Kant’s insight and Kant’s concept of a transcendental logic

Pedro M. S. Alves
Universidade de Lisboa
Centro de Filosofia da Universidade de Lisboa

1. Kant’s questionnaire

One of the greatest legacies of Kant’s magna oeuvre, the Critique of Pure Reason, is the concept of a transcendental logic. Strangely enough, this concept is also one of the most misunderstood and most under-rated amongst his opus. The reference to transcendental logic is, however, unavoidable for those who engage in a reading of the Critique of Pure Reason. Actually, both the Analytic and the Dialectic are divisions of transcendental logic; therefore, it cannot be ignored as a concept. Nevertheless, if the subject matter of both Analytic and Dialectic have been the enduring themes of ever-recurring discussions and interpretations, the types of questions which lead to the concept of transcendental logic as well as to its intrinsic program are, most of the time, disregarded or misunderstood in their full scope and strength.

From a certain point of view, the concept of transcendental logic condenses the fundamental question underlying the entire Kantian critical project. This question, or rather its great perplexity, was well expressed by Kant in one of his letters to Marcus Herz, in which he announced, under the provisional title The Limits of Sensibility and Reason, the work which nine years later would appear under as Critique of Pure Reason. Kant presents this seminal question in the following way: “I questioned – upon which foundations lie the reference to the object of what we designate in us as presentation [Vorstellung]” (Ak. X.1, p. 130).
The critical question is here concentrated in its most fundamental and productive perplexity. It is the question about the modes and conditions through which there is for us, i.e., for the subject of any possible knowledge, something like an object. It is not a matter of asking about the fact, or about the reason for the fact, that something exists instead of nothing. This vertiginous question, in which even God loses ground ("Aber woher bin ich denn?"), according to the acute remark of the Transcendental Dialectic (Ak. III 641, IV 613), is about the foundations that underlie the existence of everything, without even raising the question of finding out how this something, that exists, can be endorsed by knowledge and known as such. The critical inquiry does not arise from this question, which has been asked by Leibniz under the scope of the principium redendae rationis sufficientis. Instead, the critical inquiry arises from the subordination of being to being-known, i.e., it only considers the existence of something insofar as this something endorses itself by knowledge, as appearance, and is sustained in and by this originary relationship. To put it boldly: what emerges as being is opposed to knowledge as its object (Gegenstand) and remains within and through this reference (Beziehung) recognized (erkannt) and posited (gesetzt) as such.

How can there be something as reference to an object, and what are the modes of this reference, i.e., what are the figures of meaning of objectivity in general? This is Kant’s fundamental question. The place of this reference, which for the first time triggers the emergence of something as object, is what Kant calls the “faculty of thinking” (das Vermögen zu denken). The consideration of thought as the original place of something as object is exactly what Kant circumscribes under the designation of Transcendental Logic (transzendentale Logik). Transcendental Logic becomes pre-determined in its task and content - it is, in Kant’s own expression, “the logic of reference to the object as such”, “it reaches the origin of our knowledge of objects” (Ak. III 80, IV 55). The question which underlies transcendental logic can now be revealed: it is intended to determine the pure modes of conscience of a Gegenstand überhaupt, i.e., of an object in general, insofar as this reference emerges purely from the spontaneity of the faculty of thinking itself and is clarified by a critical examination of it. In this sense, the task of transcendental logic is one of an unprecedented radicalism. It is not the question of knowing what exists to be thought or how something is given for us in order to be thought, nor is it a question of knowing which objects must necessarily be thought - despite the fact that all these questions are implied in the concept and problem of transcendental logic, the critical question presents itself with an absolute novelty. Namely, it is the question of establishing what is to think an object and what are the figures of meaning in which an object is configured, insofar as this question has to be decided by a critique of the faculty of thinking itself. Is it possible to determine the modes according to which there can be a thought of an object as such? Not: what objects are there for thinking, but: what is to think an object and under which forms can an object be thought? This is the background question that is at the foundation of the Kantian idea of transcendental logic.

2. Formal logic and transcendental logic

Bearing in mind this preliminary notion of the task of transcendental logic, we can now determine its concept, following Kant’s presentation in the introductory chapter of the second part of the Transcendental Doctrine of Elements. For those who focus on the paragraphs entitled
“Idea of Transcendental Logic”, which have the function of introducing both Transcendental Analytic and Transcendental Dialectic, a double opposition immediately becomes clear. On the one hand, the opposition between general logic, which Kant refers to as an elementary doctrine, and a logic specific to each science, which Kant refers to as an organon of knowledge; on the other hand, regarding general logic, the opposition between an applied logic, taking as its theme the psychological conditions of the correct thinking and developing itself as a simple katartikon, and a pure logic. Kant calls this general and pure logic a canon of the use of understanding (Verstand) and reason (Vernunft) (Ak. III 74-80, IV50-55).

These are the Kantian distinctions. Kant introduces the concept of transcendental logic in reference to this concept of a general pure logic, defined as logic of the form of thought in judgments.

The relationships between formal logic and transcendental logic have been the object of incorrect characterizations. A case like this, for instance, is the thesis that, for Kant, the formal logic would occupy itself exclusively with analytical judgments, while transcendental logic would occupy itself with synthetic judgments. This thesis aims to ground itself on the correct allegation that, for Kant, the principle of non-contradiction is the supreme principle of a formal logic, and that only this principle governs what Kant designates an analytical judgment. This thesis has been the object of a complete refutation by Paton. According to it, we would arrive at the unacceptable conclusion that synthetic judgments are neither categorical nor conditional, neither affirmative nor negative, and so on, since those forms would only be appropriate to analytical judgments. On the contrary, the forms that the formal logic, i.e., the forms that the general pure logic makes explicit, are valid for all judgments in general, judgments which, according to their content, a content which the formal logic excludes from its scope, can be analytical or synthetic. Another totally erroneous interpretation is the one we find in Strawson’s assertion, according to which transcendental logic would occupy itself with the application of pure concepts to objects empirically given in intuition. In fact, although not under such formulation, this is a problem that Kant directly addresses in the theory of schematism of pure concepts of understanding, under the general designation “problem of subsumption”. However, this is not the directive question of transcendental logic. As the third and final example rather in the same vein, Benoist, in a more recent book, presents transcendental logic as “a logic of the sensible as such”, by opposition to formal logic, which would be, supposedly, “logic of pure understanding”. Perhaps it will not be necessary to make the observation that here, as in Strawson’s interpretation, we find the blend of two very distinct questions, namely, the question of the possible modes of thinking about an object and the question of the validity of an objective knowledge, clarified by the connection of concepts with what is given in intuition. However, transcendental logic, in Kant’s own characterization, is not restricted to the determination of conditions of objectively valid thinking. Its concept is much broader. Transcendental logic, for Kant, recovering the ancient Aristotelian distinctions, includes Transcendental Analytic, i.e., a logic of truth (Logik der Wahrheit), as well as Transcendental Dialectic, i.e., a logic of appearance (Logik des Scheins) (Ak. III 87-88, IV 62-64). To reduce transcendental logic to the question of the conditions of a valid knowledge, i.e., to Transcendental Analytic, would be to mutilate the Kant’s very own concept of transcendental logic.
The important point to retain from this brief presentation is the following: the general pure logic makes the forms of thinking explicit. The effectiveness of thought is, for Kant, the judgment (Urteil), and the general pure logic has as its task the exhibition of the possible forms of judgment in a systematic and exhaustive manner. A general pure logic is, therefore, a formal logic. It agrees with what we understand, since Aristotle, as “logic”, which, according to Kant himself, has moved neither forwards nor backwards insofar as it was born already finished and perfect - and this due to the fact that it is not concerned with any object nor with its knowledge, but only with the form of all thinking in general as it expresses itself in judgments, a form which is always available to logical reflection (Ak. III VII-VIII). Therefore, a double abstraction constitutes formal logic: on the one hand, abstraction of the psychological conditions of a correct thought; and on the other hand, abstraction of any positive content of knowledge. The forms that logic exhibits are, thus, forms for any possible content of any possible judgment, a content that is considered only abstractly under the general logical concept of “term”.

With reference to this concept of a general pure logic, understood as logic of the form of thought in judgments, by abstracting from any content of thought, Kant introduces the concept of a logic that encloses a pure a priori content. This paradoxical formula, which combines the idea of a general pure logic and the idea of content, as well as of a pure a priori content, is exactly what defines the Kantian concept of Transcendental Logic. In an important passage, Kant focuses on the distinction between an empirical and a pure content of knowledge - a distinction that general logic has no need to make, according to its concept, but which is crucial for the very concept of Transcendental Logic - and presents a first characterization of Transcendental Logic in the following way:

General logic, as we have shown, abstracts from all content of knowledge, that is, from all relationship of knowledge to the object, and considers only the logical form in the relationship of any knowledge to other knowledge; that is, it treats the form of thought in general. But since, as the Transcendental Aesthetic has shown, there are pure as well as empirical intuitions, a distinction might likewise be drawn between the pure and empirical thought of objects. In that case we should have a logic in which we do not abstract from the entire content of knowledge. This other logic, which should contain solely the rules of the pure thought of an object, would exclude only those modes of knowledge which have empirical content. (Ak. III 79-80, IV 55)

Regarding this pure content of possible knowledge, which cannot be abstracted when one moves from general to transcendental logic, Kant makes a new step forward when he characterizes it not as an a priori form concerning the possibility of intuition (and the possibility of a matter for knowledge), but as content produced by an act of pure thought, i.e., as an a priori concept of an object. As Kant himself puts it,

In the expectation, therefore, that there may perhaps be concepts which relate a priori to objects, not as pure or sensible intuitions, but solely as acts of pure thought – that is, as concepts which are neither of empirical nor of aesthetic origin – we form for ourselves by anticipation the idea of a science of the knowledge which belongs to pure understanding and reason, whereby we think objects entirely a priori. Such a science, which should determine the origin, the scope, and the objective validity of such knowledge, would have to be called transcendental logic, because, unlike general logic, which has to deal with both empirical and pure knowledge of reason, it concerns itself with the laws of understanding and of reason solely insofar as they relate a priori to objects. (Ak. III 81, IV 57)
Breaking the thematic concentration in the simple form of thought in judgments, which characterizes the point of view of general logic, Transcendental Logic, then, ought to exhibit, in the form itself, the pure a priori content by which the act of thinking originally produces the reference of presentations to an object.

Where does the content that transcendental logic ought to disclose emerge from? Of course, this content is not merely a simple matter one may empirically obtain, in order to fill the variables for the terms of a formal logic. Kant’s idea is that the content of transcendental logic is not added to the logical form; rather it is embedded in the form itself. It is exactly for this reason that it is a pure and a priori content. Here lies the meaning of the so much discussed relationship between the table of logical functions of understanding in judgments and the table of categories. It is not a matter of “deducing” a category from the form of judgment; rather, it is a matter of exhibiting the pure type of object which is thought by that form. This connection was the great discovery Kant made in 1775, a discovery that opened the doors towards the solution for the problem of the possibility of reference to the object that had been announced in 1772 to Marcus Herz. Three brief examples would be sufficient to explain this point. In the categorical judgment, the precise point of view of logic consists in exhibiting the form \( S \text{ is } p \). To do so, it is necessary to abstract from any content that would fill the term subject as well as from any predicate that would be attributed to it. However, what is missing from this logical reflection is the fact that one does not yet realize that the form \( S \text{ is } p \) is the place where a pure type of object is being thought, namely, a substrate and its property, and that to think this objective structure of the substrate and its property is precisely to judge according to the form \( S \text{ is } p \). For the hypothetical judgment, to reduce it to the logical form \( \text{if } p, \text{ then } q \) is to fail to consider that in this hypothetical form of judgment lies another pure concept of object, namely, the objective relationship between a condition and its consequence. In the same way, in the affirmative form of judgment a substrate becomes positively determined by any predicate. This concept of positive determination of something is the place where the concept of reality is thought in itself - reality which, of course, should not be understood as synonymous with existence (\( \text{Dasein} \)), as it is commonly interpreted, since this has nothing to do with the affirmative form of judgment, but rather with the modal form of assertorical judgment.

This analysis could be systematically extended to all forms of judgments exhibited by general pure logic. The essential point is that a pure type of object is thought by the form, an object which can only be thought through this very same form. To think of a substrate and its property is necessarily to judge categorically, according to the form \( S \text{ is } p \), and, inversely, to judge according to that form is to think of a substrate and its property. To think of the connection between condition and consequence is necessarily to judge hypothetically, and to judge hypothetically is to think of a connection between a consequence and its condition. To think of a reality is necessarily to judge affirmatively and there is no other form in which the pure concept of reality can be thought. These forms of thinking, exhibited by general pure logic, are therefore the modes of possible awareness of objects. To each form of thought exhibited by formal logic there is a corresponding type of thinkable object of a pure a priori mode, i.e., an
object that results from the spontaneity of the faculty of thinking itself, independently of any content empirically given. It is exactly this passage from Verstandesform to Verstandsbegriff and, then, from Verstandsbegriff to Gegenstand des Denkens, that transcendental logic makes explicit. These pure concepts of object are not, in themselves, new objects of thought that one would distinguish from empirical objects. Instead they are the modes through which thought of anything in general can take place, this thing being empirically given or speculatively constructed. They are, in the Kantian incisive characterization, rules for the synthesis of manifold presentations, rules that unify these presentations insofar as the reference of these presentations to something like an object is originally built in them: “All our presentations do, actually, refer to something like an object through the understanding” (Ak. IV 255, note). They determine the possible forms of thought in general. To think about something is to think about it as substrate and property, as condition and consequence, as reality, as unity, and so on. This is the significance of the Kantian idea of transcendental logic. It does not replace formal logic, but it exhibits the way a pure thought of objects is possible, insofar as it must be a priori.

As a result, transcendental logic is not an inheritor or a corrective of formal logic. Regarding formal logic, transcendental logic is at the same time its complement and its foundation. The point of view of form is not the ultimate point of view about thinking. Thought is thought about something; it is a reference to objects, which originally constitutes the objectivity that it places before itself. For this reason, the form, which is exhibited by general pure logic, is supported by a pure concept. Therefore, if there is something such as a form of thought, this is because in it and through it a pure object is being thought through its related pure a priori concept (i.e., the concept of object emerging from the spontaneity of thinking itself, which Kant calls a function, in opposition to affection, which characterizes intuition). These pure concepts of objects, or, better, these pure types of object that have been shaped by the pure concept which underlies each form, are -in the paradoxical expression of Kant, which now becomes totally understandable- the determinate modes in which we can think about an object = $X$ at all, modes which give a content to transcendental logic, and a content that is both pure and a priori.

3. THE SUPREME PRINCIPLE OF ALL THOUGHT AND FORMAL ONTOLOGY

The concept of transcendental logic is one of Kant's greatest discoveries in the Critique of Pure Reason. Perhaps one could even say that it is, together with the distinction between Erscheinung and Ding an sich, the great discovery that leads Kant to the very idea of a critique of reason. This concept of transcendental logic combines two complementary ideas that we can now make explicit, although Kant himself was not very clear in his exposition: on the one hand, the idea of a pure theory of significations under which an object can be thought - Kant designates this objective sense as the “pure concepts of understanding” or “categories”; on the other hand, the idea of a formal ontology, i.e., a determination of pure types of thinkable objects which correspond to the pure forms of signification – picking up an expression from Kant, we could designate this as the determined forms of the transcendental object = $X$. 
This idea of transcendental logic, as a correlation between pure categories of signification and ontological-formal categories, is introduced in the Critique of Pure Reason with an important complement regarding the ultimate foundations of the faculty of thinking; however, it is also introduced with a damaging limitation, which compromises the full development of the concept of transcendental logic itself, from a theoretical point of view. Before finishing, I would like to focus on these two aspects.

Concerning the first aspect, the result of transcendental logic consists in showing that the object of possible knowledge is a categorical object, i.e., that there is only one object insofar as it is constructed by acts of the understanding, acts which determine its intellectual structure. There is no longer a place for the old question regarding the appropriate relationship between thinking and the thing we thought about, supposing the latter would be a thing in itself, since whatever the understanding thinks as its object is only determined by the corresponding categorical structures operating upon a manifold of sensible (intuitive) presentations. At no point in this process does a thing in itself enter the thinking process – it focuses only on presentations, at last sensible presentations, not on a “thing” coming from the “outside” and miraculously offered to knowledge. However, this result, even if important, is not sufficient for Kant. If the question of objective being is solved by regression towards the faculty of thinking, i.e., to the understanding, why is there such a thing as a faculty of thinking? This question does not inquire about the natural causes of human thought. It is not a question of an anthropological or psychological nature. It is a transcendental question. In the critical vein, it is a question about the ultimate condition of possibility for the faculty of thinking itself. To think is to produce the synthetic unity of a manifold of presentations according to a categorical rule, i.e., according to the concept of a pure type of object. What is the condition that makes this synthetic function according to rules or the faculty of thinking as such possible? This is the Kantian question. As Kant said, it contains, according to the well-known statement in §15, “the possibility of the understanding, even as regards its logical employment” (Ak. III 132).

Here is the Kantian answer as it is presented in §16: the supreme condition of thought is the unity of consciousness, i.e., in Kant’s own formulation, the principle of the originary synthetic unity of apperception. To think is, therefore, the act of self-consciousness, and this self-consciousness is not a self-awareness of a substance who thinks, in a Cartesian fashion, but rather the process of synthesis of a manifold according to pure concepts, which constitute this manifold as an object that is the correlate of the unity of consciousness. The unity of self-consciousness is, therefore, the ultimate foundation of thought - all thought is a coming to himself of the subject. This self-consciousness, expressed in the proposition “I think” (ich denke), is the original place of openness of the space of objectivity. The suppression of the unity of self-consciousness -for instance, a diversity of presentations that could not be synthetically unified under a category- would be the suppression of the reference of those presentations to objects, a reference that constitutes thinking. The object, i.e., this condensation of categorical function, is now determined as the correlate of the unity of consciousness. Neither is it even possible to state that there is something like a manifold intuitively given and already conscious for the subject before its categorical synthesis. Insofar as a given manifold refers to the unity of consciousness only via its own synthesis under a pure concept, the emergence of the “otherness”
of the object is the very moment in which the diversity of the given is firstly perceived as such and brought to consciousness.

However, and from the beginning, Kant’s brilliant idea of transcendental logic has been attenuated in its strength by the presence of certain limitations. Among them, the idea that all originary consciousness, which Kant characterizes as a direct reference (unmittelbare Beziehung) to an object and calls intuition (Anschauung), can only become effective under the form of sensibility (Sinnlichkeit) (Ak. III 33, IV 19). This idea that the originary giveness of an object in its corresponding evidence is the same as that given by a sensibility under the form of an impression (Eindruck, Affektion) is the undeniable Humean background present in Kant’s thought. This means that every pure type of categorical object must be referred back to sensible presentations and characterized as a rule for its synthesis. This very idea that all thought must finally refer-back to sensible data acts upon the results of a transcendental logic, restricting its systematic signification. On this basis, Kant tries to keep in the table of categories only those forms that can be referred to a multiplicity sensitively given and, inversely, he interprets all judicative forms as if their objective meaning lies only in that reference. To mention just two examples, the form of categorical judgment lies in the objective concept of a substract and its determination; however, this does not mean, as Kant wishes with his narrow interpretation, that the pure concept involved there is the concept of a substance and of its quality. The concept of substance is interpreted, in the first analogy of experience, as a permanent in time through the variation of its appearances (Ak. III 224, IV 182). Some substracts of judgments can certainly be concepts of substances, understood in this empirical sense; however, not all substracts, i.e., not all subjects of a categorical judgment, are substances. Another analogous limitation is that it makes a strict equivalence between the hypothetical form of judgment and the category of causality (Ak. III 224, IV 182). Again, causality is a form of objective relationship between a condition and a consequence, however, not all conditional relationships are, ipso facto, causal connections. The concept is undoubtedly broader, and the objective relationship between condition and consequence can only be partially determined as causality, insofar as it is interpreted as a succession of regulated sensible appearances in the element of empirical experience.

The fact that Kant pushes the concept of transcendental logic towards a theory of the objects of empirical experience functions as a true limitation on the systematic meaning of the formal ontology. Not only do the forms of judgment have a greater scope than the one Kant refers to in his table of categories, but also the significance of the connection between categories of signification and objective categories surpasses to a great extent the restricted task of a theory of empirical objectivity. Taken in its absolutely general aspect, the concept of transcendental logic is the concept of a correlation between the judicative form and the pure categorical object, or between formal apophantics and formal ontology. Only when the originally given consciousness is understood as sensibility, under the Humean light, can transcendental logic convert itself into a system of principles of empirical thought in general, a system which is, really, only one of its parts. However, it was in this restricted way that the Kantian project of transcendental logic has been conceived since its very beginning. This project had a strategic meaning in Kant’s thought: it was a matter of dealing with traditional Metaphysics and showing
how the objective validity of pure concepts could only be obtained in connection with what is given by sensible intuition.

However, this hindrance that appears in the Kantian concept about the idea of transcendental logic, understood qua formal ontology, does not cancel the enormous debt we all have to his insight. All of us, I say, i.e., all those who see Philosophy, in the light of Kant, as the highest locus for understanding reality, and not as an opportunity always at hand for visionary dreams, mystical exaltations or never-ending verbosities, which in the end will prove to be empty.

**BIBLIOGRAPHY**


Kant, Emanuel (1900ff) – *Kant’s Gesammelte Schriften*, Königlich Preußische Akademie der Wissenschaften: Berlin.


**ABSTRACT:** I examine the Kantian concept of a transcendental logic, stressing its novelty and richness. I discuss the relationship between logical form of judgments and pure concept of the understanding, trying to elucidate how the pure concept is embedded in the form of judgments. Exploring this issue, I construe transcendental logic as a part of formal ontology, pointing at the end of the article to some limitations that hinder the Kantian concept of a formal theory of the “object in general”.

**KEYWORDS:** Kant, Category, Judgment, Transcendental Logic, Formal Ontology.

**NOTAS / NOTES**

1. The interpretation he intends rightly to contest is “ [...] the doctrine that for Kant the forms of judgments are the forms of analytic judgment only” (Paton, 1984, 349).

2. It is worth quoting this passage in its entirety: " [...] although formal logic abstracts in this way from all relation of its forms to objects of empirical judgment, it is surely possible to form the idea of another parallel “logic” (transcendental logic) which does not abstract from this relation. For experience or empirical knowledge to be possible, we must make empirical judgments. The forms which logic isolates are the forms we must use in making such judgments. So much is a necessity of thought, of the whole business of bringing objects under concepts. Therefore, we must have some conception of the general conditions of applying these forms in making true empirical judgments, valid judgments about objects of experience; and the general conditions of applying these forms to objects must be objectively satisfied, otherwise we could never make objectively valid judgments, and empirical knowledge, or experience, would be impossible”, P. F. Strawson – *The Bounds of Sense*. London: Routledge, 1966, pp. 75-76. Not only is this *not* the concept of a transcendental logic, but neither does what is said about it avoid the confusion with what Kant says regarding logic understood as *Logik des besonderen Verstandgebrauchs*, which is the logic of the particular use of the understanding (and not a general pure logic nor, consequently, a transcendental logic) which Kant designates as an *Organon dieser oder jener Wissenschaft* (see *KrV*, III 76, IV 52).
3 « La logique transcendantale pourrait donc aussi bien se présenter comme une logique du sensible comme tel, par opposition à la logique formelle caractérisée comme une logique d’entendement pur. » (Benoist 1996, 61. This remark does not invalidate the merit of this work, namely, some of its penetrating intuitions and analyses.

4 See de Vleeschauwer, 1934, 243. The discovery of the Leitfaden (i.e., the conductive thread from the table of judgments to the table of categories) is already the solution of the problem that Kant calls “Metaphysical Deduction” of the pure concepts of the understanding in the Critique of Pure Reason.

5 We must wait till the researches of Edmund Husserl to have a full-developed concept of the task of transcendental logic. The correlation between forms of signification and formal ontology, which is simply sketched in Kant’s thought, receives a complete clarification in the work of Husserl. On the other hand, a deeper understanding of the program of an a priori science leads to a larger characterization of the very concept of the a priori, including both a formal and a material stratum. According to this new concept, Kant’s a priori is simply analytic and formal, an a priori which must be complemented by an a priori synthetic and material, studying the different regions of being by an eidetic method. We cannot enter here into the detail. See, for instance, the first chapter of Ideen zu einer reinen Phänomenologie, where the concept of a material a priori is developed, and, for a full presentation of the concept of a transcendental logic, Formale und transzendentale Logik.