

Ontology of Knowledge

Beyond the opposition idealism/realism (issue 20230709)

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In red in this issue 20230709 some minor corrections, a quote from Frege about the necessary insaturation of any thought and a rewriting of the § abouts transcendental Bayesian Induction.

Introduction :

There are countless analyzes of the Kantian Critique of Pure Reason (ref CRP) which attempt either to condemn its idealism, or to develop diluting answers to the question: "How are *a priori* synthetic judgments possible? ".

This "trial in idealism" and this "dilution" do not have knowledge as their sole motivation, we often perceive the resistance of the two thousand years old archetype of a theology of the soul "outside the world", born of the *book*, specific to the West, whose foundation is first of all the argument of authority and which translates today into the will of domination of a realistic or even empiricist ontology.

It must be said that Kant did not make it easy for us because despite the countless readings and analyzes of the CRP, including by the greatest minds, the question posed by Kant remains subject to interpretation and ultimately leaves us in doubt about the concept of "transcendentality".

Indeed, *a priori* synthetic judgment is a response to the idea (supported by Locke but untenable according to Kant) that concepts arise by abstraction of the particular from empirical experiences, process carried out in the understanding or at least at the intelligible level.

But then, if judgment (Urteil) belongs to the intelligible, isn't its association with the term *a priori* paradoxical?

Does the term *a priori* mean "ex nihilo", "always already there", or "emerging from beyond meaning"?

Does the term transcendental ultimately designate only a form of epistémè of the intelligible or the principle of a Logos giving shape (meaning) to a meaningless Khaos?

Pour donner corps à ces questions, nous utiliserons comme modèle heuristique la pensée de Locke sur la connaissance mathématique, sans prétendre ni à la perfection ni à l'exhaustivité, avec pour but simplement de faire apparaître l'ambivalence du terme « jugement synthétiques *a priori* ».

Les lignes qui suivent citent et commentent le livre « Intuition and the axiomatic method » d'Emily Carson et Renate Huber.

To give substance to these questions, we will use Locke's thought on mathematical knowledge as a heuristic model, without claiming either perfection or exhaustiveness, with the aim simply of bringing out the ambivalence of the term "synthetic *a priori* judgments".

The following lines quote and comment on the book "Intuition and the axiomatic method" by Emily Carson and Renate Huber.

• Knowledge, for Locke, is the 'perception of the connexion and agreement' of our ideas, where ideas are whatever is the object of our understanding when we think [4.1.1].

Editor's note: One see no reference to objects in reality.

• A demonstration is really a chain of intuitive perceptions of agreement and disagreement among ideas [4.8.3].

Editor's note: The a priori conditions of possibility of an intuitive (intelligible) perception, as direct as it may seem, suppose the concurrence of an infinity of logical Facts and the agreement of this perception with Current schemes in the subject.

For example: Kant will emphasize that no perception is possible which would be incompatible with the persistent unity of the subject.

• Simple ideas, the materials of all our knowledge, are produced in the mind by means of the operation of

objects on our senses

Editor's note: There is in this sentence the a priori that the objects operating on our senses and the simple ideas they produce would be of different natures. Besides the question of the possibility of an interaction between different natures (where does the object end and where does the meaning begin?) let us note that this a priori is only based on the archetype of the separation of body and mind.

This distinction in nature leads Locke to note only the simplicity of what the simple idea "represents" and neglect the unspeakable complexity of what it "is" as reality (but not necessarily according to neurological or psychological natures which are already representational categories).

•The real essence [of the objects of our thought] is the unknown, perhaps corpuscular, constitution of a substance, while the nominal essence is a combination of perceptible properties of the substance.

Editor's note: We can compare the terms "real" vs "nominal" with the terms "proper" vs "improper" or "intensional" vs "extensional" according to Husserlian terminology.

Now, what Locke presents as the "real essence" of the simple idea is not its substantial constitution, because this is not only unknown, it is unspeakable.

Admittedly, the object of the simple idea may seem infinitely separable into "even simpler" objects, but this decomposition can only take place in the domain of the thinkable (the sayable), i.e the extensional and does not reach by no means "the real essence". The real essence (the intensional) does not belong to the sayable world described by the nominal essences (the extensional multiplicity).

•Among complex ideas, Locke distinguishes ideas of substance, which are ideas of something "self-subsisting", representing "distinct particular things", from ideas of modes, which are of "dependencies on, or affections of substance".

So ideas of substance are, roughly, ideas of natural kinds of material things, like the idea of lead or of animal. Ideas of modes are best explained in terms of their origin. Whereas ideas of substance, because they purport to refer to self-subsisting things, are combinations of simple ideas which we notice by experience and observation "go constantly together" ideas of modes are *voluntary* combinations of ideas. Locke emphasises the free activity of the mind, its power to repeat and join its own ideas "as it pleases" and "without the help of any extrinsical Object, or any foreign suggestion" [2.13.1]. The simple ideas of which ideas of modes are composed are not to be thought of as characteristic marks of any real beings with "steady existence", but as "scattered and independent Ideas put together by the Mind". Unlike ideas of substances, they have their origin and existence "more in the Thoughts of Men, than in the reality of things". To form such ideas "it sufficed that the Mind put the parts of them together and that they were consistent in the Understanding, without considering whether they had any real Being".

Because ideas of modes are combinations of ideas which the mind puts together arbitrarily without reference to any real existence outside it, the real essence *just is* the nominal essence. Because we know the nominal essence (we create it), ideas of modes have knowable *real* essences. Ideas of substances do not.

Editor's note: According to Locke the ideas of mode being combinations, by the synthesis of the mind, of ideas without reference to any real existence (ex: the straight line), could be perfectly knowable in their essence. This is not justified and inaccurate: It is not the object of the idea (meaning) that is unknowable (neither the idea of mode, nor the idea of substance, nor the simple ideas of which they are the combination) but the modality of its emergence which is untraceable.

The process of the emergence of meaning out of the unthinkable reality of the subject "before he knows" is from our point of view what Kant will designate as **synthetic judgment a priori**. (We will return to the use of the term judgment).

• because ideas of modes do not refer to anything outside the mind, "they have no other reality but what they have in the minds of men", they "have the perfection that the mind intended them to have". For example, the idea of a figure with three sides meeting at three angles is, Locke says, a complete idea, requiring nothing else to make it perfect; it contains "all that is, or can be essential to it, or necessary to complete it, wherever or however it exists"

Editor's note: Because the (intensional) reality of his simplest ideas and the laws of their composition are unknowable to him, the understanding of Human being cannot judge their perfection. At the extensional level, Human's (a priori) ideas necessarily appear perfect to him because of the idoneity of the elaboration process of multiplicity which, altogether, defines the possible ideas and the a priori results of experiments with which he could judge empirically or logically.

Because of its transcendental reality, the simple idea does not have the perfection necessary to build a truly provable logic or mathematics. For example the logical idea "A disjoint from B" which, for what it says (extensionally), distinguishes the simple ideas A and B, brings them together for what it is (intensionally) since it implies the co-participation of A and B in the Unit of the knowing subject.¹

- So complete knowledge of the idea amounts to complete knowledge of the object of the idea.

Editor's note: This proposition could denote a restriction rather than a completeness and apply to ideas of substance as well as to ideas of mode: The coherence of an (extensional) construction of objects from a priori ideas (even if they are unfounded) is unfalsifiable by empirical (intelligible) or thought experience.

These commented excerpts from Locke's thought bring out the meaning that must be given to synthetic judgment *a priori*, according to our point of view:

A priori synthetic judgment is the process of the emergence of meaning out of the subject's unthinkable reality "before he knows"*

** We will see that meaning is nothing other than the unthinkable reality from which it emerges.*

Thus defined, the *a priori* judgment cannot be operated by the understanding, it needs a definition worth before the intelligible. We propose :

A priori judgment is a **transcendental fact**: the activity of pure logic by which a complex (unthinkable) reality reveals modes of order according to a space of lesser complexity (the extensional multiplicity) in which only the understanding can operate.

Editor's note: Is that not precisely what the judge does when he "projects" the extraordinary complexity of the circumstances of the crime onto the ordered space of the sentence ?

To understand what *a priori* synthetic judgment is one should therefore answer the question "how does the subject's own reality take sense in him?" »

But Kant did not explicitly state the question in these terms, although some of his propositions would support this interpretation:

- *A representation is a Vorstellung*—literally, a ‘putting’ (*stellung*) of something ‘before’ (*Vor*) a conscious mind.

This action cannot be conscious on pain of an infinite regression. We must therefore think at least that *a priori* judgments precede the meaning that emerges from them.

- *I asked myself: What is the ground of the reference of that in us which we call "representation" to the object?* (ref PC Ak. x. 129–30)

- How my understanding may form for itself concepts of things completely *a priori*, with which

1Frege noted: It is impossible for all the parts of a thought to be closed on themselves, at least one of them must be [...] predicative and unsaturated, otherwise they could not be linked together. "Concept and Object", Notes for Ludwig Darmstaedter [July 1919], in Posthumous Writings, p. 140.

This remark on the necessary insaturation of the concept must be understood at the level of meaning: the meaning of the concept is awaiting the subjects who bear this meaning. The unsaturation of concepts explains the coherence of multiplicity (in Humanity). It should not be confused with transcendental apperception: the necessary co-participation of ideas in the Unity of the knowing subject, that is to say their co-existence in the subject which must be understood at the transcendental level.

concepts the things must necessarily agree' (ref *PC Ak. x. 131*).

*Editor's note: Kant clearly states that "(perceived) objects must agree with our concepts, but the order of the propositions also shows that according to Kant **concepts are shaped within the subject before objects could be linked to them in representation. Objectivation is built on subjectivity and not the other way around.***

- In the phenomenon, I name matter of it what corresponds to the sensation, while what makes that the diversity of the phenomenon can be ordered according to certain relations, I name it form of the phenomenon [...] the matter of all phenomenon is given to us only a posteriori, but its form must reside *a priori* in the mind, ready for all sensations (ref *CRP, IV, 30*)

*Editor's note: Kant distinguishes here the matter of the phenomenon (of thought) from its form. This matter therefore has no form for thought, it has no meaning. Sensation, matter of thought without form, is unthinkable. It cannot therefore be the material of what the phenomenon represents but its proper (logical) material (just as the material of a photo of the sea is not water). The form (meaning) is given to it according to the *a priori* forms in the mind.*

- There must be [...] a transcendental principle of the unity of consciousness in the synthesis of the manifold of all our intuitions, therefore also of the concepts of objects in general, consequently also of all the objects of experience, otherwise it would be impossible to think for our intuitions of any object whatsoever [...]. This originary and transcendental condition [...] is [...] transcendental apperception. (ref *CRP AK, IV, 82, p.183-184*)

*Editor's note: For Kant, the unity of the subject's consciousness is the *a priori* condition of all objects of experience. Now unity is not an attribute of consciousness: consciousness is Unity before being.*

Since the real nature of synthetic *a priori* judgment remained equivocal, Kant could not reveal all of its ontological implications. But did the conditions of the time, the state of science, his own thought, his extraction, his culture, his convictions allow him?

Unfortunately, the lack of clarity on the truly transcendental origin of the *a priori* and no doubt also the metaphysical (and theological) uneasiness caused by such a questioning of the nature of the Spirit as reality, among philosophers steeped in Western culture (and its theology), led them to turn to the more comfortable explanations that semantics and logic allow, according to the analytical philosophical tradition.

La tradition analytique est un mouvement philosophique austro-allemand et anglo-américain qui a vu le jour à la fin du XIXe et au début du XXe siècle en promouvant la sémantique et une théorie de la vérité nécessaire basée sur la logique mathématique ainsi qu'une interprétation tout à fait conventionnelle du langage comme élément central de la philosophie et marginalisant par là même ses préoccupations ontologiques.

First, the analytic tradition is an Austro-German and Anglo-American philosophical movement that got underway in the late nineteenth and early twentieth centuries by promoting semantics and a theory of necessary truth based on mathematical logic together with a thoroughly conventionalistic construal of language to front-and-centre position in philosophy, thereby displacing to the periphery its traditional ontological, epistemological, and psychological concerns.

The leading figures in the analytic tradition are : Frege, Russel, Carnap, Wittgenstein, Austin, Ryle, Strawson, Grice, Quine...

... it 'was born in the effort to avoid Kant's theory of the *a priori*'. Alberto Coffa *The Semantic Tradition from Kant to Carnap*, 21.

The Kant we study nowadays is manifestly a Kant who has been reworked and represented to us by those who participated directly in the analytic tradition's long and winding sinueux struggle with the first Critique.

Editor's note: those lines are quoted from Robert Hanna's book : Kant and the foundation of analytic philosophy

Everyone can understand that according to the definition given above, the synthetic *a priori* judgment in no way leads to idealism, quite the contrary: it is the most realistic hypothesis that can be since it merges the world and the mind.

In the following article we will undertake to explain the "how"

Development:

One can't think reality *in itself*

Kant shows us that it is impossible to describe objects for what they are *in itself* because: "*one cannot imagine a concept which would contain an infinite host of representations*". Indeed, nothing allows us to affirm that the reality *in itself* of the object would be sayable by a finite or even countable set of logical facts.

for example: From a single dot on a leaf billions of photons reach me every second. Only a form-point is thinkable to me, assembled in my body and my mind, in one way or another, from these billions of determinations which are not even 'the point'. It would be impossible for me to feel and give form to the complexity of the point in itself, I could not even define without ambiguity its present state from these determinations.

It is not so much the intrinsic limitations of consciousness nor the cardinality of the real *in itself* that make it unthinkable but its infinite complexity. The real *in itself* is essentially unthinkable because it is unfounded (see below). The OK designates this real *in itself*, unfounded, unthinkable by the term of meta-substance or reality In-act.

Only modes of order can be named there, that is to say exist for the subject.

Is it idealistic to say that the reality of the point *in itself* being unthinkable, it is by necessity "in the subject" that the One thing that is the point takes shape and meaning? Is this to deny reality *per se*?

It has been shown, theoretically and empirically by science, that the present state of the real *in itself* has no meaning: special relativity indeed has the corollary that the notion of "universal" present moment has no meaning and that therefore the notions of state and present form and ultimately of object have no meaning *in themselves* without the mediation of the subject.

The thesis of a four-dimensional space-time, compatible with special relativity, is purely extensional. In this sense, it does not even claim to describe the reality of objects *in themselves*. Yet the block-universe is essentially unthinkable since it leaves no room for change, whereas conscious thought *is* change. The form in which the block-universe is represented by the subject can therefore obviously not be its form *in itself* but only an object of thought, a (mathematized) form made thinkable by mediation "in the subject".

The non-foundation of the real.

A purely extensional definition of non-foundation cannot suffice.

To fully understand it, one must refer to the structure of the formalist theories, made possible by Kantian theory, which distinguish the intensional from the extensional.

Recognizing the impossibility of a proper and complete description of the intensional of logical Facts, these theories describe the extensional by means of a relational structure that we call multiplicity, following the example of Husserl.

This is typically how common sense and modern science describe the world.

Since our beginnings as protozoans, the multiplicity (ie the set of concepts, laws and principles) with which we describe the extensional part of our world, has not stopped expanding and becoming more complex.

With each lived experience, emerge from the horizon of meaning which separates us from the intensional what we designate as new facts of the world but which are in reality Facts of knowledge, which can only make sense according to the *a priori* rules of our multiplicity. This is essentially

what Kant tells us.

The conditions of possibility of these experiences, fixed by the laws of multiplicity, are so rigid and operate on such extraordinary quantities, that the probability of a hiatus between a new "Fact", as it emerges from the horizon of meaning, and the representation by the subject are negligible.

Nevertheless, if there is a hiatus, the multiplicity readjusts itself to maintain the idoneity of the representation. Today's science is well aware of the resilience of complex systems.

Thus, we believe we are describing a world in which the facts of the world occur according to the laws of the world whereas they are Facts of Knowledge which appear to us in the form and according to the laws by which we give meaning (we will come back to the concept of meaning).

That the world ceaselessly comes to exist for us, emerging from the horizon of meaning with the meaning (the forms) given to it by our extensional multiplicity, leads us to believe that what is still beyond the horizon, what does not exist yet (or no longer) for us because it is "future", "past", "too far away", "too small", "too complex", etc... the intensional inaccessible to our immediate understanding, is nevertheless governed by these same laws of our multiplicity.

The laws of what makes sense to us appear to us as Universal laws.

Our present representation projects, beyond what exists for us, present and certain, beyond the horizon of meaning, a universe of possibilities, a universe of possible meanings *a priori* conforming to the laws of the existing universe imposed by our multiplicity.

We think that what is only possible is nevertheless possible in space-time and according to the different structures of meaning. We draw a possible future, immediate or distant, a possible interior, a possible causal explanation, all images conforming to the strict formal rules of our multiplicity and which we would not even be able to think outside of these rules.

NB: We know, however, that the possible does not respect the rule of non-contradiction which is at the basis of our representation of the existing.

The intensional, beyond the horizon of meaning, that which does not yet have meaning and from which meaning must emerge, has no *a priori* reason to conform to our multiplicities.

The fact that we have been able, at every lived moment and throughout the millennia, to always push back the horizon of meaning in order to enlarge the extensional representation and explanation of the world, has anchored in us the opinion that the horizon of meaning is only a veil that separates the known (the extensional) from an unknown (the intensional) that are formally similar. It is not so: what is beyond the horizon of meaning simply does not make sense.

Let's rather say that the intensional of an Existing has an infinity of infinities of possible meanings. All the meanings compatible with the necessity of the Existent and whose probability is not zero are possible. For example: an atom of the ¹H isotope of hydrogen contains all possible positions of the supposed electron.

Let us understand that the possible meanings do not depend on the proper nature of the atom but on the "extensional" multiplicity which necessitates its Existence in the representation of the subject.

What doesn't make sense is not a subset of what makes sense to us.

We think that the unknown would be in itself sayable in accordance with the known, that past and future would be in themselves sayable in accordance with extensional laws. This is not the case: the qualifiers past and future have meaning only below the horizon of meaning, in their present instantiation. The set of weighted judgments on the possibles that past and future are for us is none other than the present meaning of our representation.

The propositions "the past no longer exists" and "the future does not yet exist" are paradoxical in that the term exist is valid only below the horizon of meaning, i.e. now.

The extensional term "future" does not apply to the intensional reality of which it is the meaning because the future exists (i.e. has meaning for the subject) only in the present.

Although by our extensional representations we believe to encompass "everything", the intensional does not formally belong to this world and has no reason to belong to it in any way; it is immeasurable to him.

The reality of what we call future is incommensurable with the extensional description that we

make of it.

The facts and beings of our extensional world, starting with the attribute of existence, have the meaning of judgments (let's rather say decrees of judgments) whose laws and principles are fixed by our multiplicity. The intensional from which these judgments emerge is incommensurable with the extensional.

The notions of infinite divisibility, atom of meaning or first cause are without ontological object. All these vanishing points of meaning are imposed on us by a perspective of the world itself constrained by our individuation. But reality has nothing to do with our perspectives and has no vanishing point.

This is how the OK defines non-foundation.

Corollary:

If the meaning of facts and beings (A and B) is unfounded, that of the laws ($A \leftrightarrow B$) that associate them in our multiplicities is itself unfounded. The suitability of the laws of our representations can therefore only refer to its own coherence or more precisely only to the effectiveness of its principle of coherence and in no way to the "conformity" of the representations of the world or of external sensations.

An infinitely knowable world in an essentially unknowable reality.

The multiplicity by which we represent our world today leaves room for different infinities, although science questions some of them.

It seems to us that no *a priori* principle prevents us from deepening or extending the explanatory power of our multiplicity, from extending and detailing the laws of the world that we represent. However, although our knowledge of the world seems to us infinitely expandable, without limit, the unfounded reality is essentially unknowable because it is always beyond any possibility of meaning.

Substance, form and principle of order are the same reality.

It is by making explicit the Aristotelian distinction between substance and form, rethought by Kant, that the distinction between realism and idealism becomes blurred: To say that the sculptor is the formal cause of the work, to say that in the subject emerges the form of the world is to deny neither the reality of substance nor that of form (of order).

As long as we are talking about an instantiated reality and not about concepts, substance and form do not mean two "realities". The form is not simply a formal cause of the object, an accident, an affect of the substance, it is the object in the same way as the substance (or substantial cause).

Designating two sheep in a pasture or designating each of the sheep is semantically different. Is it idealistic to say that it is "in the subject" that the sheep are two? (how could one say that they are two *in themselves*?).

The two sheep are not a different reality than each of the sheep.

Instantiated, substance and order are the same reality.

The world ordered by meaning (which we call objects) is no other reality than its unspeakable meta-substance, the formal thought of the world (which we call the knowing subject) is no other reality than its unspeakable meta-substance and the principle which orders is not another reality than the meta-substance which it orders or the modes of order which it generates.

Instantiated, the apple and the Earth, the Newtonian law of attraction and the fall which results from it are the same reality. The categories of substance, law and form (order) are distinguished only at the level of concepts.

In the ancient statement: the Logos (the principle of order) caused the Kosmos (the ordered world) to emerge out of the Khaos (the formless substance) there is only one reality and the substance is no more real than the principle which orders it or the instantiated orders which result from it.

To quote Kant:

AK IV 30 In the phenomenon, I name matter of this one what corresponds to the sensation, while what makes that the diversity of the phenomenon can be ordered under certain relations, I name it the form of the phenomenon. (Editor's note: we must distinguish here the

principle which orders and the resulting form)

...that in which the sensations can be ordered and arranged in a certain form cannot itself be sensation, ..., it is necessary (therefore) that the form (of the phenomenon) resides a priori in the mind, ready for (order) the set of sensations.

I call pure (in the transcendental sense) all the representations in which nothing is found that belongs to sensation...the pure form of sensible intuitions...is found a priori in the mind.

In summary: The matter of phenomena (sensations) takes form according to a principle of order (endowed with pure forms) *a priori* in the mind.

The form of the world is therefore not in the world. The sensations do not penetrate the subject already ordered by the laws of the world, ie do not have meaning *a priori*, before their apperception.

The passage from substance to order does not imply a change in reality: each sheep is not suddenly transformed into part of a formal whole, and what makes the sheep a pair is not "in the sheep" but "in the subject".

Russell illustrated this with an arithmetic example: whether the subject classifies the set of integers according to their natural order or according to the sequence of even numbers followed by that of odd numbers, the integers are not each time moved, only the perspective of the subject is in question.

It follows that :

1) infinities of infinities of modes of order (of ordered worlds) are possible (superimposed) in the meta-substance.

2)An order can replace another although the meta-substance is not subject to the change.

The transcendental subject

The real is beyond any possibility of meaning, it has no meaning in itself and it is in the subject that it takes on meaning.

Let us not be misled, however, by the idea of a mind "machinery" in which sensations would enter disordered to be processed according to a process (the principle of order) which would order them according to a priori pure forms to finally produce a phenomenon having form.

These categories which distinguish the world and the subject, the substance and the form, the principle of order and the order, can only lose us in circular reasoning.

The question of ideality would in no way be resolved if the form (meaning) were considered as attributed only by the consciousness of the subject.

The Kantian concept of "transcendental" attempts to reveal to us: "how *a priori* aesthetic intuitions (such as Unity, Extension, Causality) can present themselves, already 'in form', to consciousness as *a priori* conditions of possibility of the emergence of meaning"

But the Kantian transcendental is only partially convincing on this point.

Kant's error is to have considered a concept of subject *a priori* physically (in time and space) and psychically (his mind) individualized and not the subject in his triple reality {meta-substance, principle of order , meaning} which we will call the **transcendental subject**.

The a priori distinction between subject and object must be overcome. This is what Schopenhauer tried to convince us of (ref MVR)

The reality of the transcendental subject is unfounded.

The meta-substance of the transcendental subject from which the meaning emerges must be extended, beyond its physical and psychic envelope, beyond all the categories of meaning, outside of time and space (represented), to all the logical meta-substance who participates in his Individuation.

The transcendental subject encompasses both the knowing subject and the object of its knowledge: the transcendental subject has no "object" because it encompasses also all its object.

Because of the a priori separation between subject and object the nature of the Kantian *a priori* remained confusing. For lack of being truly transcendental, the Kantian *a priori* has more or less the contours of a Platonic idea, resulting from a world of idealities, exposing Kant to trials in Idealism.

The represented world is the knowing subject

Simple common sense and a little thought allow us to state as a matter of course that:

"the world that exists for me is what becomes myself" or "I think nothing of the world that is not already myself".

The most established conviction that there is a world opposite, the most convinced of the realists and even of the materialists cannot challenge this proposition. There may be a world opposite, there may be external sensations, but when I think of the world I only think of Me.

In the context of the triple reality of the transcendental subject, this evidence upsets the distinction between the world (the object) and the subject: There is not a reality *in itself* of the subject distinct from the reality *in itself* of the world that he represents neither of the reality *in itself* of the process of representation.

The logical meta-substance from which the meaning of the world emerges for the subject and that from which his own meaning emerges are in reality indistinct.

The transcendental subject is all at the same time and indistinctly, the substance, the product and the process. It is also the Act through which the meaning of the knowing subject and of the world emerges and through which also emerges the time and space of its representation.

It is therefore "in" the transcendental subject considered in its triple reality: meta-substance, principle of order and instantiated order, that the knowing subject and (his) world come to exist.

The distinction between the world and the knowing subject, as places of emergence for the former of the forms and for the latter of the concepts, must then be abandoned. Idealism and realism merge in the transcendental subject.

Transcendental apperception

If the world exists in Me, the Me is the necessity for the existence of the world.

Kant shows us that the necessity of the perception by the subject of a One and stable Ego, of a becoming-himself, is for the subject the *a priori* condition of all meaning. He calls this primary perception transcendental apperception:

"At the foundation of all necessity there is always a transcendental condition (Editor's note, see note in the following paragraph). It is therefore necessary to be able to find a transcendental principle of the unity of consciousness in the synthesis of the diversity of all our intuitions, therefore also concepts of objects in general, and therefore also of all objects of experience, without which it would be impossible for our intuitions to think of any object whatsoever: for this object is nothing more than the something about which the concept expresses such a necessity for synthesis. This originary and transcendental condition is none other than transcendental apperception.

The self-awareness which is forged from the determinations of our state for internal perception is merely empirical, ever-changing, there cannot be in this flow of internal phenomena a stable or permanent self, and that is what commonly called internal sense or empirical apperception. What must necessarily be represented as numerically identical cannot be thought of as such via empirical data. There must be a condition which, preceding all experience and making it possible, gives its validity to such a transcendental supposition. Now, neither knowledge nor either a connection and a unity of these knowledges among themselves could intervene in us without this unity of consciousness which precedes all the data of intuition and in relation to which any representation of objects is only possible. This pure, originary and immutable consciousness, I decide to name it transcendental apperception. That it deserves this name is already clear from the fact that the purest objective unity, namely that of a priori concepts (space and time) is possible only through the relation of intuitions to such an apperception. The numerical unity of this apperception therefore lies a priori at the foundation of all concepts, just as the diversity of space and time lies at the foundation of the intuitions of sensibility.»

(Ref CRP., From the deduction of pure concepts of understanding, 3, AK, IV, 82, p.183-184)

NB: This proposition which makes the existence of the subject for itself the necessary condition of all thought of the world is in fact an enlargement of the Cartesian Cogito: *any proposition which appears to my mind denotes as certain the proposition "I exist"*.

Through transcendental apperception, the existence of the subject for himself conditions that of all the objects of his representation.

"Becoming me" is the primary necessity that logically precedes and subsumes all my thoughts. Kant emphasizes that the unity of the subject is neither a given of consciousness, nor the empirical perception of an existent in itself, that it cannot result from (external) empirical data but from a transcendental necessity, it is to say *a priori*.

"We could not regard ourselves as self-aware thinkers unless we were at the same time objects of experience of truly extra-mental status."

This proposition does not affirm the existence of a subject *in itself*. The term "object of experience" does not denote an object *per se* but the "extra-mental" reality from which the meaning of an object can emerge.

"I become myself" is the unit, the bit of meaning that emerges, by a transcendental Act, from a reality beyond the horizon of meaning, not subject to time.

Individuation

What transcendental necessity founds transcendental apperception, the necessary unity of the subject?

The OK shows that an unfounded set of interdependencies necessarily presents singular ordering modes according to which the interdependencies (the logical or probabilistic relations) converge towards a monodimensional asymptote. These singularities are called "Individuations".

Individuation is a necessary principle*, resulting from the interdependent and unfounded nature of the real, its instantiations are nevertheless contingent*.

**Necessary, in this transcendental context does not mean «determined» or a «sine qua non condition» but «which cannot be otherwise»: There is Individuation.*

Contingent doesn't mean «who might be other» or «who might not be» but «that has different instances». Infinities of infinities of Individuations are superimposed in the meta-substance.

The Individuation of the transcendental subject is not determined logically by the convergence of interdependencies but its persistent unification is an *a priori* necessity, not subject to time.

Similarly, a whirlpool does not "result" from the convergence of streams of water but is necessitated by the general flow conditions of the river.

The transcendental subject is an instance of individuation.

The Knowing Subject is the meaning that Individuation takes for itself.

The OK designates by the term Knowledge the meta-substance that the Individuation "puts in order".

The persistent Me, the necessary relation of Me to Me, the existence of the subject for himself is the asymptote of Individuation.

This asymptote imposes *a priori* transcendental apperception on the knowing subject, that is to say that all meaning contributes to his unity.

Thus, although the transcendental subject is in reality a contingent instance of Individuation, its individuated existence and all its representation appear to the knowing subject as a necessity.

Knowledge (the meta-substance), Individuation (the mode of order) and the Knowing Subject (the meaning) are three aspects of the transcendental subject.

Note: We understand that the term "condition" previously used by Kant is not quite appropriate: It indeed suggests that the necessary unity of the subject could not be and that therefore the existence of the subject for itself would be contingent. It is not so. For the knowing subject and in the world he represents, his One existence is necessity, not a condition but the transcendental principle.

The subject is not the product of a wondrous coincidence, because the subject is not something that happens, the subject is a singular order in a reality not subject to time. The knowing subject and his time emerge from a timeless singularity.

Reversion of intelligibility

According to the principle of transcendental apperception the "I become me" is the Whole of objects of thought.

It is therefore not the objects, the facts and the laws of the world that make themselves intelligible to the subject and allow him to synthesize his representation but, since the "I become me" is the primary necessity, the representation of the world and of himself by the subject is a form of inquiry into the modes of order that fulfill this a priori necessity.

Now the principle of Individuation also applies to the meta-substance of the transcendental subject. The Individuation of the transcendental subject is therefore separable into contributing Individuations, according to infinities of possible modes of order.

These contributing modes of order are the "Existing-for-the-subject" whose principle is necessary (individuation) and the instances are contingent.

Each instance of Existent makes possible, by separation, other instances.

Representation by the subject operates by separation from self-consciousness (the only a priori necessity) and not by synthesis from atoms of empirical meaning existing in themselves.

The existence of the Fact according to its form is not in itself, as postulated by the realistic hypothesis, but is constructed in the knowing subject. The Fact exists in the representation of the subject according to its contribution to the necessity of the subject's becoming-himself.

It is the mode of separation that determines the form of the object and not its intensional reality. In this the form is extensional.

Individuation is not a sequence of states.

Existence is not the becoming of something.

The Existing is not something to which it happens to become.

Existence is a mode of separation from the becoming of the subject.

Existence has meaning only for the subject

There are no beings *in themselves* but only Existents-for-the-subject

It is then necessary to distinguish on the one hand: a notion of existence called "objective" which is that of common sense, synthesized at the level of understanding, relating to the objects of the represented world, and on the other hand an Existence called "subjective", logical and probabilistic reality relating to the subject but which is not even (not yet) a thought of it.

Note: The objective Existent is synthesized at the level of understanding while the subjective Existent precedes meaning.

The rules of Subjective Existence are quite simple:

1- "I become myself" is the first axiom.

2- What is necessary for a necessary is necessary.

3- A necessary (an Existing) can be filled by various contradictory contingents, each of these contingent modes of fulfillment represents a possible form of existence, in proportion to its Bayesian contribution (we will come back to this point) to the necessity.

4- The law of distribution of the forms of existence made possible is the meaning of the Existing

5- The contingents that fulfill a necessity are not disjoint since their existences merge in this necessity.

6- The existence (the Bayesian contribution) of a fact is not an attribute of the fact but of its relation to the whole of the subject.

7- The subjective Existent is not bound to non-contradiction.

It is possible, under certain conditions, to manipulate subjective existence according to the formal rules of probability.

Existence becomes objective when the probability of a subjective existence reaches 1. It is then

certain, necessary, present, **non-contradictory**.

Time according to Kant

According to Kant, the succession of sensations is first of all causation in the subject: It is by a causal, necessary relation that a sensation makes possible (and necessary) other sensations, this causal relation causes sensations to follow one another and from this succession of sensations will rise the representation of a succession of facts of the world. This causality is not the "external" law which imposes the succession of the facts of the world but a rule in the subject which binds the sensations (the apprehensions or apperceptions) to each other in an irreversible way. It is this causal relation which confers its own irreversibility on the time of the subject and not the time of the world which imposes its irreversibility on the causal relation.

I will not say [...] that two states succeed each other in the phenomenon, but only that one apprehension succeeds another, which is something simply subjective, which does not determine any object and therefore cannot be considered as knowledge of some object (not even in the phenomenon). Ibid., p. 930, AK, III, 171, A 194-195/B 240.

I perceive that the phenomena follow one another, that is to say that there is a state of things at a moment, while there was the opposite in the preceding state. I therefore link, strictly speaking, two perceptions in time. Now, a liaison is not the work of simple sense and intuition, but here it is the product of a synthetic power of the imagination, which determines the internal sense relative to the relation of time Ibid., p. 925, AK, III, 167, A 189/B 233

Thus, when the swallow pursues the insect, she is trying to reach not the point where the insect appears to her present sensation but the point in spacetime where she can swallow it; point made progressively possible, probable and then necessary for her according to an internal causal rule (in her mind?). Who even knows if in this process a position is perceived or thought of as such by the bird?

NB: The causal relation does not link a state of phenomenon to its previous state (as if the phenomena were things) but to the "global state of mind" or the "global perspective" of the subject because we have shown that the synthetic power evoked by Kant is in reality a power of separation from becoming-oneself.

According to Hume, this internal causation in the subject was only a matter of habit: first of all the causality in the world wants that the position A of the object is the cause of the position B and therefore that the position B succeeds in the position A. In the subject the (objective) sensation B then succeeds the sensation A. The repetition of the experiences of this succession $A \rightarrow B$ is engrained by the subject as a causal relation and any new sensation A will then cause in the subject the expectation of sensation B.

Contrary to this simplistic explanation, Kant highlights the effectively causal relationship between representation and perceptions. This rule of succession derives strictly speaking from the principle of transcendental apperception, as do the four principles *in mundo*:

...the four principles (in mundo non datur hiatus, non datur saltus, non datur casus, non datur fatum),...all agree, moreover, on this point that they allow nothing in the empirical synthesis which could harm the understanding and the continuous sequence of all phenomena, that is to say, the unity of its concepts. For it is in it alone that the unity of experience is possible, in which all perceptions must have their place.

Ed. Let us note here a lack of formal coherence: The term empirical synthesis used casts doubt on the argument of a priori necessity of the unity of which Kant makes a principle.

We must resolutely conclude on the transcendental nature, that is to say prior to any possible meaning, of the rule of succession. This rule, like the four principles *in mundo*, subsumed by the principle of transcendental apperception (which is a corollary of the principle of Individuation), establishes the framework in which the understanding can provide the subject with (animated) images of the world.

While Hume analyzed the cause-succession relationship from a realistic/psychological postulate, that is to say based on the truth of a world in itself separated from a spirit in itself, Kant seeks, in the subject, the transcendental causal (or at least logical) rule of succession of sensations.

Semantic precision: Kant will be able to qualify the succession of sensations in the subject as subjective because it relates to the subject and the representation of the world that the subject's understanding builds from these sensations as objective because it relates to the objects of the represented world.

Many examples justify the Kantian analysis:

-In the hubbub of a station hall, it is indeed a "subjective" causal rule that brings out of the confused sound sensation, the sounds of the same series, put them in order and allows our understanding to reconstitute "objective" sound facts of the world. It should be noted that our technology would today make it possible to reproduce, or even produce, this phenomenon, from a pure fact of knowledge, independently of the reality of the facts of the world.

The consistency of this internal rule is such that a jump in time, a lack of coherence, a change of rhythm, a sudden stoppage of sound are immediately grasped as incompatible with the unity of experience and invalidate the apperception of a sound-fact.

-When the sky fills with clouds, it is indeed an internal rule that brings out of the confusion that reaches my retina, which continuous lines and spots exist for me and which animals may appear to my imagination. Of course this horse I see is undoubtedly a matter of culture, but must I say that the point, the line, the spot emerge and persist in me by the fact of an acquired habit which would follow their formal meaning or of an internal rule which would precede it?

- The example of dreams and the coherent succession of situations that appear in them (despite the absence of external successions) is well known. Let us only note that a dreamed situation which would be incompatible with the persistence of the meaning One of the dreamer for himself immediately puts an end to the dream.

Schopenhauer attempted to describe the (subjective) rule of succession of representational facts as a law of the physical (in the subject's body) or psychological (by the subject's will) world.

The analyzes of Hume, Kant and Schopenhauer could not however convince because they constitute a circular reasoning. Indeed, the concepts of the body as of the will, and in a general the concepts of life as of the spirit, are *a priori* animated. Neither life nor mind are build up of successive states; they are essentially becomings and to explain succession by means of a becoming would be circular reasoning.

Schopenhauer criticized the Kantian thesis for not making room for a purely external succession (as in the case of a melody):

The succession of sounds is determined objectively and not subjectively by me who listens to it; but who then will dare to maintain that the sounds follow one another according to the law of causality QRPRS, 2nd ed., p. 225.

As we have seen from the example of the station hall, this argument turns against its author: can pure succession exist, not in the absolute, but for the subject? A set of perceptions which would not create, in the subject, the necessity of a succession (spatial or temporal), which would not continuously contain the probability of following experiences, would it make sense, would it exist for him?

To use Schopenhauer's example, is there a moment in our life when our eardrums are not solicited by the vibrations of the air? Yet in this confused turmoil, how many sounds will come into existence for us and on what condition if not precisely through attention, i.e. the lived probability of experiences to follow?

But transcendental apperception answers this question in advance: the objects of the subject's representation exist only through their contribution to his becoming-himself.

What we perceive "becomes us". What takes on meaning, what exists for the subject is what makes him "become himself". Not as the condition of his becoming, for his becoming is a timeless necessity, but as the facts that participate in this necessity. Only these facts formally exist. This explains the collapse of the wave function: although infinities of contingent (subjective) Existences are made possible by a representation, only the Existent necessary for my becoming attains the sense of objective Existent.

The multiverse is the possibility of subjective existences but has no objective Existence.

Only, in the confusion of the real, appears to the subject as existing that which is integrated into the necessity (outside of time) of his Individuation. And the need for the Individuation of the transcendental subject precedes and determines everything that can make sense for it. See the "Reversion of Intelligibility" paragraph.

The concept of transcendental subject (in the sense of the OK) takes on its full importance here because it is in him that reality not subject to time takes on the meaning of Existents. The logical meta-substance, Knowledge (in the sense of the OK) to which the principle of Individuation applies is outside of time and the principle of Individuation itself is outside of time. The principle of transcendental apperception, the a priori necessity of "I become myself" which precedes all meaning, is not based on the idea of succession or change, but on the necessity of Individuation outside of time, an "always-there" mode of order such that all experience of Me actually carries the probability of experience of Me.

Irreversible becoming is based, not on a change in substance, but on a relation of probability between two possible experiences of the ego. All the diversity of the certain experience of the present Me is subsumed in the One necessity of a Me to come. This subsumption, this judgment of necessity is structurally irreversible

Under this constraint of transcendental apperception, each fact of knowledge makes possible, even necessary, new facts of knowledge. This relationship is irreversible because it is integrated into the becoming of the subject:

My thought knows itself in time.

The transcendental subject (not subject to time) becomes knowing subject (subject to his time) by the rule of succession of facts of representation: a fact of representation carries the probability of other facts.

Just as the facts of knowledge individuate in order to Exist for the subject, they follow one another and wind around the thread of the subject's Existence.

The meaning of the experience "I am" is the mathematical expectation equal to 1, i.e. the necessity both certain and inevitable, of this same experience.

When an experience becomes necessary for the fulfillment of this necessity it become part of Me, it is then thinkable for itself, it gets objective Existence.

The rule of subjective succession fixes the conditions of all possible experience and also the condition of objective existence of the facts of experience.

Time is not a product of the understanding. It appears through the transcendental act of emergence of speakable (in time) modes of orders out of the unspeakable reality (not subject to time).

It is possible on this basis to distinguish the "subjective" succession that leads to the apprehension of the individuated fact and its meaning (as mathematical expectation) from the "objective" (having an object) succession of phenomena.

Objectivity is the product of a synthesis by understanding, by consciousness. The "objective" cause is a fact of thought while the "subjective" cause is not even a thought, it is logical and probabilistic background reality .

Subjective succession is a timeless necessity (in which for example, 1+1 is not the cause of 2 and 999 draws "true" for 0 draws "false" is not the cause of a thousandth true draw).

One moment of lived time actually contains the necessity of the next lived time. An experience

(sensation) is only possible for the subject if its appearance is made possible by the Existing. In this sense, the succession of sensations is indeed pulled by necessity and not pushed by time. (We experience this in every lived moment).

The opposition is therefore useless: there is indeed a transcendental succession of apprehensions, subjective (proper to the subject) and the succession of the represented states, objective (affecting the objects) product of the understanding.

This principle of succession retains its power when two contradictory successions are possible. The succession is then not purely chronological. To distinguish two Existents without contradiction, time then separates into objective successions according to other dimensions (of space) bringing out the diversity of meanings.

The space-time of our representations will have as many dimensions as necessary to distinguish, without contradiction, all the objective Existences.

That a fact contains the probability of other facts is not only its possibility of Existence, it is its very meaning and its very Existence. The fact does not exist otherwise than by the mathematical expectation which links it to other possible facts in the subject.

In summary: The knowing subject is **animated** by an internal law of succession of representations: Each Existing representation carries the law of probability of possible experiences.

Transcendental Bayesian induction.

The transcendental hypothesis involves a reversion of intelligibility, but the realist hypothesis also requires reverse investigation since the subject's understanding must **designate** by induction the "cause" of its sensations.

According to Bayesian induction theory (BI), the higher the probability $p(S|H)$ (*a priori* probability, known empirically or theoretically) the more the hypothesis that an event S would be caused by an event H is plausible (*a posteriori* likelihood). Under certain conditions, this likelihood can be affected by a value proportional to $p(S|H)$, which makes it possible to use the rules of probability calculation to validate and maintain by induction a representative model from a large number of experiences.

-**In the ontologically realistic use of the BI**, the (causal) facts and laws of the world exist in themselves, that these facts and laws determine the experiences of the subject (his sensations). The BI is then the tool that allows the mind of the subject to maximize, from his knowledge, the likelihood of the **system of hypotheses that associates his sensations to facts of the world**. A likelihood of 1 is associated with "truth".

In the realist interpretation the mind of the subject (and science) is metaphysically located outside the world he represents.

-According to the transcendental interpretation, Bayesian formalisms describe the interdependence relation between the present representation and its possible changes, between what exists in the present for the subject and the elements of meaning that could emerge from it.

The IB is neither the principle nor the process of association between sensations and facts of the world. The IB does not say "how" the thought of the thing arises. Thought itself is the probabilistic relationship between the certain and the possible.

The present idea is not something that has meaning or the present state that would give meaning to something, this reasoning leads to endless regression.

The idea is the subsumption into a certainty of a structure of probabilities.

The idea is the meaning and the meaning is the idea: an inductive relation of probabilities.

This is the opposite of idealism: For the OdC "*The real is interdependence, the idea is flowing through interdependence, the idea is real*"

Probabilistic induction is not based on the reality of causal determinations but describes the

principle of the emergence of meaning in itself.

Because the non-foundation of the real imposes continuity, the modes of order in the real are not independent. Any singularity in the real is like an initial condition in a dynamic system, it takes on meaning through the -intricated- structure of its probabilistic proximities with other attractors, other singularities.

A construction such as "*the meaning of the certain is its relation to the probable*", constrained by the necessity $\Pr(I|I) = 1$, ensures the *a priori* idoneity of the representation because this probabilistic morphogenesis "digests" by itself its hiatus as it animates the representation and determines the objectified existence of facts of knowledge (singular modes of order).

Only the act which brings about as certain a mode of separation (of order) among the possible modes is irreversible.

In its transcendental use the IB encompasses both the unspeakable meta-substance that is Knowledge, the principle that orders it, the Facts of knowledge and their meaning (the objects of the world and the knowing subject as modes of order). All this is one and the same reality in the transcendental subject.

Bayesian formalisms do not describe what the subject represents or how he uses his sensations to represent. They describe how facts and laws emerge, by separation, from the transcendental subject and constitute the knowing subject. They describe the dynamics of the subject himself and all that exists for him

The succession of representations could be considered as the progression of a wave in which Bayesian formalisms replace d'Alembert's equation, but where the primary necessity of the Individuation of the subject counterbalances the expansion of meaning.

In the transcendental interpretation, the knowing subject is and truly becomes the individuated form given to his world and his consciousness.

This ontological distinction has practical consequences:

In the "realistic" hypothesis existence is in itself, not contradictory. The likelihood, a real number between 0 and 1, does not measure the truth of the hypothesis "H exists" (which can only be true or false) but the subject's opinion of it.

In the transcendental hypothesis, existence is a form, a judgment of necessity*. The facts of knowledge have, for the subject, a certain importance* which relates to their probability of appearing (of existing) in his representation.

- The probability of appearing for the unspeakable meta-substance is so close to zero that it does not Exist.
- When the probability of the Fact to appear is close to 1, it has a so-called objective existence. A Fact Exists objectively when it is necessary for the Existence of the subject.
- A necessity can be fulfilled according to various contingent modes of order (the possibles). All these modes have a form of reality, as the possible solutions of a problem have, each mode of order having a probability of appearing, which will be designated as its Actual Existence, less than 1. **In the possible contradictory modes of orders can co-participate to the fulfilment.**

The unspeakable reality is not modified by its possible modes of order. These can therefore superimpose without being subject *a priori* to non-contradiction.

On the other hand, the singular modes of order which participate in a necessity are made interdependent by the very fact of their union in this necessity: each singular mode of order (each Fact) can be separated into a structure of mathematical expectations (of Actual Existences) of other singular facts but always this abundance is compensated by the constraint of Individuation. The Actual Existences of the various contingent modes merge in the necessity which they fulfill.* This structure of mathematical expectations is in itself the meaning of the Singular Fact. Not the meaning "in the eyes" of the mind but the "formal nature" of the mind.

Meaning is the possibility of other meanings and nothing more.

* Which has the corollary that the objective Existence (of probability 1) is non-contradictory.

What is the Existing Fact?

Why do the object E of experience and C of induction appear specifically to the subject, why E_i and C_j rather than other Facts?

In the realistic *a priori*, although the induction of the relation E-C is a fact of the mind, although the opinion that the subject has of it is diffuse, constructed, although the representative model is only supposed to be isomorphic to reality, the existences of E and C and the relation of C to E are assumed to be determined "in the world". The very existence of C (resp E) is assumed to be an attribute specific to C (resp E), in which the mind of the subject is not supposed to take part, even if it notes it by induction.

It follows that the particularities, the conceptual limitations of the subject do not affect C in that it exists but only in that it is present in a representation.

In the transcendental hypothesis, a fact exists objectively if it is necessary in the necessity of the subject, according to a separation whose rule is not proper to the fact but imposed by the Individuation, the Becoming-itself of the subject. Existence does not result from a determination but from a necessity.

The thread which is the Existence of the subject necessarily separates into "threads" and each thread depends on all the other threads by the very fact of their participation in the Existence of the subject. The object only Exists as a participation in the Existence of the subject.

The fact of Existing is in itself extensional, in the multiplicity (in Husserl's sense) of the subject, itself ruled by the principle of Individuation.

The Fact Exists only as an "initial" condition leading, with non-zero probability, to other attractors in the multiplicity of the subject. It follows that the Existence of the object is not an attribute of the object in itself but the asymptotic form of a singular structure of mathematical expectations.

It follows that the laws, the particularities, the limitations linked to the modes of Individuation of the subject are also those of the Existing object.

The Existence of the object is by necessity compatible with the Existence of the subject.

In the transcendental hypothesis, Existence is not a reality but an unfounded form, a mode of order, relative to the subject whose Existence is also a mode of order.

Since the Existing is an unfounded form, the relation of probability between Existents, interdependence is itself unfounded, it is also a mode of order.

The passivity of sensibility with respect to external sensations is an appearance, limited to the objective world of the knowing subject, below the horizon of meaning. Now the conditions of possibility of formal sensations have their reality beyond the horizon of meaning. Thus, the reflex gesture is triggered before the sensation appears to the knowing subject.

It is in and through the transcendental subject that the Act takes place which causes sensations to emerge.

The categories of experiences are only empirical at the level of the knowing subject, that is to say objective, but they are logically constituted upstream of meaning. The ability to hear or see or touch does not arise from subjective experience but from a logical system of individuation of sensation contributing to aesthetic intuition. It is only at the objective level of experience that categories can exist, even though subjective experience is in some way the meta-substance of objective experience. Empirical categories are formed under the condition of a priori possible forms.

From inductive quantic to deductive macroscopic

Induction is not based *a priori* on non-contradiction: a result of experience can actually be obtained along contradictory paths.

The objective experience of the impact of the photon on the target: $Pr(F_{target}|J_e) = 1$, does not make it possible to induce through which slit (F_d or F_g) it has passed. The paths F_d and F_g therefore both have an Actual (subjective) Existence and only an experience which would make F_d appear to exist objectively $Pr(F_d|J_e) = 1$ will eliminate F_g as possible because $Pr((F_d \text{ or } F_g)|F_{target}) = 1$.

The deductive is based on the inductive. The Existing Fact is nothing other than a statistical anomaly, a self-determined mathematical expectation*, a singularity, a logical attractor whose probability is infinitely greater than the impossible (for the Actual Existent) and close to 1 (for the objective Existent).

The objective Existing (macroscopic, deductive) is the singular trace of the quantic (transcendental, inductive) on the horizon of meaning, in the knowing subject.

The difference between macroscopic and quantum behavior is not a property of the world but of meaning.

* this is possible in a timeless reality; induction creates its objects, its Existents

Conclusion

From 1) the main ideas of the Kantian CRP - 2) a reinterpretation of the concept of transcendental subject and - 3) the logical principle of Individuation, we have proposed a new ontology in which subject and object are the same reality.

We have described the dynamic principle by which the Existence of the subject emerges from formless meta-substance and separates into an animated representation of the world.

PS: Questions to realists

To the *a priori* realist we must ask the following questions:

Why must a particular probability distribution be grounded by a particular causal structure?

Since common sense recognizes as reality in itself the causal link from C to E, object of a possible objective deduction (even probabilistic), why not recognize as reality in itself the effective probable link from E to C, object of a possible probabilistic subjective induction?

Why not admit the necessity of individuation as a reality in itself?

Must the persistent Unity of the knowing subject (and only can it) be considered as a consequence of a singular network of causalities?

The necessity of the Me *knowing* the Me, is it not in itself the Existence of the Me?

The meaning of our Existence, the certainty of "I will be" is inductive; not the conscious idea we have of our persistence, but its transcendental nature of necessity from which meaning emerges.

Is there need for a "mind" that interprets mathematical expectations or are these expectations themselves and all at once: the Facts of knowledge, the meaning of the Facts, the formal substance of the mind, the knowing subject?

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Ed. Mon petit éditeur 2013