Categorical Analysis © is a method for establishing a scientific foundation for the laws of awareness comprising a philosophical system. This method was developed independently but nevertheless follows closely and is modeled along the lines of, the Kant-Fries-Nelson-Ross school of Critical Philosophy.

Our common sense experience consists of things with various qualities. These things also stand in various relations to each other. If we bracket out all of the relations that are contributed by the understanding, we are left with appearances or sensations which consist merely of things and their various qualitites. These sensations are themselves composed of a material element, which corresponds to raw sensation and a formal element, the dimensions of the space/time manifold of awareness. We cannot even be aware of sense-data without placing them within this manifold of awareness. To be aware of even two sense-data, means placing them within an order of temporal succession. Space and time constitute the coordinate system, in which the manifold of sense-data is ordered or arranged. In other words they are the dimensions which constitute its unity-of-being.

Space and time simultaneously differentiate and integrate (in space/time relations) the indeterminate matter of appearance. This differentiation and integration is a condition of our awareness, not a consequence of it, for we never have a sensation outside of this space/time coordinate system. What we are given in empirical intuition1 is already differentiated and integrated.

1 Here it is necessary to add a few words in explanation of the use of the word “intuition” which is used here in accordance with Kelly Ross’ explanation of:

“... one of the most pivotal doctrines of the Friesian tradition: the theory of non-intuitive immediate knowledge. This is a profoundly paradoxical doctrine, which is at variance with contemporary notions of immediate knowledge and intuition.

“Non-intuitive immediate knowledge is the category to which Fries and Nelson assign the knowledge that belongs to the object language systems [1] of metaphysics and ethics, as opposed to the empirical category to which they see the metalanguage, i.e. epistemology itself, belonging [2]. Here “intuition” is used for the German Anschatung as used by Kant and the Friesians, and it does not mean “intuition” either in the ordinary sense of a spontaneous belief or in the similar philosophic sense. In Kant the notion of intuition originally seems to be the equivalent of perception and perceptual knowledge [3]. The conception becomes confused, however, when Kant himself appears to conclude that perception cannot be knowledge, or even perception, without the mental activity of synthesis [4]. The conclusion would reduce “intuition” to no more than a pre-conscious receptivity of the senses. Intuition as “immediate” knowledge would also thus become impossible, since knowledge would require the mediation of the intellect to become knowledge. Friesian theory accepts Kant's earlier notion of intuition as being immediate knowledge, albeit not conceptually articulated in any way. Nelson's point in that regard [5] is that not all knowledge can be mediate, or conceptual, because all conceptual propositions, except tautologies and contradictions, are essentially arbitrary and must, for their truth or falsity to be determined, be referred to some external ground. The "external ground" then for perceptual knowledge is immediate knowledge as such. That gives rise to what Nelson [7] calls a "dogmatic disjunction" in the attempt to formulate the nature of the ground of metaphysical knowledge: that any knowledge is either from intuition or from reflection. This is to
say that any case of knowledge is either mediate, involving concepts and thought, where through reflection new knowledge can be generated, or immediate, where all immediate knowledge is intuitive."

"Object languages" are deductive systems (i.e. theorems derived from axioms) which are described by a "metalanguage," i.e. propositions that do not belong to the deductive system but which refer to it.

Leonard Nelson, *Socratic Method and Critical Philosophy*, Dover Publications, 1965, "The Verification of Judgments: Proof, Demonstration, and Deduction," p. 153. It is the most distinctive claim of Friesian epistemology that the propositions constituting the "critique of knowledge," i.e. epistemology itself, are empirical and a posteriori rather than non-empirical and a priori, as are the propositions of ethics and metaphysics.


Ibid. pp. 129-150, the famous "Transcendental Deduction" in the first edition of the *Critique of Pure Reason*.

Nelson, op. cit., p. 120.

Ibid., p. 117.


Kelly L. Ross, Ph.D. *The Foundations of Value, Part II, Epistemological Issues: Justification (quid juris) and Non-Intuitive Immediate Knowledge after Kant, Fries & Nelson*, Copyright ©1996 All Rights Reserved; Published http://www.friesian.com/founda-2.htm

Later Whitehead apparently unaware of Kant's contribution, reintroduced this distinction substituting the word "visceral" for internal and "visual" for external. "Philosophers," he said, "have disdained the information about the universe obtained through their visceral feelings, and have concentrated on visual feelings." [*Process and Reality*, ©1929, Cambridge pg. 169, ©1929 New York pg. 184]
of matter and form. Their matter corresponds to sensations. Their form corresponds to that which enables the appearances to be arranged in certain relations.

The objects of perception are associated with a set of innumerable linearly superimposed schemata which are collectively known as the imagination. The total set of schemata associated with (and generated by) the objects of perception is called the persona wave function. The persona wave function (a.k.a. the persona) is thus composed of this total set of linearly superimposed schemata.

The persona wave function as the totality of the schemata associated with the objects of perception constitutes a conscious temporal awareness package. This conscious temporal awareness package constitutes the categorial structure of our unity-of-being-in-time and is also called the persona.

A startling consequence of this approach is that, in sharp contrast to Gerald M. Edelman’s primary consciousness which following the pragmatic approaches of William James and John Dewey has its origins in the physical world of evolutionary biology; the space/time coordinate system has its origins in the dimensionality of the categorial form of the persona wave function itself. That is, for Categorical Analysis the physical world of evolutionary biology is seen to have its origin in the categorial world of consciousness. Nevertheless and perhaps even more surprising, in Categorical Analysis, temporal knowledge of this categorial world and of the physical world it subsumes remains as dependent upon empirical data as it is in the pragmatic method.

Similar to the approach taken in Kant’s Transcendental Logic the 2nd fundamental axiom which forms the basis of Categorical Analysis is that: the ordinary act of knowing, conformally maps the laws of awareness onto the space/time manifold of awareness as the laws of matter/energy/space and time. These laws of awareness are not abstracted from sense experience as John Dewey believed, nor are they derived from genetics as Piaget’s genetic epistemology and Edelman’s theory of neuronal group selection have suggested, but have their origins in the very structure of consciousness itself. We have on the one hand the space/time manifold of awareness and on the other hand a plurality of laws of awareness. What determines which law or laws are applied. There must be some connecting link between the data of sense intuition and the laws of awareness if the former are to be subsumed under the latter. It is the imagination which performs this mediating function between knowing and perceiving. The imagination produces and is the bearer, as it were, of schemata. A schema is in general a rule or algorithm for the production of images.

Here it must be emphasized, that these schemata (or algorithms) for the production of images, are not arbitrary products of habit and custom as Dewey believed. Quite the contrary, they are none other than the actual categorial structure of the persona wave function itself. Each of the persona’s linearly superimposed schema produces through the function of the imagination, (that is, through the unitary evolution of the persona wave function), an image. This image schematizes or delimits, so to speak, a law of awareness so that it can be mapped as a particular meaning onto one or more objects of perception. The schema is not itself an image, but represents a general algorithm for the formation of images out of one or more objects of perception. The image is a spontaneous product of the power of the imagination working according to a schema which it itself produces. This process of conformal mapping by means of which the image is actualized out of the plethora
of linearly superimposed possibilities is called the **Cognitive Synthesis** (a.k.a. **the collapse of the persona wave function**) and it converts objects of perception into those entities, which following **Kant** are called “**objects of knowledge.**”

The *linear superimposition* being general has an affinity with the *laws of awareness:* the *image* being particular has an affinity with the *object of perception.* **Cognitive Synthesis** produces these objects of knowledge by actualizing one of the many possible schema of the imagination, that is, by mapping the meaning of one of its evolved *images* onto an object of perception. **Cognitive Synthesis** is itself the decision making process which constitutes the act of knowing (judging or thinking) and it is mediated by the imagination which is structured as the set of innumerable **linearly superimposed schemata** comprising the persona wave function.

In sum, there are two chief sources of knowledge in the human mind, which spring from a common root, namely **perceptual synthesis** and **cognitive synthesis.** Through the former, (as the faculty or power of receiving impressions) objects are given us; through the latter (as the faculty or power of thinking the data by means of concepts) they are thought. The knowledge of objects requires the cooperation of both, neither can substitute for the other. As **Kant’s** oft quoted phrase has it “**Thoughts without content are empty; intuitions without concepts are blind.**”

All of the equations or laws of **Modern Physics** are derived from four **Standard International (SI) Basic Units of measurement,** of the physical world (mass, length, time and charge). As a consequence of the 2nd fundamental axiom of Categorical Analysis, these laws of physics are also mappings on the space/time manifold of awareness of the laws of awareness. These laws of awareness function as the “grammar” of four empirically observed criteria which comprise the Standard Universal (SU) Basic Units of measurement of the categorical world (categorical mass, categorical length, categorical time and self-esteem). The four criteria generated by, (and through which), this mapping occurs, are as follows.

1a) **Unit of length.** The **metre (m)** is the length of exactly 1,650,763.73 wavelengths of the radiation in vacuum corresponding to the unperturbed transition between the levels 2p10 and 5d5 of the atom of Krypton 86, the orange-red line.

1b) **Unit of categorical length (i.e. time).** The **second (s)** is the duration of 9,192,631,770 periods of the radiation corresponding to the transition between the two hyperfine levels of the fundamental [ground] state of the atom of cesium 133.

2a) **Unit of mass.** The **kilogram (kg)** is the mass of a particular cylinder, of platinum-iridium alloy, called the **International Prototype Kilogram,** which is preserved in a vault in at Sevres, France by the International Bureau of Weights and Measures. The kilogram can also be defined as 9.1 x 10⁻³¹ kg times the rest mass of an electron; as electron rest mass = 9.1 x 10⁻³¹ kg.

2b) **Unit of categorical mass (a.k.a. “semantic weighting”).** The **kilogram (kg)** is defined as 9.1 x 10⁻³¹ kg times the categorical rest mass (semantic weighting) of a persona; as the categorical rest mass of a persona = 9.1 x 10⁻³¹ kg.

3a) **Unit of time.** The **second (s)** is the duration of 9,192,631,770 periods of the radiation corresponding to the transition between the two hyperfine levels of the fundamental [ground] state of
1. In Carl Jung’s studies of the phenomena of association he demonstrated that there are combinations of psychic elements grouped around a complex (i.e. feeling toned content) comprised of a nuclear element and a large number of secondarily constellated associations. The nuclear element is composed of an individual’s set and setting. According to Jung there are two types of unconscious complexes 1) a repressed complex toward which the persona’s attitude is hostile and 2) a creative complex which despite the willingness of the persona to embrace it, can because of its strangeness, remain in the unconscious for a long time without being repressed. In the language of this study these unconscious complexes correspond to the two types of unconscious temporal awareness packages in the unconscious ego nucleus that is they correspond respectively to 1) one or more repression quanta and 2) one or more creation quanta.

2. For example motivation (or the pace of being-in-time) is like speed a scalar quantity, while conviction (motivation with a categorical direction through the categorical world) is a vector quantity like velocity (speed with a direction).

the atom of cesium 133. One second, can also be defined as the extension through time it takes for a certain number (m) of virtual photons to be exchanged at the highest possible energy level between the electron and proton of a hydrogen atom in its fundamental [ground] state.

3b) Unit of categorial time (i.e. eternity) A fifth sapiental or noological dimension orthogonal to the space/time continuum. The unit by means of which eternity is measured, is the virtual decision packet, which is defined as the amount of extension through eternity required for a certain number (M=m) of virtual essence quanta to be exchanged at the highest possible consciousness level between the persona and creation quantum of a neuroses free individual, in his or her fundamental [ground] state.

4a) Unit of electric current. The ampere is the constant current (flow of the negative charge of the electron) through a wire in space/time, of about $1.6 \times 10^{19}$ electrons per second as one electron charge $= 1.6 \times 10^{19}$ amperes/sec (or coulombs). 

4b) Unit of bioelectric current. The bioampere is the constant biocurrent (flow of the negative self esteem of the persona) through the hierarchial structure of a pecking order in space/time/eternity of about $1.6 \times 10^{19}$ personas per virtual decision as the self esteem of one persona $= 1.6 \times 10^{19}$ bioamperes/sec (or biocoulombs).

In accordance with these four observed criteria, the laws governing the cognitive synthesis of the persona are mapped (via this very same cognitive synthesis) onto the space/time manifold of awareness as the laws governing the collapse of the electron’s wavefunction. Therefore the mathematics governing the indistinguishability of elementary particles such as electrons are mapped as the mathematics governing the indistinguishability of elementary awareness packages such as personas.

Because of this mapping, the categorial distance (timelag) between the laws of awareness and the space/time manifold of awareness upon which they are mapped as the laws of matter/energy/space and time, is constant for all life forms so that the topological proportions of the above basic units of the laws of awareness are conserved when the laws of awareness governing categorial mass, categorial length, categorical time and self esteem are mapped onto the space/time manifold of awareness and are perceived as the laws governing mass, length, time, and charge.

The categorial world thus generated by the above two fundamental axioms and its four observed criteria, turns out to entail a set of propositions and principles (laws of awareness) that are in a one to one correspondence with the propositions and principles of a surprisingly large percentage of what passes as human knowledge. The innate structure of this categorial world is
none other than the **synthetic a priori** structure of our own awareness and as such, is the world in which the **unity of our being-in-time** occurs as a **persona**.\(^6\)

The **laws of awareness** and observed criteria which generate the **categoreal world** are **phenomenal** appearances belonging to the natural world and perceived by the **sensuous** intuition.

This proposal of **Categorical Analysis** as a method to establish a scientific basis **(and thus clear the ground)** for the **laws of awareness** comprising a philosophical system, leaves **Categorical Analysis** open to two egregious yet seemingly perennial misunderstandings.

The 1\(^{st}\) misunderstanding (that of mistakenly perceiving **Categorical Analysis** to be a form of **trancendentalism**) leads to the unwarranted charge that **Categorical Analysis** must be a system of speculative philosophy (as in **Descartes** and **Leibniz**). That is that the **laws of awareness** must be developed **a priori** as a philosophical system, because of the rational character of philosophy. This of course sacrifices the main methodical thesis of **Categorical Analysis**; that the **laws of awareness** cannot be dogmatically postulated but must be derived from a concrete ontological investigation of the steps leading to knowledge, that is from a concrete ontological investigation of the processes of the **perceptual** and **cognitive syntheses**.

The 2\(^{nd}\) misunderstanding (that of mistakenly perceiving **Categorical Analysis** to be a form of **psychologism**) leads to the unwarranted charge that **Categorical Analysis** must be conceived of as a branch of psychology. That is, that the **laws of awareness** must be developed empirically from sense data, as if the ontological investigation of the **laws of awareness** falls within the empirical sphere of psychology (as in **Locke** and **Berkeley**). This of course fails to acknowledge the **impossibility** of a purely psychological theory of the **laws of awareness** because it fails to recognize that the **laws of awareness** stand in a qualitatively different ontological relationship to the **objects of knowledge** than do for example the **laws of physics**, which **do** govern and **are** empirically derived from the relationship of the **objects of knowledge** to one another.

The perennial nature of these misunderstandings can be seen in the fact that **Leonard Nelson** (1882-1927) had to defend **Jakob Friedrich Fries** (1773-1843) from the 2\(^{nd}\) misunderstanding, as he (**Fries**) had been largely dismissed (**quite mistakenly**) by his later critics, as promoting what they called an outmoded **psychologism**. This charge was probably due in part, to the fact that **Fries** preferred **Kant’s 1\(^{st}\) edition of the Critique of Pure Reason** with its long and “**subjective**” **psychological deductions** of the **categories** (**laws of awareness**) to the shorter and “**objective**” **transcendental deductions** of the 2\(^{nd}\) edition.

Also doing little to dispel this mistaken charge of **psychologism**, was the fact that in freeing the **laws of awareness** from their restriction of being contingent upon the validity of any particular physics paradigm (**Newtonian** or otherwise) **Fries**, (**in developing the difference between the non-empirical and necessary **laws of awareness** and the empirical and fallible critique**), likened the critique’s uncovering of the **criteria** (**categories**), to the methodology of experimental physics. It was not at all clear to his critics that he meant to stress that the criteria are empirically derived from the concrete ontological investigation of the mapping of the necessary and non-empirical **laws of awareness** onto the **space/time manifold of awareness**, as the empirically derived **laws of physics**.

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\(^6\)In some ways the **persona** as defined in **Categorical Analysis** occupies a position similar to what **Kant** termed the **soul** in his **Critical Philosophy**, that is the totality of the categories of the understanding. It differs in at least as many respects as it is similar, however.
rather than directly from sense data as are the laws of physics.

However the specious nature of this charge is evident, as Fries did not perceive only that the Transcendental Deduction was circular if it rested on premises which were themselves synthetic a priori, as it did in the 2nd edition. He also noted it was inconsistent if it rested on premises which were synthetic a posteriori and empirical, as it did in the 1st edition.

While Hegel and others concluded that this dilemma rendered Kant's argument ineffective, circular, or unnecessary, Fries solved the problem with a distinction that is now commonplace but is still rarely noted by those who have bothered to address Fries' system: the distinction between object language and meta-language. Thus, Fries would say that the object languages of metaphysics, ethics, etc., whose first principles would consist of synthetic a priori propositions, which in the case of ethics would also be propositions of value (with "ought") rather than propositions of fact (with "is"), are logically distinct from the meta-language description of them which is the actual content of Kant's "critique." Thus "critique" itself can be empirical a posteriori without this affecting in any way the a priori status of the object languages. Since "first principles," by Aristotle's own definition, cannot be proven anyway, we cannot understand Kantian "critique" to offer in any logically familiar sense a proof of synthetic a priori first principles. [Kelly L. Ross, Jakob Friedrich Fries, © 1997]

Nelson elegantly resolved these difficulties along the lines of the Friesian solution and in the following paragraphs, we shall transpose the essence of his solution into the terminology of Categorical Analysis.

Both of the above mentioned misunderstandings tacitly assume that a basis of knowledge must consist of proving the laws of awareness from the two fundamental axioms of Categorical Analysis.

If the two fundamental axioms of Categorical Analysis and the laws of awareness of the philosophical system were in fact related to each other in the same way that the premises and conclusions of logical problems are related, then indeed Categorical Analysis and its resulting philosophy would be subject to the same constraints — that is they would (following the logic of Hume's fork) have to be either empirical and psychological or rational and a priori.

Investigating the nature of these two misunderstandings of Categorical Analysis show that (and why) this above mentioned tacit assumption is itself mistaken; Categorical Analysis serves to clarify one’s understanding of the origin of the laws of awareness and of their function in the human knowing of facts.

Knowing is an activity of the self, motivated by sensual stimulation; objects of perception, acquired by sensual stimulation (perceptual synthesis) are, by the act of judgement or knowing, converted into objects of knowledge and thus related to one another (cognitive synthesis). It is the function of the algorithm of imagination to delimit the laws of awareness by building an image that can be applied to an object of perception thus converting it into an object of knowledge. At this point it is important to be very clear that the laws of awareness are not mapped directly onto the objects of perception. However, they are mapped directly onto the space/time manifold of awareness, as the laws of physics which govern the objects of knowledge.
The function of Categorical Analysis is to demonstrate the laws of awareness (involved in this process of knowing) as well as the four observed criteria (by means of which these laws of awareness are applied to sensations) by analyzing the concrete steps involved in the cognitive synthesis and by this means to follow these laws of awareness back to their origin in this same cognitive synthesis by means of a psychological theory of the mediating function of imagination in the act of judgement (the act of thinking or knowing). It is not the function of Categorical Analysis to prove the objective validity of the laws of awareness in which these four criteria are expressed.

Consequently, the laws of awareness are themselves of a philosophical rather than a psychological nature. They are themselves the means by which the four criteria which they govern are expressed, even as grammar is itself the means of expressing the language it governs. They cannot be derived from the two fundamental axioms of Categorical Analysis; indeed as the laws of awareness are the basic assumptions implicit in all perception, they cannot be derived from any judgements more valid than they are.

This connection between Categorical Analysis and the laws of awareness comprising the system of philosophy it makes possible is, (as this analysis reveals), not one of logical proof; it is derived rather in Nelson’s terms, from “reason’s faith in itself;” or as Fries put it, from the fact that all striving for knowledge assumes faith in the possibility of knowing and this striving is thus by its very nature —self-referential. This faith is reason’s faith in reason, inasmuch as reason is itself the faculty of knowing, that is —is itself the cognitive synthesis. This faith in reason as the mapping of the laws of awareness onto the space/time manifold of awareness is maintained by the agreement of our knowings with each other, but reason as this mapping cannot be further checked or justified by a comparison of these knowings with the object known. This is so because the object known derives its very existence as an object of knowledge by this mapping function of reason and does not exist separate from this cognitive synthesis.

This sets an unsurpassable limit to the provability of knowings. Nelson expressed this in his paper on the impossibility of a psychological theory of knowledge which attempts to investigate scientifically the objective validity of knowing. In contrast to this purely empirical dead end, Categorical Analysis limits itself to investigating the direction in which faith in knowing is in fact turned.

Categorical Analysis wholeheartedly embraces the Friesian response to Kant. Unlike empirical and pure intuitions (perceptions), which are clear and readily available to consciousness, the laws of awareness lie concealed and obscure in the depths of human reason. It is obvious that Kant misunderstood the function of critical philosophy and the status of the synthetic a priori laws of awareness as the object language of metaphysics that constitute it. Whereas, the object language laws of awareness that critical philosophy aims to uncover are non-empirical and necessary, the critique itself (through which the assumed criteria that both govern and are expressed in the laws of awareness are revealed) is empirical and fallible.

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Furthermore, Categorical Analysis is in complete agreement with Nelson as regards his conclusions concerning the relationship of Kantian theory to the later development of non-Euclidian geometry. Kelly Ross in a delightfully thought provoking treatise develops the implications of the fact that we perceive (and visualize) space in three and only three dimensions, even though the analytic formulas of mathematics have for some time enabled us to think and conceive in terms of higher dimensions.

“The Euclidian nature of our imagination led Kant to say that although the denial of the axioms of Euclid could be conceived without contradiction, our intuition is limited by the form of space imposed by our own minds on the world. While it is not uncommon to find claims that the very existence of non-Euclidian geometry refutes Kant’s theory, such a view fails to take into account the meaning of the term “synthetic,” which is that a synthetic proposition can be denied without contradiction. Leonard Nelson, realized that Kant’s theory implies a prediction of non-Euclidian geometry, not a denial of it, and that non-Euclidian Geometry vindicates Kant’s claim that the axioms of geometry are synthetic [Leonard Nelson, “Philosophy and Axiomatics.” Socratic Method and Critical Philosophy, Dover, 1965; p.164]. The intelligibility of non-Euclidian geometry for Kantian theory is neither a psychological nor an ontological question, but simply a logical one — using Hume’s criterion of possibility as logically consistent conceivability.”[Kelly L. Ross, The Ontology and Cosmology of Non-Euclidian Geometry, © 1996]

Strangely enough Nelson who had no problem embracing non-Euclidian geometry nevertheless perceived a tension between Modern Physics (relativity and quantum mechanics) and the Critical Philosophy. Apparently this perception derived from the fact that he like Kant and later Fries had observed criteria (i.e. substance, causality and reciprocal action) which coincided in fact with the basic principles of classical mechanics and thereby came into conflict with modern physics.

Categorical Analysis rejects this perception of a conflict and takes a similar posture towards Relativity Theory and Quantum Mechanics as Nelson himself did towards non-Euclidian geometry. Kant’s theory implies a prediction of non-Newtonian physics, not a denial of it. Non-Newtonian physics vindicates Kant’s claim that the axioms of physics are synthetic. Nelson overlooks the very Friesian solution that he championed. Whereas the laws of awareness are themselves non-empirical and necessary, the observed criteria which function as their grammar are empirical and fallible. Although as noumena or things-in-themselves, the laws of awareness are synthetic a prioris; as objects of knowledge of the phenomenal world of nature, they are empirically derived approximations. Their existence as noumena represents a limit, to which their existence as objects of knowledge approaches asymptotically but never reaches. The laws of awareness determining the structure of the categorial world are thus itself an object-of-knowledge of the natural world and is open to investigation by empirical means.

As a crude analogy one can think of the image of ones face in a mirror. The image would then correspond in this analogy to the laws of physics of the physical world. One would then have knowledge of one’s face as an object-of-knowledge empirically derived from the image in the mirror together with the world that it moves in corresponding to the laws of awareness as objects-of-knowledge together with the categorial world. The face as an object of knowledge empirically derived from the image in the mirror would belong to the world of images in the mirror
corresponding to the laws of awareness as objects of knowledge empirically derived from the laws of physics would belong to the natural world. Whereas the face itself would not, rather it would belong to the world of solids corresponding to the laws of awareness as noumena.

What this means is that as the steam of material ignorance clears off of the space/time manifold, we begin dimly to perceive in the laws governing the structure of matter as if in a mirror, the (increasingly defined) reflection of the synthetic a priori laws governing the structure of our own awareness. As a consequence Categorical Analysis is not tied to and floats above the validity of any particular physics paradigm.

In other words, objects, to be objects, must be related to the unity of apperception, to the unity of consciousness. And they are related by being subsumed under four observed criteria which govern and express the laws of awareness. These laws of awareness determine the very structure of consciousness itself. The complex of possible objects of experience, thus forms one natural world in relation to the unity of consciousness in general. And the necessary conditions for thus relating them are themselves the ground of the necessary laws of the natural world. The principles of possible experience are then at the same time universal laws of the categorial world which can be known a priori.

Without the cognitive synthesis there is for us no natural world, and the cognitive synthesis of the synthetic a priori laws of awareness gives laws to the natural world. These necessary laws of awareness of the categorial world are in a real sense imposed by the human subject; but they are at the same time objective laws, because they are valid, and necessarily valid, for the whole range of possible experience; that is, for the natural world as the complex of possible objects of experience.

However Kant did not distinguish for the forms and categories of the Understanding between their empirical existence as objects-of-knowledge and their synthetic a priori existence as noumena. He recognized only the latter possibility. This made the categories contingent upon Newtonian Physics which like Modern physics postulates a unity of the natural world unprovable by experience. Kant agreed with Hume that this unity could not be proven by empirical induction and concluded from this, that the natural world must therefore conform to the a priori conditions of objective experience. This fact, said Kant, enables us to know a priori certain truths which lie at the foundation of Newtonian Physics such as, for example, “all change accords with causality.” Of course this so-called a priori does not fit in with quantum physics which enthrones the concept of indeterminacy. Thus Critical Natural Philosophy addressed the problems raised by Hume, but was deprived of the natural robust flexibility which springs from a free-floating ontology.8

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8 Avicenna (980-1037) made this very same mistake when he tied his reversal of the meaning of interiority to Aristotelian Physics and Ptolemaic Astronomy. This served only to cause his epistemology to be discarded along with Ptolemy with the advent of the Copernican Revolution and to insure to a large measure its complete and utter unintelligibility to the modern mind. Here it is enough to note in passing this phenomenological homology between their respective approaches and a few salient details which differentiate the two.

Avicenna mapped his reversal of the meaning of interiority onto the Aristotelian spheres of emanation, as Newton’s physics didn’t even exist yet. Furthermore as Avicenna was working with Aristotelian rather than Newtonian physics his observed criteria by which the laws of awareness were governed as well as expressed, were as different from Kant’s observed criteria (his so-called a priori categories) as was the difference between the respective physics which they served as categories for. Nevertheless Avicenna’s world of experience did represent a synthesis of the innate categories with the ineffable, as did Kant’s. He also had a prototype version of Kant’s second synthesis which he called the individuation of form and which also was mediated by the imagination. All of which represents a remarkable adumbration of Kant’s philosophical “Copernican revolution.” [See Henry Corbin, Avicenna and the Visionary Recital, ©1980, Spring Publications, Inc.]
As Newtonian Physics reflected only deterministic, finite and local laws of awareness, there was no place in it for the unconditioned (non-deterministic) world of free will, the immortal soul and G-d. It was therefore necessary to subsume these non-deterministic, infinite, and non-local entities under a different set of categories, which Kant called the categories of Reason. Free will, the immortal soul, and G-d were thus not possible objects of experience as they were not part of the natural world. Deprived of any possibility of existing as objects of experience, they could not exist as objects of knowledge and they existed only as the limits of reason, that is as noumena or things-in-themselves (Ding an sich).

Categorical Analysis agrees with Kant and Hume in so far, as it recognizes that even Modern physics postulates a unity of the natural world unprovable by experience and further that this unity can not be proven by empirical induction and furthermore like Kant, Categorical Analysis concludes from this, that the natural world must therefore conform to the synthetic a priori conditions of objective experience. However Categorical Analysis parts company with Kant, for it denys that this fact enables us to know as synthetic a prioris, the synthetic a priori certain truths which lie at the foundation of any Physics paradigm, whether the paradigm be Newtonian, Modern or whatever. Categorical Analysis allows only that these synthetic a priori certain truths can be known as empirically derived objects-of-knowledge.

From the perspective of Categorical Analysis, principles such as “all change accords with causality” are themselves “objects-of-knowledge” dependent upon the Cognitive Synthesis for their existence and as such are empirically derived approximations of the synthetic a priori laws of awareness, which as noumena represent the limit which are approached asymptotically but never reached.

Even more significant is the fact that Modern Physics does reflect indeterminacy, infinite, atemporal and non-local laws of awareness. Suddenly there is a place for free will, the immortal soul and G-d as objects-of-knowledge in the natural world, not as objects-of-knowledge of physics perhaps, but as objects-of-knowledge of the categoreal world which is itself, in its role as an object-of-knowledge, part of the natural world. Of course, in its role as noumena, the categoreal world remains separate from the natural world, that is it remains the limit, which in its role as an empirically derived object-of-knowledge and part of the natural world, it approaches asymptotically.

Therefore Categorical Analysis subsumes Kant’s Categories of both Understanding or Reason under the four observed criteria. In Categorical Analysis they express and govern the fermion-like realities of the mortal mind as conscious temporal awareness packages and the boson-like realities of the divine mine as conscious atemporal awareness packages. These four criteria also span the complexes of the subconscious mind as unconscious temporal and atemporal awareness packages, allowing much of Carl Jung’s Analytic Psychology and all of Victor Frankl’s Existential Psychoanalysis to be mapped into the categoreal world as well (to name just a few). Piaget’s genetic epistomology can be mapped as is or can be turned completely inside out and be mapped as epistomological genetics. These expanded capabilities are a direct result of applying Kant’s Copernican Revolution to modern physics.
Categorical Analysis freely embraces and applies the Kantian “Copernican Revolution” to both Modern Physics (relativity theory and quantum mechanics) and recent Mathematical developments such as, Cantor’s transfinite number theory, Robinson’s infinitesimals and Godel’s incompleteness theorem. For a demonstration of the feasibility of incorporating special relativity into the framework of Categorical Analysis see Bias Transforms, © John E. Range. Papers on the others are forthcoming.
But just what precisely has been accomplished by this dogmatic separation, beyond the fact that for centuries, the battle of morality has been fought between the empirical orientation of looting socialist thugs who preach like Hegel that because mortal mind has been conflated with the divine mind by denying any separation that the ultimate good is a counterfeit relativity requiring self-sacrifice for the sake of incompetents on earth because your life belongs to your neighbor and the rationalist orientation of the mooching mystic who preaches like Plato that because the mortal mind has been separated from the divine mind by denying any unity that the ultimate good is a counterfeit absolute requiring self-sacrifice for the sake of ghosts in heaven because your life belongs to G-d. One idolizes sex and emotion and the other demonizes them.

“Both sides have agreed that morality demands the surrender of your self-interest and of your mind, that the moral and the practical are opposites, that morality is not the province of reason, but the province of faith and force. Both sides agreed that no rational morality is possible, that there is no right or wrong in reason — that in reason there is no reason to be moral” [Ayn Rand, Atlas Shrugged pg 930]

Whatever else they fought about, it was against man’s independent mind that they stood united. It was man’s independent mind that all their preaching was intended to despoil and destroy. Perceiving this, Ayn Rand proclaimed that the world today must choose to learn that the anti-mind is the anti-life or to perish.

Modern physics (relativity, quantum physics) by going beyond absolute time and absolute space, and the deterministic and myopic locality of Newtonian physics has together with modern mathematics (Cantor’s set theory, Abraham Robinson’s non-standard analysis and Gödel’s incompleteness theorem) de-constructed the Kantian arguments for separating knowledge and the sacred, reason and faith, science and metaphysics. The very same arguments that Kant advanced in support of the rupture of rational knowledge and the unconditioned sacred, now support the unity of rational knowledge and the unconditioned sacred. That is the arguments for the synthetic a priori existence of innate categories of the mind. The mathematics of relativity theory empirically demonstrate that relativities presuppose an absolute and vice versa. A rational way now exists for extending science into the metaphysical realm, that is, for establishing an objective morality based upon reason. A morality which sees the in relation matter to energy, a reflection of the relation of the synthetic a prioris of the mortal mind to the synthetic a prioris of the divine mind. A unity with separation. A life-affirming morality which holds sacred, the individual decision making process, exults the independent mind, and treats sex and emotions as facts of life, not gods or demons. A moral attack on polarizing misshapen life-denying values is now not only not out of bounds but is clearly mandated by reason itself!