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Note: This paper collects two articles relating to the concept of transcendental: **The transcendental subject** and the **Ontology of Knowledge and the Kantian transcendental**.

Complementary, sometimes redundant, I could not bring myself to the effort of merging them.

## The transcendental subject

critique of the critique

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### Abstract :

In this article, we would like to clarify the concept of transcendental Subject according to the Ontology of Knowledge (OK), not with the idea of contradicting but with that of completing the Kantian vision. We would nevertheless like to show how Kant's lack of a true transcendence of the subject limits and disorients the development of his thought.

We would finally like to trace some tracks towards new ontological (and scientific) options that the OK makes possible beyond those which the Kantian critique entailed.

### Introduction :

The OK owes a lot to the metaphysical revolution initiated by Kant, who exhorts us to admit that "objects must be regulated according to our knowledge" (ref: CRP) rather than claiming to regulate knowledge according to objects.

According to Kant the knowing subject is active: She is at the "center" of knowledge and gives it form and not simply passive in relation to an external reality which would have form by itself.

The OK does not however claim the qualifier of Kantian or post-Kantian theory.

The OK could more correctly be qualified as proto-Kantian or meta-Kantian insofar as it is the very foundations of Kantian metaphysics that the OK proposes to deepen.

For the OK, the premise that the Kantian theory does not sufficiently take into account is the following:

*If we exclude the hypothesis of the divine, nothing can be outside reality: the physical world and the spirit necessarily participate in a single reality.*

Now the Kantian transcendental gets lost in the mysteries of the mind, in concepts of pure forms or intuitions and fails to question the truly transcendent nature of the knowing subject: in which way the knowing subject is simply real.

p154 B91 ... *We will therefore track down pure concepts in human understanding until their first germ*

Through the *analytics of concepts*, Kant opens up a horizon of psychological understanding of the concepts of representation, but he obscures their ontological perspective, replacing the mystery of the *a priori* form of the world with the mystery of forms and concepts *a priori* in the understanding or in the spirit, without telling us how the spirit is reality. Likewise, it does not tell us anything about what the **"Power of knowing"** is which leads knowledge (in fact the representation) to always extend, nor about what **Individuation** is which always unifies knowledge in the "I" of the subject.

By leaving the role of judge to the understanding (thought-mind), Kant cannot resolve the ontological question and inevitably exposes himself to trials in idealism.

This lack is highlighted by the concept of intentionality: Brentano designates by this term the psychic phenomenon by which the object comes to exist for the subject. Intentionality is the distinguishing feature of psychic phenomena. Yes, but it is obvious that the existence of the object for the subject requires, in one way or another, the co-presence of the object and the subject. Co-presence to which we must give meaning.

The Kantian vision is caught in this trap: is co-presence a reality of the world or a phenomenon of the mind?

The first hypothesis makes intentionality an extensional object, which reduces the revolutionary in the Kantian explanation (space-time is indeed an obscure point in his theory), the second hypothesis initiates a recurrence which is not in itself prohibitive but requires the analysis that the OdC tries to bring in this article.

If the OK proposes to transcend the knowing subject; this in no way requires that the mind be material or the world be ideal, but that both of these concepts be transcended into the same nature of the real.

Kant distinguishes an "exterior" to the subject, which arouses the sensations but whose nature we will not know, and an "interior" which determines the conditions of possibility of these sensations and whose nature we will not know either. In CRP, this interior, although it logically precedes consciousness, implicitly

remains in the domain of the mind, of a different nature than the exterior.  
For Kant, representation remains of a different nature from what is represented.

The OK endeavors to describe what reality Kantian understanding is made up of. According to the OK, *a priori* concepts are not produced by the subject's mind as by a mysterious thinking machine but emerge in logical reality devoid of form as singular order modes. These order modes are called "individuations". The OK shows that such singularities necessarily occur in an amorphous, interdependent, unfounded logical reality. Because these singularities have Shannon entropy close to zero, they are information. The transcendental subject himself is an individuation, a singular mode of order in this logical reality. He carries the information "I am - I am becoming myself" which appears to him as a necessity, and the world appears to him as the contingent individual modes of fulfilling this necessity.

The OK states that the representation is neither "grasping a form", nor "isomorphism" but "morphogenesis". This proposition does not contradict Kant's view.

*(A126) p 194/195 Although we learn a lot of laws by experience, these laws are however only particular determinations of even superior laws, of which the highest (under which all the others are inscribed) come a priori from the understanding itself and are not borrowed from experience, but must rather give phenomena their conformity to laws and thus make the experience possible. Understanding is therefore not only the power to forge rules for itself by comparing phenomena: it is itself legislation for nature, which means that without understanding there would be no nature anywhere, ie it is a synthetic unity (A 127) of the various phenomena according to rules. [...] Now the unity of apperception is the transcendent principle of the necessary conformity of all phenomena to laws in an experience. [...] So excessive and so absurd that it seems to say that the understanding is itself the source of the laws of nature and therefore of the formal unity of nature, such a statement is nevertheless quite correct and in accordance with the object, that is to say to experience.*

The above statement could not be clearer: The laws of understanding are superior (impose themselves) to the laws of nature.

Kant situates morphogenesis "within the understanding of the subject" and analyzes as much as possible the modalities of this morphogenesis.

Implicitly, therefore, the form of the world would be "spiritual".

But questions such as that of the "substance" to be given form or that of the "nature and power of the spirit" that gives form are not settled.

The battle of "... isms" (realism, materialism, idealism, dualism ...) is still raging today, which clearly shows that nothing satisfactory has yet been proposed on the subject.

### **The unity of the world and the subject**

For Kant as for the OK, the world does not have form in itself or at least it does not have in itself the form given to it by the knowing subject. The subject "gives shape to the world". In the subject emerges the extensional meaning (the form) of objects and facts which have no *a priori* reference in an "external" reality. Let us also quote Schopenhauer: "*The world is my representation*"

*"You have to know how to convince yourself that the world is there only in the state of knowledge and at the same time dependent on the knowing subject that each one is for himself. The being of things is identical to its taking cognizance. "They are" (Editor's note the OK would say "they Exist") means: they are represented. [...] the being (the existence) of things consists in their representation.*  
"

That said, the simplistic interpretation according to which the meaning is produced by the subject would inevitably lead us into an infinite regression since we would then have to "give meaning to the subject which gives meaning". This applies to materialistic (neurological) explanations as well as to idealistic (psychological) explanations of meaning.

If the world takes shape in its dependence on consciousness, the subject is not for all that overhanging the form, since we can only know what affects us, what transforms us.

Let us also remember that nothing can be outside reality: the world and meaning necessarily participate in a single reality.

The world is representation by the subject for which it Exists just as much as the knowing subject is representation of the world in which he Exists.

The subject is not all of reality.

It follows that the world is not all of reality but only the part of reality to which the subject gives meaning, that is to say which makes the subject Exist.

### **Individuation**

Extracts from the CRP

*A 116 p189: We are aware a priori of the continual identity of ourselves with respect to all representations which can ever belong to our knowledge, as a necessary condition for the possibility of all representations (given that in any case, in myself they only represent something because they belong, along with any other content, to a consciousness, and must at the very least be able to be linked to it). This principle is firmly established and can be called the transcendental principle of the unity of all the diversity of our representations.*

*... a corollary of which is the synthetic unity of the diverse in all possible intuition.*

*note on A 117 p189: The synthetic proposition according to which, in what it has of diverse, all empirical consciousness must be linked into a single consciousness of oneself, constitutes the absolutely first and synthetic principle of our thought in general. .... the simple representation "I" constitutes, in its relation to all the others (of which it makes the collective unity possible), the transcendent consciousness.*

*A 118 p190: Since the original unity of apperception is the foundation of the possibility of all knowledge, the transcendent unity of the synthesis of the imagination is the pure form of all possible knowledge through which therefore all the objects of possible experience must be represented a priori.*

These three extracts clearly show us that for Kant already:

- we have no direct evidence of external things but at best mediated through the construction of the I (or the actuation of the I-will-be),
- the persistence of the unity of the I transcends the synthetic unity of the real in its representation by the subject,
- the unity of self-consciousness is the first and synthetic principle (Editor's note therefore formal) of our thought.

According to the CRP already, the principle of individuation of the subject transcends the principles which govern the elaboration of meaning and therefore its representation of the world. It transcends them in that the laws of meaning are logically deduced from the principle of individuation and not the other way around.

To clarify this principle according to the OK, without risk of failing on the still unsolved question of the substance, we must clarify the concept of non-foundation according to the OK

### **The non-foundation of reality.**

A purely extensional definition of non-foundation cannot suffice:

- Science has shown us that the divisibility of space and time is not infinite.
- Infinite material divisibility is also lost on the quantum scale.
- The absence of a first cause does not approach the concept of non-foundation according to the OK.

To fully understand it, we must refer to the structure of 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 will call **multiplicity**, following Husserl in that.

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

Since our beginnings as protozoa, we have not ceased to extend and complicate the multiplicity (ie the set of concepts, laws and principles) with which we describe the extensional part of our world.

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 take on meaning according to the a priori rules of our multiplicity. This is in substance 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 minimal. Nevertheless, if there is such a hiatus, the multiplicity will readjust to maintain the idoneity of the representation. Science today is well aware of the

resilience of complex systems.

Thus, we believe we are describing a world in which facts of the world occur according to the laws of the world while they are indeed 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 notion of meaning).

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

The laws of what has meaning appear to us as the laws of Everything.

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 senses *a priori* in accordance with the laws of the existing universe imposed by our multiplicity.

We believe that what is only possible is nevertheless 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 that we do not even know how to think outside these rules.

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

These lines attempt to highlight the bias that affects our representations: since the process of attribution of meaning is also the one that ensures the suitability of the process, it is impossible for us to "prove false" our representation of the world. Whereas in truth 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 be in conformity with 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 broaden 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 the unknown (the intentional) which are formally similar. This is not the case: what is beyond the horizon of meaning has no meaning.

We think that the unknown would be in itself sayable in accordance with the known, that the 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 on this side of the horizon of meaning, in their present instantiation. The set of weighted judgments on the possible that are for us past and future 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 only valid within the horizon of meaning.

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

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

The intensional reality of what we call the future is immeasurable to our extensional description of it.

The facts and beings of our extensional world, starting with the attribute of existence, have for meaning judgments (let us rather say "statement of judgments ") whose laws and principles are fixed by our multiplicity. The intensional from which these judgments emerge is immeasurable to 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 doesn't care about 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 ( $A \leftrightarrow B$ ) which 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 to the effectiveness of its principle of coherence and in no way to the "conformity" of representations of the world or external sensations.

## A heuristic model of reality and Logos

The following lines will show what principle allows the unspeakable Reality to "know" itself.

Let us imagine for that the Reality in a discontinuous form.

Let us create two heuristic concepts: the element and the link of interdependence.

Denoted by  $A \leftrightarrow B$  with:  $\Pr(A | B) > 0$  and  $\Pr(B | A) > 0$

This link of interdependence is In-act, the sign  $\leftrightarrow$  does not have universal value here, it only applies to the relationship between A and B which themselves are In-act realities and not variables.

The relation  $A \leftrightarrow B$  has not the value of a condition "if A then B"

Let us also consider the interdependencies  $B \leftrightarrow C$ ,  $C \leftrightarrow D$ ,  $C \leftrightarrow E$ , etc....

We can then build a network stemming from A (the Point of View) by adding to it, step by step, the interdependent elements. At the  $n^{\text{th}}$  addition, this network will naturally constitute a part of Reality, we will name such a network stemming from A: a Knowledge.

**- Knowledge is a structure of interdependencies from a point of view**

A Knowledge extends from the Point of View, following the relations of interdependence, by absorption of the logical neighborhood in an In-act reality.

Knowledge does not require any *a priori* law, only interdependence.

Now let's create the new heuristic concept of proliferation.

**Proliferation:** Means that an element is statistically interdependent from more than two (i.e.  $2 + \epsilon$ ) other elements (see figure 1 below).

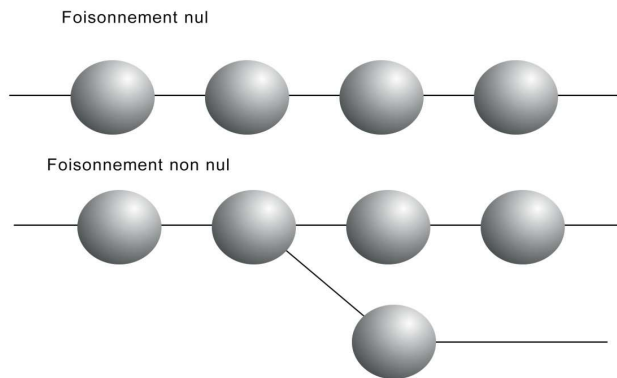


figure 1

Case 1: If the proliferation is zero, the Knowledge (the chain) stemming from A is obviously cuttable, by simply "cutting" both links. This cut by a countable set of links is of dimension zero. It is also through these links that the cut part is interdependent of the rest. The Knowledge stemming from A is monodimensionnal.

Case 2: If the proliferation is not zero, as soon as the number of interdependencies is high, not only the potency of the network stemming from A but also its complexity become infinite: the network of elements and interdependencies stemming from A exceeds any possibility of cut, because at the  $n^{\text{th}}$  iteration, the neighbourhood (the interface) of the Knowledge would contain  $(1 + \epsilon)^n$  elements. To "cut" the Knowledge stemming from A from the rest of Reality it would then necessitate a cut of infinite dimension because:  $\forall N$ , when  $n \rightarrow +\infty$ ,  $(1 + \epsilon)^n / n^N \rightarrow \infty$ .

The number of links to the interface is always infinitely larger than would be what an N-dimensional "geometric" surface would allow, no matter how large N.

Shall we think that the Reality would be inseparable in parts, not cuttable?

In fact, no, we will see that a principle of aggregation tends to reduce the complexity of Knowledge.

To grasp this principle let's define the heuristic concept of **loop**:

- In the simple case of zero proliferation, if the chain  $A \leftrightarrow B \leftrightarrow C \leftrightarrow D \leftrightarrow \dots$  closes on A so that  $A \leftrightarrow B \leftrightarrow C \leftrightarrow D \leftrightarrow \dots \leftrightarrow A$  we say that this chain forms a loop.

- In the case of a nonzero proliferation, the notion of loop can be generalized to a case where the network of links of interdependence globally closes on itself (as a ball could we say).

In absolute terms, no wire would protrude from the ball, no link would cross the cut. The loop would then be an immanent reality in itself.

This element, having no "free" interdependence, could, however, only Exist for itself. Although its reality cannot be denied, it cannot exist in any representation. Its existence is of zero measure.

Apart from this particular case, we will say that the generalized loop of interdependencies is a statistically singular configuration, presenting a minimum neighbourhood, a number of links with Reality lower than the  $N$  mentioned above, that is to say constituting a part of Reality separable by a cut to  $N$  dimensions and therefore representable as an element of dimension  $N+1$ . (on the term of cut see ref: MON)

Let's now postulate that:

**- the probability of loops in a Knowledge grows and tends to 1 when complexity increases.**

Note: A similar result may have already been demonstrated by mathematics. However, the term 'postulate' is necessary because this principle claims to transcend mathematics.

In a Knowledge stemming from  $A$ , a proliferation greater than 0 leads to complexity and therefore necessarily to the existence of loops, constituting "new elements", presenting a minimum neighborhood. This aggregation of Knowledge applies *ad libitum*, as long as the complexity is not "exhausted", that is, until the proliferation tends to zero, without ever being able to reach it since when the complexity is exhausting, the probability of loops would tend to cancel out. Knowledge from  $A$  tends towards a single-dimensional chain.

We described two necessary and antagonistic phenomena:

**- A non-zero proliferation imposes complexity**

**- Complexity collapses metastably towards a zero proliferation**

The result is an asymptomatic balance between the expansion and aggregation of Knowledge from the point of view.

As it integrates the links toward its logical neighbourhood, Knowledge is aggregated towards the asymptote of a monodimensional future.

This asymptote ( $\epsilon=0$ ) is the **Individuation**.

It should be noted that Individuation is a mode of pure logic, that nothing changes the In-act reality.

The individual being is not the result of the Individuation, it is the process of it, the Act, an Actual probability infinitely close to one but infinitely repelled.

Individuation is a necessary consequence of the principle described above. It does not require any law *a priori* or any *ad-hoc* constant.

We will name this principle the **Logos**

**-The Logos is sufficient cause of the Individuation.**

In the context of non-foundation, it is possible to go beyond this discontinuous heuristic model and consider the elements themselves as individuations.

The elements of this model are then not beings in reality but singular monodimensional modes of order, Existants, Facts of knowledge.

Individuation  $\rightarrow A$  with:  $\Pr(A | A) \rightarrow 1$  is strictly a Fact of knowledge, itself unfounded.

The interdependence  $A \leftrightarrow B$  with:  $\Pr(A | B) > 0$  and  $\Pr(B | A) > 0$  is strictly a Fact of knowledge, itself unfounded.

The probabilistic expression "knowing  $A$ " then takes on its full meaning: It signifies that the elements being modes of order of an unfounded reality, their Existence only arises from- and by the expansion of- a prior representation. The experiments which reveal them and reveal their persistent unity are governed by laws of probability raising from a prior representation.

The quantified individuation in the form of existents, of unfounded complexity, is necessary.

According to the principle of individuation, the logical necessity of the individuation of Existence precedes its revelation as a mode of singular order.

Individuation  $\rightarrow A$  is necessary In-act before being revealed by the Act  $A \rightarrow A$ .

The Existants being unfounded, the question of their substance is irrelevant, nevertheless, only a knowing subject can reveal their Existence.

The Viewpoint is not "actually" the primary element of Knowledge. It is itself a cut in the individuation, a state of Knowledge, necessarily composed, its components being themselves composed and so on.

Under these conditions:

**-Knowledge is unfounded, without founding, without first element.**

**-The Point of View, is a cut in a Knowledge.**

An unfounded reality of Interdependence necessarily presents infinities of infinities of these one-dimensional order modes along which Shannon's entropy would be zero: that is to say along which individual information circulates.

In a context of non-foundation, individuation is never exhausted: all individuation can break down into contingent modes of filling and constitutes a contingent mode of filling of an individuation.

The knowing subject, the transcendental subject, is a particular solution of the principle of individuation. The individuation of the transcendental subject  $\rightarrow I$ , the relation  $I \rightarrow I$  or even:  $\text{Pr}(I | I) \rightarrow 1$  is a necessity as a principle but it is contingent in its instantiation.

Its representation of reality is for the transcendent subject a form of inquiry into the contingent modes of fulfilling the necessity of "I become myself", into the contingent modalities of his own individuation.

## Meaning

*NB: Does the ability to give meaning to "what is" bring such an advantage that evolution would have developed such a complexity? Certainly not since "what is" is already gone at the very moment it takes on meaning. The only real evolutionary benefit is to make sense of "what might be"*

As Kant already noted, it is not to facts of the world that the subject gives meaning but to Facts which appear to his Knowledge.

What our experiences present to us is entirely determined in its form, in its meaning, by conditions of possibility which fix *a priori* which experiences, which sensations, in fact which meanings are possible-probable-certain-necessary.

Meaning is not an attribute of the things of the world. We do not reveal the meaning of things in the world. The things of the world do not have attributes by themselves. This very thought is absurd: a stone cannot have the meaning of a stone for itself or for other stones. The meaning does not reside anywhere else than in the representation. Meaning is an attribute of the things of representation, starting with the attribute of existence itself.

Before being a representation, the world has no meaning, there are neither things nor facts of the world, the world has no shape in itself.

The question of the relation between the forms of the world and the meaning that we give them is therefore a question with no object. We do not perceive forms of the world.

We do not experience the world in the sense of taking cognizance, be it approximate or approximately isomorphic, of something that would already be there, we only extend the meaning that we give to the world that we represent.

Nothing therefore has meaning apart from our Knowledge which takes on meaning.

It is not the forms of the world that take place in space and time, but the forms that the subject gives to his representation.

There are not on the one hand the forms of the thing in itself and on the other the meaning that we give it or that we give to the phenomenon that this thing in itself creates, there is only the meaning.

What then is the meaning? Not the meaning of things in themselves but the meaning of the representations of the subject?

It would also be absurd to claim that a state of thought corresponding to a representation "would have meaning" in itself. Of two things, one in fact:

- Either the state of thought is the (neurological) state of a thing which cannot have meaning in itself, it is then necessary to give it meaning and for that to ask the same question, it would be to start an endless recurrence.

- Either with Kant we choose the psychological acceptance of meaning of which we can only describe the extensional part, that of the relations of an element of meaning to other elements, described in the world of meaning. But then we know nothing of what is beyond the horizon which hides from us the intensional part of meaning. Certainly the syntactic rules could seemingly be detailed *ad infinitum*, certainly the horizon of meaning could seemingly be infinitely pushed back, but the fact is that it has never been crossed. In this case we should be content with the mysteries of the psychological meaning.

Even more absurd would be the thought that meaning can be the present attribute of a thing in itself or of a state of thought in itself: how extraordinary indeed the diversity of the thing and, even more evidently, of a state of thought could they be associated in the present moment in a real attribute. Although meaning appears to us to be present in its extensional description, the intensional nature of meaning cannot be present. Meaning does not belong to the state of the world, nor to the subject's state of thought.

And yet, since we are reality and since in a certain way the meaning is in us, the meaning is reality.

*p118 AK 30 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 the form of the phenomenon ... it is necessary that the form of the phenomenon resides a priori in the mind, ready for all sensations, and that it can therefore be considered apart from any sensation.*

Isolated from its context, this proposition seems like a failed act since, devoid of form, no matter can create a sensation. Pure (logical) matter is unfounded, while (formal) sensation is quantified. Existence is not "in itself", it is a form. For a sensation without form, the probability to exist would be zero. Why then not do without the "matter" of the phenomenon?

Without singularities of form such as OK describes them, sensation would be without consistency, without existence. Aesthetic sensation, the Fact of Knowledge requires a singularity, quantified by its very logical nature. Quantified is equivalent in this case to: "of non-zero probability of existing".

The law of quantification is not in the nature of the phenomenon but in the rules of the game, in the principle which makes all sensation possible, and this principle is in the subject.

Moreover, the Kantian idea that form would reside *a priori* in the mind comes up against the nature of the form: what would be the pure form which resides *a priori* in the mind, if not a form?

To this question Kant does not really answer:

*p118 AK, IV, 30 I name pure (in the transcendent sense) all the representations in which nothing is found which belongs to the sensation. In accordance with which the pure form of sensible intuitions in general is found a priori in the mind, where the diversity of phenomena is intuited in certain respects.*

This second proposition reinforces the unfinished aspect of the reasoning: what is the use of sensitive intuition, external sensation, so-called empirical meaning, if in any case nothing will take up form except through the relationships between pure forms residing *a priori* in the mind?

Let us now specify what the transcendental meaning is.

We have seen that neither materialistic nor idealistic explanations provide a satisfactory answer to this question. Each in its own way imposes on its supporters either infinite regressions or obscure areas.

Since we want to transcend the subject, our definition of meaning must transcend his understanding and more generally his consciousness.

*B94p156: ... we can reduce all the actions of the understanding to judgments, so much so that the understanding in general can be represented as a power to judge. Because it is ... a power to think. To think is to know by concepts. But the concepts relate, as predicates of possible judgment, to some representation of an as yet undetermined object.*

The notion of judgment is much more than the relation of a concept to others or of a given representation to a concept. Judgment according to OK replaces an inexpressible complex with an act of representable complexity in the multiplicity of the subject. This is precisely what happens in court: the judgment replaces an unspeakable (because too complex) set of circumstances with the simple act of the imposed sentence. We could also say that the judgment brings out of a reality of infinite dimension, descriptive order modes in the space of finite dimension that is that of meaning.

Beyond the Kantian vision, the OK states that the judgment thus defined owes nothing to understanding.

To shed some light on this, let's take the example of the casino:

If Alice enters the casino with a finite amount of money (as large as you like) and the intention of playing roulette indefinitely, then her ruin is a **judgment of necessity**.

The expression "judgment of necessity" owes nothing to understanding or intuition or any act of faith on the part of Alice, or the understanding of a third party observer. The term *necessity* denotes the singularity of a mode of order, the term *judgment* denotes that the relationship between Alice's entry (Fact A1) into the Casino and her ruin (Fact A2), although necessary, is logically unprovable (incalculable).

"Judgment of necessity" means that the probability of Alice's ruin, "knowing" an initial state of affairs, is infinitely close to 1, although the calculation of the term and all the sequences leading to it is impossible. The Act of entering the casino brings out the meaning of the predicate "Alice is ruined" as a probability infinitely close to 1.

Knowing the initial condition A1, all the possible contingent logical paths will inevitably lead to the attractor that is A2.

The necessity of A2 is a mode of order of the logical interdependencies attached to A1.

This relation is an element of meaning attached to Fact A1

The meaning of an experience is the experiences that it makes possible.



In the same way, knowing the initial condition "Bob rolls a dice" all the possible contingent logical paths would lead to the attractor which is "the dimensionless space of the 6 equiprobable results".

What Alice is at instant A1 is unspeakably complex. Nevertheless, the relation of necessity between the Fact of Knowledge A1 revealed as such and the Fact A2 not yet revealed is a one-dimensional singular order mode in the unspeakable set of interdependencies associated with A1.

By the fact of this singular mode of order, the inexpressible complexity of A1 becomes speakable simplicity in the multiplicity of Alice or of an observer. This singularity whose Shannon entropy is zero constitutes an element of information in the multiplicity of Alice as a subject of her own becoming (and of a third observer).

The judgment of necessity states that in the representation E1 the necessity of the individuation A2 is already at work.

The necessity of A2 knowing A1 is an (speakable) element of meaning of A1

The necessity of Alice's ruin does not depend on a state of Alice's finances but on the rule of the game of roulette. The predicate "ruined", although it appears attached to Alice and to her temporal becoming, in fact finds its reality in 'a rule of the game', in In-act conditions of possibility, the reality of which is 'outside' Alice's own space-time, with no time relation to her future.

The reality from which the meaning of Fact A1 emerges is not 'in' A1 but in the conditions of possibility of its experience, that is to say in the multiplicity of the knowing subject.

The ruin of Alice is necessary before its revelation by the Contingent Act. That ruin appears to be future, that the paths to this ruin appear as endless series of chances, should not make us forget that the relation of necessity, the mode of order, finds its reality in the general conditions of possibility of experiences that are not related to the future of Alice or the observer.

Meaning as necessity (as a singular mode of order) transcends the contingent paths of its revelation.

A proposition such as <this stone is green> differs from the proposition <Alice is ruined> (stated in the third person) in that nothing contingent seems to separate the stone from its color in our representation. In this case, the stone and its color emerge as "A Fact" on the logical horizon of meaning. Color appears as a "simple necessity" and not as a "judgment of necessity".

The horizon of meaning could nevertheless be pushed back to reveal the contingencies which fulfill this necessity, it will then appear that the conditions of possibility of "color" do not belong to the present moment of the "stone" as a Fact. In reality, the color green does not "belong" to the stone.

Knowing that Individuation is a judgment of necessity, this shows that the distinction between the predicate attached to the State of Fact and the law of probability on the contingent modes of Individuation of the Fact depends only on the possibility of cuts: Without cuts the predicate appears attached to the state of fact in the representation of the subject, if cuts are possible the predicate is detached from the fact to become law in the representation of the subject.

The distinction between the meaning of the Fact as a "state" or as a "becoming" is only a matter of the horizon of the meaning.

What to remember about the meaning:

- The meaning of a Fact (of knowledge) is the law of distribution of probabilities on the Facts that its revelation makes possible.
- Meaning is not a state but an act. In this the meaning is animated.
- Meaning as necessity transcends its revelation.
- The reality of the meaning of a Fact is not in the Fact itself but in the conditions of possibility of its revelation.

### **The transcendental subject**

The (transcendental) subject is an individuation, one instance of a necessary mode of order imposed by the Logos.

*The reality of this mode of order is unfounded. Order is neither material nor psychic. It is purely logical, out of time and space.*

The proposition <I am-I become myself> is therefore not a proposition which would appear to the understanding of the subject but it denotes, in the first person, a transcendent logical necessity.

As we saw in the previous chapter, the meaning of "what I am" is the law of probability distribution on the

possible, ie contingent, modes of fulfilling this necessity.

Indeed, since the reality of the subject is unfounded, each of these modes of filling is in turn an individuation, one contingent instance of a necessary mode of order.

The need to "become myself" transcends the meaning of "what I am".

The individuation of the subject does not occur by the conjunction of atomic processes (impossible to found), it is in the subject the first necessity which is separated in contingent modes by iteration of the Logos.

*To use Hintikka's term, a logical analysis of the meaning of the world should therefore not be a synthesis from atomic propositions, but truly an **investigation** on the **modes of filling** the  $\rightarrow I$ . Investigation which would elucidate the 'how' of an a priori necessity and in which each question is made possible by what is already known.*

The simple meaning (the one digit information) of "I become myself" subsumes the whole meaning of "what I am"

The probabilities which constitute the meaning of "what I am" merge into the certainty of "becoming myself".

Because of that, any Fact which exists for the subject is interdependent of all other Facts of his representation, not only in its individual meaning but in its very possibility of existing.

Nothing that exists (for the subject) is in reality disjoint.

In other words, since the intensional from which an extensional meaning emerges does not "belong" to this meaning, when two Facts appear to us to be disjoint on the horizon of meaning, this in no way implies the disjunction of their intensionalities (indeed this expression has no meaning), we can just conjecture the quasi-certainty that any experiences that we could practically make from them would appear to us to be disjoint.

*NB: the question of an existing infinity is therefore irrelevant*

Only that which is a necessary condition for his individuation can exist for the subject.

This allows us to specify what an evidence is: the subject acquires the evidence of a Fact A when the Fact becomes a necessary condition for his own existence, when not  $A \rightarrow$  not I

Any proposition that arises in the subject is an element of the meaning of "what I am".

*NB: This is an extended form of the Cogito.*

The proposition <All that exists is " in me " although I am not all of reality> is only true in the first person. It denotes that in essence, the meaning of the world is relative to the subject, subjective.<sup>1</sup>

Since ultimately the one-digit "I become myself" subsumes (merges) everything that has meaning for the subject, the existence of a Fact for the subject depends on everything that has meaning for him.

Because individuation is a transcendent principle, the subsumption of "all that exists" by the "I become myself" determines in the subject himself (and not "outside") the conditions of possibility of all experience.

Any revealed Fact in turn contributes to the conditions of possibility of the following experiences.

The conditions of possibility of experiences are therefore also subsumed by the need for the individuation of the subject.

Fulfilling the necessity of the transcendental subject is in one Act, the meaning and what gives meaning.

The idoneity of the representation by the knowing subject is therefore not constructed but *a priori*, its necessity transcends the subject and its representation of the world, in the same way as the necessity of "I become myself" of which it is a corollary. .

The persistent idoneity of the representation is the result neither of an "impossible contingency", nor of an

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<sup>1</sup> Everyone knows how risky it is to speak about the subject in the third person. Doctors of body and soul experience this every day. The difficulty is precisely that in the third person, the subject is an object while it is in the first person that he is affected. Meaningful propositions in the third person are either insane in the first or do not have the same meaning, and vice versa :

The proposition <He is> denotes a contingency while <I am> denotes a necessity. The propositions <I represent my world>, <He represents his world> and <He represents my world> do not have the same meaning at all.

To transcend the subject is to transcend morphogenesis. Materialist representations, psychologists, phenomenologists, formalists ... one way or another avoid this transcendence, which makes them comfortable but strikes them with an essential confusion. Kant did not transcend the psychology of the subject.

The OK does not escape this difficulty since by obligation, it tries to describe beyond the horizon of meaning with concepts that only have meaning below. We will therefore not claim that the 'transcendental subject' of the OK truly transcends morphogenesis. We will only say that the OK tries to push back the horizon of meaning and that this expansion of our representation involves a considerable questioning of its laws.

"evolutionary process" of the Darwinian type, but a mode of order transcending the subject, in which expansion and individuation of meaning are necessarily balanced.

Although the transcendental subject, being a mode of order, is not subjected to time, the meaning he gives himself and the world is animated by the very nature of meaning, as we saw in the previous paragraph. This **anima** is the essence of a **subjective time**, of a time of the subject according to which his own representation and that of the world seem to become. The anima is also the essence of the subject's power to know, that is to say the reason why his representation is constantly expanding through the emergence of new Facts, even though the reality of the subject is out of time.

There is nothing mysterious or even new in the anima: the exchange between revealed meaning and the power to know could just as well take the mathematical form of the dynamic equation of a wave.

The essential things to remember about the transcendent subject:

- The transcendental subject is individuation.
- "I become myself" transcends "what I am".
- Only can exist for the subject what is necessary for his own existence.
- All the Universe exists in the subject although the subject is not all of reality.
- The Existants of the world appear to the subject by separation of his own Existence.
- In this, all Existants are interdependent. What makes meaning depends on everything that makes meaning.
- The representation of the world by the subject is and remains idoneous out of a necessity.
- Although the subject's reality is not subjected to time, his meaning is animated.
- The nature of meaning is the essence of time in the subject and his power to know.

### **Back to Kant**

Essentially, Kant's view is not incompatible with that of the OK. However, let us underline the main differences:

#### ■ **Time:**

*P292 We must succeed in grasping time as a form of internal meaning by depicting it by a line and the internal change by the tracing of this line (movement) (Editor's note: the act), as well as, consequently, [Editor's note: by depicting ..] our own successive existence in its different states by an external intuition; the specific reason for which is that any change presupposes something permanent in intuition, if only to be itself perceived as change, but that there is absolutely no permanent intuition in the internal sense.*

For OK this declaration is unjustified in that existence is not a succession of states of existence. Existence is not the state of something. To exist is meaning, including the existence of the subject for himself. To exist for the subject is to have meaning for oneself.

The meaning does not state "what is" externally or internally but what is made possible because of what Exists for the subject.

This relationship between what exists and what it makes possible is transcendent. Certainly it appears as such to the subject's mind: my mind knows how to think of the relationship between <snow> (as existing) and <cold> (as possible), but this sayable relationship is only an emergence beyond the unspeakable according to a judgment of necessity (which transcends, ie logically precedes the spirit, according to the definition of the OK).

In a way, the Existing <snow> is the label of a set of vectors (the possible ones) with a probability law. All these possibilities are the attractors of meaning which determine the multiplicity of the subject.

By its nature of judgment of necessity, by the "existential" relation between present meaning and meaning to come, meaning constantly escapes the present moment of the Existent.

The essence of time is therefore in the very nature of meaning: the intensional reality from which the meaning of the present moment emerges contains the possibility, even the necessity, of other experiences which will come to increase the existing and so on, irreversibly.

Meaning is nothing more than a promise of meaning.

The "present" is (extensional) meaning, but the (intensional) reality of that which has present meaning does not belong to the present moment.

The meaning of "I am" is not in a real present state of the I (which would be absurd since I is not One in reality) but in the fact that the experience of the I makes it almost certain (of a probability infinitely close to 1) the experience of the I.

Existence is therefore change, without reference to an external intuition of time.

Note: The Kantian proposition <that there is absolutely no permanent intuition in the internal sense> is not

justified for all that. On the contrary, the first axiom of what Kant designates as the internal meaning is the transcendental permanence of "I become myself".

■ **The direction of intelligibility:**

*B130 p 197 ... any connection is nonetheless an act of the understanding, which we would like to designate by the general name of synthesis*

*B132 p 198 All the diverse of intuition maintains a relation to the 'I think', in the same subject where this diverse is found.*

*I call this unity of the representation (of the I think) the transcendental unity of self-consciousness, to designate the possibility of the a priori knowledge which proceeds from it.*

According to Kant himself the unity of the subject is transcendental, the above quotations are then contradictory: The unity of meaning being transcendent cannot result from a synthesis (convergence towards the I-think). On the contrary, the meaning of the world and of the subject itself emerge by separation from an I-think whose unity is a priori necessary, in its contingent modes of realization.

The meaning of the world appears to the subject as an investigation of fulfillment (starting from the primary necessity of I-become).

The questions of this investigation (the experiences) are dictated: 1) by the Existing (i.e. what has a present meaning) and 2) by the rules of the multiplicity of the subject (i.e. the set of meaning attractors, singularities beyond the horizon of meaning, Actual although not represented).

Only experiences are possible which contribute *a priori* to the becoming-self of the subject, i.e. the result of which is *a priori* intelligible, i.e. in accordance with the laws of the multiplicity of the knowing subject: Only can exist what has *a priori* meaning for the subject.

This constraint should not be understood as a *sine qua non* condition: "if my experiences had no meaning they would not contribute to my becoming and I would disappear" but, conversely, as a result of transcendent necessity (outside of time and causality) of my individuation: "my experiences have meaning for me because this meaning is imposed by the necessity of my becoming".

The subject does not "discover" the world, he extends his representation of the world from a present representation and provided with a set of possible meaning attractors which are all compatible *a priori* with his individuation.

The intentionality of the subject, beyond the definition given by Brentano and Husserl, does not content itself with identifying the object of the experience: the process of intentionality includes in itself the spaces of potential results, the attractors of meaning potentially accessible from the initial condition of what exists. Space and time do not come from external aesthetic intuitions but from the separation of individuation into contingent modes.

The world does not synthesize the subject. The world does not make itself intelligible to the subject. The subject does not synthesize his own meaning.

The individuation of the subject is a singular mode of order in a formless logical reality.

All individuation carries the information "I become myself".

The world results from the separation of this information into its possible modes of order.

We can easily see the major impact of such an inversion of intelligibility on the representation of the world:

Not only does the world require neither forms nor laws since the laws of meaning are imposed, but also, since the "I become "is the ultimate limit of any representation, all concepts of infinity must also comply with this limit.

The question is therefore no longer "are there real infinities in relation to the concepts of potential infinities?" But "is a concept of infinity even possible?". This subject is detailed by the articles ref MOND and LAMG

**The horizon of meaning**

Where and how is the "limit" established between the world and the meaning given to it by the subject? (but we saw that a horizon is not really a limit)

What is the horizon of meaning and why is there only a horizon of meaning?

This question arises in a particular way for the Kantian vision as well as for the OK since in both cases it is the subject which gives shape to the world: The objects that we represent are not "delimited" by their form in the world but by the logical laws of our knowledge.

We must get rid of the idea that the horizon of meaning would be an absolute limit, objectively linked to what would be representable or sayable in reality. Since representation is subjective, the horizon of meaning is also relative to the subject.

The question is therefore not: where is the horizon of meaning located, but up to what level of complexity and up to what depth relative to the primary meaning of "I become myself" can information be separated? In fact, the classical school escapes this question only by the power of habit: why do we perceive objects rather than the tiny substance of which they are made? Why the ocean rather than quarks scattered in a vacuum? Why the Space-Time as we know it? The usual answers to this question, which involve the resolution of the senses, the intentionality of the subject or a selective advantage, are nothing but vouchers for an infinite number of other questions.

The case of the OK has this specificity that on the one hand it imposes to transcend the psyche of the subject to seek his purely logical nature and that on the other hand reality is unfounded. The horizon of meaning cannot therefore cling to the subject's mind or to the atoms of meaning.

For the OK there is in reality neither subject, nor object, nor substance. The transcendental subject is only a singular mode of order, a logical necessity and the Facts of Knowledge which take on meaning for him are also only singular modes of order which we have shown that they necessarily present in turn, potential singularities.

Representation occurs by separation from individuation and not by synthesis.

The tool that regulates this separation is the multiplicity of the subject, the set of non-existent Actual (possible) attractors.

The singular modes come to Exist on the horizon of meaning according to laws of probability on all possible modes (Actual) beyond this horizon and the laws of probability of these possibilities are the meaning of the Existing.

The subject is both what is described and what describes. Knowledge contains both meaning and the tool that gives meaning. Subject Knowledge describes himself, in himself.

The Facts of Knowledge while taking meaning push back the horizon of meaning.

If, to simplify the reasoning, we admit that the individuation of the subject is a logically individuated subset of reality<sup>2</sup>. If we simply say that Knowledge is not all of reality.

Then we can state that:

***-Meaning runs through Knowledge like a wave of judgments of necessity.***

***-The horizon of meaning is the front of this wave.***

***-This wave of meaning is the knowing subject.***

Let us recall that 1) nothing changes in reality, 2) the propagation laws of this wave are probabilistic and 3) the meaning is immeasurable to Knowledge.

We still do not know why the subject is not limited to the simple information "I become myself", which only means the certainty of his existence. Why is his existence separated into speakable information and, conversely, why can it not be separated infinitely into speakable information?

Why and according to what logical law does the (speakable) judgment of necessity replace the (unspeakable) reality which it judges?

Does the complexity of meaning have a theoretical maximum of pure logic?

Is our multiplicity by principle or by accident limited quantitatively or at least qualitatively in its capacity to create meaning?

Our reflection can be limited by two remarks:

1-Since reality is unfounded, without atom of meaning, the proposition which would describe the Knowledge of the subject in all its modes is impossible to write. The very idea of finitude or infinitude of such a proposition is absurd. The proposal of the OK: <Reality is pure logical interdependence, immanent, formless, unspeakable> is certainly necessary for us to start with but it bluntly exposes its own paradoxes.

2-The proposition "I am" seems to impose itself as truth but does not mean anything by itself: it only takes on meaning through the transaction "I become myself" which only takes on meaning through the propositions that it makes possible then probable then necessary.

Our field of reflection is therefore limited at one end by a representation which would say everything about objects with impossible Existence and at the other end by a representation which would say nothing about an object with certain Existence.

Let us recall then that the separation of meaning from the first meaning "I become myself" occurs according

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<sup>2</sup> Note, however, that Individuation is only an asymptotic mode and that, in the case of the human subject, residual interdependencies play a decisive role since it is through them that the subject is interdependent on his culture, i.e. on his language. What would representation be without language? This subject is dealt with in ref PLOC

to possible modes of individuation. An element of meaning in a representation is therefore an individuation or a law of probability on possible individuations. Information that contributes to the meaning of our representation therefore implies at least one dimension, the dimension of becoming-self.

This remark highlights a semantic and epistemological problem which affects logic (and the theories built from logic): The logical propositions <the stone>, <the stone is black> or <the stone breaks the scissors> have the form of truths without temporal thickness, that is to say which could be both true and present.

This form attributed to truth contradicts the fact that information is an individuation, a becoming, an act. Such a form allows concepts of logical grains whose meaning could be both true and present (hence the terms graining).

But these grains would be strictly meaningless since meaning is a becoming.

There can be no meaning present.

There is confusion between the world of representations in which things Exist in the present and the transcendental subject in which they take on meaning by contributing to his becoming.

Logical information can only take on meaning in the subject and only as a participation in his future.

Proposition A denotes in the subject not "the object A" but "the becoming-self of A".

In this sense, if a proposition A denotes the Unity of a complex or a judgment of necessity, it is of logical stringing that one should speak (and not of graining). It is according to this string (or this strand) that the logical Fact can be assimilated as individuation to the information it carries. The meaning of logical Fact is a necessary *a priori* balance between expansion towards the complex and fusion towards unity.

Replacing the Fact/object by the Fact/becoming allows to reconcile logic and geometry:

- 1) the logical Fact is a becoming, a judgment of necessity, an asymptotically one-dimensional mode of order.
- 2) the meaning of the logical Fact is a law of probability on all the possible modes of fulfilling this necessity, on the various contingent paths of accomplishing this necessary becoming.
- 3) all possible Facts are subsumed in the necessity of the subject's Existence.
- 4) Possible Facts, in order to be distinct, must contain contradictory elements. Only certain, Existing Facts are non-contradictory.

To cope with these conditions the structure of the space of possibilities must be geometric (ie extend in several dimensions).

The logical space of possibilities is also the multiplicity of the subject where possible experiences are determined, ie which meanings can come to Exist for the subject. It follows that the subject represents the world in a geometric space.

Mathematicians will no doubt know how to formally compare this geometric logical space to the space-time in which we represent the universe.

We shall now complete our proposals:

***Meaning runs through Knowledge like a wave of judgments of necessity,  
This course has the structure of a geometric space.***

Let us now return to the distinction between the concepts of Knowledge, Multiplicity and Representation.

In a simplistic way, this distinction covers the 3 modes of order of reality as defined by the OK:

- The **En-act**: Formless, immanent, interdependent, unfounded reality (vacancy of order)
- The **Existing**: What has for the subject, a present, almost certain, necessary meaning. (the established order modes for the subject)
- The **Actual**: What is made possible, although not existing, by the Existing (possible order modes).

*NB: These are modes of order : The Existing is not "another thing" than the Actual which is not "another thing" than the En-act.*

-**Knowledge** (of the subject) is the In-act reality (the set of interdependencies) "included" in the Individuation of the subject. Except for that inclusion, Knowledge is formless, interdependent, unfounded. Knowledge has no meaning.

-The **Representation** is the Existing for the subject: these are the modes of order which, within Knowledge, have for the subject a present, certain, necessary meaning. The representation appears in the present of the "I".

Any Existing A of representation appears to the subject as a necessary condition of his individuation (which is denoted  $I \rightarrow A$ ). The Existing is non-contradictory since  $\text{non-A} \rightarrow \text{non-I}$ , while I is a transcendent necessity for the subject.

-**Multiplicity** is everything that is made possible by the meaning of the Existing, by the present

representation. We have seen that the meaning of the Existing is the law of probability of the experiences which are made possible. All possibilities are Actually possible. They are nevertheless not Existing, not present, not subject to non-contradiction and do not have the same probability. The fusion of the probabilities of all the possibles cannot exceed the certainty of the Existence of the subject, by this the possibilities are interdependent. The possible meanings recombine until new Existants emerge which in turn modify the law of probability of the possible, and so on. These definitions make it possible to "locate" the horizon of meaning: the horizon of meaning is the locus of logical Acts by which the Existing statistically emerges from the possible.

We can now conclude (provisionally) on the horizon of meaning:

- Meaning runs through the transcendental subject (Knowledge) like a wave moved by logical judgments of necessity.***
- The course of that wave has the structure of a geometric space.***
- The horizon of meaning is the front of this wave, the locus of logical Acts by which the Existing (ie certain) statistically emerges from the Possible.***
- This wave of meaning is the knowing subject.***

# The Ontology of Knowledge and the Kantian transcendental

Jean-Louis Boucon

## Introduction:

Kant's "revolutionary" criticism of the representation of the world triggered debate since its publication and is still being debated. The excellent article by Prof. J. Dubucs: Beth, Kant and mathematical intuition (Ref Dubucs) gives an edifying example.

Insecure interpretations of what the "transcendental" is are largely involved.

The aim of this article is not to restore the original meaning of the term, nor to make the history of the polemics, nor to take sides.

We propose to integrate the concept of the transcendental into the general theory of the Ontology of Knowledge (OK), while remaining faithful to what seems essential to us in the Kantian texts, then, by way of example, to analyze in this frame the implications of the transcendental emergence of meaning on the construction of a geometry.

The preliminary reading of my articles (Ref OK and LAMG) is recommended without being essential.

## 1-What is the transcendental in the OK?

Reality in itself has no meaning, it transcends meaning.

Reality is not *a priori* ordered in points, lines, shapes, categories, laws, etc.

A "principle" however allows the meaning to emerge for the knowing subject and allows him to describe a world having form, order.

This principle is the **Logos**.

As a principle of order the Logos is not of substantial nature, neither are the orders that it creates nor even what it orders.

There is no substance.

The Logos does not create reality although it does make categories to Exist.

We must distinguish the Existing having form (speakable) from the formless Reality (unspeakable).

The Logos and its instances are purely logical, they transcend the physical, the psychic, the cultural because these terms already denote categories of meaning, modes of order.

The logical facts which, acting the Logos, cause meaning to emerge are said to be transcendental.

The subject can only know what has meaning for him, that is to say what emerges from the transcendental, but he cannot give meaning to the transcendent which is "before meaning".

The reality of the transcendent is not separated into "things". Individual things as well as predicative categories come into Existence only through meaning.

The reality of the transcendent is neither in time nor in space, which are predicative categories.

However, the meaning does not designate "something other" than the transcendent reality from which it emerges. The meaning of a chair does not designate something other than the atoms it is made of which in turn do not designate something other than the particles they are made of, etc...

It is therefore strictly true that the transcendental is the condition of possibility of all experience.

Note 1: The notion of truth as the adequacy of a proposition (even if it is the simple expression of a sensitive intuition) to the reality it denotes is meaningless. Gonsseth quite rightly replaced it by that of idoneity which in the context of the OK, would be defined by the *de facto* impossibility for the subject of experiences that would invalidate the proposition.

Gonsseth elevates idoneity to the transcendental level by showing that the principle that (statistically) governs judgments assimilates invalidating experiences and corrects itself to restore future idoneity of meaning. As a result, the propositions that emerge from it appear to be true *de jure*.

Note 2: The knowing subject is himself transcendental. He is a mode of order in formless reality, an individuation from which emerges the meaning : the meaning of the "I" which is filled with the meaning of the self and the meaning of the world.



It is the transcendental which brings into existence in the subject both the "supposed" empirical objects of his sensitivity and the ideal objects created by his understanding, including geometrical space and time.

Mathematical objects are the idealization and then the conceptualization of the objects of our sensitivity. They therefore have the same nature as the objects of our sensitivity.

The same is true of the relations, classes, categories, attributes and laws that are associated with them.

All are representations, singular modes of orders resulting from "transcendental" laws which make the sense emerge out of a reality without form and of which the subject is himself a mode of order. They are in a way the speakable end of the transcendental.

Everyone understands that the sensitive intuition of a color is the product of a "transcendental" construction and that despite our ability to give a partial meaning to this construction, beyond a horizon of meaning, the meaning of a color vanishes into the transcendent.

From this point of view, spatial intuitions cannot be distinguished a priori from other sensitive intuitions.

## 2 What should we understand by "the transcendental is the condition of possibility of all experience"?

In the absence of a formal reality in vis-à-vis, what should be understood by experience?

Experience is the emergence of a new meaning from the present meaning.

Objects, relationships, classes, categories, attributes and laws emerge from the subject's global capacity to represent through transcendental judgments.

The knowing subject is involved in these judgments, not as the "patient", not as the "actor" but as being himself the first transcendental judgment: "I exist - I will exist" that the Cogito already expressed.

Let us quote Schopenhauer: "the world is my representation"

That proposition shall be understood as " the world is what fills the representation of my Existence "

It is this first transcendental condition of possibility of all experience, which explains the necessary idoneity of transcendental constructions: The Existence of the subject logically precedes the meaning he gives to the world and to himself. This necessary Existence is the first transcendental judgment of which all other judgments are only contingent modes of realization. "Nothing can exist in the subject's world that does not contribute to his individuated existence."

Note 3: Let us underline in passing what Schrödinger designated by "the elision of the subject" by science, which conceals from us that the existence of the subject is the first postulate of all signification.

According to the OK the meaning of a representation is the structure of transcendental judgments on the contingent modes of realization of the necessity of "I exist" with the present meaning as initial condition.

The present meaning is certain, necessary, non-contradictory and gradually makes possible other contingent embodiments, other experiences. These possible experiences are not equally likely. An experiment makes a possible to Exist with certainty and excludes contradictory possibilities. In doing so, it changes the law of probability on the possibilities to come, that is to say the newly present meaning. And so on.

The expression "the transcendental condition of possibility of all experience", far from designating the a priori register of all the forms whose experience would be possible or of all the forms of pure intuition, designates the rules of the game, the general principle by which the necessity of the subject's existence is separated into contingent contributory necessities. This general principle is declined in classes of eigen-solutions, in singularities towards which "aim" the judgments of necessity .

### 3-Analysis

To analyze the effect of the transcendental emergence of spatial intuitions, the example of the triangle would be badly chosen because its complexity makes us lose sight of the essential. Let us rather analyze "the geometric point" by including what both individuates the point and associates it with other existing points for the subject.

Before therefore considering Euclid's postulate or the sum of the angles of a triangle, let us try to understand what is transcendent in a proposition such as "two points".

3-1) Let us imagine to begin with a point made up of one millionth of a gram of carbon deposited by the tip of a pencil on a sheet of paper. This point contains approximately one billion billions ( $10^{18}$ ) of carbon atoms, which at each moment return, by chance each time renewed, comparable quantities of photons. Our empirical intuition will however be that of One point.

Certainly our understanding can give a partial meaning to the emergence of the intuition of this point, empirical experiences are possible to make intermediate representations appear to us, however our investigation towards the reality of this point is always lost beyond a horizon of meaning. It is therefore through the transcendental that One point emerges to the sensitive intuition of the subject.

3-2) Back to the proposition "two points": Beyond the horizon of the meaning, in the transcendent part from which this proposition emerges, by the very conditions of possibility of its instantiation, the subject and the two points cannot be independent because both exist in the same universe for the subject.

This seems to contradict the disjunction implied by the extensional sense of the proposition.

In fact the concepts of "existence", "unity" and "disjunction" do not have meaning beyond the horizon of meaning.

In our proposition "two points", not only the form "point" but also the joint existence of the two points for the subject and the relation of disjunction between these points result from a transcendental construction.

Opposing the empirical to the transcendental is meaningless. The transcendental makes possible the appearance to the sensitive intuition of objects, forms and predicates.

*More details on the modalities of meaning emergence are given in my articles in reference.*

### 4-What are the implications of the transcendental emergence of meaning on the elaboration of a geometry?

Let us say first of all that nothing prevents the subject from constructing a geometry according to the mathematical method, from empirical intuitions, by idealization, conceptualization, axiomatization, formalization. This elaboration, carried out in the domain of meaning, makes it possible to construct the multiplicity (three- or four-dimensional) in which the subject describes the world. We can analyze the formal coherence of this construction by understanding and its idoneity by empirical experiments.

Nevertheless, the transcendental emergence of meaning affects this construction of the following "weaknesses":

aI- The object A which appears One in the meaning is in reality of an unfathomable complexity.

aII- The proposition <A exists> is unprovable, its kind is of a judgment of necessity.

aIII- The disjunction of A and B is unprovable and its kind is of a judgment of necessity.

aIV- A relation  $A \leftrightarrow B$  such as it is taken into account in the multiplicity of the subject is only the extensional sense of a set, with unfathomable complexity, of interdependencies between {all what is A} and {all what is B}, it is unprovable.

aV- The principle of non-contradiction is only valid in extensional multiplicity and its kind is of a judgment of necessity. Thus the relation  $A \leftrightarrow B$  can present, in its transcendent reality, beyond the horizon of meaning, two possible modes  $A \leftrightarrow C \leftrightarrow B$  and  $A \leftrightarrow C' \leftrightarrow B$  such that C and C' would be contradictory. However, the subject will only be able to experience (make Exist) one of these two modes.

aVI- The totality of the (extensional) meaning that I can give to the world is subsumed by the

primary meaning "I exist". This justifies the reflexive proposition of that of Schopenhauer: "I am the representation of the world".

That proposition shall be understood as " my Existence is what embeds the representation of the world "

From these six "weaknesses" it results among others:

bI-Any proof by infinite induction of a logical inference is invalidated as proof and reduced to the status of a practical judgment of necessity, ie the practically zero probability of a contradictory experiment.

bII- The axioms and the laws of inference which provide the formal proof of Euclidean geometry result from transcendant judgments. These axioms and these laws seem true to us *de jure* whereas they are only *de facto* idoneous, as we have seen (in 1-nota 1). The experience of non-Euclidean facts is therefore not totally excluded. On the other hand, the empirical existence of non-Euclidean facts denies the idoneity of Euclidean geometry and imposes on the subject a new geometry which integrates these facts without calling into question the necessary integrity of his I.

There is nothing extraordinary about this. This is how science progresses.

bIII-The point aVI makes, in principle, impossible the existence for the subject of a geometrical space containing an infinity of points (or objects) with Existence ie signifying \* (whatever the number of dimensions of this space).

\* An order relation gives some meaning to the objects it orders.

***The notion of infinity has no meaning beyond the horizon of meaning.***

Annex  
**In mundo non datur ...**

**Preamble :**

The aim here is not to explain or challenge Kant's Critique of Pure Reason (ref CRP), but to show that one of the principles of the OK is already present in the "Critique".

Principles analysis

Postulates of empirical thought p285:

*"The laws that common sense and science still attribute to the Universe today, to this external reality which we believe we 'have' taken cognizance of, in fact result from the laws of understanding, from rules which, at the same time, make possible and give shape to any experience. "*

There is certainly something arbitrary in choosing this passage. Let us say that it is relevant in relation to the objective, that it has the advantage of being quite understandable (which is not negligible concerning Kant) and that it seemed to me to be of particularly general value.

The Ontology of Knowledge differs from Kant's Critical Idealism in that (and many other aspects) it dehumanizes Knowledge. For the OK a Knowledge is not built by the understanding of a knowing being. The OK defines Knowledge as a bundle: The bundle of interdependent relationships that link, step by step, what we call a point of view to an informal reality. The shape of the world results from the laws which govern its course. As a result, there is no frontier for Knowledge between the internal and the external, between the object and the subject. Knowledge is no other reality than Reality.

**Development :**

Several times in this extract Kant reminds us that his demonstration concerns phenomena and their perceptions that meet the general laws of experience.

*"So it is not from the existence of things (substances), but from that of their state that we can know necessity, and that from other states which are given in perception, in accordance with the empirical laws of causality. From which it follows that the criterion of necessity resides solely in the law of possible experience, that everything that happens is determined a priori, phenomenally, by its cause. Hence it is that we know only the necessity of the effects occurring in nature and the causes of which are given to us, and that the character of the necessity in existence does not extend beyond the field of possible experience, without to be valid, even in this field, for the existence of things as substances, since these can never be considered as empirical effects or as something which occurs or which is born. Necessity therefore concerns only the relations between phenomena according to the dynamic law of causality and only the possibility, which is based on this law, of concluding a priori, from any given existence (from one cause) to another existence (to the effect) "*

Note 1. For the OK the reverse is the case, it is the Actually singular probability of this effect as a "future" phenomenon which is the meaning of the cause; in that this singular probability makes conjectures effective. *likewise: no necessity occurring in nature is a blind necessity, but it is always a conditioned necessity, therefore intelligible (non datur fatum). These two principles are laws through which the play of changes is subject to a nature of things (as phenomena) or, what is equivalent, to the unity of understanding, in which only they can belong to an experience considered as the synthetic unity of phenomena. "*

Note 2 ... as phenomena: it is Knowledge that opposes the blind chance of causes. The *a priori* law of nature is in fact an *a priori* law of knowledge. No one can know a pure chance without necessarily creating there the meaning of beings who will appear precisely as the causes of the effects that are the sensations. The need for a cause is a law of Knowledge.

This is all the more true since, as Kant shows, causes are never substances but only states.

*Everything that happens is hypothetically necessary: this is a fundamental principle which in the world subjects change to a law, that is to say to a rule applying to necessary existence, rule without which it there would not even be nature. Therefore, the principle: nothing happens by blind chance (in mundo non datur casus) is an a priori law of nature.*

Note 3 The "non datur casus" principle of causation and "non datur fatum" principle of intelligible necessity are linked to the laws which ensure the unity of understanding and make all experience possible.

*These two principles belong to dynamic principles. The first is properly a consequence of the principle of causality (as it forms part of the analogies of experience). The second belongs to the principles of modality, which further adds to causal determination the concept of necessity - but a necessity which is subject to a rule of understanding. The principle of continuity prohibited any leap*

*in the series of phenomena (changes) (in mundo non datur saltus), but also, within the whole constituted by all empirical intuitions in space, any lacuna or all hiatus between two phenomena (non datur hiatus); for one can formulate the principle thus: in the experiment nothing can enter which proves a vacuum or even simply allows it, as if it could be a part of the empirical synthesis. ... Likewise the principle of continuity (non datur saltus) and that of the absence of hiatus or lacuna (non datur hiatus)*

Note 4 This demonstration has since been illustrated by experiments carried out on semi-neglectful subjects following trauma. Although they perceive only a part (for example the left half) of the universe that a normal subject perceives, their understanding synthesizes for them a universe without lack and without hiatus. Ref: *How matter becomes consciousness* G. Edelman G Tononi ed. O. Jacob sciences 2000

The 4 dynamic principles of any possible experience mentioned by Kant can be summed up as follows:

In mundo non datur Hiatus: Principle of absence of voids

In mundo non datur Saltus: Principle of continuity

In mundo non datur Casus: Principle of causality

In mundo non datur Fatum: Principle of an intelligible necessity

To these dynamic principles the Ontology of Knowledge adds, as resulting from the laws of Knowledge, the formal principles which want us to necessarily represent ...

1... ourselves "at the center of our perceived universe"

2... ourselves in a present moment which seems to us to correspond "to the last moment of our perception"

3... the world in the form of beings, existing in this same present moment and becoming according to the same flow of time.

### **Conclusion:**

If therefore, as Kant and the OK show, the laws of understanding (and/or Knowledge) are sufficient to explain the form we give to the world, how does the hypothesis of a form of the world in reality, of an external form, would it be necessary?

Since, through the Cogito, the existence of understanding proves itself. Since Kant shows us that the laws of understanding are necessary and, for the most part, sufficient to justify the form and dynamics of our representations of the world. Why not do without the hypothesis, which is moreover unverifiable, of a form of reality?

The idea is nothing new: the concept of "vacuity of form" has been familiar to Eastern thought for millennia, even if we Westerners, formatted by 15 centuries of Judeo-Christian dogma, want to see in the concept of vacuity a mysticism more than an efficient metaphysics.

Knowledge, "de-humanized" by the OK, is free from suspicions of subjectivity and inconsistency that could be raised vis-à-vis Kant's understanding. The Knowledge is not even "contained" in a knowing subject. The laws which regulate the course of Knowledge are purely mathematical, probabilistic. Applied to courses of a complexity far beyond the imaginable, these laws may present the repeatability of the deterministic laws of the macroscopic world, leading to an invariant representation despite different points of view.

If therefore Knowledge (or understanding) gives form to a reality without form, according to the laws which regulate a course of Knowledge "from" the point of view, then it is absolutely logical that the representation of the world is relative to the point of view.

The principle of equivalence dear to A. Einstein becomes obvious, provided it is rewritten as follows:

"The laws that regulate the representation of the world are the same regardless of the point of view. "

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