

# THE PHOENIX REVISITED

POST KANTIAN STRATEGIES FOR DEALING WITH  
THE NON-STANDARD OR “NOUMENAL” WORLD

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## Abstract

**Kant’s flawed analysis** of the ground of being as the arbiter of value which he named the *noumenal universe* defined it as totally unconditioned and inconceivable. Consequently anything associated with **Kant’s noumenal universe**, such as the concept of the heart as an atemporal knower (*herein referred to as the Phoenix*), was labeled “unscientific” or “metaphysics.” According to **Kant**, only knowledge of the *phenomenal universe* based on the temporal knower (the *Turtle*) was scientific. This approach has led many to even banish the *noumenal universe* from existence itself.

However **Kant’s analysis** was based on **Bishop Berkeley’s scathing but ultimately flawed refutation** of infinitesimals. This treatise traces western philosophical treatment of the *noumenal universe* from **Kant** up to the present and illustrates how **Kant** both informed and mislead the development of western philosophy. It is then demonstrated how certain developments in modern logic have not only invalidated **Kant’s rationale** for banishing the *noumenal universe* from rational scientific analysis but actually mandate bringing the *noumenal universe* and therefore the **Phoenix** into the realm of Science.

**NOTE:** Although **model theory** never uses the terms *phenomenal* and *noumenal*, which originated in **Kantian analysis** and although **Kantian analysis** never uses the terms *standard* and *non-standard* which have their normal sphere of application in **model theory**, throughout this treatise the terms will be co-mingled. This is done so as to facilitate the readers ability to move from the one terminology to the other without constantly having to go back and review the context in which the terms are employed.

- 1) In formulating his philosophy **Kant** (1724-1804) had two major objectives:  
a) First, he sought to reconcile the astounding predictive power of **Newton's laws of motion** with **Hume's devastating critique** of induction which seemed to show that there was no logical basis for the scientific method.

(*Kant had to answer how can we know in order to save Newton from Hume*)

and

- b) Second, he sought to save free will from being banished into nonexistence by the local determinism inherent in **Newton's laws of motion**.

(*Kant in order to save free will from Newton, then had to answer what can we know and what can we NOT know and in each case why,*)

- 2) **Kant** achieved the 1<sup>st</sup> objective, by noting first of all, that it required a resolution of the controversy between those (*such as the rationalists*) who believed in innate ideas or tendencies (*the primacy of consciousness*) and those (*such as the empiricists*) who stressed the importance of ideas acquired by learning (*the primacy of existence*).

- 3) This was to be achieved (*proclaimed Kant*) by means of a radically new concept, that of the **synthetic a priori** proposition. Ideas were neither solely innate nor solely imposed from outside of the mind, rather they were constructed by the mind's application of its innate categories to experience.

3.1) The distinction between the **a priori** and the **a posteriori** begins with **Aristotle** who defined it in both an ontological and an epistemological sense. For **Aristotle** **A** is said to be prior to **B**, if **B** would not exist without **A** and also if **B** cannot be known without knowing **A**. Otherwise **A** was said to be **a posteriori**.

3.2) For **Descartes** and for 17<sup>th</sup> century philosophers in general, **a priori** signified a *movement of thought from causes to their effect*, whereas **a posteriori** signified a *movement from effects to causes*. (Similar to our use today of the words "*induction*" and "*deduction*.")

3.3) For **Gottfried Wilhelm von Leibniz (1646-1716)**, this became "*truths a posteriori, or of fact*," guaranteed by the principle of sufficient reason (or what was later called in **Kant's terminology** "**synthetic**" propositions) and "*truths a priori, or of reason*" guaranteed by the principle of contradiction (**Kant's "analytic" propositions**) (*Nouveaux Essais, Bk. III, Ch. 3*). Thus for **Leibniz** the epistemological distinction is between what is derived from experience and what is derived from reason.

3.4) **Hume** (1711-1776) also distinguished between "*maters of fact*" which were merely contingent and "*relations of ideas*" which were necessary. He claimed that there were only three categories of analysis, **analytic a priori, synthetic a posteriori**

and **nonsense**. Of course, one consequence of this charming epistemological maneuver, was to relegate the traditional philosophical concepts of **G-d, Self** and the **World** to the flames. For since it was impossible to trace these ideas back to sense data (*which meant that they could not be **synthetic a posteriori** propositions*) **Hume** believed that they could therefore be true only if they were **analytic a priori** propositions. In which case however, they would (*as **analytic a priori** propositions*) tell us nothing about reality and would be only meaningless and trivial tautologies.

4) By distilling the faculty of “thinking” from **Leibniz’s faculty of “reason”**, **Kant** added a third faculty to the two faculties of “sensibility” and “reason.” Within this triad there could be no simple **Leibnizian** or **Humean** opposition between the faculties of **sense experience** and **reason**. **Leibniz’s epistemological distinction** between experience-based and reason-based truths, become (*for Kant*) a distinction between what is derived from experience and what is not, whether or not the notion of the *a priori* also had the notion of demonstration in terms of cause or reason associated with it.

4.1) **Kant’s three faculties** and their corresponding sets of categories are:  
**Sensibility** (*categories of perception*) **Thinking** (*categories of understanding*)  
**Reason** (*categories of reason i.e. G-d, Self & World*)

5) Thus **Kant** did accept **Hume’s fork** (i.e. the **analytic/synthetic distinction**) as the key philosophical tool of analysis. **Kant** also agreed with **Hume** that all **analytic** propositions are *a priori* and that all *a posteriori* propositions are **synthetic**.

6) However **Kant** rejected **Hume’s implicit claim** that all **synthetic** propositions are *a posteriori* and that all *a priori* propositions are **analytic** (*hence tautological*). **Kant’s synthetic a priori** propositions were meaningful statements about reality (they were not tautologies) whose truth was known independently of observation.

7) Now here, at this point in our discussion, it is **extremely** important to note that many of **Kant’s detractors**<sup>1</sup> and an equal number of those who claimed to be supporting **Kant**<sup>2</sup> have mistakenly embraced the notion that **Kant’s Copernican Revolution in Philosophy** was just another rationalist variant of the old **Platonic/Cartesian doctrine** of innate ideas. That this is **NOT** the case can hardly be emphasized enough. **Kant** was **NOT** claiming that we are born with a specific group of ideas already existing somewhere in our minds, rather he was proposing that the mind is structured in such a way, that it analyzes its data in terms of a particular set of **synthetic a priori** categories which produce ideas when fed information by the senses. These **synthetic a priori** categories are not

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<sup>1</sup> See tape 2 of **David Harriman’s** audio course *The Philosophic Corruption of Physics*

<sup>2</sup> See **Marx** and **Hillix’s** *Systems and Theories in Psychology Part One Systems*: Chap. 2, *The Emergence of Psychology*, Section *Psychology’s Legacy of Problems*, Subsection *The Psychology of Perception* pg.29 and **Reuben** and **Hersch’s** *The Mathematical Experience* Chap. 7 *From Certainty to Fallibility* Section *The Euclid Myth* pg. 329

deduced by the mind from sense data; on the contrary, the mind brings them to data. This is why **Hume** had been unable to find them “*out there*” when he looked for them.

8) **Kant** acknowledged the claim of the **British empiricists** that knowledge could come only through experience, but he denied that the mind was a *tabula rasa*, a blank sheet, as this could give no explanation of how experience itself was possible. There had to be organizing categories, or all would be confusion. There *was* thus in **Kant’s insistence** on the apodictic nature of his *synthetic a priori* organizing categories an *faint echo* of the **Platonic/Rationalist quest** for apodictic knowledge.

9) **Kant** achieved his 2<sup>nd</sup> **objective** (saving free will from Newton) by separating the categories of thinking and sensibility from those of reason. The categories used by the faculties of thinking and sensibility became *synthetic a priori* categories which belonged to the standard or “*phenomenal*” universe. Whereas the categories used by the faculty of reason became *pure* categories of the non-standard or “*noumenal*” universe. These categories of reason were said to be “*pure*” in the sense of being uncontaminated by the senses.

10) This separation of the *synthetic a priori* categories of sensibility and understanding from the *pure* categories of reason effectively separated *both* the *methodologies* of science from *those* of religion *and* the *domain* of reason from the *domain* of faith. In **Kant’s words** “*I found it necessary to limit knowledge to make room for faith.*” Free will was placed in the domain of faith, safely beyond the reach of science, and thus **Kant** achieved his 2<sup>nd</sup> objective and saved free will from the local determinism inherent in **Newton’s laws of motion**

11) The standard or “*phenomenal*” universe because it was “**synthesized**” by the two categories of understanding (or *thought*) and intuition (or *perception*) i.e. the human operations of thinking and sensibility, was the exclusive and sole domain of science.

12) The non-standard or “*noumenal*” universe because it was comprised of pure (*completely non-empirical and therefore unsynthesized*) concepts, (such as **G-d, World and Self**) which were produced by what **Kant** called the **categories of reason** was the proper and sole domain of religion and faith.

13) For **Kant** the legitimate sphere of human thought was restricted to the standard or “*phenomenal*” universe, because according to the rules of his analysis the *categories of the understanding* could only be legitimately applied (*in the process of thinking itself*) to sensations as “*objects of perception.*” In fact the primary function of the *categories of the understanding* (*such as existence, cause and substance*) was to further synthesize sensation and he held that although it is psychologically possible to apply these categories to supersensible realities, such application does not yield any scientific knowledge of these realities.

14) **Kant** accepted **Hume’s conclusion** that we could not directly perceive as sense data, the totalities referred to by the words “*physical world*”, “*soul*” (what later thinkers have called “*self*” or “*free will*”) and “**G-d**”. Sense data could never include these totalities. All that we could perceive

were finite subsets of these totalities.

15) When we looked at the phenomenal representation which we called the physical universe or “*world*” all we could perceive directly were finite subsets of it. This was true of a cubic box as well as the physical universe.

15.1 In this connection **Husserl** was later to point out, in his distinction between formal and material ontologies that even though we could never even directly perceive a cubic box in its totality because at most we could only directly perceive three of its sides at once, we could nevertheless perceive the box as an object of knowledge because we could (*at different points in time and space*) encompass within our experience all six sides. In this way the totality of the box was available to our direct perception and **Husserl** felt that in this way we could experience *things-in-themselves*. This was however even for **Husserl** not true for the totality of the physical universe.

16) Likewise, (**Kant** pointed out) when we look at what **Kant** called variously the “*soul*,” “*ego*,” “*self*,” or “*free will*” all we can perceive directly are finite subsets of it and the same limitation is true in spades of the totality referred to by the word “**G-d**.”

16.1) For **Kant**, these ideas of such totalities are neither 1) mere abstractions from sense data derived empirically from experience, nor are they 2) innate ideas applicable to sense data. They transcend *phenomenal* experience in that no objects are given, or can be given, within *phenomenal* experience which correspond to them. And for **Kant** all human experience is *phenomenal*. Such *pure (unsynthesized)* ideas are produced, said **Kant**, because the human mind has a natural tendency to seek unconditioned principles of unity. Thus it seeks the unconditioned principle of unity of all *thinking* in the idea of the *soul* as a *thinking subject* or *ego*. And it seeks the unconditioned principle of unity of all *objects of experience*, in the idea of **G-d**.

16.2) The possibility of experience requires that all representations be related to the unity of apperception, in the sense that “*I think*” must accompany them all. Today, the problem of accounting for this “*unity of apperception*” is referred to, in consciousness studies, as the “*binding problem*.”

16.3) Reason, said **Kant**, tends to complete this synthesis of the inner life by passing beyond the **empirical, conditioned** “*ego*” (a.k.a. “*soul*,” “*self*,” “*free will*”) or thinking subject, and assuming an **unconditioned permanent**, substantial, and thinking *noumenal* self, which is itself never a predicate, but always the subject.

16.4) That is, according to **Kant** this permanent ego (*which he also referred to as the “transcendental ego”*) is never known, but is always the knower.

16.5) For **Kant** the transcendental nature of this ego was defined in contradistinction to **Hume's empirical set** of atomistic (*or discrete*) experiences of the self and to which **Kant** referred as the "*empirical ego* ." As we shall see later on in this treatise, *Categorical Analysis* recognizes what **Kant** referred to as the "*permanent*" or "*transcendental ego*" but denies that it is non-empirical (*transcendental*) and refers to it as the conscious temporal awareness package or "*persona*."

17) For **Kant** then, such totalities, did not belong to the standard or "*phenomenal*" universe, rather they belonged to the universe of "*things-in-themselves*," that is, to the nonstandard or "*noumenal*" universe **Kant** never really relinquished his faith in the existence of the *noumenal* world, even though he held it could never be known.

18) Human thought could thus (*according to Kant*) only be legitimately applied to the standard "*phenomenal*" universe, which he also called "*synthetic*" because it was constructed by means of a synthesis between data fed the mind by the senses and the two innate categories of perception and understanding.

19) **Kant's analysis** demonstrated that the *objects of perception* perceived in the standard or "*phenomenal*" universe were synthesized by mapping the "*hard-wired*" *syntax* of our temporal sensory modalities (i.e. *space and time* a.k.a. *the categories of perception*) onto the *ineffable* which he equated with the non-standard or "*noumenal*" universe.

20) He equated the non-standard or "*noumenal*" universe with the *ineffable* by declaring it (*the non-standard or "noumenal" universe*) to be absolutely unknowable (i.e. *totally inconceivable*).

21) Thus for **Kant's empirical ego**, the non-standard or "*noumenal*" universe could paradoxically in a *positive* sense, actually be said to exist as the ontological ground of value, whereas in a *negative* sense as the inconceivable limit of **reason** it could **not** be said to *actually exist* nor could it be said to *actually not exist*. For to be able to assert either proposition, would constitute knowledge about the *non-standard or "noumenal" universe* and this would contradict its definition as absolutely unknowable.

22) **Kant's analysis** thus had two major logical flaws which were to be variously exploited or resolved by succeeding philosophers.

a) his inadequate and misguided attempts to justify the organizing categories of perception and understanding by attempting in the first edition of the *Critique* to deduct them logically and in the second edition to derive them empirically from **Newton's laws of motion**.

b) the logical tension between, on the one hand, explicitly stating that the non-standard "*noumenal*" universe was totally inconceivable and on the other hand implicitly treating it as if it existed.

23) The latter flaw (b) derived *both* from the former flaw (a) *and* from **Berkeley's refutation** of the existence of infinitesimals (*more on this later*).

24) Together these logical flaws in **Kant's analysis** combined to make what **Jakob Boehme** (1575-1624)) had called the "*natural language of the heart*" appear to be a logical impossibility.

25) However, as for **Kant's logically flawed analysis**, the category of "*existence*" was a *category of the understanding* which could only be applied within (*and to*) the standard or "*phenomenal*" universe, there was consequently, an inherent contradiction *in* the logical structure of his *analysis* which was to be discovered and eagerly exploited by **Fichte, Schelling** and **Hegel**, who pointed out (*in rapid succession*) that if the *noumenal world* was defined as absolutely unknowable (i.e. *totally inconceivable*) it could not be said even to exist and if existence was known to be one of its attributes then it could not be said to be absolutely unknowable (i.e. *totally inconceivable*).

25.01 As the reader probably already suspects, the paradoxical ambiguity, introduced by **Kant's logically flawed analysis**, concerning the ontological nature of the nonstandard "*noumenal*" universe, necessitated a significant difference in the way in which **Kant** treated the "*noumenal*" *categories of reason* from the way in which he treated the *phenomenal categories of thinking and sensibility*. Consequently at this juncture, a clarification of the unique features **Kant** ascribed to the "*noumenal*" *categories of reason* relative to the "*phenomenal*" *categories of perception and understanding*, is in order.

25.02 For **Kant**, in the IDEA of **G-d** we think the totality of super-sensible or *noumenal* reality, and in the IDEA of **the World** (*i.e. the body/world schema*) we think the totality of sensible or *phenomenal* reality. Each IDEA represents a *limit* which thus contains a maximum and we can say as a consequence of this, that there is one **G-d** and one **World**.

25.03 These two IDEAS together form the IDEA of **the Universe**. Apart from **G-d** and the **World** there can be nothing. These two IDEAS are not merely coordinated, rather the IDEA of **the World** -*the sensible standard "phenomenal" universe* is subordinate to the IDEA of **G-d** -*the supersensible nonstandard "noumenal" universe*.

25.04 Further the relation between them is *synthetic* not *analytic*. That is to say it is man (*i.e. the SELF as thinking subject*), who thinks and relates these IDEAS. **Kant** does not mean that the IDEAS of **G-d** and the **World** are conceptual apprehensions of objects given in experience. We perceive directly, only finite subsets of these two IDEAS, consequently they exist for us only as **limits of reason**, not as *objects of perception* given in experience.

25.05 In a certain sense of course, **G-d** and the **World** are thought as objects, that is, as *objects of thought*, but they are not *given* as *objects in experience*. All that is given *in experience* is a **finite subset** of the maximum, which, the IDEAS represent as a limit. The IDEAS are the self-referential thinking of pure reason, as it constitutes itself as thinking subject. Like **Aristotle's categories** then, these two

IDEAS (**G-d** and the **World**) are ontological as well as logical categories. They are not mere concepts but laws of thinking which the subject self-referentially prescribes to itself by virtue of the structure of its own being. By thinking these two IDEAS the “*subject*” gives itself, as an object *to itself*, and constitutes itself as conscious.

“The first act of Reason is consciousness.” [XXI page 105]

“But I must have objects of my thought and apprehend them; for otherwise I am not conscious of myself (*cogito, sum*: it should not run, *ergo* ). It is *autonomia rationis purae*. For without this I should be without ideas ... like a beast, without knowing that I am.” [XX! Page 82]

“These representations are not mere concepts, but also Ideas which provide the material (*den Stoff*) for *synthetic a priori laws* by means of concepts.” [XXI, page 20]

**25.06** **G-d** and the **World** are not ...

“substances outside my Ideas, but the thinking whereby we make for ourselves objects, through *synthetic a priori* conditions and are subjectively self creators (*Selbstschopfer*) of the objects we think.” [XXI, page 21]

**25.07** The construction of experience can thus be represented as a self-referential process of what **Kant** calls *self-positing, self making, self constituting, and so on*. Starting, so to speak, with the Idea of the **World**, (i.e. the **body/world schema**), there is a continuous process of schematization, which is at the same time a self-referential process of objectification. And this self-referential process is for **Kant** the work of the self-positing *noumenal* subject.

**25.08** The organization of our sense data by means of these categories is thus said to be the self-referential process (or act) by means of which the subject self-referentially posits itself and constitutes itself as object for the sake of possible experience. And *space and time*, repeatedly affirmed to be pure subjective intuitions and not things or objects of perception, are said to be *primitive products of imagination*, self made intuitions. The subject self-referentially constitutes or posits itself as object, that is to say, as both the *empirical ego* and as the *object* or “*noumenon*” which affects the *empirical ego*. We can thus speak of the subject as affecting itself.

**25.09** So for **Kant**, the laws of **Physics** governing the images of matter and energy formed on the space/time *manifold of perception* are derivable, by a process of schematization, from the self-referential self-positing of the *noumenal* subject. At least **Kant** believed that this had to be shown if one was to hold that it is the



“*subject*” itself which self-referentially constructs experience.

**25.10** Here however is precisely where **Kant** got into trouble, for although he restricted his *phenomenal categories of sensibility and thinking*, to forms-of-mental-representation and thus managed to avoid attributing an atemporal aspect to them, his *noumenal categories of reason* (like *Aristotle’s ten categories*), had **both** a temporal *and* an atemporal aspect. That is, his *noumenal categories of reason* were atemporal forms of Existence Itself, as well as temporal forms of human logic.

**25.11** In saying that the laws of physics can be derived by schematizing from the “*subject’s*” self-referential self-positing, he unconsciously introduced an ambiguity into the term “*subject.*” This ambiguity lies in the fact that, in one sense he treats the “*subject*” as a standard or “*phenomenal*” object of *thought* which is actually given in our experience in time (*which cannot be self-referential without contradiction*) and in another sense he treats the “*subject*” as a nonstandard or “*noumenal*” object of *thought* outside of our experience in time (*which CAN be self-referential without contradiction*), that is, it is *thought* as an object but it is **not** *actually given* as an object in experience.

**25.12** **Kant** had mistakenly identified the nonstandard “*noumenal*” universe with the ineffable and absolutely inconceivable, which led inexorably to this highly embarrassing ambiguity in his use of the term “*subject.*” This ambiguity was however, for **Kant**, quite unavoidable. **Berkeley** had refuted *infinitesimals*, and it followed from this refutation that the **Ideas of Totality**, i.e. the **Ideas of the World, Self and G-d** could exist only as *ideal self-positing limits*, never as *real self-referential self-positing infinitesimals*.

**25.13** Thus the actual existence of an *atemporal “noumenal” subject* could not be considered and consequently the gap between self-knowledge and being could never be bridged. That is, self-knowledge could never actually be, or ever actually become “*categorical*” In **Dewey’s sense of the word**.

**25.14** It is because of his inability to resolve the essential ambiguity involved in his concept of a self-positing “*subject*” that **Kant** has, in the eyes of many of his detractors, discredited himself as an **idealist** and laid himself wide open to the **FSH** line of attack on his analysis of the ontological status of *noumena*.

**25.15** The self-referential attributes of “*self-positing, self making, self constituting, etc.*” **cannot** be predicated of a *temporal* knower, as a phenomenological analysis reveals, such self-referential attributes can only be predicated of an *atemporal* knower. They can only exist for a self-referential knower, i.e. a knower which is its own subject. For a *temporal* knower, the knower must always be separate from what is known, for there is no such thing as cognition outside of the polar field of tension established between subject and object. As **Victor E. Frankl** points out in *The Will*

to Meaning.

“Preserving the *“otherness,”* the objectiveness of the object, means preserving that tension which is established between object and subject. This tension is the same as the tension between the *“I am”* and the *“I ought,”* between reality and ideal, between being and meaning. And if this tension is to be preserved, meaning has to be prevented from coinciding with being. I should say that it is the meaning of meaning to set the pace of being.” [pg. 51]

**25.16** This tension between subject and object is the same as that between fact and value only in the sense that this tension exists in the realm of temporal fact and does not exist in the atemporal realm of value. This cannot be established without first also distinguishing between temporal and atemporal consciousness. For temporal consciousness, meanings are discovered not invented.

**25.17** However because at the time **Mal’cev** and **Henkin’s** compactness theorem and **Robinson’s proof** of the existence of infinitesimals did not yet exist, **Kant** could not see a way out of his dilemma. Consequently, in his *Opus Postumum* we find him wrestling (*in a manner which appears on the surface to resemble the Fichte line of attack on the existence of the nonstandard “noumenal” universe*) with the ambiguously defined “*subject’s*” concepts of *noumenal* categories treated as “*limits.*” Which “*limits,*” (*because Kant had mistakenly defined the nonstandard “noumenal” universe as ineffable and absolutely inconceivable*), could not even be said either to exist or not to exist.

“The object in itself (*Noumenon* ) is a mere Gedankending (*thoughtthing or ens rationis*), in the representation of which the subject posits itself. “ [XXII p.36]

**25.18** It is

“the mere representation of its own (*the subject’s* ) activity.” [XXII p.37]

**25.19** The ambiguously defined “*subject*” self-referentially projects as it were, its own unity, or its own activity of unification, into the negative idea of the “*thing-in-itself.*” The concept of the “**thing-itself**” becomes a self-referential act of the self-positing but ambiguously defined “*subject.*” The *thing-in-itself* is here, for **Kant**,

not a real thing” [XXII p. 24]

it is “not an existing reality but merely a principle,” [XXII p. 34]

“the principle of the synthetic a priori knowledge of the manifold of sense intuition in general and the law of its co-ordination.” [XXII p.

And this principle is due to the subject in its self-referential construction of experience. The distinction between appearance and *thing-in-itself* is not a distinction between objects but holds good only for the self-referential subject.

**25.20** As far as it goes, **Kant's construction of experience** as sketched in *Opus Postumum*, does bear a superficial resemblance to **Fichte's subjective transcendental idealism**. **Kant** derived the whole of phenomenal reality from the self-referential self-positing acts of an ambiguously defined temporal "*subject*." A "*subject*" which could not, (if taken in its *noumenal* aspect), even be said to exist or to not exist, and which, (if taken in its *phenomenal* aspect), could not be self-referential without contradiction. However, this resemblance does not justify the dogmatic assertion that in his later writings **Kant** completely abandoned the actual existence of the *thing-in-itself*.

**25.21** Such a dogmatic assertion is not justified because the ambiguities within **Kant's logically flawed analysis** of the nonstandard or "*noumenal*" universe made possible the development of his "*Critical Philosophy*" in several directions not merely the direction **Fichte** chose. **Fichte** seized upon the distinction between the *phenomenal* and *noumenal* aspects of **Kant's "subject."** He posited a **temporal "subject" or knower** which WAS self-referential, in its *noumenal* aspect (*Fichte's Transcendental Ego*) whereas, in its *phenomenal* aspect (*Fichte's Empirical Ego*) it WAS NOT.

**25.22** Leaving aside for the moment, the fact that **Fichte's "cure"** was worse than the "*disease*" for it introduced a more troublesome ambiguity than the one inherent in **Kant's flawed analysis** of the nonstandard or "*noumenal*" universe which he was endeavoring to eliminate.

**25.23** Let us just note in passing that **Kant's "noumenal"** ambiguities could have been removed had he been able to entertain **Boehme's notion** of a "*natural language of the Heart*" in terms of an *atemporal intuition* based on **atemporal categories of perception**. But even the "*intellectual intuition*" which **Kant** considered, but ultimately ruled out (*and which Fichte later picked up & developed*) was itself merely temporal and did not function outside of the categories of space and time.

**25.24** **Kant** very much wanted to hang on to the existence of the nonstandard or "*noumenal*" universe in order to have an objective basis for the self-referentially created standard or "*phenomenal*" universe. Thus we are told that

"If we take the world as appearance, it proves precisely the existence

(*Dasein* ) of something which is not appearance.” [XXI p. 440]

**25.25** He also seems to imply on occasion that the *thing-in-itself* is simply the thing which appears when considered apart from its appearing.

**25.26** The fact of the matter seems to be that in revisiting and wrestling with the ambiguity inherent in the word “*subject*” **Kant** was struggling to answer the objections of those (*such as Fichte*) who considered the theory of the *thing-in-itself* to be inconsistent and superfluous. Without **Mal’cev** and **Henkin’s** compactness theorem which vindicated inferring the existence of the **Totalities** of finite subsets taken together from the existence of each of them taken separately and **Robinson’s** proof of the existence of infinitesimals he could not strike at the root of the problem which was his defining the nonstandard “*noumenal*” universe as absolutely unconditioned and inconceivable,.

**26)** As a consequence of this perceived logical flaw **Fichte (1762-1814)**, suggested that the *noumenal world* was irrelevant and could for all practical purposes (FAPP) be said not to exist.

**27) Hegel (1770-1831)** in adopting this conclusion took the properties which had traditionally been attributed to the *noumenal world* and quite illegitimately applied them to collectives within space and time. In essence, he asserted that the in the **State** the *phenomenal map* and the *noumenal terrain* somehow, in some mystical way became one, so that in the State, the phenomenal map was indistinguishable from the noumenal terrain. **Hegel** insisted that the **State** as a collective, was none other than the evolving self-knowledge of the totality to which we referred by the word **G-d**.

**28) Hegel** and the various ideologies which built on his anti-individual collectivist polemics, thus substituted some form of collective such as the state (**Marx**) or a particular race (**Hitler**) for the nonstandard “*phenomenal*” universe as the arbiter of value.

**29)** In order to erect a bulwark against these anti-individual forces and the denial of the efficacy of reason which they embraced and which were unleashed by **Hegel’s unwitting logical inconsistencies**, **Charles Stuart Pierce (1839-1914)** and then **William James (1842-1910)** and later **Wolfgang Kohler (1887-1967)** redefined the physical world itself as *both* the ontological ground of value *and* the unknowable *noumenal world*. This strategy of course brought free will into the natural world and therefore psychology into the domain of science. Boiled down to its essence this pragmatic strategy takes the following *reductio ad absurdum* form.

Consider the following premise:

**P is a theory whose percentage of isomorphic deviation from N is  $> 0$  and  $< 1/2$**

Let “**P**” represent a “*phenomenal*” theory, representation or map of the nonstandard “*noumenal*” universe “**N**”

Let **0** represent **0.0%** isomorphic deviation whatsoever between **P** and **N** and hence

identity, that is  $P=N$ .

Let **1** represent **100%** isomorphic deviation between **P** and **N**, and hence complete divergence, that is no isomorphism whatsoever.

Let the fractions between **0** and **1** represent all of the infinite variations in isomorphism between **P** and **N**.

Consider the following premises:

**P is a theory whose isomorphic deviation from  $N > 0$  and  $< 1/2$**

**P is a theory whose isomorphic deviation from  $N > 0$  and  $< 1/3$**

**P is a theory whose isomorphic deviation from  $N > 0$  and  $< 1/4$**

and so on .....

This is an infinite number of premises which can be written in the language **L** of science

With reference to the standard “*phenomenal*” universe **R** of real numbers, every finite subset of this infinite set of premises is true, because for any finite subset of such premises, no matter how large *n* is,  $1/2n$  will always be bigger than **zero** and less than any of the fractions in your finite subset of premises.

Now suppose there were a infinitesimal “**P**” that could be said to represent absolute truth or certainty in the sense that no “**P**” could possibly be more isomorphic in any way to “**N**” without itself being the “*noumenal*” universe. In **John Dewey’s terminology** the entity “**P**” corresponding to such a limit would be said to possess the semantic property “*categoricity*” with respect to “**N**” That is “**P**” could then be said to implicitly define (*completely describe or characterize up to the point of isomorphism*) the structure of “**N**.” More precisely, the entity “**P**” corresponding to such a limit was said by **Dewey** to be “*categorical*” if every two of its models (*satisfying interpretations or realizations*) are isomorphic to each other.<sup>3</sup>

If there were such a actually existing entity “**P**” [*rather than merely representing a set of logical relations (i.e. a “limit”) among other actually existing entities*], then the *entire infinite set of premises* would have to be **true** with reference to the standard “*phenomenal*” universe **R** of real numbers.

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<sup>3</sup> Dewey was the first to use the word “*categoricity*.” although the concept can trace its mathematical roots back to **Dedekind** and its philosophical roots back to **Aristotle’s “essential or real definition”** [in which an object is defined in terms of its real specific essence (form or category)] as opposed to 1) his *nominal or descriptive definition* [in which an object is defined in terms of its nominal description] and 2) his distinctive or characteristic definitions [in which an object is defined in terms of its distinctive characteristics]. Discerning and defining the universal which implicitly defines the structure of “**N**” is thus the ideal, while in practice empirical science gets along without attaining this ideal.,

IN OTHER WORDS:

If there were such an actually existing entity “**P**”, then it would have to be indistinguishable from “**N**” in our phenomenal experience.:

Yet if you consider the entire infinite set of these premises, it is **false** with reference to the standard “*phenomenal*” universe **R** of real numbers because no matter how close to 0.0% isomorphic deviation from “**N**” you make “**P**” (*that is, no matter how small a positive real number you chose for your smallest fraction*),  $1/n$  will always be smaller than “**P**” if  $n$  is big enough.

IN OTHER WORDS:

Yet in our phenomenal experience, the map can always be distinguished from the terrain because no matter good the map is closer examination will always disclose how a deviation of the map from the terrain. (*Notwithstanding Hegel’s illogical assertion to the contrary as regards the state.*)

Therefore there cannot be such a “**P**”.

**30)** Heroic as it was, this strategy nevertheless retained the weakness inherited from **Kant’s flawed analysis**, to wit, the logical tension between on the one hand explicitly stating that the non-standard “*noumenal*” universe was totally inconceivable and on the other hand implicitly treating it as if it existed.

**31)** **American** educational reformer and pragmatic philosopher **John Dewey (1859-1952)** was the one who, with the foundation of his **pragmatic instrumentalism** abandoned the relevance of truth and certainty to knowledge altogether.

**31.01** Profoundly influenced by the type of **Hegloid idealism** being taught by **G. S. Morris** at **Johns Hopkins University**, Dewey in **1884** published “*Kant and Philosophic Method*” in the journal of a group known as the **St. Louis Hegelians**. Although Dewey later rejected the full-scale **Hegelianism** expressed in the article, he did so only after gathering up a partial synthesis of the thought of **Kant, James, Darwin** and **Hegel** and under the influence of **William James’ *Principles of Psychology*** while he was head of the department of philosophy at the University of Michigan (**1889-94**). At first Dewey had embraced the **Hegloid** theory of **experience** as a **seamless continuum** and rejected the atomist and subjectivist tendencies of the **British empiricists**.

**31.02** Later he felt that **Hegel** had

1) **undervalued the role of sensibility in knowledge** by neglecting the nonreflective and noncognitive experiences of doing.

2) **erred in regarding experience as a continuum** by neglecting to note that the individual experience is the primary unit of life, and that life consists of a series of overlapping and interpenetrating atomistic experiences, situations or contexts, each of which has its internal qualitative integrity.

and

3) **overgeneralized his insights** into the organic nature of experience **into a false cosmic projection**. Dewey felt that the organic character of experience could be given a more careful, detailed, scientific articulation by means of what he called an “*anthropological-biological*” orientation.

**31.03** Whether or not this partial synthesis is explicitly termed *transcendental* in the **Kantian** sense (*that is, as opposed to empirical and concerned with experience as determined by the mind's conceptual and categorial makeup*), it does two things:

(1) it affirms **Kant's insight** that physical particulars cannot first be identified and later interrelated by means of the categories, but, to be identified at all, they must be assumed to be already categorized, and reasoning must proceed to expose those **categorial** structures that make the actuality of knowledge possible;

(2) it agrees with **Fichte, Schelling and Hegel's line of attack** on the logical tension inherent in **Kant's flawed analysis**, at least to the extent that **Kant's idea** *that the source of sensations is in a noumenon (thing-in-itself) external to the mind* is regarded as a transgression of **Kant's own doctrine** that the categories, particularly that of causation, can only be applied within phenomenal experience.

**31.04** Dewey thought that **Kant** confused the *empirical* and *transcendental* standpoints by mixing analysis *of the organism as sensorially responsive* with analysis *of mind*. He claimed that **Kant** forgot that it is only because the knowing subject already grasps the world through its categories that it can *self-deceivingly* regard its sensations as subjective **and as caused by something not known** (the nonstandard or “*noumenal*” universe). Thus, for Dewey,

*"The relation between subject and object is not an external one; it is one in a higher unity that is itself constituted by this relation."*

**31.05** In other words, by following **FS&H's lead** in doing away with the nonstandard or “*noumenal*” universe” Dewey was able to assert that, consciousness and its object, (*i.e. knower and known, subject and object*) both constituted and were unified in the temporal process of knowing (*such that consciousness was its own*

*object*),. The relation between subject and object was not dependent upon an inconceivable nonstandard or “*noumenal*” universe external to the mind, rather the mind itself was the nonstandard or “*noumenal*” universe.

**31.06** Simply put, he was saying, that because the map maker and the map both constitute and are unified in the process of map making there is no terrain independent of the mind, rather the mind is itself the terrain.

**31.07** By embracing this intellectually dishonest position, which he claimed follows from the **Kantian notion** that “*knowing is a form of doing*,” he committed the classic **Hegloid error** of asserting that turtles could fly, that is, of assigning to an object in the standard “*phenomenal*” universe an attribute (*the identity of the knower and the known*) which can be applied only without contradiction to an object in the non-standard “*noumenal*” universe.

**31.08** This denial of the independent external existence of “*things-in-themselves*” (of *noumenon*) follows from **Fichte, Schelling, and Hegel’s denial** of the existence of the non-standard “*noumenal*” universe. Consequently from this point of view, something which does not exist (*the noumenon*) cannot be the source of sense data, the source is the mind itself. Thus it follows from **Dewey’s obfuscating analysis** that reality itself is a mere social construct. **Dewey’s partial synthesis of Kant, James, Darwin and Hegel** thus infected the thematic core of much of contemporary **American** and continental metaphysics with one of the most destructive mental viruses in the history of humankind.

**31.09** Like **Hegel’s subject-object delusions** with regard to the state, **Dewey’s obfuscation** of the **subject-object relation** with regard to the temporal process of knowing, has overtones of the medieval church at its worst, engendering a concept of a supposedly democratic, pseudo-scientific collective of inquirers, bound together through common totems and taboos. **Dewey’s vague and ambivalent obfuscation** helps undermine the whole contrast between *immanent* and *transcendent* and with the best of intentions (*or perhaps not*) leads society on a sleigh ride to hell.

**31.10** According to **Dewey** one of the cardinal errors of philosophy from **Plato** to the modern period was what he called “*the spectator theory of knowledge*,” and what is more commonly called the “*correspondence theory of truth*” that is, the tendency to view knowledge as a kind of passive recording of facts in the world in which success is seen as a matter of the correspondence of our beliefs to these antecedent facts. Here **Dewey** definitely parted ways with the earlier pragmatic individualists **Pierce** and **James** who although they did agree that we could not know ultimate truth, nevertheless retained their belief in a real world of antecedent facts.

**31.11** **Dewey** did not view nature as “*the-world-as-it-would-be-independent-of human-experience*” rather he viewed it as constructed out of concepts These



concepts were evolving instruments whose function was to “*construct*” nature and whose purpose was the enhanced survival of the organism. In other words the standard or “*phenomenal*” world was the world of science and the world of science was the standard or “*phenomenal*” world. For **Dewey** (like **Hegel** but unlike **James** and **Pierce**) the nonstandard or “*noumenal*” universe was non-existent and irrelevant

**31.12** This identification of nature (*also held to be synonymous with existence*) with the standard or “*phenomenal*” universe, elicited accusations of reductionism through an “*excessive anthropomorphism*” which equated matter and experience. **Dewey’s extended later thought** responded to these accusations by defining metaphysics as “*the descriptive study of the generic traits of existence*” and experience as but one of three levels of “*transaction*” in nature (*physico-chemical, psycho-physical, and human experience*). Experience was thus just one of the levels of transaction in nature and not reducible to the other forms.

**31.13** In this way, in his ongoing dialog with **Santayana** on precisely this point, he was able to distinguish his “*naturalism*” which he saw as a non-reductive empiricism, from “*materialism*” which he saw as a kind of reductive empiricism. Concern with **God** and **immortality** slipped nearly from view, as is typical of **contemporary Hegloid philosophy** in general.

**31.14** **Dewey’s Instrumentalism** thus replaced the real world based pragmatic individualism of **William James** with a pragmatic collectivism based on a world socially constructed by a collective of inquiring minds.

**31.15** Whereas for **Hegel** the state took the place of the nonstandard or “*noumenal*” universe, for **Dewey** it was the collective of inquiring minds which usurped its function as arbiter of value.

**32)** As the founder of mathematical *intuitionism*, the general orientation of **Dutch** mathematician **Luitzen Egbertus Jan Brouwer (1881-1966)** was a direct and essentially **Kantian** response within the philosophy of mathematics to the paradoxes and contradictions which were threatening the logic and mathematics of his time.

**Brouwer** believed these unwanted paradoxes and contradictions were the result of trying to apply finite mathematics to infinite totalities. In his treatment of “*potential infinities*” vs. “*actual infinities*” echoed both developed and promoted a

For **Brouwer** like **Aristotle** before him, only a “*potential infinity*” could be understood. He then asserted, on this basis, that a statement about *all* numbers is true only if we can prove it for any arbitrary number. Which led him to reject **Aristotle’s law of the excluded middle**. All of this is, of course, just another variant of the line of attack opened by **Fichte, Schelling** and **Hegel** on **Kant’s flawed analysis** of the *noumenal* universe.

**32.01** Contrary to the school of *logicism* developed by **Fregge** and later continued by **Whitehead and Russell** which held that mathematics was derivative from logic, **Brouwer** believed that logic is derivative from mathematics and dependent for its evidence on a content-less temporal succession -an essentially mathematical intuition similar to **Kant's notion** of time as the perceptual category or form of inner sense.

**32.01.1 Brouwer** believed that if mathematical thought could be likened to wine then the language in which it was expressed could be likened to a wine bottle. Furthermore Logic was then produced by the shape of the bottles and not by the wine at all. Mathematics was a language-less activity of the mind and logic derived from the structure of the language in which a mathematical thought was expressed, not from the mathematical thought.

**32.02** For **Brouwer**, intellectual life (*and therefore mathematics*) begins with “*temporal perception*,” in which the self separates experiences from each other and distinguishes itself from them.

**32.02.1 Brouwer's temporal perception** is similar to the self-referential process of objectification undergone by **Kant's** self-positing *noumenal* subject, which starts, so to speak, with the **Idea of the World**, (*i.e. the body/world schema*), from which there is a continuous process of schematization, which is at the same time a continuation of this self-referential process of objectification.

**32.03** This “*temporal perception*” is the **first phase** of an attitude (or “*mathematical consideration*”) which the self takes as an act of *free will* to preserve itself, that is of *free will* taken in the broad **Schopenhauerean** sense, that is, of *free will taken* as the equivalent of **Kant's noumenal** subject. For **Brouwer**, the most fundamental intuition of all mathematics is this perception of temporal succession “*divested of all content.*”

**32.03.1** The series of natural numbers arises from the perception that the process of division and synthesis can be repeated indefinitely. Thus **Brouwer** felt he could say that the theories of the natural numbers and of the continuum come from one intuition.

**32.03.2 Brouwer** believed the disturbing paradoxes and contradictions were the result of trying to apply finite mathematics to infinite totalities. His treatment of the “*potential infinities*” of the natural numbers vs. “*actual infinities*” (*such as the continuum*) reflects an “*instant replay*” of the **Kantian** analysis of the “*limit*” vs the “*infinitesimal*.”

**32.03.3** For **Brouwer's perspective** (like that of both **Aristotle** and **Kant** before him), only a "*potential infinity*" could be understood. He then asserted, on this basis, that mathematics should consist of a "*constructive*" mental activity, and a mathematical statement "*should*" be an indication or report of such activity. Therefore a statement about *all* numbers is true only if we can prove it for any arbitrary number. This then forced him for the sake of consistency reject **Aristotle's law of the excluded middle**.

**32.03.4** Developed in this **neo-Kantian** context **Brouwer's constructivism** was probably motivated less by a phenomenological insistence on absolute evidence and a rejection of hypotheses, than by his subjectivism and his irrational **Schopenhauer-like** insistence on the primacy of *will* over intellect.

**32.03.5** On these grounds, **Brouwer** claimed that

**32.03.6** This position is seen to be a variant of **Fichte Schelling**, and **Hegel's line** of attack on the logical tension which resides in **Kant's flawed analysis** and which tacitly identifies **infinite totalities** which exist as *limits* (*such as the continuum*) with the *ineffable*. Essentially asserting that all we can rationally know to exist is the standard *phenomenal* universe.

**32.04** The **second phase** of **Brouwer's "mathematical consideration"** he called "*causal attention*", in which "*one identifies in imagination certain series of phenomena with one another,*" an operation by which one can pick out objects and postulate causal rules.

**32.05** This relation between the categories of **Brouwer's "temporal perception"** and "*causal attention*" is analogous to that between **Kant's "categories of perception"** and his "*categories of the understanding.*"

**32.06** Like **Frederich Nietzsche**, **Brouwer** believed reality is most immediately presented to us by our instincts, and therefore that thinking (*the 1<sup>st</sup> and 2<sup>nd</sup> phases of this "mathematical action"*), was a sort of fall from grace giving only uncertain and disappointing results which take us away from reality.

**32.07** In *Leven, Kunst, en Mystiek* and in "*Consciousness, Philosophy and Mathematics*" (1948) he regards the communication upon which society is based as another form of this "*mathematical action*" and that what is ordinarily called communication is actually an attempt to control another's behavior, although he allowed that sometimes a deeper communication of souls is approached.

33) **Wittgenstein (1889-1951)** also tried at first in his **blue books** to resist the denial of reason's efficacy by the self-styled "*progressive*" rhetoric (*which was at that time invading the U.S. from Europe*) by asserting that the *ineffable* actually existed as a objective ground of value *and* as a reason's limit. But here again the logical tension inherited from **Kant's flawed analysis** remained.

34) But succumbing to the line of attack **Fichte, Schelling (1775-1854)**, and **Hegel** had previously mounted against the aforementioned logical tension in **Kant, Wittgenstein** backed away from his initial position in his **brown books** and renounced his prior notion that the *ineffable* could be said to exist.

35) **Kohler (1887-1967)** too ran head on into this logical inconsistency as in his writings<sup>4</sup> he frequently oscillated between stating sometimes that **physical reality** (*the world of physics*) is a knowable social construct and at other times that, as the nonstandard "*noumenal*" universe, it is totally inconceivable.

36) **Husserl (1859-1938)** also waffled. First, he *unconsciously embraced* relativism by recognizing only the *phenomenal world* then *recognizing* a flaw in his initial arguments he *rejected* relativism, recognizing the *noumenal world* in what he called his "*transcendental ego*." Then he *re-embraced relativism oncd again* by switching to a view that the *noumenal world* is a collectivist construction.

**36.01 Husserl** assisted for a short time the noted mathematician **Karl Theodore Weierstrass**. **Berkeley's Analyst**, published in 1734, contained a brilliant and devastating critique of the use of the infinitesimal method employed by **Sir Isaac Newton** and **Gottfried Wilhelm von Leibniz** in their infinitesimal calculus. In order to meet **Berkeley's objections**, **Weierstrass** and his followers developed the "*epsilon-delta*" method in order to reformulate the infinitesimal calculus without infinitesimals.

**36.02 Husserl's search** was for the unshakable foundation of human knowledge, which he often referred to as the "*Archimedean Point*"

**36.03** And so it was, that this search for unshakable foundations combined both with **Berkeley's criticism** of the infinitesimal calculus and with **Weierstrass' success** in banishing infinitesimals from the calculus, to imbue **Husserl** with a strong reluctance to employ basic mathematical concepts without first eliminating all presuppositions and then establishing through observation and description both a complete clarity and an apodictic knowledge concerning their meaning.

**36.04** Further encouraged in this regard, by **Brentano**, he began to strongly focus on the philosophy of mathematics and in 1891, he published the first volume of his *Philosophie der Arithmetik*. After reading the mathematician **Gottlieb Frege's critical review** of this book he was so impressed with **Frege's objections** that he

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<sup>4</sup>Kohler [1938] [1947]

never wrote the planned second volume.

**36.041** The realist revolt against **Hegel's rather bureaucratic brand of idealism** occurred some three decades earlier in **Germany** than it did in **Britain**. **Frege's** contribution to this revolt consisted mainly in his attack on what he called *psychologism* -- the thesis that an account of the meanings of words must be given in terms of the brain states which they arose in a speaker or hearer or which are involved in acquiring a grasp of their sense (or the stronger thesis that these mental processes are what we are referring to when we use the words).

**36.042** It was in the context of this counterattack against *psychologism* that **Frege's review of Philosophie der Arithmetik** accused **Husserl** of confusing psychology and logic. He argued that logical and mathematical concepts (such as, numbers, essences, and characteristics) differ from the psychological acts (of cognitive synthesis) in which they may occur and that, therefore, the discussion of the latter does not serve to explain the former.

Just as the face (categories) reflected in the mirror (space/time manifold of perception), differs from the act of reflection in which it (they) may occur, and that therefore, the discussion of the act of reflection does not serve to explain the face (categories).

**36.05** Instead of the planned second volume **Husserl**, in the period from 1900-1901, wrote the two volume set *Logische Untersuchungen* in which he repudiated the *psychologism* in his earlier book: the assumption that logic and psychology could be assimilated. Psychology **Husserl** proclaimed, was an *empirical* or *a posteriori* science, whereas math and logic and philosophy were *analytic* or *a priori* sciences.

**36.06** Based on this consideration **Husserl** parted from the view that the science of philosophy was an empirical natural science and attacked both "*naturalism*" -*the view that the laws of physics are premises in philosophic argument*, and *historicism* -*the view that philosophic truths are not eternal but are relative to historical epochs*.

**35.07** In spite of his polemic against *psychologism* **Husserl** began his two volume set using the term "*descriptive psychology*" to describe his *a priori* autonomous science of philosophy.

**36.08** Realizing quickly it was inconsistent to use the word "*psychology*" he began using the term "*phenomenology*" without at first knowing exactly what he meant by it, except that consistent with his earlier imperative it was to be descriptive.

**36.09** Consequently he emphatically retained the **Kantain distinction** between the the "*thing-as-it-is-given-to-us*" (i.e. the standard or "*phenomenal*" universe) and the

“*thing-in-itself*” (i.e. the non-standard or “*noumenal*” universe) by claiming that phenomenology described only the “*thing-as-it-is-given-to-us*” (i.e. the standard or “*phenomenal*” universe).

**36.10** In the fifth essay of the *Logische Untersuchungen* Husserl described the several elements of intentional acts. It was here that the problem of distinguishing between these phenomenological descriptions and ordinary psychological descriptions (*a crucial distinction upon which his quest for an “Archimedean Point” depended*) first came into focus for him and he realized that there was a need to specify a means of making such a distinction.

**36.11** In the decade **1900-1910** Husserl reflected more deeply on our experience of time, on memory and on the nature of the descriptive distinction between phenomenological and ordinary philosophical thinking upon which his quest for an “*Archimedean Point*” rested.

**36.12** Realizing that his quest was imperiled by accepting **Kant’s distinction** between the perceptibility of the “*thing-as-it-is-given-to-us*” and the imperceptibility of the “*thing-in-itself*” which effectively banished science from the real world (i.e. non-standard “*noumenal*” universe), he developed and introduced what he called the “*transcendental-phenomenological reduction*,” in a series of lectures given in **1907** and entitled “*The Ideas of Phenomenology*” (*published in 1913 under the title Ideas Pertaining to a Pure Phenomenology and Phenomenological Philosophy*)

**36.13** This “*phenomenological reduction*” (*in Greek an epoche*) was just what was needed to clarify what he considered to be the distinction between his phenomenological descriptions and ordinary psychological ones. By means of this “*reduction*” the “*trancendental ego*” was established.

**36.14** **Kant** had argued (see 7,8, and 9 above) that “*thing-in-themselves*” belonged to the the non-standard “*noumenal*” universe. They could never be directly perceived, only indirectly as “*objects of perception*” which were synthesized from *sense data* (finite subsets of “*thing-in-themselves*”) and the *categories of perception* (*space and time*). Consequently, the non-standard “*noumenal*” universe and its *noumena*, could never be perceived, and the legitimate sphere of human thought was restricted to the standard or “*phenomenal*” universe,

**36.15** The non-standard “*noumenal*” universe must be, according to **Kant**, banished from the legitimate domain of science as it was rationally unknowable and hence totally inconceivable, requiring it to be placed outside of the legitimate sphere of human thought and therefore of science itself.

**36.16** By means of the descriptive difference **Husserl** elucidated between his method of “*reduction*” and ordinary philosophy’s method of “*deduction*” from arbitrary premises, **Husserl** believed that he had established the indubitable existence

of the “*transcendental ego*.” Its discovery served both to distinguish phenomenology from the empirical sciences and also to provide the coveted “*Archimedean Point*.” at which to begin our studies thereby circumventing **Kant’s argument** banishing science from the non-standard “*noumenal*” universe.

**36.17** Predictably, these doctrines were misinterpreted and caused considerable stir, particularly among those who embraced the line of attack on **Kant’s ideas** developed by **Fichte**, **Schelling** and **Hegel** which had not only banished science from the real world (i.e. the non-standard “*noumenal*” universe) but had even banished the non-standard “*noumenal*” universe from existence itself.

**36.18** Many of such admirers of **Husserl’s earlier work** and even members of the phenomenological movement itself, regarded these new doctrines of **Husserl’s** as regrettable lapses into metaphysics, a straying away from the primrose path of descriptive phenomenology and hence distanced themselves from what he now taught.

**36.19** For the next **10** or **15** years **Husserl** maintained a position rather similar to that of *Categorical Analysis*., but alas, his attempt to circumvent **Kant’s argument** could not stand without **Mal’cev** and **Henkin’s** compactness theorem and **Robinson’s proof** of the existence of infinitesimals, and **Husserl** finally succumbed to **Fichte**, **Schelling** and **Hegel’s** attack on the existence of the non-standard “*noumenal*” universe.

**36.20** The problem of the intersubjectivity of transcendental egos was first discussed in the *Cartesianische Meditationen*, which originated in a series of lectures given in Paris in **1929**. In lectures given in **1935**, (*three years before his death*), the “*transcendental ego*.” lost its absolute status and was said to be “*correlative*” to the world. Also the world was no longer defined in terms of an individual but in terms of an intersubjective collective of individuals.

37) Whitehead (1861-1947)

**38)** Dewey had opened wide the door for the **Post-modern Deconstructionists** such **Foucault (1926-1984)**, **Irigaray** () and **Derrida** () who again following **Fichte**, **Schelling**, and **Hegel** denied the relevance of the *noumenal world* altogether, advocating cultural relativism.

**39)** The anti-ontological and epistemological orientation inherent in the **Copenhagen Interpretation** rejected the idea that the role of physics was to model an underlying “*real*” or *noumenal world* and was interpreted by many to support the cultural relativists deconstruction of **Dewey’s Pragmatism**.

**40)** The **vN/W approach** was written to counteract the **Copenhagen Interpretation’s** rejection of the idea that the role of physics was to model an underlying “*real*” or *noumenal world*.

41) Let us now turn to *categorical analysis* and its proposed resolution of this nagging problem which has been haunting western civilization for two centuries.

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### THE NON-STANDARD OR “NOUMENAL” UNIVERSE EXISTS.

#### **Kurt Godel’s Completeness Theorem:**

Every theory (i.e. *set of sentences or premises*) is logically consistent if and only if it has (i.e. *the sentences have*) a model (i.e. a “*universe*” in which they are all true.)

**Transposed into the language of *Catagorical Analysis*:** Every **sense-datum** (as a finite subset of possible premises about some such totality as the *physical world, the self or G-d*) is logically consistent if and only if, it has a model.

#### **Commentary on the transposition:**

First let us recall that for *categorical analysis* every sense-datum is a finite subset of a totality of possible premises and is therefore itself a set of premises. This is true whether or not the totality in question is the Physical World, the Self or G-d.

Second let us remember that the phenomenal universe is by definition a map (*or model*) of the noumenal universe (*or terrain*).

Consequently by **Godel’s completeness theorem**, every sense datum is therefore logically consistent only if it corresponds to something in the phenomenal universe which models a noumenon

This is no more and no less than a rigorous formulation of the difference between perception and imagination.

#### **Mal’cev and Henkin’s Compactness Theorem:**

If every finite subset of a collection of sentences **L** is true in the standard “*phenomenal*” universe, then there exists a non-standard “*noumenal*” universe in which the entire collection is true at once.

**Transposed into the language of *Catagorical Analysis*:** If every **sense-datum** (as a finite subset of possible premises about some such totality as the *physical world, the self or G-d*) is modeled in our *phenomenal* world, as an object of perception (*which it is by definition*) then there exists a *noumenal* world in which the totality also exists.

The Compactness Theorem of **Malcev** and **Henkin** follows easily from the Completeness Theorem.



If every finite subset of a collection of sentences (*collection of premises*) **L** is true in (i.e. *modeled by*) the standard “*phenomenal*” universe, then every finite subset is logically consistent.

**Transposed into the language of Categorical Analysis:** If every **sense-datum** of a collection of **sense-data** (*as a finite subset of possible premises about some such totality as the **physical world**, the **self** or **G-d***) is modeled in our phenomenal world as an object of perception (*which it is by definition*), then every such sensation is logically consistent.

Since any and every deduction can make use of only a finite number of premises, it follows that the entire collection of sentences is logically consistent.

**Transposed into the language of Categorical Analysis:** Since any and every deduction can make use of only a finite number of **sense-data** (*as a finite subset of possible premises about some such totality as the **physical world**, the **self** or **G-d***), it follows that the entire collection or totality of all possible **sense-data** is logically consistent.

**Commentary on the Transposition:**

Since any and every deduction about a totality which functions as a “*limit*” to thinking (such as the World, the Self or G-d) can make use of only a finite number of sense-data,

and because by the transposed compactness theorem every true sense-datum is modeled in our phenomenal world as an object of perception and is therefore logically consistent, (that is no contradiction can be deduced from any valid sense-datum)

it follows that the entire collection or totality of all possible sense-data is logically consistent (no contradiction can be deduced from the totality of all possible sense-data).

Therefore, by the completeness theorem, there exists a non-standard or “*noumenal*” universe in which the entire logically consistent collection is true at once. Because by the completeness theorem such a collection can be logically consistent, *if and only if*, such a non-standard or “*noumenal*” universe actually exists.

**Transposed into the language of Categorical Analysis:** Therefore, by the **completeness theorem** there exists a “*real world*” in which

the totality actually exists. Because by the **completeness theorem** such a totality can be logically consistent, if and only if such a “*real world*” exists.

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## CONSCIOUSNESS AND EXISTENCE

- 1) The concept of **existence** implies that something exists which someone perceives (*i.e. the known*).
  - 2) The concept of **consciousness** further implies that someone exists possessing the faculty of perceiving that something which exists (*i.e. the knower*).
  - 3) That Which Exists *as the known* cannot be perceived without something to perceive it whether that which perceives it is **existence** itself or not.
  - 4) **Consciousness as the knower** (*whether defined as the faculty of perceiving that which exists, or not*) cannot **exist** without something to be conscious of (*i.e. without something that exists*), whether that-which-exists is **consciousness** itself or not.
  - 5) Therefore the concept of **existence** implies two things: the **knower** and the **known** each of which implies the other.
  - 6) In order for the **knower** and the **known** to be one and the same, **consciousness** and **existence** must be one and the same.
  - 7) Therefore in order for **existence** itself to be that which perceives **existence**, -- **existence** itself must also be **conscious**.
  - 8) And in order for **consciousness** itself, to be its own object, -- **consciousness** itself must also be **existence**.
  - 9) **However**, as long as what is known is presented to **consciousness** as sense data conveyed by means of the **five spatio-temporal human sensory modalities** (*whether the perceiving consciousness is an individual or a collective of individuals*), then the **knower** cannot be the **known**.
  - 10) Furthermore, it also follows that as long as the **knower** is not also what is known, then **consciousness** cannot be **conscious** solely of itself as that would then be a contradiction in terms.
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## INFINITESIMALS AND THE NON-STANDARD “*NOUMENAL*” UNIVERSE ARE SIBLINGS

The **existence** of the totalities of the non-standard or “*noumenal*” universe is not the only direct consequence of the compactness theorem. Amazingly enough, **Abraham Robinson’s proof** of

the “*existence*” of infinitesimals and its specific application to the proof that *existence exists as the ineffable’s self knowledge* also follows directly from the compactness theorem.

Consider the following premise:

**P is a theory whose percentage of isomorphic deviation from N is  $> 0$  and  $< 1/2$**

Let “**P**” represent a “*phenomenal*” theory, representation or map of the nonstandard “*noumenal*” universe “**N**”

Let **0** represent **0.0%** isomorphic deviation whatsoever between **P** and **N** and hence identity, that is **P=N**.

Let **1** represent **100%** isomorphic deviation between **P** and **N**, and hence complete divergence, that is no isomorphism whatsoever.

Let the fractions between **0** and **1** represent all of the infinite variations in isomorphism between **P** and **N**.

Consider the following premises:

**P is a theory whose isomorphic deviation from N  $> 0$  and  $< 1/2$**

**P is a theory whose isomorphic deviation from N  $> 0$  and  $< 1/3$**

**P is a theory whose isomorphic deviation from N  $> 0$  and  $< 1/4$**

and so on .....

This is an infinite number of premises which can be written in the language **L** of science

With reference to the standard “*phenomenal*” universe **R** of real numbers, every finite subset of this infinite set of premises is true, because for any finite subset of such premises, no matter how large *n* is,  $1/2n$  will always be bigger than **zero** and less than any of the fractions in your finite subset of premises.

Now suppose there were a infinitesimal “**P**” that could be said to represent absolute truth or certainty in the sense that no “**P**” could possibly be more isomorphic in any way to “**N**” without itself being the “*noumenal*” universe.

If there were such a “**P**”, then the *entire infinite set of premises* would have to be **true** with reference to the standard “*phenomenal*” universe **R** of real numbers.

IN OTHER WORDS:

If there were such a “**P**”, then it would have to be indistinguishable from “**N**” in our phenomenal experience.:

Yet if you consider the entire infinite set of these premises, it is **false** with reference to the standard “*phenomenal*” universe **R** of real numbers because no matter how close to 0.0% isomorphic deviation from “**N**” you make “**P**” (*that is, no matter how small a positive real number you chose for your smallest fraction*),  $1/n$  will always be smaller than “**P**” if  $n$  is big enough.

IN OTHER WORDS:

Yet in our phenomenal experience, the map can always be distinguished from the terrain because no matter good the map is closer examination will always disclose a deviation of the map from the terrain .(*Notwithstanding Hegel’s illogical assertion to the contrary as regards the state.*)

Therefore there cannot be such a “**P**”.

But notice that so far this argument has essentially the same logical form as the argument given by **Dewey’s pragmatic instrumentalism** to deny the “*existence*” of the nonstandard “*noumenal*” universe.

The blockbuster here is of course, that from the compactness theorem of **Malcev** and **Henkin** it follows that there *is* a nonstandard “*noumenal*” universe which the *entire infinite set of premises* is **true** in reference to and which contains nonstandard “*noumenal reals R\**” including a positive nonstandard “*noumenal*” real number **P** smaller than any number of the form  $1/n$ . That is, not only is **P** infinitesimal but it also **exists** in the nonstandard “*noumenal*” universe.

Moreover, **P** has all of the properties (*such as existence*) of the standard “*phenomenal*” universe **R** of real numbers. Any true statement about the standard “*phenomenal*” universe **R** of real numbers (*such as “it exists”*) that you can state in the formal language **L** is also true of the nonstandard “*noumenal reals R\**.”

However, unlike **Kohler** and the pragmatic view, this is also true for the infinitesimal **P**. Any true statement about the standard “*phenomenal*” universe **R** of real numbers that you can state in the formal language **L** is also true of the nonstandard “*noumenal reals*” **R\***, including the infinitesimal **P**.

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So there does exist such an ultimate phenomenal representation **P** of the totality of things which is infinitesimally close in every detail to the terrain (*or infinite totalty*) which it represents. So close indeed, that it can be considered in one sense (that of the “*noumenon*”) to be one with the terrain and considered separate in another sense (that of the “*transcendental object*”).

By definition a representation must represent some real object (a *noumenon*) to a knower.

But because in its atemporal sense as *noumenon*,” the knower merges with the known, and

because this merging of the knower with the known completely precludes the possibility of this knower being temporal, this ultimate representation must be none other than the atemporal self knowledge of the ineffable.

That is (*in its sense as “noumenon”*), “*existence itself*” is nothing other than the ineffable’s atemporal self awareness.

It can be considered to be the terrain’s self knowledge, that is, the ineffable’s experience of itself as object, is its objectification in its self knowledge, and this self knowledge can exist only in the nonstandard “*noumenal*” universe as “*existence itself*.”

## “*EXISTENCE ITSELF*” EXISTS - AS THE INEFFABLE’S SELF KNOWLEDGE

*Categorical Analysis* thus affirms the distinction (drawn by **Kant** in his first edition of the *Critique of Pure Reason*.) between a “*transcendental object*” as a mere limiting concept and a “*noumenon*” conceived as a positive reality which could be the object of an intuition or perception. However *Categorical Analysis* replaces **Kant**’s temporal intellectual intuition with an atemporal intuition which can be either “sensuous” or “intellectual” or both.

The idea of appearance involves the idea of something which appears. Correlative to the idea of a thing as appearing is the idea of a thing as not appearing; that is, as it is in itself, apart from its appearing. But if I try to abstract from all that in the object which has reference to the **a priori** conditions of knowledge, that is, of the possibility of objects of knowledge. I arrive at the idea of an unknown “*something*,” an **unknown and**, indeed, **unknowable X** This **unknowable X** is completely indeterminate; it is merely something in general. For example, the idea of the X correlative to a cow is no different from the idea of the X correlative to a dog. Thus we have here the idea of the transcendental object; that is, “*the completely undetermined idea of something in general*.” [A. 253] But this is not yet the idea of a *noumenon*. To transform, as it were, the transcendental object into a noumenon, I must assume an intellectual intuition in which the object can be given. In other words, while the concept of the *transcendental object* is a mere limiting concept, the *noumenon* is conceived as an intelligible, a *positive reality* which could be the object of an atemporal intuition. Here we have the unknown and unknowable described as a positive reality. Let us examine this.

In order to have knowledge there must be a knower, reciprocally a knower also implies a known, that is an object of knowledge. The object of knowledge is a synthesis of the categories of knowing with an object of perception. The object of perception is a synthesis of the categories of perception with the ineffable.

A knower can be either conscious or unconscious. Thus a conscious knower implies consciousness knowledge (*an object of knowledge which is consciously known*) and this corresponds to the notion that consciousness implies consciousness-of something. Consciousness

in order to exist and be conscious-of something requires a structure. The laws determined by and determining this structure are called the *laws of awareness*.

This returns us to our starting point, for as knowledge requires a knower, these *laws of awareness* which **follow** from the existence of a conscious knower, are **also** what makes knowledge possible. Since according to the principle of intentionality, the presence and focus of consciousness is in its object, it follows that the *laws of awareness* (being the forms or rules by which the object is known, or generated) **are implicit** but they **are not explicitly perceived**; as such they can be said to be known unconsciously as the ground of perception. This is what **Nelson** referred to as non-intuitive (*i.e. unconscious*) immediate knowledge.

But taking consciousness itself as an object can easily bring those presupposed *laws of awareness* into the objective focus, making possible their **explicit** entry into consciousness (*as objects of knowledge*).

As the *laws of awareness* taken as the ground of perception can be said without ambiguity to exist, they cannot logically be identified with the ineffable which can neither be said to exist nor to not exist. However they can be identified with the ineffable's self knowledge as existence itself.

Both of the categories of existence and non-existence are categories of thought. To ascribe either if these attributes to the ineffable would reduce the ineffable to an object of knowledge. An object of knowledge is distinguished **from the ineffable**, precisely in that, it (the object of knowledge) is a **synthesis** of one or more **of categories** of thought **with the ineffable**.

**Kant's position** was that since our knowledge of objects is restricted to phenomenal reality, we cannot cross the bounds of phenomenal or empirical reality and know what lies beyond these bounds, nevertheless, **we have no right to go to the other extreme and to assert that there are only phenomena**. However this inability to determine existence or nonexistence is in actuality (*as developed above*) an incoherent position because infinitesimals can as the ground of perception be definitely said to exist.

**Kant** was forced into this untenable position by his need to justify the reasonableness of believing in the existence of **Free-will, G-d, and the soul** in the face of the determinism of **Newtonian Physics**. Therefore **he separated the natural and supernatural worlds** and for **Kant** the natural world was composed of phenomenon and the supernatural world was composed of noumenon.

**In so doing** he confused the concept of the **unknown but knowable infinitesimal** with that of the **ineffable limit**. He overgeneralized the concept of the **unknown and unknowable** by **temporal sensuous** intuition to the concept of the **unknown and unknowable** by **any** intuition (whether **sensuous or intellectual — temporal or atemporal**).<sup>5</sup>

Existence itself is thus both the **ineffable limit** or **unknowable transcendental object** and the **unknown but knowable noumenon** or **infinitesimal**. Existence itself as **noumenon** (the

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<sup>5</sup>Here the **sensuous—intellectual modes of intuition** apply respectively to the *natural world* and the so-called *super-natural world* whereas the **temporal—atemporal modes of intuition** both apply to the *natural world* alone.

ineffable's self knowledge) is infinitesimally isomorphic in every way to the **unknowable transcendental object** as an ineffable limit. **Existence is the ineffable transcendental objects of the limits of reason knowing themselves as infinitesimals.** VS Existence is the ineffable's self reflection.

Although the real world is experienced as a **unknowable limit** when perceived from the temporal viewpoint of the persona, when perceived from the **atemporal viewpoint** of the essence it is experienced as a **knowable infinitesimal**.

Because of the merging of the knower with the known this ultimate representation of the real world is unattainable for the temporal syntax of the **physical human mind**. However it is not unattainable for the **atemporal syntax** of the ineffable's self knowledge.

There is now no need to separate the infinite totalities of GWS away from a natural world which is identified with the world of physics. Not only because QM allows for indeterminacy, **but also because the existence of atemporal categories of perception allow such infinite totalities to become "objects of perception"**. Therefore for **categorical analysis** both the **ineffable limit** and its self knowledge as a **knowable infinitesimal** fall within the domain of reason and science.

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## An Infinitesimal Point

Question:

Does **Categorical Analysis** identify **Kant's noumenal world** with the **nonstandard world** of model theory?

Answer:

No. **Categorical Analysis** asserts that **Kant's noumenal universe** is a nonstandard universe, not the nonstandard universe.

**To recap: Berkeley's flawed refutation of Infinitesimals** led **Kant** to assert that apart from our phenomenal experience "**Things in themselves**"[such as GWS - God the World and the Self (*free will*)] functioned only as the "**Limits of Reason**" and as they were thus completely unknowable, could not rationally be said either *to exist* or *NOT to exist* . This we shall call the existence paradox.

But we now know (*thanks to Abraham Robinson's proof that infinitesimals exist*) that **Berkeley's refutation** ultimately turned out to be incorrect. We now know that GWS need not be conceived of existing only in a **negative** sense, that is as **limits**, because they **CAN** be rationally conceived to exist in a **positive** sense as **infinitesimals**

Furthermore, because infinitesimals do not and cannot exist in the standard universe of model theory but can only exist in a non-standard universe it follows that if GWS are conceived as infinitesimals then they must also be conceived to exist in a non-standard universe.

Since we can now rationally conceive the GWS as existing in a non-standard universe as infinitesimals, we are now in a position to address **Kant's flawed analysis** of the *noumenal* universe.

We are immediately confronted with two alternative ways to alter **Kant's definition** of the *noumenal* world in an attempt to avoid the just mentioned existence paradox.

1) we can continue to equate the *noumenal* universe with the **Buddhist void** (by defining it as totally inconceivable as did *Kant*) and then we have a standard phenomenal [*persona syntax*] and a non-standard phenomenal universe.[*essence syntax*]

A) GWS thus belong to the non-standard *phenomenal* universe and they are no longer *noumena* but are ontologically degraded to the status of *phenomena*.

B) This is not very productive as it retains the problem of not being able to state either that the real "*noumenal*" world exists or that it does not exist.

OR

2) we can differentiate the *noumenal* universe from the *void* by defining it as a non-standard phenomenal universe [*essence syntax*]

A) This has the virtue of enabling us to take the real *world* (i.e. the *noumenal world*) as actually existing.

*Categorical Analysis* selects the second alternative.