconcealedness, dwelling in it*, so-to-speak.

In our analysis and discussion of EM that follows, Heidegger's magnificent but underestimated and neglected explication of all that metaphysics means to him, the two parts of the chasm, the perceptive part which makes out the 1st half of the metaphysical gap, and the action part, the 2nd half of the gap, are what EM is all about.

Heidegger on Observing Environmental Phenomena

We find examples throughout EM of Heidegger illustrating his lectures by digressing to specific examples of observation of items in his environmental scene. But here, in this introductory section, we look only at the first three chapters, in order to see how Heidegger began to teach his preferred approach to the ***Seinsfrage*** to students who walked into the lecture hall off the street, with no prior acquaintance of his peculiar philosophy, who would expect to be taught by him as by any of their other professors, presenting himself as a plain man, as an ordinary human being, having in common with them striving to make do in a demanding world.

Indeed, here our aim is to introduce ourselves to the company of Heidegger the every-day man, not the author of a worldview formulated in an arcane vocabulary that is difficult to learn, where only a few people are accustomed to its usage.

Examples from EM, Chapter I: fundamental question of metaphysics. For Heideger, the poetic experience of phenomena is an integral part of perception, other than scientific observation. Everything, a tree, a bird calling, a house, a mountain can be perceived by a poetically minded human being in quite a different way than what he calls *mere science.*

EM, p. 20: *Philosophy stands in quite a different domain and rank of mental life. In the same order with philosophy and her Thought is only poetry.* [...] *in poetry* […] *superiority of mind in its essence prevails over against mere science. From out of such superiority the poet always speaks as if what-is becomes spoken to and about for the very first time. In the verses of the poet and the thoughts of a thinker there always is spared new room in the universe so that anything, a tree, a mountain, a house, a bird calling loses all ordinariness and familiarity.*

This part of EM is of greatest importance for our project of discovering the science of LD in EM, the metaphysics of hermeneutic Dasein.

The topic of his lecture today is our questioning concerning why there is something rather than nothing. He remarks that what-is does not get changed by our questioning, *which merely is a process inside ourselves, involving soul and spirit* (EM, p. 22). In this process of questioning, he continues, we appear to wholly belong to ourselves (EM, p. 23). Properly, we are transported into a clearing and our questioning itself takes on a new form, and casts a new space over and through everything. With this background, he now sets up his example of perceiving of a concrete object. At this point, Heidegger finds himself, not unlike many other professors, with a piece of chalk in his hand, suggesting itself for his example, suitable for him to make his point.

EM, p. 23: *What matters is not to be misled by premature theories, but to experience the next best thing just as it is. This piece of chalk is an extended rather firm thing formed in a definite shape, and just so with all that as a thing meant for writing. As certain as it belongs right here—and not there, so it must be of a certain size, and not larger. That we can draw it along the blackboard and thereby wear it down is not something that we merely add mentally to the thing. Itself is such in this possibility, or it would not be the writing implement.*

The point of this example for us that Heidegger recognizes context, local context, but that of course always is part of global context, which remarkably we are possessing in a special functional unit of the brain, our noumenal cosmos, of which we know a bit through the DMN research using fMRI of Raichle (Raichle *et al.*, 2001), and the earlier work on the P300 ERP by the EEG researchers over many decades.

In common terms, Heidegger's point of context involvement is that if a piece of chalk is found outside context, carried around by accident outside lecture halls and academic surroundings, then perhaps we would not even notice it, or if made to pay attention we might be indifferent or astonished, depending on circumstances.

We next have two extremely important examples with clear evidence in favor of our thesis, that basically, EM is just a treatise on human perception, albeit offering to us a completely novel view founded in deep insight into our liberty, the freedom to choose our actions for good or bad.

HS across-the-street example: Visual-spatial structure of a building.

Bird noise example: Auditory structure of a capercaillie hen's whirring wings.

EM, p. 26: [...] *it is even hard and unaccustomed to describe the pure noise. We hear always* **more** *[considering the mere noise]. We hear the flying bird, although strictly speaking we have to say: a wood grouse is nothing we can hear, it is not a tone that could be registered on a scale.*

These are exactly the considerations that have led researchers to emphasize the importance of top-down feedback from higher centers: In this case the noumenal cosmos = global context has in store a preconceived wood grouse (capercaillie) with all its potential attributes, including the peculiar whirring sound that its wings make.

We find nothing but what would lend itself to LD, such as observation of weather.

EM, p. 26: *A heavy thunderstorm gathering in the mountains "is," or—it makes no difference here—"was" in the night.*

Even more striking for Being as a stand-in for perceiving the scene is the next quoted sentence.

EM, p. 26: *A distant mountain range under a vast sky—such a thing "is." What does its Being consist in? When and to whom does it reveal itself?*

He brings out the point that the mountain range "is" very far away, melding with the sky. Dimly perceived, its summits and indistinct slopes gleam like a distant vision of heaven. A view evoking thoughts of forgotten poems, the pale image is fixed just above the horizon. Hidden beneath lie the rocky crags jutting tall from the tree line, by thousands of feet further below the dark greens, lower still lie the fertile valleys. To state the

far-away mountain range 'is" demonstrably amounts to observability of a certain scenery, a patch of color of a certain shape in a certain spatial relationship to the horizon. Immanuel Kant in his inaugural dissertation "De Mundi Sensibilis atque Intelligibilis Forma et Principiis" (1756, 1770) put it this way, in reference to what is now known as the afferent linguistic data stream in the peripheral nervous system: "Etiam praedicata dentur sensitive observabilia, predicates also are observable sense data".

Regarding a painting by van Gogh, "A Pair of Shoes," Heidegger again sketches the idea of a ***scene.*** We recall that analog signals from a scene are the basic environmental data which are entered into the digitizing sensory neurons to be converted into a linguistic U-data stream,[4] representing an apparition of a phenomenon, in this case a pair of farm work boots painted by Vincent.

EM, p. 27: […] *you are at once alone with what* **is** *there, as if you yourself were heading homeward from the field on a late autumn evening, tired, with your hoe, as the last potato fires smolder out.*

What better way could there be, than this lovely description of a master's painting by the master philosopher to demonstrate the working of top-down processing. Notice how Heidegger describes an entire scene from his own mental imagery, none of it is in the picture, van Gogh only painted a pair of rough, worn boots.

When we observe phenomena, pre-linguistic structures, the scene is not in the phenomenon, we stitch it together from snapshots, saccades as our eyes dart about, to and fro until we have enough to do the scene *in toto.*

Notice that these are all basic questions of perception. We can answer them with the LD theories based on top-down processing of linguistic signals issued by pLs.

We skip Chapter II which concerns important questions of word origin, and of the grammar of "being" or "to be" with its many strongly inflected forms stemming from three different roots, we learn that "is" turns up as the one wordform found to have the most primitive designation of Being.

He drives home the point that the merger in prehistoric times of the three roots was a uniquely significant event hinting at a greater whole of "being" than suggested by the common conception of an empty word, the mere copula of grammar and predicate calculus.

Examples from EM, Chapter III: question of character of being. After a lengthy investigation in Chapter II into the many uses of "is," Heidegger prepares an enumeration of various example cases, and includes with each example a ***descriptive term.***

The multiple roots of the verb *to be* are reflected in the semantic multiplicity revealed in these descriptive terms. For us here, there are first hints of the scientific preparation for a science of perception as indeed intended by him for Chapter III.

For us here primarily important are facts of evidence that emerge from Heidegger's lecture: Here, he first raises issues in which are hidden problems to be solved by science approaches, questions amenable to science methodology.

In EM, as in SZ, we frequently meet Heidegger's Dasein encountering itself as *being-in-the-world*, or, in its *inner-worldliness.* It is important to recognize the affinity of this concept to what in LD we refer to as *the scene,* the matter proper for acquisition in perception.

This is what he discusses already in Chapter I in context of a van Gogh painting. The scene is a part of the

[4] FOS11.

environment where we perceive phenomena.[5] We next demonstrate the striking parallels between EM and LD that are revealed by identifying the two transcendental[6] constructs:

1. In LD: Observation of the scene.

2. In EM: Inner-worldliness of Dasein.

Needless to say, neither "being-in-the-world," nor "inner-worldliness" occur in EM by way of verbatim mention. Nonetheless, instances cited are easily recognizable, from Heidegger's general method of presentation.

Here next are several passages which we quote with the intent of providing evidence that *the scene* has ample presence in EM:

EM, p. 58: [...] *we have all sorts of things immediately at our disposal: the things nearby that we can grasp with our hands, all the gear that we have at hand at all hours* [...]

We find a long list of entities, what-is, or beings, ranging from hand tools to inmates in an asylum.

EM, p. 58: *But then, how do we know that all these, which we mention and enumerate so confidently, really are entities?*

He goes on to say we are not entertaining doubts whether these entities really are, those familiar doubts of a professed scientific kind that all of these phenomena experienced by us are merely sensations, with no way out from our physical bodies relative to which we remain restricted in our accounts.

Emphatically, he then explains that such facile and lightweight reflections, although seemingly coming from a critical and superior vantage point, actually are quite uncritical. But it seems he more criticizes philosophers of science rather than the working scientist in his or her lab.

We cite these remarks because Heidegger explicitly comments negatively on contemporary science in some of its style and thought processes, now unmasked as mere pretensions, by virtue of these quoted passages, in which his thoughts are seen to move on the same plane of ordinary life as does all science, only that science is aided by ample supplies of auxiliary equipment from technology, engineering, and mathematics.

Instead of such superficiality, the philosopher wants us to become aware of ***our receptive capacity to discern being and not being.***

EM, p. 59: *How shall, always and everywhere, that which is, be something for us that is, unless we already understand "Being" and "Not-Being?"*

As a caveat, it should be said that he fails to mention that there are lots of entities which we don't discern, each of us being limited by our marginal competence inherent in our human recursive and fallible nature.

EM, p. 59: [...] *But now, we are constantly encountering what-is. We discern it in its Being-just-so and Being-otherwise, and we judge about Being and Not-Being.*

Therefore we now are mired in ambiguities. Having previously found Being to be nebulous as a concept, we now have convinced ourselves that humans clearly discern Being from Not-Being.

Is not here a place to gently inquire about the budding scientist: So Heidegger, the cognitive psychologist in-training?

EM, p. 59: *The word Being is thus indefinite in its meaning, and nevertheless we understand it definitely. "Being" proves to be something extremely definite and completely indefinite.*

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[5] FOS05, FOS11.

[6] FOS05.

An inherent contradiction has arisen, Being is both, extremely definite and completely indefinite. Here, Heidegger places himself very near the working bench of the experimental scientist. This entire passage could be read as a preliminary answer to the Seinsfrage, in as much it turns out that humans have the ***capacity to discern Being ubiquitously,*** indeed everywhere and at all times, in their encounters with what-is. This partial solution again points toward the scene, and how the human organism is able to perceive it, to understand it, an issue that is thoroughly in the scientific realm. In fact next in this lecture, he tells his audience:

EM, pp. 59-60: [...] *Provided we don't deceive ourselves, and if for a moment amid all the day's hustle and bustle we can make the time, we find ourselves standing in the midst of this contradiction. This, our stance, is as real as almost anything else that we call real, more real than cats and dogs, automobiles and newspapers.*

EM, p. 61: [...] *We may seek out thousands and thousands of trees, but if* [...] *knowledge of treelikeness* [...] *does not clearly determine itself,* [...] *then all this will remain an idle enterprise in which we cannot see the tree for the trees.*

And yet we observe him continually skirting this very matter, the science aspects of ontology, never coming close to stating it outright. We must conclude that he fails to come to full awareness of the potential, despite a rising crescendo of hints.

But in fact, such hints may be found interspersed in the earliest discussions of Seinsfrage as indeed throughout the treatise which works in layers and on several levels much of the time. An example of this is where he quotes his own inauguration speech as rector of Freiburg University:

EM, p. 37: *Mind is neither empty cleverness, nor noncommittal wit, nor the endless enterprise of rational deconstruction, even less the world-soul, rather, mind is origin-attuned, knowing determination to reach for the character of Being.*[7]

Here, Heidegger proposes implicitly for science to seek a fuller understanding of our mental world.

Heidegger's aim in Chapter III is to establish that, in all its faded vacuity and despite the mixture of human ideas which historically have combined in the concept, Being is at once a unique verb certain in our judgment, and is indeterminate in its significance.

"Being" is not a kind (genus) like "tree" which we can apply to various phenomena, such as oaks, but not rabbits. This was already noted by Aristotle as a peculiarity. When we talk of *Being,* it is never just a word among others. We cannot explain it by examples, such as an oak tree elucidates the concept *tree.* Even to know trees, we need more than a few examples, indeed the entire context of living things, plants, *etc*. Even more so for *being,* where we require insight in a global world context, including the uniqueness of the verb.

We understand Being, in its indeterminacy, vagueness of meaning, yet with our own com- prehension of it as quite determinate, certain, and have uncovered this as a fact, but one quite unlike other facts. Some kind of process is involved that we must further investigate: Here we meet the Seinsfrage in a new, scientific form, calling us out to engage in a new research project, to determine the reality of the now revealed fact.

In spite of this result, once more we try to find a naive explanation of *being.* There is an enormously important point, how language involves our understanding of being any statements falling apart if Being is taken away, reducing our speaking to mere babble. More than speaking, any act linguistic or otherwise, becomes like dealing with vapors if existence or being is dropped from view. Even our own existence, Heidegger's famous *Dasein,* to which we give a high place in our own minds, requires of us a fully focussed

[7] Translation from inferred overall sense, rather than verbatim.

attention to *Being.*

EM, p. 63: [...] *for our life, this, that we comprehend Being, if only in an indeterminate way, has the highest rank, in as much as in this a power reveals itself, in which first the essential possibility of our life is grounded.* [...] *Yet even for our life to remain something that is indifferent to us we would need to understand Being. Without this understanding, we could not even say no to our life.*

Even if we despair of life, he seems to imply, we focus attention on our own Being.

Here we put English "life," where translators leave Heidegger's "Dasein." It is clear from the totality of EM, and indeed SZ, that the author is engaged in profound analysis and critique of Western man's life and life-styles. At least that would seem to be one possible interpretation of his philosophy and something natural to occur doing, as one living at the time when these lectures were given (1935).

Our comprehension of Dasein, lies in our continuing survival, and therefore of paramount importance because this Universe and the tiny blue planet in it is a dangerous place full of mishaps and knavery.

The least error of judgment concerning the momentary situation can lead to catastrophic changes in the outcome of our efforts. This is the center of what existentialism might have been, but has never changed its standing as our principal interest in life.

From Chapter I we recall the starting point of our considerations.

EM, p. 65: *At first, we brought in evidence as a fact: The word "being" has a nebulous meaning, it is almost like an empty word.*

Having cleared up this fact in Chapter II on the basis of grammar and etymology, we can accept the fact as basis for further questioning. We attempt to get away from Being and go to beings, what-is, entities swarming all around us.

EM, pp. 65-66: *Is "Being" merely an empty word?* [...] *just a last wisp of evaporating reality* [...] *or is Being the most questionable* [...] *we complete the decisive step from an indifferent fact and the seeming emptiness of meaning of the word "Being" to the most questionable event, that Being necessarily opens itself up within our understanding.*

The seemingly unshakable bare fact, to which metaphysics blindly appeals, **[i.e., the vacuity of the concept of Being,]** *now has been shattered.*

The traditional opinion of the schools is seen as untenable: No longer can it be said that Being is the emptiest concept.

Now we have caught a glimpse that Being is not a matter of grammar and etymology, the connection with language is of a different kind, we must "let Being speak", a Heideggerian twist for which he is so well known.

He compares our investigation into Being with a physicist discussing grammar of atom, today we would refer to quark and gluon, which we would counter with a call for him to return to his lab bench and do his work.

We observe that, strange to say, Being is not an entity like a clock or a house. Being of the building across the square in no way is comparable to such entities as its roof and foundation.

Still, Being is dependent on an utterance, yet in any of its modifications, when applied to this building or to that clock, never like any other attribute to its subject.

EM, p. 67: *But from this we cannot deduce that Being consists only in the word and its semantics. The word meaning does not amount to a meaning of the character of Being.* [...] *From this follows: Ultimately, in the word "Being" and its modifications and in all that lies in the domain of this word, the word and its meaning are united more originally to what it refers to, but also vice versa. Being itself must rely on the word*

in a totally different and more essential sense than does any entity.

The point we wish to make is that these descriptive terms are ways of encountering the scene in familiar way, various types of scene, parts of the scene, showing Heidegger as a human being like the rest of us, his situation, task, and mood. The several terms below are selected by him according to the following thought pattern:

EM, p. 68: *Each time the "is" is intended differently. Of this, we can easily convince ourselves, especially if we take this saying of the "is" the way it actually happens, i.e., as each time as spoken out of a particular situation, task, and mood, not as mere sentences and stale examples out of a grammar book.*

To compare with our project of a science interpretation it is quite valuable for us to know that Heidegger's actual experience of the scene is not at all unlike our own familiar, every-day experience, and to include his vocabulary of descriptive terms that is printed in-line, but displayed here in a more elaborate form of an itemized list of descriptive terms characteristic for and describing Heidegger's salient examples if using the common verb "is."

EM, p. 69:

- *actually present*
- *constantly present at hand*
- *takes place*
- *comes from*
- *consists of*
- *dwells*
- *belongs*
- *succumbs to*
- *stands for*
- *comes about*
- *prevails*
- *sets in*
- *comes to pass*

This entire Chapter III of EM is the philosopher's discussion of Being as it is actually discovered, discerned, identified by a receptive human organism in command of his noumenal cosmos NK, *i.e.*, Being qua percipient according to our *naive rule of thumb*, in the context of kinds of scene as the organism is capable of reading incoming signals and to place them in the proper context within NK.

Heidegger's Metaphysics Anticipates Recent Neuroscience

We can quote numerous passages in EM where we find support for our project, by discovering traces of neural Darwinism in EM.

With a certain amount of visionary insight, we translate Heidegger's pronouncements into neurolinguistic processes performing our own on-the-spot linguistic hermeneutics. Here we have a "risky maneuver" based on meta-context, as discussed in a preparatory manner above, *cf.* §1.

As we go through EM step by step we are able to quote numerous passages that translate fairly directly into neurolinguistic processes analyzed and investigated in my earlier work, confirming Heidegger's genius at hermeneutics as he discloses in Dasein's world those biological structures that have arisen through Darwinian evolution by adapting neural circuits to the metaphysics of the Universe, or here in our set-up, to the metaphysical-cognitive gap. These important differences between our and Heidegger's interpretation of the metaphysical gap should be clearly kept in view, notwithstanding our fundamental indebtedness to EM for a perspective of the chasm separating λόγος from φύσις.

For us the historical development of Western thought moves into the background, there merely exposing a grander scheme, in which Nature herself dictates certain invariant structures for all animals, present in the

squirrel in the trees outside my window and in the abundant rabid wolf spiders[8] carpeting the lawn,—and occasionally getting into my living quarters, —but vastly more developed in human CNS.

An astounding agreement of Heidegger's insights with science is obtained here below next. We would be led to postulate as inconceivable, unimaginable for such agreement **not** to be present, apparent and in evidence, because of necessary workings of metaphysical selection. Darwinism would seem to imply Dasein's being-in-the-world to be mirrored in the phylogenetic experience of the organism. Accordingly, it is impossible that there should be found discrepancies to exist between neuroscience and Heidegger's hermeneutics of Dasein.

What are the implications for its survival, its very existence as its own Self, its plans of action for the short term as well as for duration, what does it all mean to the Ego or Self in its estimation of its own status and performance.

Being and Thought

In EM, Chapter IV.3 we find his main treatise of perception as the core of metaphysics. A huge gap, or chasm, divides Being and Thought, its extent marked by the cognitive gap, if our interpretation is at all accurate, as we intend to prove it is.

The gap yawns between the recursive Logic of L on one hand, our human rational grasp of the world deduced from wavefront signals impinging on our receptor neurons, and on the other hand the physics of U, the natural ultimate reality of the world, its forces unknown to us, at times now in our own actions being beneficiaries of them, at other times now finding ourselves as hapless victims of their actions.

Subplot: Three-Way, Fork in the Road. The story of the ***Three-Way*** is a subplot that runs through all of Chapter IV, as we gradually get to know Heidegger's vision of Being, and it constitutes an important link in the chain of evidence tying EM into LD.

Repeatedly mention is made above of the three ontological modes from EM: **Being, Nothingness, Appearance or Semblance.** In LD, the three modes become three cognitive terminal destinations.

The initial mention of the Three-Way, occurs in Section VI.2, after much discussion of appearances, true and false. Much of it is suggestive of a theory of human perception.

EM, p. 83: *Being and appearance belong together* [...] *are together, and* [...] *make possible errors and confusion. For this reason, when philosophy began, the chief effort of Thought [...] was directed at the protection of Being within Appearance, so as to discern Being over against mere Semblance.* [...] *But while Being must be distinguished from its Other, and strengthened as* φύσις, *the distinction of Being against Nothingness completes itself, yet simultaneously so does the distinction between Nothingness and Semblance.*

Notice the "effort of Thought," related to extracting Being from mere Appearance, clear reference to theory of human perception.

It might be objected that *the effort* would refer to thoughts about perception, not by the percipient about the percept of some phenomena under his observation. But at the early time of Heidegger's concern the theorist would be guided largely by his own perception.

This is the first hint of the idea of a Three-Way: Being, Appearance, and Nothingness in one sentence.[9]

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[8] Rabidosa (formerly Lycosa) rabida.

[9] Appearance, semblance, and seeming all translate Schein, where an effort is made to choose the word best fitting the context of the original.

We have caught a glimpse of the three, but next follows the defining passage where three ways or paths are named explicitly.

EM, p. 84: *Because matters thus stand with Being, Unconcealment, Appearance and Nothingness, there are three ways needed for man, who bears up amidst Being revealing itself, and always out of such a bearing acts and reacts toward Being according to circumstances. Man, if he is to take on his life in the light of Being, must bring this to a stand and must in mere semblance persevere against semblance, must rescue both Appearance and Being from the abyss of Nothingness.*

Man must distinguish these three ways and accordingly decide for them and against them.

Again there are his historical considerations, here he relies on Parmenides, several fragments from his didactic poem, Frag. 4, 6, and 1.[10] Heidegger's account of the three ways or paths, ὁδοι, extends over four pages. We sketch brief selections, truncated and abridged, from his version of Parmenides (P.), with interspersed comments by Heidegger (H.).

EM, pp. 84-86:

P. Frag. 2
which paths are to be held in view for inquiring
The one: how it is (H. what it, Being, is)
and also how not-Being (is) impossible
This is the pathway of grounded trust
But the other one: how it is not
H.
1. The path to Being,
which is the same as the path into unconcealment.
2. The path to Not-Being.
it cannot be traveled, of course
But meditation on the two paths mentioned
entails a confrontation with a third
P. Frag. 6
keep away also from the way
that human beings prepare for themselves,
two-headed, confusion their measuring rod
in errant reception, thrown this way and that
dull and blind, bewildered, the undiscerning clan
their statute: present and not-present be the same
and not the same, the path running backward in all
H.
The path now named is the way of δοξα,
in the sense of semblance,
on this path what-is now looks this, now that way
Here opinions are the only order

[10] http://philoctetes.free.fr/parmenides.htm. His Frag. 4 now usually is numbered 2.

Humans slide from one opinion into another, thence and hence
In this way they mix up Being and Seeming
This path is being walked on constantly,
so that humans completely get lost on it.
All the greater the need to be aware of this way,
so that Being may reveal itself
in the midst of mere semblance and against semblance.
Accordingly, we find the indication of this third way
P.
Needful is for you (H. now on the way toward Being)
to discover all things
well-rounded unconcealment's untrembling heart
but also opinions of humans
with no indwelling faith in unconcealment
But nonthelessin all this, you shall learn
how that which seems must remain acceptable (in its own way)
con-perfecting all things
H.
The third path is the way of Appearance or Semblance
so that in this way Appearance is experienced
in its belonging to Being.

However in so doing, we discover that likewise, hermeneutics of Dasein is the methodology followed by Heidegger in EM, as well as its main result: Being is disclosed in the hermeneutic process of physis.[11]

Heidegger's formulations, such as—

the path to Being, which is the same as the path into unconcealment
to be aware of this way, so that Being may reveal itself in the midst of mere semblance
and against semblance

—are immediately suggestive of as well as compelling evidence for a subject of perception operating in a clandestine back channel in the far recesses of phenomenological heuristics.

Of course, appearance occupies a place of prime importance for any theory of human perception, the embedding of which we observe in EM and demonstrated specifically in Section IV.2, here. The Three-Way, its three paths, are the logical steps that a CNS must traverse by a top-down controlled computation, as it transmutates mere apparitions into percepts of phenomena.

There is more, Heidegger can point to Heraclitus for an essential insight into Being as perception, confirming our naive rule of thumb, *cf.* below, to the effect that Being is perception of natural phenomena.

EM, p. 87: […] *to illuminate the contrast, i.e. at the same time the unity of Semblance and Being in a word of* **Heraclitus** *(Frag. 123):* φυσις κρυπτεσθαι φιλει. *Being [emergent appearing] by itself inclines toward*

[11] *Cf.* Thomas Sheehan, "Martin Heidegger," in: *A Companion to the Philosophers,* Robert L. Arrington ed., Blackwell Oxford UK (1999), pp. 288-297: "Contrary to popular accounts of his philosophy, Heidegger's central topic is not 'being' (at least not in any of the usual meanings of the term) but rather the disclosure of being within human understanding."

self-concealment.

This explains, so EM, that Being hides behind semblance, but may be perceived, can lead to perception of a phenomenon, because it is emergent, an event structure highly suggestive of a complex brain as a necessity, because it indicates high demand on neural mechanisms required to extract phenomena, their percepts, successfully from incoming environmental signals, wave fronts impinging on the receptors of sensory neurons.

Such high demands are plausible grounds why there can be no chance of survival for any organism lacking a world map, global context, or noumenal cosmos, at least in the most rudimentary forms as we should hypothesize exist in the simplest life forms.

Being and Thought Divided by the Cognitive Gap

He reaches the conclusion that dating back to the ancients from the age of classical Hellenic philosophy onward, an unbridgeable gap between Nature and Logic, φύσις and λόγος, the Universe U and Language L has dominated Western metaphysical thought. The profound distinction is stated unambiguously if implicitly in remarks by Frank Wilczek, Nobel physicist & ultimate realist, intending to describe incomprehensible realities.[12]

Frank Anthony Wilczek, from his Nobel Lecture (2004): *It is truly awesome to discover, by example, that we humans can come to comprehend Nature's deepest principles, even when they are hidden in remote and alien realms. Our minds were not created for this task, nor were appropriate tools ready at hand. Understanding was achieved through a vast international effort involving thousands of people working hard for decades, competing in the small but cooperating in the large, abiding by rules of openness and honesty. Using these methods—which do not come to us effortlessly, but require nurture and vigilance—we can accomplish wonders.*[13]

In EM, edited lecture notes for a course that he taught in 1935, Heidegger formulates and explains a theory of such a gap, separating Language or Logic, ΛΟΓΟΣ, from Nature, ΦΥΣΙΣ, the gap which we like to call the Heidegger separation. The cognitive gap is mentioned in EM explicitly and often.

Heidegger himself emphasizes the importance of the fact, and that it comes up frequently.

EM, p. 88: *As pointed out repeatedly above, the divorce of "Being and Thought" completely predominates in the life of the West.*

Heidegger's exact designation varies from *chasm, Kluft,* χωρισμος, to *divorce,* to *separation,* to *contrast.*

EM, p. 80: cognitive gap . .between . . seeming entities . . and true Being

EM, p. 88: divorce of "Being and Thought "

EM, p. 94: original common tie between Being, λόγος and φύσις

EM, p. 103: divorce of Being and Thought

EM, p. 103: separation of φύσις and λόγος

EM, p. 104: separation of φύσις and λόγος

EM, p. 104: separation of Being and logos

EM, p. 106: Being and Thought in competing effort

EM, p. 108: contrast of Being and Thought

EM, p. 136: separation of λόγος and φύσις

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[12] Outcomes of many experiments are predicted accurately by theory.

[13] The award, "for the discovery of asymptotic freedom in the theory of the strong interaction," was shared by David Gross, David Politzer and Frank Wilczek, as three joint Nobel laureates.

Importantly, the presence in Being is noted of both Appearance, or Semblance, and Becoming, *cf.* Chapter IV, Sections 1, 2, as opposed to Thought, which stands against Being as φύσις, Nature, opposite across the cognitive gap.

Inner ties of symbolic logic and language with human thought are relevant because of and despite their hidden, latent existence in the logical dimension based in the computational aspects of brain function.

This contrast or opposition Being–Thought is quite a predominant interest because it brings us closer to an understanding of the Seinsfrage.

EM, p. 89: *Basically, we are asking what it is with Being, how and from where it is, brought to a stand, understood and conceived, and authoritatively established in its inner structure.*

His discussion leads directly to noumenal cosmos fitting in top-down processing mode, where Ego searches available meta-contexts for a best fit. We find Heidegger give an almost verbatim description of these, now well-known, and well-understood, neural processes by means of which we are able to identify phenomena correctly. Typically, incoming data pass through a series of neural centers, each with a filter-like function adding detail and specificity to any preliminary forms of percept ruling phenomena at hand. Each filter receives feedforward data from lower centers but importantly also early feedback from downstream centers presenting the type of phenomena likely encountered from contextual information gleaned by running through NK as its dictionary and encyclopedia.

In LD, Thought as application of CCA is needed for identifying phenomena. Remarkably, parallels exist with key passages from Kant's famous *Transcendental Deduction.*[14]

An important aspect of the recognition process is the final voluntary act of discerning the percept as the correct diagnostics for the apparition. The decision involves conscious CCA application according to Kant's explanation from the B156 footnote.

Heidegger elaborates on this central point in a lengthy paragraph or two containing Heidegger's **key element of scientific metaphysics,** that we must dissect with extra care, as it, coincidentally but not accidentally, gives an answer to half of the Seinsfrage, and he reenters this, his chief concern, immediately, with pointedly precise formulations so as to leave no doubt of the gravity of the matter.

EM, p. 89: *From our present vantage point in this investigation we can command an overview of something else. Earlier we made plain that the word "Being" has quite a delimited meaning, contrary to popular opinion. This includes: Being itself is comprehended in a definite way. As something so comprehended it is revealed and apparent to us. But every act of comprehension, as a basic mode of revelation must move in a definite line of sight or viewing track.*

This passage just cited gives a clear and unmistakable indication that our topic is of a scientific nature and should be treated as such, signaled in the stand-out phrase ***"must move in a definite line of sight."***

Here, Heidegger uses vocabulary that avoids any explicit mention of *consciousness,* which is subsumed conceptually under "Dasein" and its inner-worldliness. Consciousness cannot play a role in his project which is phenomenological hermeneutics of Dasein. But not even Dasein appears in this passage. All that is discussed is that Being is comprehended, in a process which reveals Being and makes it apparent. This matches fully what in LD signal extraction occurs, as the logical content of perception revealing the ISHR of a phenomenon, a pLs, to a human Logos Machine.

[14] *Esp.* footnote B156, *cf.* FOS11.

But in LD, our anatomic-logical meta-context of CNS function, we are well able to launch into the subject of consciousness, which in any encounter with a fellow human being or animal is always the first diagnostics we render: Is the creature attentive and aware of its surroundings, and interacts in the appropriate manner?

In the very next sentence he turns to the perceived scene, confirming he is moving in the scientific sphere of empiricism perceiving an item he and his student audience notice on the wall above the podium where he is standing, delivering a lesson in the lecture hall at Freiburg in 1935, the day of Heidegger speaking, reading from EM, his prepared notes.

EM, p. 89: […] *This thing, e.g. this clock, remains closed off to us in that what it is, as long as we don't know in advance of something like time, time reckoning, time measurement.*

Evidently, he is demanding a global context, a noumenal cosmos, for phenomena like clocks to be properly perceived. No doubt, lecturing on metaphysics in 1935, he anticipated a recent neuroscience achievement: Top-down information is used to re-enter lower centers for flawless processing of a structure being perceived or in view which is **known in advance** at least in its basic outlines.

EM, p. 89: *The viewing track of the sighting must be lined up in advance. We call it the preview track, the perspective. This will show: Being is not only not comprehended in an indefinite way, but rather, the definite comprehension of Being itself moves along a predetermined preview track.*

We now identify the preview track with top-down processing, and this interpretation is of very great assistance when trying to understand Heidegger's further explanations in the next paragraph which is somewhat difficult even obscure. There, he considers the condition of thought in the West, as well as its history, and finally links it to the cognitive gap. He touches on several important themes and we render it in full.

EM, pp. 89-90: *This, our going to and fro on this track, slipping and sliding, is ingrained in our flesh and blood, has become second nature, to such an extent that we neither have any knowledge of it nor even take notice of or understand any* **question** *about it. Our immersion [not to say being lost] in [constant] pre-view and viewing-through, which sustains and guides all of our comprehension of Being, is at once all the more powerful and concealed, because even the Hellenes no longer brought to light this preview track, and indeed were unable to do so for essential reasons (not from human failure). Yet, upon formation and consolidation of this preview track, in which even Hellenic comprehension of Being already moves, the separation of Being and Thought as it unfolds and grows is having an essential influence.*

From our viewpoint of LD-minded hermeneutics of the EM text, we cannot overlook the fact that, here, Heidegger is mixing two themes, the intellectual history, the evolution of the West and the perceptive processes of world-discovery, hermeneutics very possibly not even fully aware of his confusion, if it is permitted to consider such an occurrence. Of course the error site being in this essay's viewpoint cannot be ruled out as we are reading EM with a somewhat different plan in mind from that of its author.

Almost starting over on section IV.3, he continues with a new theme & a general explanation of Thought, which again very much has the flavor of the duty performed by CCA in recognition of phenomena as described above. A brief quote illustrates.

EM, p. 90: *Thought brings something before us,* **represents it.** *This representing always starts on our initiative, it is a free doing and ordering, but not arbitrary. Rather, it is bound by the fact that in representing we think upon and think through that which is represented, as we dissect it, lay it apart and back together again.*

This ruling contrast Being–Thought must come from inner unity. In a way this is about the commonplace

distinction between Reality, the "what-is" *vs.* "what we think."[15]

But how to discover the source? We need to better comprehend Thought before there can be progress on this issue.

EM, p. 91: *Thinking, besides desiring, willing, and feeling, is one of our powers. In the exercise of all powers and behavioral modes we relate to what-is, not only in Thought. Of course, but the distinction "Being and Thinking" involves something more essential than a mere relation to what-is. The differentiation springs from an initial inner union between Thought and Being itself. The designation "Being and Thought " invokes a distinction that in a way is demanded by Being itself.*

This quoted passage again reminds us about our brain function that we take to provide us with a meta-context for Heidegger's man-as-Dasein[16] where it is found that, under its own guidance, Ego, the logical unit representing the orbito-frontal neural clusters with their global fields of reception, scrutinizes momentary action in the scene, identifying phenomena from their attributes, using tools of the conceptual-categorical apparatus.

Neurologically, this is based on Top-Down Processing, with the lower order processing centers instructed by Ego, which in turn is guided by Order and Beauty to prevail while building up the Interior Castle, or noumenal cosmos.

Heidegger analyzes aspects of die Seinsfrage that involve logic and the role of logic, couched in his famously idiosyncratic expressions. Actually, our first attempt is to take recourse toward logic.

But, this track leads us in a dead-end-lane, even though seemingly logic is such a cut-and-dried topic.

But, in this lengthy passage quoted next of a basic transition from our naive understanding of Logic, and of Mind *vs.* Being, we very quickly make valuable progress and discover the linguistic nature and foundation of mind, which is a major point of contact between EM and LD that we have set out to investigate in this essay.

EM, p. 91: *Moreover, she* [logic] *is the one science and that discipline within philosophy, where ideological standpoints and movements play little or no part. Furthermore, logic is considered as a reliable and trustworthy science. She has taught the same thing since antiquity. True, one logician may rearrange the various traditional disciplines with regard to their structure and order, another leaves out this and that, another brings in additions from epistemology, yet another undergirds everything with psychology. But on the whole, a gratifying agreement prevails. Logic relieves us of the trouble of laboriously investigating into the nature of mind.*

And yet—we should like to raise one question: What does "logic" mean? The name is an abbreviated expression for επιστημη λογικη, *science of* λόγος. *And here* λόγος *means speaking. But logic is supposed to be science of thinking. Why then is logic the science of speaking?*

Do we really need to start with speaking in order to identify thinking? This is far from self-evident. Previously, we explained "thinking" without any reference to speaking and speech. Therefore, reflection on the nature of Thought if it is done as a reflection on λόγος, *and thus becomes* **[mere]** *logic, is quite bizarre.*[17] *"Logic" and "the logical" by no means are immediately* **the** *manners of identification of Thought, as if absolutely nothing else were possible. On the other hand, it clearly was no accident that the science of thinking became "logic."*

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[15] FOS05: *Reality is not what you think it is.* FOS11: Our noumenal cosmos is not the actual Universe.
[16] This despite his evident neglect of any bio-anatomical aspects of Being, *cf.* FOS11.
[17] The original text has G. 'eigenartig' which is miunderstood & mistranslated in both translations cited in the reference section.

By the reference to *speaking* Heidegger reveals that the Logos root belongs to linguistic mental grasp, which illuminates the computation, the Physis matter supports the events and makes the final record possible, but remains blind to the calculated result.

The true logic begins to emerge in the final sentence of the succeeding paragraph, after a critique of "logic" in quotation marks and it now must be secured.

EM, p. 92: *We seek, in service of Thought, to win precisely that from where the nature of Thought determines itself, the* ἀλήθεια *and* φύσις, *Being as unconcealment, that went missing due to "logic."*

Here we discover another point of contact between EM and LD: Being φύσις, as we learnt in Chapter I, now out in the open, in unconcealment—ἀλήθεια, and this with the help of Thought, in the service of which we arrive here.

This is precisely the function Kant taught us in his famous Transcendental Deduction, that we control perception by our thought processes that are required to discern the true facts of actuality in the scene that surrounds us in any given moment of time, being aware of the thoughts as our Ego is able to observe its own actions, where "observe" is a euphemism, a misnomer, a circumlocution for the actual event, about which all we can truthfully claim is that Ego is receptive toward its own actions, which is safe for us to assert, taking advantage of Ego's global field of receptivity.

Of course, the relevance of Ego observing its own actions is for the purpose of NK harmony: Is the application of CCA, the conceptual-categorical apparatus, housed in parietal cortex, consistent with the rest of the noumenal cosmos? Does my Ego restore cosmic harmony, at least internally? Any misidentification will quickly be discovered when Ego checks on the result of its own thought processes, and discovers that the phenomenon was misplaced in a wrong category. Examples are plentiful in our daily lives: A sudden scratch or sting on my skin while walking through weeds could be a burr or an insect, I will know soon by visual cue or because burrs don't itch, while insect bites usually do, *etc*.

This mental reflection brings into unconcealment a phenomenon by its true percept in its origin causally dependent on an apparition mixed in with the U-data stream and concealed by it as particles of gold are immixed in the dredged up gravel, hurtled through the water running down a miner's chute.

This function of Thought, the Kantian attention of Ego toward its own actions in the ***discernment, categorization, and conceptual classification of phenomena involved in the momentary scene,*** is what Heidegger describes as **Dasein's receptivity toward Being**.

We next see the philosopher engage in a full-fledged discussion and analysis of the Heidegger separation, *i.e.*, the separation of Being and Thought, primarily concentrating on understanding of λόγος.

This ends his introduction to Chapter IV, Section 3 of EM.

Heidegger's Antigone Reading: Violent Man and the Metaphysical Gap

At this point in EM, Heidegger is still very much in pursuit of his philosophical anthropology, the question "Who is man," and now here in his lectures, he inserts a selection from the tragic play *Antigone* by Sophocles, an ominous choral ode sung by the Chorus as they anticipate the arrest of the heroine, placing the text in his very own, special translation. In his actual lecture, he apparently read the Hellenic text aloud to his student

audience.[18]

He then gives his interpretation of the ode, more than that: an *Exegesis*—in three *Passes*, here by way of examination for, and discovery of, LD-type notions, presented in three dedicated subsections, for which see below.

There is no need for us to consider the full text of the poem in this essay. But it is necessary that we follow some of the interpretations offered by the philosopher as he is expanding on his views how original unity of nature and logic was born and why it was lost in Western civilization, so that we may understand him, in his preparations for the final assault in the succeeding pages on the Seinsfrage.

However, emphasis here as elsewhere in this essay is on those declarative statements that Heidegger offers in clear reference to neural-environmental processes factoring into the view of EM as an LD-theory of human perception.

Antigone Chorus, Exegesis: Pass 1

Heidegger continually emphasizes the unusual character of his endeavor to bring Being out and into unconcealment. His purpose of adducing Sophocles is to make sure we are not missing the point: This EM, this treatise, these lectures deal with the bottomless terrors of existence in an inscrutable Universe which man must face and struggle for life with all he has but still go down in defeat at the end.[19]

Here for clarity, are the first two lines of the ode.

πολλα τα δεινα κοὐδεν
ἀνθρωπου δεινοτερον πελει
Many the fearful things and none
More fearful arises than man

He lays down the plan of exegesis of the choral ode.

EM, p. 114: *We seek that which carries and permeates the whole. But we really do not need to seek it. Threefold it is what assails us three times like a repeated assault and at the outset breaks up all measures of everyday questioning and affirming. The first is the begining:* πολλὰ τὰ δεινὰ …

In the dictionary[20] we find δεινός, δεινή, δεινόν, *fearful, terrible, awful, marvelously strong, powerful, wondrous, strange, clever, skillful, vehement* **(oratory)**. Heidegger likes *unheimlich, uncanny, scary, horrific.*[21]

EM, p. 114: *Man in* **one** *word is* τὸ δεινότατον, *the uncanniest.*

He warns against misinterpretation, this is "horrific man" in an ontological, not an everyday sense. He is proceeding to the Heidegger Chasm, in a grand sweep of his well-known capacity for poetic philosophy, one of the core passages of EM.

EM, p. 114: *This saying of man hafts him from the outermost limits and the sudden abysses of his Being. This abruptness and ultimacy never will become visible to the eyes of mere description and declaration of something present, even if there should be many thousands of eyes that may attempt to explore condition and circumstances of man.*

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[18] So noted by Gregory Fried & Richard Polt, the translators, in one of their footnotes. They also frequently supply translations that, although more standard, may not convey subtleties which the philosopher has discovered in the textual and rhythmical details of the Hellenic original.

[19] It is impossible not to observe the seer lecturing at a time when the destroyers of his nation already had been in power for two years.

[20] H. G. Liddell and R. Scott, Greek-English Dictionary, Clarendon Press (1996).

[21] Google back-translates horrific as *entsetzlich*, which might be construed as a stronger version of Heideggerian *unheimlich.*

His entire paragraph here has this epic, this other-worldly sound to it.

But, so Heidegger notes, δεινόν, is ambiguous in a profound way. This is the first meaning of deinon.

EM, p. 114-115: *The* δεινόν *is the horrific in the sense of overpowering order. The powerful, the overpowering order is the character of order itself.*

Without too much difficulty we recognize here in deinon in the first senses how Heidegger discerns the violent Universe U, of LD theory that poses an almost impossible need to struggle for survival on all living things.

At last we next arrive at ***violent man*** who in a way is the central topic in this First Pass through the choral ode, supplying the nexus to Heidegger Chasm as a man-made artifact, not a natural occurring phenomenon. This is the second meaning of deinon.

EM, p. 115: *On the other hand,* δεινόν, *connotes the powerful in the sense of him, who uses power not merely has power at his disposal, but is violent in his actions, inasmuch as his use of violence is a basic trait not only of his Doing but of his Dasein.*

He makes clear, this has nothing to do with street-level violence, which always finds its societal compensations dealing with disturbances and injuries.

Rather this is again ontological: What-is as a whole is deinon as overpowering order U in the first sense, but man is exposed to and remains a part of this, while on the other hand he is deinotaton as a violent doer, as the choral ode describes him so well, because he needs to be such in order to survive in chaotic U.[22]

Three words, a "three times repeated assault" Heidegger announced at the start of Pass One, of which deinon is the first.

EM, p. 116: […] *the* **second** *supportive and soaring word* […] παντοπορος, ἄπορος ἐπ΄ οὐδεν ἐρχεται: *"Everywhere faring, on the way, inexperienced with no way out he comes to naught."* […]

We sense how the παντοπορος, ἄπορος *contains an exegesis of* δεινοτατον.

The exegesis completes itself in the ***third*** *soaring word* […] ὑψιπολις ἀπολις […] *Poets,* […] *thinkers,* […] *priests,* […] *rulers* **are** […] *power-doers, use violence and become soaring in historical Being as makers, as doers. In the place of history soaring, they at once become* ἀπολις, *without city or place, alone, horrific ones, with no way out amidst the whole of what-is, at once without statute or limits, unbuilt and unfit, because as makers they must first be founders of all of this.*[23]

The lengthy passage goes into detail how the Ode paints a vivid image of man's violent actions needed to stay alive and how he himself may be among the victims of his own tricks and machinations, all this required of man for survival in the random chaos of U. In SZ words, man in *care and sorrow*[24] struggles to maintain his *existence.*

Antigone Chorus, Exegesis: Pass 2

Heidegger describes the world in the choral ode as it stands against man. We have no difficulty plainly recognizing this world as the world of U from LD, the untamed Universe that stands against being conquered by man in the way of Language L, the Logos.

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[22] The antidote against sin is to stop sinning.
[23] The year is still 1935, but he seems to be describing '45.
[24] *Sorge* connotes both.

For clarity in the following quote from EM, here are the 3rd and 4th lines of the ode.

τουτο και πολιου περαν ποντου
χειμεριῳ νοτῳ χωρει
this one also crossing grey seas
sets out driven by wintery south winds

EM, p. 118: *Immediately after the principal and leading saying at the start, the Ode, with* τουτο και πολιου *sets in hard. It sings of breaking out into the billowing bottomless, of giving up firm land. Departure is not occurring upon the cheerful smoothness of brilliant waters but in a wintery storm. The saying of this departure is fitted in* […] *as the word* χωρει, *is fitted in* […] *where the meter shifts:* χωρει, *he surrenders place, he moves out—and boldly entrusts himself to the superior power of the sea's placeless flood. Like a pillar in the build of these verses stands the word.*[25]

We recognize the adversity offered by a hostile Universe U, plain and simple, to him who must venture out in order to make a living, in his metaphors ''he departs" (χωρει), "bottomless," "giving up firm land," and in "placeless" (Utopos).

Caution is required not to misread the poem, this is not a tale of the secret of man's origins, not science. Rather, man's violent interference in his world is illustrated by the ode's manifold imagery, his need for violence, if he is to live, in answer to the overpowering forces that he encounters every day.

Even the mechanisms of perception of the scene, the organism's immediate environment, require violence, the mere naming of the animals. This is explicitly stated declaratively by Heidegger, and one of the main links between LD and EM, proximate cause for the birth, the formulation of LD, when this author first began reading EM. The philosopher is speaking about the various images and scenic set-ups of the poem.

EM, pp. 119-120: *Rather, what the ode is now citing, language, understanding, passion and building belong to the overpowering power just as much as do sea and earth and animal. The difference is only that the latter include man in their order and carry, beset him and fire him up, while the former orders him from within as that what-is which he himself is, and must accept and adopt as specifically his own.*

This ordering from within loses nothing in its overpowering by man himself taking it in his immediate power, which he then uses as such. This way only serves to conceal the fearfulness of language, of passion, as that into which man as historical is fitted, all the while to him it appears as if it was **he** *who disposes of it.*

The passage describes our noumenal cosmos NK, the center of man's soul in our utility interpretation, and how it may give rise to humans being inclined to require that the lay-out of our own internal private world should be reflected in the conformation of external matters. From here, too, originate common illusions of limitless license to exercise one's free will.

He shortly arrives at an exact description of how the scene is recognized in top-down neural processes by means of fitting phenomena to the noumenal cosmos and applying the conceptual-categorical apparatus CCA to "violently" identify the percepts as we make them to correspond with phenomena.

EM, p. 120: *The violence of poetic diction, of a thinkers design, the construction of building, of nation-building action is not an occupation of capacities owned by man, but is a taming and fitting of powers, by which what-is develops itself as such, when man moves in on it.*

In a final passage from this train of thought before moving on to even more incisive revelations, the

[25] Apparently, χωρει.

essence of violent man fitting the scene to his purposes is formulated by him in exemplary finished language.

EM, pp. 120-121: *Only when we comprehend that the use of violence in language, in understanding, in forming, in building, co-creates [and that always means: brings forth] the pushing-through of the pathways into the enveloping order of what-is, only then do we comprehend the fearfulness of all violence.*

And, we meet the Three-Way (implicit), from mere sense data to meaningful perception of a scene, the fork in the road, but now turned into a circle, where man, lost between mere appearance and futility of his own machinations, has no way out in the end but death, a predicament which shades his existence on every day of his life.

We next meet three words selected from the choral ode, from its final strophe, which amount to building blocks by means of which Heidegger will construct the solution to the Seinsfrage in the ensuing and concluding passages of Section IV.3, minus an appendix on cultural criticism.

EM, pp. 121-123:

1. Power, the powerful, in which the doing of the violent one moves is the entire circle of machinations which are delivered over to him, το μηχανοεν. […] *We are aware of essential aspects which are declared in the Hellenic word* τέχνη. [. . .] *We translate* τέχνη *as knowledge.*

2. Just like δεινον *as violence gathers its character into the basic Hellenic word* τέχνη, *so* δεινον *as the overpowering manifests itself in the basic Hellenic word* δίκη. […] *Being,* φύσις, *as order is original collectedness:* λόγος, *is fittingness that makes to fit,* δίκη.[26]

3. […] *The violent one, the maker, who moves out into the un-said, breaks into the un-thought, who forces the un-occurred and makes the un-seen appear, this violent one, at all times stands in daring (*τολμα*). When he dares to overpower Being, he then must expect the assault of un-beings,* μη καλον, *the break-up, un-constancy, un-jointedness and mischief.*[27]

Antigone Chorus, Exegesis: Pass 3

He offers a summary of Passes 1 and 2, referring to the key roles of dikeh and techneh.

EM, p. 124: *The* δεινοτατον *of the* δεινον *lies in the oppositional relationship of* δίκη *and* τέχνη.

This consideration he develops into social pessimism, asserting that ultimate success of man~L is not to be expected in resisting the overpowering forces of Nature U.

Most impressive evidentiary testimony for our thesis, of a neurolinguistic model underlying EM, are those passages where Heidegger speaks directly to the historical record left by Being when confronted by man's violent actions.

EM, p. 125: *As breach for the revelation of Being, set to work in what-is, Dasein of historical man remains an* **incident,** *that incident in which suddenly arise, and enter into the work as history, the powers of the unbound overpowering of Being.*

Especially valuable is the follow-up that appears to hint at what nowadays we would call the neurolinguistic processes by which Hellenic philosophers saw the recording to be performed, processes top-down processing, of U-data from phenomena, really apparitions,[28] qua pre-linguistic structures, and retrofitting into a noumenal cosmos.

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[26] EM: *fügender Fug.*
[27] *Unfug,* his translation of ἀδικια.
[28] FOS11.

EM, p. 125: *Of this suddenness and singularity of Dasein, Hellenes had a profound intimation into which they were forced by Being itself, which they experienced revealing itself to them as* φύσις *and* λόγος *and* δίκη.

Main Claim: Violent Man Breaches the Cognitive Gap

He next makes an assertion, one that directly relates to the question of origin of the Heidegger Chasm dividing U and L, which therefore we refer to as his ***Main Claim*** regarding the place of the Logos in origin and nature of language, linked to man by hermeneutics.

Parmenides' Frags. 5 and 8.34 are quite similar, their Hellenic versions, included by Heidegger.[29] He refers as ***the Saying of Parmenides,*** to both, jointly and/or separately, in the current passage through Section IV.3, to its end.

According to Heidegger, the ancient thinker, in the Saying thus understood, explains the human capacity of the receptive mode, high-lighted above to stand in contradistinction to the false notion of the mind being reducible to mere logic.

EM, p. 126: *In Pass 2, we intentionally emphasized* […] *the mutual relationship of* δίκη *and* τεχνη. Δικη *is the overpowering fittingness.* Τεχνη *is the violence of applying knowledge. Their mutual relationship is the occurrence of the fearful.*

We now claim: the togetherness of νοειν *(receptivity) and* εἶναι *(Being) expressed in the* **Saying of Parmenides,** *is nothing else but this mutual relationship.*[30] *If this holds up, then the earlier assertion is proved, that this* **Saying** *gives an unprecedented outline of the character of man, and does not mention man accidentally, in some way.*

Remarks relating to *Main Claim*. The following remarks are in order, preceding our examination of his proof of his *Main Claim.*

We can see how this excellently clear pronouncement above of his key position in a declarative statement allows us to identify his key verbal building blocks with key neural processes described in our earlier work, as cited:

1. τέχνη = Applying the CCA to identify a phenomenon's percept.

2. δίκη = Fitting the percept into the global context of the NK.

Here, he correctly makes out the δίκη to be ***overpowering,*** because each such step of retrofitting a phenomenon into one's inner world requires the entire ***known universe,*** *i.e.*, the NK, to be consulted for adequacy of fit.

A great help is Heidegger's enigmatic essay *Der Spruch des Anaximander,*[31] which dramatically paves the way for us to an understanding of Heidegger's treatment of δίκη in the sense of *fitting, Fug*. There, he translates ἀδικια as *Unfug, mischief,* **literally** *unfitting,* in consideration of the historically archaic philosophy.

EM, p. 127: *In the poetically expressed mutual relationship of* δίκη *and* τεχνη, δίκη *stands for what-is in its entirety.* [..] *The oldest saying that has come down to us,* **the Saying of Anaximander,** *speaks of Being in an essential contextual nexus with* δικη.

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[29] For Frag. 8.34 he has two slightly different translations.
[30] *I.e.*, of δίκη and τέχνη, their relationship emphasized preceding.
[31] In: Holzwege, Vittorio Klostermann (1950, 1994, 2003).

Heidegger offers his interpretation of Heraclitus Frag. 80, where the ancient sage refers to δίκη in a significant Being-related context. Again, the clear reference to perception is in evidence.

EM, p. 127: Δίκη *as joining jointwork belongs to turning-against-in-conflict, as which* φύσις *emerging lets appear the apparent, and thus presents itself as Being.*

For Parmenides Δίκη is the Goddess who holds the keys to the Three-Way of Being, Appearance, and Nothingness.

EM, p. 127: *Finally, Parmenides himself, remains the definitive witness for a thinker's use of the word* δίκη *in speaking of Being.* Δίκη *to him is the goddess. She guards the keys alternatingly closing and opening the gates of day and night, i.e., to the ways of (revealing) Being, (disguising) Appearance, and (closed off) Nothingness. That is to say: what-is opens itself up only inasmuch as the fittingness of Being is preserved. Being, as* δίκη *is the key to what-is in its jointwork.*

The author of the present essay had read these words years before being able to formulate a theory of human perception, based on the understanding that we depend on fitting observations into our internal, noumenal cosmos.[32] *I.e.*, in the confused tangle of apparitions that enters our brain, only by fitting sense data into a world model, can we recognize even the simplest phenomena in the environmental scene. Awareness of the scene is required, application of concepts and categories from the CCA, verifying of correctness of CCA application by clusters of neurons in the orbito-frontal cortex that are distinguished by their global fields of receptivity, meaning **everything** influences their firing including the fit or misfit of the apparition with regard to the attempted CCA application. The inner jointedness, the jointwork of the Universe must be preserved when we see, hear, feel or smell anything, the vertebrate brain will not help an organism to survive unless it has its noumenal cosmos in good shape, to the extent representable in the internal world model of the NK.

In our earlier work[33] we explained that phenomena are certain pre-linguistic structures, and that our own organisms belong into that category. There are sufficient reminders given about the foundational issues presented by such an understanding of phenomena, the Universe U being a chaotic, uncountable realm, not accessible fully to the rational, linguistic mind, restricted by recursive, countable structures of neural-computational logic. In fact we begin with the resigned, deliberately ambiguous quip: *Reality is not what you think it is.* We have the precursor in the memorable dictum coined by Alfred Korzybski *The map is not the territory.* But no major effort was undertaken to address the question of outer limits of mental comprehension of the ultimate realities of whatever the Universe may be—to bring into focus the utter strangeness of man's existence in an incomprehensible, often outright messy Universe. This is exactly the direction where Heidegger goes next, we are curious where he will end up in his lectures to students at Freiburg University.

The developments of this passage of Section IV.3 are the key points for LD-interpretation, and are of top-importance for what follows.

Continue proof of *Main Claim*. Next as his proof of the *Main Claim* continues, more of our analysis for LD-content. He reminds his class of matters about which he had lectured earlier, regarding how receptivity makes what-is to appear in unconcealment.[34]

EM, p. 127: *To the poet, the onrush of* τέχνη *against* δίκη *is that event by which man becomes alienated.* […] *Thus, in the occurrence of fearfulness, what-is reveals itself as a whole. This revelation is the event of*

[32] FOS11, with preparations in FOS05.
[33] FOS05.
[34] *Vide supra*, EM, p. 106, 123.

unconcealment. This is none other than the occurrence of fearfulness.

The poet's saying, we can agree, can be understood in the indicated manner. Here, the poet of course is Sophocles, and we are reminiscing about his choral ode, our contemplation of its meaning by interpretation of its verses in repeated passes.

The fearful violence to be expected of humans in the process of reading the scene for what it is, here is brought out by Heidegger in dramatic language, well-founded because humans typically trust their own judgment, foolishly believe they know what's what, but in the end, pitifully, all too often find themselves shipwrecked, at their own Waterloo, private or public, defeated, destitute, destroyed, or dead.

EM, p. 128: *But what we miss in the sober saying of* **Parmenides** *is the fearfulness that we have characterized.*

Therefore, it is now upon us to show the sobriety of thought in its true light. […] *if receptivity in its togetherness with* δίκη *is such that it uses powerful order and as violence is an urgent need and must be undergone in a struggle* […] *and if we can show that receptivity expressly is related to logos, and this logos reveals itself as the ground of being human, then* […]

***Main Claim* well-founded.** The *Main Claim* is seen as being well-founded.

Next in his proof, he provides more detail regarding that our main quest is for the Logos. First, to prove his point, he designs a plan in form of a three step program:

EM, p. 128:

1. Receptivity is no mere process, but a decision.

2. Receptivity stands in an inner essential commonality with the Logos. The logos is an urgent need.

3. The logos establishes the essence of language. As such, it is a struggle and the foundational ground of historical Dasein of man amidst the whole of what-is.

It is advisable to begin with his summation, after completing the three steps of his proof, in order for us to gain our own perspective, which may differ starting from an LD point of view, and also, to make it easier for us to see him go through all three points of the plan.

EM, p. 133: *Indeed, Parmenides, too, deals in essential respects with logos. Logos is an urgent need and in itself must use violence, to fend off gossip and distraction. logos stands as* λεγειν *opposite* φύσις. […] *Being human amounts to this: To gather, to take up the gathering receptivity of Being of what-is, to take over the knowing putting in operation of appearance, and thus to manage unconcealment, to preserve it against concealment and cover-up.*

A few lines hence we see how the fundamental ontology of Dasein was created to allow access to such answers.

Reading this we are curious why the emphasis on gossip, the proof preceding indicates it was a concern already for Parmenides and the ancient Hellenic culture. Perhaps Heidegger, too, shared the concern, which occupies a prominent place in SZ, because he was a keen observer of the market place, of the religious cults, and of the political scene, all of which are much under control of the quick tongue, with deception and near fraud rarely far away. The great leaders of statecraft, industry, church, and business have always been those who were able to keep at bay the dangers posed by the slick craftiness of deceipt and by verbal seduction into questionable practices.

At the same time it is beginning to dawn on us that Heidegger is drifting in a direction now more and more getting to be far removed from any deep searches into the far reaches of Being which are hidden behind the

curtain, the magic Veil of Maya, and that he will walk up with us only up to and near the curtain of Appearances. A small step beyond is still possible, to understand how the appearance of a phenomenon gets us into studying the pre-linguistic character of phenomena, that they internally carry their own internal historic records which we can learn to read, as a geologist knows his type fossils.

The three steps of the proof, their content conducive to LD-type interpretations, can be sketched now, as follows. The approach to Being is always through the Three-Way, in each of the three steps of the proof, the appearance of phenomena, and the Logos as structure constantly reminds us this is a theory of human perception.

Step 1 of proof of *Main Claim*. He reminds us of what was said in an earlier lecture, that receptivity involves confronting reality, Being, so as to be ready for reception of appearance of what-is.[35]

EM, p. 128: *Receptivity is passage through the fork of the Three-Way, but this can come about only if receptivity fundamentally is* **decision for** *Being* **against** *Nothingness, and thereby conflicts* **with** *Semblance.* […] *must* […] *use violence against the constantly pressing entanglement in the everyday and the commonplace.* […] *The violence of the so decided one moving out, on the way toward Being of what-is, moves man out of his home, out of the world of the nearest and familiar things.*

Heidegger continually wishes to guard against any possible misunderstanding of phenomenological hermeneutics of Dasein, his approach to metaphysics, with standard rational discourse on the scientific level based on notions that might cast receptivity νόειν in the mold of a human ability or capacity, one that "humans have or possess." This puts again into question our main aim for this essay, to model Dasein as function of a logical brain, a Turing machine that can identify phenomena because it has a vast store of memory and a continually working default network that is working out a perfect noumenal cosmos and is interrupted in its energy consuming activity only by urgent tasks arising for the organism that require to shunt the blood supply to neurons that can figure out what to do about the urgent need. The point that we hope will rescue the project which this essay is attempting to undertake is that to Heidegger the novelties underlying LD, facts of recursive function theory, of computational mathematics, of medical fMRI technology, and of neuroscience, were unfamiliar, unavailable and unthinkable. Clearly, we argue, the Dasein of Heidegger's philosophy is a function of Heidegger's organism, and modeling would seem to be a timely enterprise, now feasible, and urgently needed .

Neither, he says, is receptivity a psychological process among others.

EM, p. 129: *Rather, receptivity is* **wrested** from the usual drifting along and against it. […] *The sobriety of the Saying is a thinker's sobriety, for which the severe in the concept of "receiving" makes up the fundamental form of being captivated.*[36]

Step 2 of proof of *Main Claim*. This is the main step, almost three pages long, while Steps 1 and 3 span less than a page each. Here, Heidegger examines the pre-Socratic fragments for sayings that will prove the primitive connection in reasoning of νόειν and λέγειν, receptivity and collection, to prove his second point that indeed, λόγος stands in close kinship to νόειν and thus, to unconcealment ἀλήθεια.

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[35] *Vide supra* EM, p. 106, 123.

[36] Literal translation: *the severe of the receiving concept.* But Heidegger nowhere else mentions concepts as the ones doing the receiving, as agents of receptivity, which would violate his hermeneutics of Dasein and more resemble a modeling approach based on rational philosophy. So when he writes *das Strenge des vernehmenden Begriffes,* he is using *Begriff* **attributively,** as an attribute that modifies *vernehmend,* and likely was envisioning Parmenides' severe concept of νόειν *vernehmen receiving, when the ancient thinker was forming the concept.*

Going back to the start of Section IV.3,[37] we are reminded of having read Parmenides Frag 6.1.

EM, p. 129: *At that time we postponed knowingly a closer interpretation of the first verse. Meantime we read and hear differently:* χρη το λεγειν τε νοειν τ᾽ἐον ἐμμεναι. *Even then, we translated: "Need there is of the collected positing as well as the reception of this: That what-is (is) Being."* […] *With reception is named* λέγειν *as an event of the same character.*

He elaborates on the urgent need of the combining event of logos and reception, and that logos here cannot mean merely the structural gathering of the jointwork of Being, but must refer to **the violent human act of collecting Being in its collectedness.**

What is brought into unconcealment is **Being as logos,** which in LD-theory for us means: **as structure,** specifically, pre-linguistic structure that allows us to read its genetic history encoded in the phenomenon. So we posit this as our metaphysical equation, λόγος = pLs.

How does he discover a relationship of logos to unconcealment? Once again, we are transfixed in amazement, upon reading how Heidegger captures in his highly personal and paradoxical wording deep philosophical insight into that wondrous reality of human existence where small amounts of joy are mixed with endless pain and despair, cast in a chaotic hostile universe. The translation can endeavor an attempt to ease the impact of the strange, the absurd, while giving up none of the severity of what is expressed.

EM, p. 130: *Being human, as an urgent need of receptivity and collection, is a constraint into the liberty of adopting and acquiring* τέχνη, *of knowingly putting Being in operation. Such is history.*

[…] *Because* λέγειν *is determined as collecting, gathering, is related to the original collectedness of Being, and while Being signifies: Entering into unconcealment, that is the reason why this gathering has the basic character of opening up, of revealing. In this way,* λέγειν *enters in a clear and sharp contrast against covering up and to concealment.*

This is immediately and unambiguously confirmed by a saying of Heraclitus. Frag. 93 says: The Lord whose oracle is done at Delphi οὐτε λεγει οὐτε κρυπτει, *he neither gathers nor conceals,* ἀλλα σημαινει *rather he gives hints. Gathering here is put in contrast to concealing. Gathering here is discover, make apparent.*

Also, he makes an attempt to explain the secret origins of humans and of their language along with our species.[38]

EM, p. 131: *That language should be logos, gathering, is not at all self-evident. But we understand this explanation*[39] *of language as logos, i.e., as gathering, out of the origin of the historical life of the Hellenes, out of the fundamental direction, in which Being first opened itself up to them, and they brought it to a standstill in what-is.*

The symbolic function of verbal language is an essential aspect of any scientific attempt, such as LD, to explain the human capacity of perception, as we all experience everyday the verbal identification of both, the utilities and distractions of daily life are made so much easier if the right words can be found.

EM, p. 131: *The word, the naming, places what-is as it opens itself up, away from the immediate onrush back into its Being and preserves it in this openess, boundedness, and constancy. Naming does not provide after the fact some designation by a mark, called a word, but quite the reverse: the word returns, sinking, from*

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[37] EM, p. 86.
[38] *Esp.* mentioned prominently EM, p. 119, 131.
[39] Deutung.

its initial height of power, of a violent deed that opens up Being, in a manner that it slips itself in front of what-is. By the original saying is opened up the Being of what-is in the jointwork of its collectedness.

Reading this, we cannot help but to delightedly read into Heidegger's formulation:

the word, its saying, opens up the Being of what-is in the jointwork of its collectedness,

to be equated with it, the very core framework of LD,

conceptualization of phenomena as pre-linguistic structure that contain in them a record of their genetic origin.

In fact, in passing it's worth a thought: Perhaps *collectedness* is a useful definition of *structure.*

Step 3 of proof of *Main Claim*. Before we look into his arguments in this passage, which pertain to logos as collectedness belonging together with language, we would like to say, in a way predict, that this must have to do with pre-language, the fundamental concept of LD theory, that is used to describe the basic hermeneutic function of the brain-language system that we have been calling the *Logos Machine:* The pre-linguistic character of phenomena described as those structures that we can read because they tell us what they are by virtue of carrying inside themselves their own Internal Structural Historical Records (ISHR) each expressed in their own individual pre-language.

The violence aspect which ranks high for Heidegger, in part may be motivated by what nowadays we call environmental impact. Man has completely altered vast landscapes, beginning in prehistoric times. Every time we examine phenomena closely, a severe intervention is required, with few exceptions. A special engineering art, so-called *non-destructive testing,* is designed to minimize having to rip things apart in order to make sure they are intact, and to verify that they had been working fine, up until then.

EM, p. 132: *Because the essence of language is found in the gathering of the collectedness of Being, language as everyday vernacular speech comes into its truth only when speaking and hearing are referred to the Logos as collectedness in the sense of Being.*

Here again, we find in the formulation *logos as collectedness in the sense of Being,* a suitable definition of "structure," enlarged somewhat from the preceding attempt, in the hope that this extension will help to clarify. About the peculiar difficulties of defining this concept, *cf.* our earlier work.[40]

EM, p. 132: […] *in Being and its jointwork, there is what-is, originally and as a standard, beforehand already, as it were, a* λεγομενον, *gathered, having been said, before-spoken and to-the-fore-spoken.*

The mysterious nature of pre-linguistic structures, stories told by no story teller, paintings painted by no painter, is adequately and commensurably expressed by the philosopher, according to a sacred *language of things* (Gadamer).[41]

On his way to an answer to the Seinsfrage, he interprets another key text of Parmenides, Frag. 8, 34-36, with a difficult semantic content, but perhaps a fairly easy to swallow one, because of its venerable antiquity. His translation amplifies Parmenides, translated here yet again, in a slightly trivialized version:

EM, p. 132: *The receptive mode (*νόειν*) and that which is received belong together. For not without that what-is, in which being is already spoken (*λέγειν*), will you find reception.*

Above when previewing the passage immediately following Step 3, we already took occasion to remark on Heidegger's preoccupation, adhering to that of Parmenides, with social criticism in the form of warning against

[40] FOS05.
[41] *Vide supra*.

gossip, and other manifestations of the loose tongue. Perhaps he shared the concern as a keen observer of the market place, the always unfettered sales rhetoric of the shopping stalls routinely deceptive and often bordering on the fraudulent: Business, trade, and therefore civilization, are unthinkable without the power of persuasion to pay a price as high as a fooled buyer will pay.[42] His pre-Socratic reference is one more Parmenides Frag. 7, containing a decisive Hellenic verb, of importance in every perceptive act of the human Ego, which he is able to show amounts to another link to the Logos. The literal relevance for perception in the LD sense is again strikingly obvious, Ego qua Dasein having to judge for each and every phenomenon whether it was mere semblance or the real thing.

EM, p. 133: […] λογος *here stands in closest association with* κρινειν, *separating as deciding, in execution of gathering the collectedness of Being. The selective reading is the basis, and carries the pursuit, of Being and the defense against semblance. In the meaning of* κρινειν *resonates: to select, to contrast, the rank-setting measure of valuation.*

Heidegger's Doctrine of the Logos in Unity With Nature

We scan EM for the next succeeding occurrence of the Three-Way which is in the context of interpreting Parmenides Frag. 8, Heidegger going about his plan to establish that Heraclitus and Parmenides teach the same metaphysics, of the Logos in unity with Physis = Nature, contrary to what has been taught in the schools since antiquity. That false teaching was based on a misreading of their texts, overlooking the founder role effect of the Pre-Socratics.

EM, p. 104: *Parmenides shares the same ground with Heraclitus. Where indeed would we expect these two Hellenic thinkers, the inaugurators of all philosophy, to stand if not in the Being of what-is? For Parmenides, too, Being was* […] *the permanently manifested order through which perpetually shines-through*[43] *even the semblance*[44] *of the one-and-many-sided. Hence the indispensable way toward Being passes through unconcealment, yet still remains a Three-Way.*

There is much more, deeply imbedded in the remaining pages of EM, having a central part in the final treatment answering the Seinsfrage. An attentive student of EM will observe a special context occurring several times where the Three-Way comes up implicitly with the words absent, but plain nonetheless from the matter under consideration. Most occurrences of the Three-Way are best covered in context, as contributions to the main matter of Heidegger's metaphysics, —and possibly so noted and passed over on occasion when the discussion becomes dense and the level very high.

Being and Thought: Heraclitus on Logos-Gathering

He sets up a to-do list of five questions that we must answer in order to understand both, separation and unity of logos from/with physis.

EM, p. 94:

1. How is the original unity of Being and Thought present as the unity of φύσις *and* λόγος*?*

2. How does the original separation of φύσις *and* λόγος *happen?*

3. How does λόγος *come to play a role and become protagonist?*

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[42] EM, p. 132, Parmenides Frag. 7, v. 3-6.
[43] Original has *hindurch scheint.*
[44] Original has *Schein.*

4. How does λόγος *(the "Logical") become the character of Thought ?*

5. How does this λόγος *as reason and mind come to dominance over Being when Hellenic philosophy began?*

The next following discussion of the historical question sheds light on this significant topic in hermeneutics, revealing an ambiguity that we cannot here resolve, but that could lead to a misinterpretation of EM. Again the issue is whether the matter under investigation consists of invariant phenomena, vital neural functions, that are required in perception of reality, and the history of their discovery in Western philosophy beginning with the pre-Socratics and other early Hellenic sources, —this would be the point of view adopted by this author, —or does EM treat thought patterns as they prevail in various ages in their historical evolution from primary, direct contact to Being, degenerating from wholesome dealing with life's challenges in early Hellas to modern facile usage of worn concepts that bar reality from the doorstep?

As we see next, EM appears to offer a mixture of these, with our task here asking us to sift out invariant features. We cannot deny validity to his deprecatory remarks but find a more felicitous interpretation of mental progress in observing that the trivializing tendencies, the facile words, give witness to invariant, deep-seated logical and neural structures functioning in vital roles to facilitate survival by more trivial means.

Here is a productive way to think of this controversy:

How does Heidegger explain today's conceptual formation which prevails as separation of logos from physis? Heidegger begins by declaring history equivalent with character in his appraisal of this contextual complex of mental issues.

EM, p. 94: […] *we again pursue this separation in its historical, i.e., also its essential origin.* […] *Our question about the origin of the separation therefore is also and primarily a question about the essential togetherness of Thought with Being.*

As suggested above, the "correct" reading—in the way of LD—of EM is as a theory of human perception. In this paragraph he has introduced a line of reasoning, which sends us to Immanuel Kant's famous Transcendental Deduction for an important historical explanation and perhaps even a solution of the Seinsfrage. If we try and posit a ***naive rule of thumb,*** to crudely replace EM "Being" by "perception of natural phenomena," then we can read EM like a treatise on psychology, and will find that we actually are embarked on the easiest passage to sail toward a science approach to his subject-matter in these remarkable lectures.

EM, p. 94: *Historically the question is: What is it with this togetherness at the onset of Western philosophy?* […] *We can take a hint from the Hellenic doctrine of Thought becoming one of* λόγος *and "logic."* […] *We only need to free ourselves from the opinion that* λόγος *and* λέγειν *originally and properly meant as much as Thought, Mind, and Reason.*

The significant semantic conclusion is revealed by deriving logos from the verb λέγειν, to speak, read, gather, collect, with the basic conclusion: logos is gathering. This is to be identified with Kant's synthesis, a fundamental part of the NK top-down process, as the chief way we identify phenomena mentally.

However, needless to say, he makes no mention of dualism, a concept fundamentally opposed to his concept of Dasein as being-in-the-world. Hence, following our stated goal, on the basis of LD we apply hermeneutics to EM seeking to retrieve a perceptive theory, those essential elements identifiable from LD and characteristic of dualistic epistemology.

But primarily we, from our own interest and in our focus of attention, are looking for nature and origin of

the Heidegger Chasm, which then coincidentally is the key to understanding Being and Perception. This indeed is the constant topic which we find is discussed in his §IV.3 on Being and Thought.

EM, p. 95: *When we consider the basic meaning of* λογος *to be gathering, then we have gained little thereby toward clarification of the question: In which way are Being and logos for the Hellenes originally united identical, so that subsequently they can separate from each other, and for definite reasons must do so?*

Heidegger's answers to all this become clear in context of hermeneutic analysis of remaining fragments from the lost works of Heraclitus and Parmenides, which are well-suited for our purpose, to interpret EM as affirming LD, formal linguistic dualism.

After an involved analysis of a fragment from Homer's Odyssey and of several Heraclitian ones, we understand that ***logos is gathering,*** needed by the receptive human Dasein when confronting Being.

A brief sampling of lines from his remarks that proceed in a protracted explanation, as always profound and detailed, must suffice to convince readers of the correctness of this interpretation of EM, interpreting several Heraclitus Fragments.

EM, pp. 98-99: *To see clearly and to comprehend the meaning of* λόγος *in the sense of "constant gathering," we must grasp more precisely the interconnection of the fragments cited above first.*

*Standing opposite to the Logos are human beings, and in particular they are seen to behave in the way of those who fail to comprehend the Logos (*ἀξυνετοι*). Heraclitus employs this word several times (comp. esp. Frag. 34). It is the negation of συνιημι which means "bringing together;"* αξυνετοι: *humans are those who do not bring together,* […] *and meaning what? Humans are left as those who do not bring together, do not grasp, neither catch as One, be it that they have not heard as yet, or have heard already. The next sentence states the intended meaning. Heraclitus says: "Humans don't get through to the Logos, although attempting to do it with words,* ἐπεα.

There is a remedy suggested to his fellow Hellenes by the ancient thinker for their falling short in this cause.

EM, p. 99: *You are not to get hung up on the words, but be receptive toward the Logos.*

A few lines further down, relying on Frag. 72, we find the first occasion where Heidegger links the Logos to the Seinsfrage directly, for these considerations to be developed further, albeit in a peculiarly negative way, *i.e.* toward ***absent presence,*** as the normal human condition.[45]

EM, pp. 99-100: *The* λόγος *is where humans are amidst all the time, and that from which they are away all the same,* **absently present.**[46] *Thus, they are the* ἀξυνετοι, *the not-comprehending ones.* […] *Humans have to do with Being all the time, and yet it is foreign to them.* […] *They linger amongst all that is and mistake whatever they can hold in their hands for that which is to be comprehended, and so each has his own nearest and dearest.*

At this juncture, the ancient Hellenic philosopher seems to be leading Heidegger to strongly equate logos and Being, an identification in that we are not ready to join him completely, and where he himself ultimately may elect not to let matters rest, much more further below about these transcendental and mysterious issues.

EM, p. 100: Λογος *is permanently standing gathering, the standing-in-itself collectedness of what-is, i.e., it is Being.*

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[45] This appears to be related to the important concept of *Alltäglichkeit* everydayness, SZ, pp. 66, 114-130, 334-372=Chapt. 4=§67-71. *Cf.* EM, p. 126.

[46] Emphasis for this essay.

We arrive at a complete reversal of our prior expectation regarding the place in the metaphysical order of the Logos, Thought *vs.* Being, physis, having set off from a modern conception of separation, the Chasm, by reading Heraclitus explaining logos of gathering, which is characteristic of physis.

We find Heidegger quote Heraclitus giving low grades to people who miss out on the logos, do not capture it, bumbling through life, uncomprehendingly and failing to achieve order and beauty in their own lives, resembling dogs, donkeys. Being ever remains hidden to them. But Being is not vapor and smoke.

This notion of a messy U from LD comes up in EM, where Heidegger includes a quote from Frag. 124 of Heraclitus, calling it alienating, strange.[47]

EM, p. 102: *Because Being is* λογος, ἁρμονια, ἀληθεια, φυσις, φαινεσθαι, *it shows itself in a way that is anything but arbitrary. The true is not for everyone but only for the strong. It is with a view to that inner superiority and concealment of Being that the strange, the alienating word is spoken, that, just because it appears to be so un-Hellenic, precisely gives witness for the nature of the Hellenic experience of the Being of what-is:* ἀλλ΄ ὡσπερ σαρμα εἰκη κεχυμενων ὁ καλλιστος κοσμος, *"like a dungheap cast down carelessly is the most beautiful cosmos" (Frag. 124).*

Here "sarma" is the raw Universe in all its smelly, vile messiness with which we all are so familiar, "kallistos κόσμος" exists only in our souls, sadly, as an individual's noumenal cosmos. In that Summer Semester of 1935 at Freiburg U. Heidegger was right to confront his students with prescient remarks on the raw Universe through which we have waded since.

It is usually supposed that essential Unity of Being in the Western world is the domain of Parmenides, to whose philosophy we next transition, but Heidegger makes it plain that in this matter as on other issues, there is no daylight to be found between the two thinkers who inaugurated Western philosophy.

At the time Heidegger wrote EM, little was known in the West about what we now can hypothesize concerning Western dependence on early first millennium BC Hindu Vedic philosophy including Samkhya epistemology and logic and Advaita Vedanta, and their transmission to the West. In Hindu Vedanta, Advaita[48] is the name of a division which elaborates on the doctrine of essential unity of the Atman and the Brahman. This may have been transmitted to the West, influencing early Hellenic philosophy. Indeed we find Advaita in EM, provided we are willing to contemplate translation of Atman to λόγος and Brahman to φύσις.

EM, p. 102: *As holding together, the* λόγος *has the character of thoroughgoing order, of* φύσις.

He gives a review of and dispenses with the historical role in Western thought and religion of the Logos, then restates his project in such a way that it is released from its envelopment in the historical context, and so becomes of interest to us as a matter for research in the natural sciences as the primal, the pivotal insight that motivates and leads to Formal Linguistic Dualism claiming a central place in the mental toolbox of these sciences.[49]

EM, p. 103: *We have attempted to explicate the natural togetherness of* λόγος *and* φύσις, *where our intent was to understand, from out of this unity, the internal necessity and possibility of the separation* **[the Chasm]**.

From here we can understand the LS-computational model of perception as world-discovery by a Logos Machine serving as the logical structure that we find realized anatomically in the Central Nervous System

[47] Original has *befremdlich.*
[48] *Cf.* Sarvepalli Radakrishnan, *loc. cit.* (1957).
[49] FOS05.

(CNS) operating by feed-back based top-down processes of how percepts from the environment are stitched together in the momentary scene guided through conscious control by Ego seated in the crow's nest of orbito-frontal cortex globally connected by possession of global receptive fields, including the internal noumenal cosmos, a reworked record of the organism's own genetic and maturational history, part of its ISHR, into which then the scene is integrated, guided by Ego responding to its own actions as a satisfactory explanation of consciousness.

EM, p. 103: *If the unity of* φύσις *and* λόγος *is so original, the separation must be correspondingly original.*

Again we recall our own deciding question regarding significance and origin of the Chasm, seeing that here, the question is stated implicitly by Heidegger.

The Chasm has nothing to do with mistaken notions of subjectivity *vs.* objectivity, an arena of debates, a snake pit of perplexities, which have become detrimental historically.

At this point, Heidegger, going beyond his preoccupation suddenly turns the subject from one of Western intellectual history into a matter of scientific concern.

EM, p. 104: *In defining the opposition of Being and Thought, we move in a familiar schema. Being is what is objective, the object. Thought is subjective, the subject. The relationship between Thought and Being is that of the object to the subject. The Hellenes, it is opined, lacking sufficient schooling in epistemology, at the beginning of philosophy still envisioned this relationship in a rather primitive way.*

Summarizing EM, p. 104: We must inquire further into the opposition of Being and Thought, of λόγος and φύσις. Heidegger intentionally now is about to turn away from Heraclitus countering the conventionally held opinion that the ***Doctrine of the Logos*** is a specialty of the philosophy of *Heraclitus.*

Parmenides on Noein-Receptivity

For further progress we must comprehend more sharply the unity and togetherness of λόγος and φύσις. To do this he next turns to Parmenides. This does look far from a promising suggestion, according to the schools.

EM, p. 104: *But where does Parmenides speak of* λόγος*? Not to mention what we are now seeking, the separation of Being and logos?*

There is a faint indication here in EM that metaphysics is a kind of physics, or a natural science of sorts, and that would be in agreement with the aims of this essay.

We should remind ourselves at this point of the slight shift in outlook, in aim between EM and LD, the latter searching for invariant logical structures, necessary for perception in any world age, indicative of a vigorous healthy organism that manages to successfully make a stand faced with intractable, circumstances, and standing against a hostile environment, *vs.* Heidegger seeing a cultural decline, a skid row of the mind almost, as Western mental deterioration brings to common coinage facile constructs preventing us from gaining full experience of reality.

EM, p. 106: *Let us set out from Being, which as* φύσις *has become more clearer to us in several respects. Being indicates: standing in the light, appearing, entering into unconcealment. Where this happens, i.e., where Being establishes its order, there also orders and happens as belonging to it: Receptivity, an acceptant bringing-to-a-stand of the in-itself-enduring revealing itself.*

This compares well with our own LD-type conclusions regarding perception, the effort required to bring

about the momentary scene, its phenomena out of the wavefronts emitted by environmental structures, pre-linguistic entities now translated into grammatical signals that propagate along our afferent neural pathways.

Heidegger reminds us that seemingly in Parmenides we find the exact opposite of separation of logos and physis. Available to us is a teaching of Parmenides in two versions, one of which is Frag. 5.[50]

EM, p. 104: το γαρ αὐτο ἐστιν νοειν τε και εἰναι.

He throws into question the long-accustomed translation, "for the same are thinking and being," and works out his own essential rendering over the space of two pages.

EM, p. 106: Being *and* Thought *in competing effort are united, i.e., identical in their togetherness.*

Heidegger further develops this matter, and quotes the Hellenic version of the quite similar Parmenidian Frag. 8,34.

EM, p. 106: τ ΄ αὐτον δ ΄ ἐστι νοειν τε και οὑνεκεν ἐστι νοημα.

The same is receptivity and that for the sake of which reception takes place.

It should be said here that in the original language of EM, we find *Vernehmung* here stands for both, *receptivity* νόειν & *reception* νοημα. Also, compare EM, p. 132, for a slightly different translation.

The identification, under our recurring theme of Being = perception, or its object, the phenomenon, νοημα, we should see receptivity as a good word for perception, or as Heidegger would insist, the essential perception of a phenomenon.

At this juncture, Heidegger can rely on having explained to his students many things such as that Being in a way should be identified with Nature, the Universe U, in the sense of φύσις, because this is the basic Hellenic word for Being, as Heidegger explains in Chapter I. Also, Thought is λόγος, which we read as Language L. Therefore from the LD point-of-view we may paraphrase the above quote and put it this paradoxical way:

U and L in competing effort are united, i.e., identical in their togetherness.

The strange contrast-cum-identity is a puzzle that it is our task here to try and unravel, quite apart from any related interpretations.

Imbedded in the conceptual framework of the preceding explanation of Frag. 8,34 we discover Heidegger's own definition, well-worth keeping in mind, of appearance = entering in unconcealment, in its close association with receptivity.

EM, p. 106: *Receptivity occurs for the sake of Being. The latter presents only as appearance, entering into unconcealment, when unconcealment occurs, when self-opening happens.* […] *Being orders, but because it orders and sofar it orders and appears, there occurs necessarily also receptivity* **along with** *appearance.*

It is easy to see this as a valid **science of perception**, albeit expressed in the manner of phenomenological hermeneutics.

The key insight into the original unity of λόγος and φύσις, of U and L, arrives in our view after a lengthy digression on philosophical anthropology, concerning the question "who is man," and after Heidegger interprets verses from a magnificent choral ode on the strangeness of human life, in the tragic play *Antigone* by Sophocles, where he goes through the text in three passes, and draws his essential conclusions for metaphysics.

[50] Frag. 3 in some editions.

The Metaphysical Definition of Man

After reaffirming the unity of logos and physis, EM evolves into a philosophical anthropology, but not one of describing man, of analyzing his nature, but one of Heidegger asking a question: *Who is Man?* Actually, he poses the question first in another form: *What is Man?*

The double form corresponds to the ambiguity inherent in the Seinsfrage as a philosophy of Dasein, an hermeneutic enterprise, asking itself *who is man,* but also a subject of anthropology, from the moment on when we are willing to put into play a neural-environmental model, inquiring into the model *what is man.*

The question first appears in the exegesis of Parmenides Frag. 8,34, Heidegger strenuously contradicting conventional interpretations.

EM, p. 106: *The statement says* […]: *Being orders, and because it orders, and in as much as it orders and appears, there occurs necessarily* **along with** *appearance* **also** *reception. But now, if man is supposed to have a part in the occurrence of this appearance and this reception, then indeed man himself must be, must belong to Being.* **The character and the way of man's Being can determine itself only from the character of Being.**

The query of this segment as part of his main quest, the Seinsfrage which concerns Dasein, and hence in-and-by-itself is anthropologic in character, but now, here in his lectures, is put in this particular place by Heidegger for a very specific purpose, to clear the table for his much more radical outline of this new question that seemingly anybody can answer. We are not even able to comprehend what is being asked Heidegger insists, therefore, it's a matter of questioning, that the point of inquiring about man's nature is in asking the question, understanding the question, not any answers, least of all reciting familiar notions.

This is a project of EM that is fully in consonance with the fundamental insights of LD. There is at this point a noticeable shift in the tone of EM, as if entering a sanctuary, which indeed we are, approaching mysteries, the remaining mysteries not open for our solution. As we claim, both EM and LD have in common explaining basic processes of perception of natural phenomena: But what are phenomena, the Hellenic verb φαινομαι translates as *appear*, but what is it that appears? We could try asking physicists, and expect a reply in terms of quarks and gluons. Thus, we find ourselves at once proclaiming our profound ignorance, απορία, of which Aristotle spoke so eloquently: […] ἀει ζητουμενον και ἀει ἀπορουμενον […]

The passage is required here because it actually is the beginning of the final approach to the answer of the Seinsfrage to be presented near the end of EM, Section IV.3, p. 134. This development requires us to ***understand Dasein from and in its historicity.***

Why this sudden importance of historicity, the significance of an individual's history for the discovery of the character of man? This is not a new topic for Heidegger by any means, but the view of the subject of anthropology as historicity is important already in SZ, forming the topic of the penultimate chapter.[51]

In reading EM with a mind that expects an LD kind of theory of cognition, we interpret historicisty as Heidegger's way of speaking about the noumenal cosmos, that specifically human (mammalian, vertebrate) form of an internal genetic historical record of the organism.

Hermeneutics of historicity is hermeneutics proper, occupying the center of all other hermeneutical projects, as explained in his discussion of Dilthey, SZ, §77, where he appears to be endorsing him, more or less.

[51] His doctrine a prominent subject on *Geschichtlichkeit* historicity, SZ, pp. 372-404, Chapt. 5=§72-77. *Cf.* EM, p. 106. We should remark that he explicitly denies the relevance of scientific—as distinct from a philosophical—anthropology in this segment of EM, p. 107.

Heidegger acknowledges an influence of Count Yorck,[52] Dilthey's friend, the collection of letters they exchanged. It is possible to read between the lines[53] and find a proposal for placing the noumenal cosmos at the center of his research into historicity of Dasein.

SZ, quoting Count Yorck, p. 401: *The overall psycho-physical circumstance is not merely present in a natural sense, but is alive, that is the point of germination of historicity of Dasein. And a contemplation of Self directed not to an abstract Ego but to the fullness of my selfhood, will find me determined historically, just as physics recognizes that I am cosmically determined. Just like being Nature, so I am History.*

Heidegger then comments that Yorck will not hesitate to make the fullest use of his insight into historicity. And indeed, Yorck does link the individual history to consciousness, much in agreement with the way in which we were able to identify the noumenal cosmos to the individual's life experience of his environment, and this to the dMFC portion of the default network of fMRI neuroscience while the PC operates the conceptual-categorical apparatus.[54]

SZ, quoting Count Yorck, pp. 401-402: *In view of interior historicity of self-consciousness it is not adequate to systematize philosophy apart from history.*

The common misreading in our current understanding of the reality of man, of his nature and character, is the reason for the amount of emphasis on the subject that is given in EM by Heidegger with respect to νόειν receptivity.

Here in Section IV.3 of EM, this theme is developed gradually and methodically over the space of several pages, from which only a bare minimum can be sampled for the purposes of annotating EM in this essay. It is codified in an evolving multi-step program, first in three steps (EM, p. 107), then expanded to seven (EM, p. 109), only to be expanded later and greatly amplified by considerations drawing on Hellenic tragic theater.

The implicit concern in EM with perception, a subject amenable to scientific investigation, that we claim Heidegger exhibits throughout the treatise, is again prominent in this thematic cycle.

EM, pp. 106-107: *But if appearance belongs to Being, to* φύσις, *then man, who-is, must be owned by this appearance. Again, because his being man amounts to a peculiar Being amidst the whole of what-is, the peculiarity of being a man will emerge from the peculiar manner of his being owned by Being as the ordering appearance. But now, inasmuch as there is receptivity belonging to such appearance, accepting receptivity of that which reveals itself, we may conjecture that it is here exactly, from where the character of being man determines itself.* […] To ask the question about the character of man and how it is decided is historic*al, not just in general but as to the character of history.* […] *What is man in this ordering of Being and receptivity?*

And a great strengthening of the case for Parmenides to be interested in the Logos occurs with Frag. 6. It contains an injunction related to Frag. 8,34 and comes in a reference by Parmenides with an occurrence of λεγειν. This is placed here by Heidegger early in EM, with the decisive λόγος being brought up in the grand finale further below.

EM, p. 107: χρη το λεγειν τε νοειν τ΄ἐον ἐμμεναι. *An urgent need is* λεγειν *as well as receptivity, namely, of what-is in its Being.*

EM, p. 108: *Receptivity and that which Parmenides says about it*[55] *is not a capacity of a human being*

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[52] Paul Graf Yorck von Wartenburg, *Cf.* SZ. p 397, *ftn.* The family name in an older form was of Pomeranian origin.
[53] As quoted in SZ, pp. 398-404, from Yorck's letters.
[54] FOS11.
[55] Referring to νόειν receptivity in Frags. 5(3) and 8,34, *vide supra*.

who already is known otherwise, but receptivity is a process, an occurrence, wherein man, occurring, first, then appears, enters into history as he-who-is, i.e., himself arrives at Being [in the literal sense].

Receptivity is not a behavioral mode that man has, as a characteristic, rather it's the reverse: Receptivity is that process that has man.[56]

Heidegger has achieved the ***metaphysical definition of man,*** which is no small thing in view of the pallor that afflicts the remnants of Western man's self-awareness.[57]

In fact this, Western thought turning shallow, formulaic even commonplace, this bleak specter of philosophy, is Heidegger's target in the current Section IV.3 of EM.

EM, p. 108: *Type and direction of the opposition of Being and Thought are so singular, because here man enters in view of Being. This process, this occurrence is the knowing appearance of man as the historical one. Only after man was known as such an entity, was he then also "defined" in a concept—namely, as* ξωον λογον ἐχων *animal rationale, rational biological organism. In this definition of man, the* λόγος *occurs, but in completely unrecognizable form, and in a rather unlikely setting.*

But for us here, in this present essay, the salient point is that the definition, although expressed in his idiosyncratic style of phenomenological hermeneutics, turns out to be totally congruent, parallel, with the perceiving biological organism serving as a Logos Machine, an LS, in the sense of Formal Linguistic Dualism LD.

Moreover, there can be no doubt that Heidegger in this section where he is wholly occupied with a discussion of **Opposition of *Being* and *Thought,*** νόειν and λόγος *vs.* φύσις and εἶναι, is in effect exposing the reality of a kind of ***Logical Duality,*** again congruent with, paralleling, *Formal Linguistic Dualism*, the opposition of Computational Language (Systems) L *vs.* Universe U which is the terminology preferred for LD.

The gist of Heidegger's definition is that man becomes himself in his discovery of the world of U, and his own efforts to understand what he discovers, all of it to be duly recorded in his noumenal cosmos but not only that man is discovering a world but in fact creating himself in the form of his soul, his noumenal cosmos as the essential part of a Logos Machine.

This is the basis of Dasein's historicity, that we find expressed by Heidegger in his hermeneutical style.

We here are examining EM for hints that appear to be hidden in EM, that a scientific theory of human perception underlies EM in the name of metaphysics, and find an almost shocking extent to which we can verify just that, that the main outline of LD is mirrored in EM, this metaphysical theory by the co-creator of existentialism, indeed leading to far-reaching identification of LD with EM, metaphysics of Dasein, dressed up in a different costume but identifiable when both are viewed from the elevated point of view afforded atop the far hills along the horizon.

EM, p. 110: *Man only comes to himself and is a Self as questioning-historical. Man's selfhood expresses this: That Being which reveals itself to him, this he must convert into history, and therein bring himself to a stand.*

The correspondence of this formulation in EM to basic principles of the self-recording human organism could not be more striking than in this passage.

These identifications emerge from the obscurity of the variant presentations, but gradually only, after some

[56] Note the occasional strangeness of his language. Every effort was made to preserve as much as possible of the special timbre of his almost poetic choice of words, although an attempt an exact replication always was out of the question.

[57] We can reduce the count of definitions if we identify receptivity with the Cartesian *cogito.*

deep contemplation of human fate we begin to see identical patterns appearing.

Indeed it appears to readily lend itself for just that, a translation into a scientific anthropology of perception along the lines of our computational neural model.

Neural processes which are the anatomic correlates of symbolical and logical workings of a Logos Machine, make an animal capable of surviving in the Universe, at least on planet Earth, on the basis of its logos, its world model, supplying it with sufficient comprehension of what goes on about it in its disorderly environment.

Such correspondences should be unsurprising because of the common truth of both sets of testimonials, black letter texts scraped out of life and placed into the common tomb of the Universe of Discourse.

Such processes of identification of course are commonplace in science and mathematics, a famous example being Heisenberg operator quantum mechanics and Schrödinger wave mechanics, two isomorphic theories based on Hilbert space.

The Metaphysical Definition of Nature: Being Depends on Man

He draws his essential conclusions for metaphysics, in the succeeding lengthy passage following Pass. 3, and transitions to the final assault on the Seinsfrage. Thus, we next undertake the task to describe his final insights and attempt analysis of his conclusions regarding the historical move, to which he ascribes our conceptual poverty in understanding the essential Being-perceptive function of the human mind, and indeed of each vertebrate CNS, its logical formal-linguistic function, culminating in a formulaic pronouncement.

Heidegger teaches in EM, and we here amplify, that the human soul is receptive toward Being, and incorporates in its inner, noumenal cosmos any experienced phenomena provided that these can be included in an orderly, in a logical fashion in known brain centers called the default mode network (DMN), integration being accomplished by top-down identification that ensures that any new experience maintains order and beauty of the cosmos, the noumenal one, which serves as our utility model of the human soul. This is expressed by Heidegger in terms of his basic words, the building blocks that he rescued out of the Antigone choral ode. We again recognize and pay attention to the correspondence of his language to known neural processes in the CNS by which man perceives phenomena as described in our earlier work cited above.[58]

Above, we have engaged in a full-fledged discussion and analysis of the Cognitive Gap, *i.e.*, the separation of Being and Thought, primarily concentrating on understanding of λόγος.[59]

Indeed as explained, we here show that EM contains a scientific core to which we already have had recourse in previous work and which we develop further in this essay.

For our purposes, the Cognitive Gap is the proper cause of a logical dualism operating in our human world, logical structures being distinctly different from natural structures, which more precisely and sharply may be referred to as formal linguistic dualism, differing from logical dualism on the grounds of its existence and functional actuality in a biological organism, that makes possible the life of the animal. However note again, there is no explicit mention of dualism in EM.

At this point in our LD-minded reading of EM it becomes necessary to complement in detail passages from EM in which Heidegger analyzes and investigates the action of the Logos in the hands of a human, with a presentation of the main LD sequence of processing steps, as described in the *Nine-Step Process* (Burchard,

[58] FOS11.
[59] *Cf.* §1.

2014), corresponding to the above account of how Thought relates to Being, which constitutes a part of the Seinsfrage, perhaps more prosaic, certainly scientific analytical investigation-dependent but also more transparent than his hermeneutic style, even if the use of scientific analytical investigations implies a more naive approach to this aspect of metaphysics.

In this way, we may make plain the exact role played in the LD interpretation of EM by the Seinsfrage: What is it with Being?

Being is revealed by the Logos of the CNS logical functions but Being is in the phenomenon, not the percept—if we can trust our logical powers of metaphysics.

This "Being" is a linguistic, an L-attribute, not anything that exists "out there" in U.

There is uncountable ambiguity in the choice of phenomenon φ, all possibly causing the actual signal complex *A*, due to the infinite variety of possible interpretations in this original form of hermeneutics from out of which only now π comes into Being out of the confused U-data stream, and the actual, uncountable complexity of φ.

The atrophied, degenerate summation of Western Thought, in the form of a common definition familiar from Aristotelian philosophy as taught in undergraduate courses that makes humanity a subject of and for zoology, as discussed above.[60]

ἀνθρωπος ξωον λογον εχων.

"Man is the reasoning animal."[61]

The central fact to be unearthed at this point is Heidegger's version of the doctrine of a language machine. Dasein is the Logos (Language) machine.

Second, and importantly, this he puts in pointed form at the end of his analysis, his asserting original equivalence of logos and physis, culminating in Heidegger actually stating this, his grand finale end result, in dramatic style as a formula put in equation form:

EM, p. 134: φυσις = λογος ἀνθρωπον ἐχων.

Nature = Logos Having Man

This remarkable brief phrase, is Heidegger's rendition of original philosophy's answer to the Seinsfrage. At this juncture, where we are yet barely initiated novices, as we enter this grand edifice of philosophy of man erected by the philosopher in his metaphysical textbook, lecture notes that he wrote down in preparation for or from his lectures, we still are at the very beginning of our effort to explain and understand metaphysics. This pronouncement as a fundamental proposition, this phrase appears to be difficult. Put in the vernacular, and perhaps expanded a little for clarity, Heidegger's Hellenic formula equation, EM, p. 134, would seem to amount to something like the assertion: "Nature equals the Logos in possession of human receptivity." No doubt, this quoted equation constitutes the philosopher's second principal result, obtained in these lectures. after defining man by his receptivity in the preceding section. Indeed, such an exalted status for the brief phrase is quite evident from the text in the several surrounding paragraphs in EM. This led him to make this claim, which almost suffices to clarify the above paradoxical declaration, and does so at least partially, but which left us with a smile and a shrug. This, the quoted equation EM, p. 134, is meant as a kind of converse of Aristotle's definition of man as the rational animal, Heidegger's counterstroke to it, which it will take some doing to

[60] *Cf.* EM, p. 108, *vide supra*.
[61] Heidegger's own statement, similar to Nicomachean Ethics, I.7,1098.

explicate and perchance explain, in the future. The astonishing reverse statement above is the outcome of what the philosopher himself acknowledges must appear to be an arbitrary re-interpretation which could not be confirmed by an exact reading. Here is Heidegger about Heidegger, his reputation.

EM, p. 134: *According to the usual opinion of today, the statement indeed is merely the result of that violent character and one-sidedness, which already have become proverbial, of the Heideggerian mode of interpretation.*

For Heidegger's thoughts on the problem complex of perception, *cf.* his KPM, *vide supra*. Does it not amount merely to a trite reversal, pointed and exaggerated, of what in Heidegger's view is left over as a remnant in philosophy after passing the high point of pre-Socratic, semi-poetic intelligence? Perhaps to some, this might seem like a meager outcome, if touted as a philosopher's proclamation of novel insight of ground-laying importance. But in view of mysteries that remain, we should be grateful for this simple step into the light. The definition also may reflect the age of new discoveries in quantum physics & relativity theory in common with the destruction of two powerful monarchies, that seems to have incurred a strong reaction, a kind of mental backlash & widespread intellectual despair. Utterly profound, difficult to comprehend as meaningful, we readily accept the interpretation in terms of the Nine-Step Process, *i.e.*, interpret EM as a hermeneutic version of LD. From a more practical standpoint, we would take the equation as a definition of φυσις: Nature, seen through human eyes, in all of her glorious magnificence.

Parmenides Lectures 1942/43

Above, we emphasize global context, a.k.a, the noumenal cosmos NK, in its central role of how we humans conquer the cognitive gap. NK differs from the universe U in that we depend on the noumenal cosmos as an orderly, logical construct which exists only in the human mind. A good illustration of the difference is given in this quote from his Parmenides Lectures 1942/43 (Heidegger, 1942/43, 1982, 1992).

Heiddeger, *Parmenides*, p. 95:

Plato's Politeia is not a "Utopia" but exactly the opposite, namely the metaphysically determined, τόπος *of the essence of the* πόλις. *Plato's Politeia is a recollection of the essential and not a plan for the factual.*

In the noumenal cosmos all is perfection, ne'er to be found in reality, in the physical universe, where our bodies must dwell, if our mental world is to exist. According to Heidegger, beings come to their Being by ἀλήθεια, *uncocealedness*, defeating λήθη, forgetfulness of Being. He speaks of ἀλήθεια-uncocealedness, in greatest clarity, on the most casual of occasions, as if left uninhibited to speak out.

Heiddeger, *Parmenides*, p. 123:

All things are ordered in advance for the Greeks in the simple clarity of Being which lets beings arise in a lustre and sink down into darkness.[62]

Heidegger's own understanding is centered on his theory of profound changes in the West's mental functioning, the Understanding of Being, a more shallow, less lively condition of today than people had possessed at the time of the pre-Socratic Hellenic philosophers. This fundamental aspect of his philosophy leads to a confrontation against our own work, as we precisely seek to understand him as science would analyze him and his thoughts on the laboratory bench, so-to-speak, under the microscope, which he would abhor, physically as well as figuratively, as this is exactly an attempt coming from the point of view of the kind of thoughtless modernism, that he deplores.

[62] More literally translated, "everywhere there holds sway in advance..."

Fortunately, he has some very well thought-out passages to help us in our attempts of sorting out how we can interpret him in ways that are not immediately refuted (Heidegger, *Parmenides*, 1942/43, 1982).

Heidegger, *Parmenides*, p. 128:

Certainly the time of Plato, four centuries later, is no longer the age of Homer. The ability, hence the inclination as well as the aptitude, to express the appeal of Being becomes more and more concerned with establishing something that has been attained in the meanwhile, namely a being-at-home in beings on the basis of what man has instituted by his own procedures. The legendary word is not weaker; but man's perception is more variegated and dispersed and hence too volatile to experience as present the simple, which comes into presence originarily and therefore constantly. In the final era of the completion of the Greek world, we recognire already the traces of the early form of that historical condition which then determines the epoch of modernity in the West. In this epoch, as a consequence of a peculiarly concealed incertitude, certitude in the sense of unconditional certainty counts as what is most valuable, and therefore ascertaining becomes the basic character of all comportment. Ascertaining is not a merely subsequent corroboration but is rather the aggressive making secure in advance for the sake of certitude. The content and the reality of everything objective has whatever validity it has as the inexhaustible occasion for objectivization in the sense of the certification of the content of world and "life." Procedural processes (τέχνη) and their modes dominate experience. A river no longer flows in the mysterious course of its windings and turnings along banks it itself has carved out, but it now only pushes its water to an "end" predirected to it without detours, between the uniform rails of cement walls, which are in no way banks. The fact that precisely at the time of Socrates and Plato the word, τέχνη, *which there surely still means something essentially different from technique in the sense of modern technology, is often used, and is already thought of, is a sign that procedural processes are lording it over experience. The ability to listen to legend becomes weaker and more withdrawn from its essence.*

Acknowledgments

Thanks are due several reviewers of earlier versions for their instructive and helpful remarks for which I am extremely grateful.

In memory of my sister Erika, on her 80th birthday.

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