From Experience to Judgement On the Fundamental Elements of the Husserlian Critique of Kant's Transcendental Logic

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Abstract. This paper will attempt to discuss the assumptions and fundamental elements of the turn that Husserl gives to the meaning and function of transcendental logic. Starting from the configuration that transcendental logic assumes in Kant, the assumptions and consequences of the Kantian approach will be discussed from a phenomenological Husserlian perspective. The reconfiguration that Husserl gives to certain fundamental theoretical nodes, such as the relationship between sensibility and understanding, and that between thought and experience, will be considered. The decisive moments of the passage from a conception that makes thought a sphere separate from experience to the recognition of the essential connection between thought and experience are presented in their theoretical issues, finally arriving at the project of a foundation of logic from its experiential basis.

Riassunto. L'articolo cerca di discutere i presupposti e gli elementi fondamentali della svolta che Husserl conferisce al significato e alla funzione della logica trascendentale. Partendo dalla configurazione che la logica trascendentale assume in Kant, si discuteranno da una prospettiva fenomenologica husserliana i presupposti e le conseguenze dell'approccio kantiano. Verrà considerata la riconfigurazione che Husserl dà ad alcuni nodi teorici fondamentali, come il rapporto tra sensibilità e intelletto, tra pensiero ed esperienza. I momenti decisivi del passaggio da una concezione che fa del pensiero una sfera separata dall'esperienza al riconoscimento della connessione essenziale tra pensiero ed esperienza verranno presentati nella loro rilevanza teoretica, arrivando infine a discutere brevemente il progetto husserliano di una fondazione della logica a partire dalla sua base esperienziale.

Keywords. Husserl, Kant, Transcendental logic, Foundation of logic, Thought and experience.

Parole chiave. Husserl, Kant, Logica trascendentale, Fondazione della logica, Pensiero ed esperienza.

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The purpose of this paper is to compare some fundamental aspects of two models of transcendental philosophy, the Kantian and the phenomenological (in the sense of Edmund Husserl), in order to detect the character, the sense and the function that something like a transcendental logic has in each of these philosophical projects. The main point of this evaluation will be to show, on the basis of a comparison of these two models, the sense and the scope of the turn that the Husserlian perspective gives to the meaning and the task proper to transcendental logic. This thematic core concerns the very theoretical foundations of both philosophical approaches, so that the discussion cannot avoid dealing with a variety of themes and concepts related to these foundations, without, of course, being able to go into the details of each of them. The paper will therefore remain at a general, introductory level, with the aim of providing an overview of the subject. Its task is to illustrate the main points of distance between the two perspectives, which is in contrast to readings that reconcile the Kantian and Husserlian approaches, such as in Summa (2019), where an attempt is made to show the closeness between the two authors, particularly with regard to the question of the constitution of space. For the comparative purpose of this paper, which is to highlight the distances between the two projects from a historical and systematic perspective, the point of view of the Husserlian critique of Kant will be adopted, which is of course not free from a certain one-sidedness and can be contested, as happens in the literature.

In the first section, I will first discuss how Kant understands transcendental logic and what its task is in the context of a system of transcendental philosophy as Kant conceives it. From here, in the second section, I will point out, from a phenomenological perspective, the presuppositions that condition Kant's system within the framework of the separation between sensibility and understanding. Then, in the third section, I will outline the terms of Husserl's critique of this framework, which aims to show the untenability of the separation between the sensible and the intelligible world. This is followed in the fourth section by some basic coordinates of the phenomenological project of clarifying the experiential roots of logical categories, leading to a new, specifically phenomenological view of the task of transcendental logic. Finally, the motivations and significance of such a project within phenomenology are briefly discussed in the fifth section.

1. General characterisation of formal logic and transcendental logic in Kant

In questioning the meaning and function of transcendental logic, it is natural (and, from a systematic point of view, necessary) to raise the question of its relation to logic as commonly understood, especially as a purely formal system. Indeed, the role and the very possibility of a transcendental logic, its raison d'être, depends on the demonstration of the necessity – or at least the possibility – of its being admitted alongside formal logic, and the consequent question of how its relation to the latter is articulated. It is precisely the difference in the approaches taken to articulate the relationship between the two logics, and more precisely to consider the function of transcendental logic in relation to formal logic, that highlights the differences between the Kantian model and the phenomenological model with regard to the nature of transcendental logic itself.

It is clear that these differences depend largely on the contingent historical state of the understanding of logical knowledge in their respective times, which makes Kant and Husserl have to deal with a different theoretical situation with regard to logic. In the particular theoretical situation in which Kant finds himself, there is only *one* valid logic, and although

¹ For a comprehensive overview, which to some extent differs from the perspective proposed here, see Kern (1964), Lohmar (1998).

Kant laments certain inadequacies of the classical logical tradition in force in his time, he has no reason to doubt that the rules laid down by classical formal logic comprehensively capture the laws of thought as such and extend their validity universally to everything that can legitimately be object of knowledge.

While for Husserl the question of a philosophical foundation for formal logic will be precisely the ground on which transcendental logic is to be developed (as we shall see), in Kant's time classical formal logic seems to need no foundation at all. For what could be complained about logic are only local gaps or inadequacies in its system, and certainly not its general validity as a canon of the intellect and reason (cf. Kant 1911a, 77), which is based on the unquestionably self-evident character of this discipline in general, which exempts it from any foundational enterprise. It could therefore be said that for Kant the validity of formal logic is self-founding, based on the self-evident character of its fundamental principles (first and foremost the principle of non-contradiction).

The founding of a discipline requires the suspension, at least temporary, of its validity in order to submit it to the tribunal of a higher instance, which should establish its validity. But with regard to logic, what was true for Aristotle is also true for Kant, i.e. its suspension would be tantamount to the paralysis of thought itself (cf. Aristotle, *Metaph.*, 1006a; in Ross 1923), and any attempt to take a step outside the realm of logic would result in a contradiction. In any argument, even one that seeks to criticise logical principles, these principles must necessarely be presupposed if the argument is to make rational sense and be conclusive. If not, the argument simply cannot take place, and the resulting "silence" merely demonstrates the necessity of those principles for any "saying" that must be possible. It is therefore not surprising that the instance of a transcendental foundation of formal logic is missing in Kant, and to attribute this as a deficiency to Kant would be a lack of historical perspective, since in his theoretical situation such a requirement would reasonably have seemed absurd.

Given the character of classical formal logic as a universal source of rational validity, transcendental logic has nothing to contribute to it in terms of principles valid for pure thought. This is so true that, for Kant, transcendental logic itself derives its validity from formal logic – which Kant calls *general logic* (*allgemeine Logik*) –, inasmuch as the latter constitutes a merely negative but ultimate touchstone of truth, referring in the most general sense to the formal structure of all thought and knowledge, independent of any determination of content (cf. Kant 1911a, 84 f.).

Transcendental logic itself, like any other possible rational discipline, thus inherits – with regard to the purely formal conditions of the validity of thought – the principles and rules of formal logic, assuming them unconditionally in its own system and without prior critical examination. This configures a rather asymmetrical relationship, in which formal logic is always and necessarily a condition of transcendental logic, never the other way around. The specific contribution of transcendental logic, if it has nothing to say about the validity of the principles and rules of formal logic – which can only be accepted as already given – will instead consist in narrowing the field of formal logic. This narrowing takes place through the introduction of further conditions that transform logic from a logic of thought into a logic of experience. Whereas formal logic deals only with the pure laws of the understanding, independently of their relation to objects of possible experience, transcendental logic adds to the formal conditions of thinkability (in the pure understanding) the material conditions of the possibility of experience - and thus of empirical knowledge -, so that it is no longer only a matter of the intellect's agreement with itself, but of its agreement with a reality as an object of possible experience (cf. Kant 1911a, 80).

These additional conditions are not to be found in the purely formal domain of pure intellect, but are dictated by the other source of knowledge, namely spatial and temporal

intuition with its own rules established in transcendental aesthetics. Transcendental logic also has to do with the laws of the pure intellect, but in so far as these are a priori applicable to objects of possible experience (cf. Kant 1911a, 81 f.). What its laws exclude is not only the analytic-formal contradiction, but also the material contradiction, whereby the concepts of the intellect do not agree with the data of intuition, according to the forms of space and time. If the principles of formal logic are the principles of possible thought, then the principles of transcendental logic are the principles of possible experience. If the former – according to the principle of non-contradiction – only excludes everything that entails analytical contradiction, the limitation imposed by the latter requires that not only the conditions of the agreement of thought with itself, but also those of thought with reality, be fulfilled. The correlate of thought according to the rules of transcendental logic is not the mere logical possibility governed by the rules of the analytic a priori, but the empirical possibility of objects insofar as they must be able to be experienced within the synthetic connection of experience.

In so far as it does not abstract from the content given in intuition, transcendental logic – in its analytic part, as opposed to dialectic – is a *logic of truth* (cf. Kant 1911a, 87): it explains the principles without which no object of possible experience can be thought, according to the legislation of the synthetic a priori propositions that govern the agreement of the conditions of pure thought and those of pure intuition.

2. Explanation of the separation of the sensible and the intelligible spheres in the Kantian approach

From the point of view of Husserlian transcendental phenomenology — as a major alternative with regard to the project of a transcendental philosophy — the Kantian approach appears to be affected by crucial assumptions that determine the structure and spirit of Kant's project, but also its limitations.

From a phenomenological perspective, the lack of a transcendental investigation of the presuppositions of logic is linked in Kantianism to an abstract separation of the analyticformal realm from the material-intuitive realm and, ultimately, from experience in general. Certainly, the task of a transcendental logic according to the Kantian model is to show the conditions under which the concepts of pure thought can be applied to objects of possible experience. But the mediation between thought and experience remains secondary and tributary to the preliminary separation between the analytic-formal and the empiricalsensible spheres. In the final analysis, the realm of the logical remains in principle independent of the realm of the empirical, so that there is an asymmetry in which the understanding provides the conditions of possible experience (in accordance with the a priori conditions of sensibility, of course) without the latter having any conditioning role with respect to the understanding. This is reflected in the unilateral constitutive character that the a priori categorial structure of subjectivity has in Kant with respect to the object of experience, in a unidirectionality that goes from the meta-empirical condition to the conditioned. The meta-empirical (a priori) character of the concept signifies a logical priority over the empirical. It is precisely from this "priority" that the Kantian sense of a priori is derived.

This depends on the underlying systematic outline of Kant's approach, which presupposes a division of subjective faculties, such as understanding and sensibility, a division borrowed from psychology and not critically questioned. Precisely the clear division between sensibility and understanding — as referring to two different faculties of finite subjectivity — is a point that Husserl explicitly reproaches Kant for (see for example Husserl

1976a, 420 f.). This criticism is full of consequences for the phenomenological meaning of a transcendental logic and a transcendental philosophy in general.

Now, for a phenomenologist, the Kantian critical perspective would inherit both an *empiricist* and a *rationalist* bias (for the following discussion cf. De Palma, 2001). Of course, one need not insist that Kant's philosophical project, in its historical significance, is the place where the lesson of British empiricism is embedded in the European rationalist tradition, opening up a new phase in which the one-sidedness of both traditions is overcome. From a phenomenological point of view, however, in Kant the empiricist and rationalist prejudices – while compensating for each other – are far from being neutralised, but rather persist by being added to each other.

A well-established tradition of interpretation maintains that, for Kant, the realm of sensibility is radically separated from that of understanding. Sensibility, in fact, belongs to the flowing empirical multiplicity of material impressions, which in itself lacks a genuine lawfulness capable of allowing – within this multiplicity – the identification of structural invariants. This would correspond to the empiricist bias. Kant responds by assuming the rationalist bias, namely the existence of a sphere detached from sensibility – that of pure understanding – which would guarantee the structuring of sensible multiplicities. This is done by giving them *a priori* that organisation in structural invariants which alone makes science possible.

So instead of overcoming the two prejudices, Kant would adopt them in his critical system and simply use one against the other. The structuring role of understanding would ensure that experience is more than a bundle of impressions governed by purely empirical-psychological laws (as in empiricism), just as the necessary reference to sensible intuition prevents the understanding from embarking on metaphysical adventures, in which its concepts, instead of referring to objects of possible experience, remain empty, lost in a meta-empirical use (as in the systems of the rationalism of the 17th and 18th centuries).

If we look more closely, we find confirmation of this original separation between sensibility and understanding in the very fact that the real synthetic operationality – which unites the sensible manifold in the knowledge of an object - is, strictly speaking, only that of the understanding. Correspondingly, the categories of the understanding are nothing other than the various modes of this synthetic unification on the basis of the originalsynthetic unity of apperception (cf. Kant 1911a, § 17, 136 f.), which Kant calls the highest point of the understanding, or rather as the understanding itself (cf. Kant 1911a, 134, footnote 1). The synthesising function thus appears as something that is in principle detached from the sensible sphere, and that belongs to a register that - insofar as it is necessarily supersensible - is in principle completely heterogeneous with respect to any conceivable material data. If the categories have the task of imposing a synthetic unity on the multiplicity of sensibility, this takes the form of the application of a grid defined by a closed and determined set of concepts which, as it were, structure sensible experience from the outside. The synthetic unity of the realm of the temporal, individual, material, is thus in a sense imposed from beyond this realm, from the radically separate sphere of the timeless, universal, formal, in a top-down process that has no counterpart in the opposite direction.² This is consistent with the fact that the categories in Kant, as pure concepts of the understanding, are derived from the logical table of judgements as a guiding principle (cf. Kant 1911a § 9) - since judgments are unity functions (cf. Kant 1911a, 94) - in a way that is completely independent of experience.

² For an alternative position, see, for example, Kern (2006). There are also studies (Fichant 2004; Onof & Schulting 2015) that aim to show that although the two branches of knowledge are separate, pure intuition has its own legality that cannot be attributed to the determination by the understanding.

The radical separation between the sphere of logical understanding and the sphere of sensible experience is thus determined on both sides by the fact that, on the one hand, the categories – as logical functions of synthesis – have no basis in experience, and that, on the other hand the multiplicities of experience do not in themselves contain any sufficient or necessary condition for a possible synthetic unification. They must therefore expect this unification from a completely different faculty – that of understanding – in accordance with the forms of judgement.3 In fact, no synthesis in the strict sense can be ascribed to the receptivity of sensibility, but at most a synopsis, which - if knowledge is to be possible must always correspond to a synthesis that has its source in the spontaneity of the understanding, as stated in the first edition of the Critique (cf. Kant 1911b, 97). In this respect, even the role of the transcendental synthesis of the imagination, which for Kant is supposed to mediate between sensibility and understanding, does not seem to challenge this dualistic framework. It is true that for Kant the synthesis of a sensible multiplicity (synthesis speciosa) is the work of the imagination, but this synthesis is only possible on the basis of the categories and the unity of apperception. Moreover, in the second edition of the first Critique, imagination is no longer even an independent faculty, but seems to become a function of the spontaneity of understanding (cf. Kant 1911a, 151 f.).

According to this reading, therefore, the radical heterogeneity between sensibility and understanding – which was already stated in the inaugural dissertation of 1770 (Kant 1958) – would thus be irreducible, and would present itself as a transcendental reinterpretation of the traditional metaphysical opposition between *mundus sensibilis* and *mundus intelligibilis* (cf. Kern 1964, 64).

3. On the phenomenological critique of the thesis of the separation of the sensible and the intelligible spheres

What Husserl rejects is the idea that understanding and sensibility are, from the outset and in principle, two separate realms, linked to two completely independent faculties of finite subjectivity. For the phenomenologist, this separation has no descriptive status, but is rather the result of a construction (or reconstruction) from the *given* to the *non-given*. It goes beyond the realm of evidence of the given phenomenon, the only one in which a scientific description of the invariant structures of experience is possible for the phenomenologist. In this way, the Kantian approach irrevocably moves beyond the terrain circumscribed by the givenness/evidence pair, which Husserl proclaims as the famous *principle of all principles*, and according to which the source of evidence is to be found in every originally giving intuition (cf. Husserl 1976b, § 24). Thus, it is already clear at this point that for Husserl the Kantian attitude has more to do with a regressive reconstruction than with a legitimate description in an originally giving evidence.

However, it is undeniable that in the *Logical Investigations* – his first major work – Husserl adopts the Kantian division almost literally, with a similar division between the sphere of sensible intuition and that of the understanding, i.e. of categorial synthetic acts (cf. Husserl 1984).⁴ But the very admission of a *categorial intuition* which, in its judgmental activity, bears the burden of grasping the evidence of formal or syncategorematic moments – to which there is no material counterpart in sensible intuition, but which can only be given in the operativity of a categorial synthesis – already indicates that the crystalline

³ In this regard, one could ask the question: If the synthetic unification of experience data comes from a dimension lying outside experience, what is the criterion for this unification?

⁴ The second section of the *VI Logical Investigation* is significantly entitled "Sinnlichkeit und Verstand".

sharpness of this division has been violated. Already in the *Investigations*, the constraint that bound intuition to the sphere of sensory receptivity – as opposed to the spontaneity of the understanding, which would lacks any capacity for intuition – falls away.

This is not the place to go into the complex philosophical background from which the phenomenological doctrine of categorial intuition emerges, and which – beyond the phenomenology of strict Husserlian observance – will constitute a primary source of questioning for Martin Heidegger's ontological considerations. Suffice it to say here that the need to extend the limits of intuition far beyond the realm of the sensible (limits to which Kant strictly adheres) has to do with the rejection of the assumption of a model of subjectivity in the Kantian sense – with its pure intellect – which Husserl considers mythological, because it does not correspond to any evidence. If it is no longer permissible to refer to subjectivity as the source of the evidence for the formal-categorial components of judgement, then there must be some form of intuition (not sensible, but precisely categorial) that guarantees epistemic access to these components.

3.1. Recognising the logic of experience

In any case, and in addition to this, after the *Logical Investigations* Husserl extends the notion of understanding and reason to sensible experience, which is no longer seen as a mere bundle of hyletic data, but as already endowed with its own internal structure (cf. Kern 1964, 62). The two spheres are now understood as two aspects of a deeper unity. The division between the *spontaneity* of understanding and the *receptivity* of sensibility is no longer for Husserl an *absolute* one, based on the nature of these faculties of human subjectivity. Rather, it is a *relative* separation, since the distinction between spontaneity and receptivity, activity and passivity, is now a relative one.

First, for Husserl, receptivity falls within the sphere of active spontaneity itself, constituting its lowest and most primordial level (cf. Husserl 1939, § 17). Certainly, the objects of purely sensible experience, prior to any categorisation, are those that are constituted in what can be called the receptivity of sensibility. But sensible apprehension which in this receptivity functions as a necessary condition for the constitution of experience – is already the act of a primordial proto-spontaneity (cf. Kern 1964, 63). Just as intuition is not the prerogative of the sphere of sensibility alone, but enters the sphere of thought with categorial intuition, so activity is not only the domain of thought, but already belongs to the structures of pure experience. Husserl speaks in this regard of an activity of grasping (Erfassen), which is precisely the activity of receptivity (a rather oxymoronic mixture from a Kantian point of view), clearly distinct from the egological activity of thinking in the proper sense, which is articulated categorially (cf. Husserl 1968, 95). One would therefore look in vain for a phenomenological counterpart to Kant's pure sensibility in Husserl: intentionality, spontaneity, is everywhere (cf. Husserl 1956, 224). Even in the most inarticulate acts of sensible perception, intentionality is at work, and where there is intentionality, there is spontaneity. Absolute sensibility is admissible at most as a limiting concept (cf. Kern 1964, 63).

But where there is intentionality, there are also its structures, and among these is the synthetic constitution of the objects of experience, governed by the laws of the synthetic a priori, which must therefore be found already in the apparently pre-logical and pre-egological terrain of sensible experience. If, in Kant, the synthesis does not emerge from experience, but – insofar as it is grounded in the understanding – is applied, so to speak, from outside in order to make experience possible (this is the asymmetry referred to above), for Husserl experience itself as such is permeated by a synthetic lawfulness that makes it *originally*, from the outset, an experience organised according to invariant structures dictated by a well-defined grammar. This grammar, although a priori, belongs to

experience itself, rather than coming from a separate domain. This means that experience as such, already at the level of pure perception, has a solid synthetic organisation. It is therefore possible to speak of a synthesis of experience, without this synthesis being dictated by a meta-empirical logical normativity. If there is a synthetical activity here, it is not yet a categorical activity (cf. Husserl 1968, 96). (It is clear, however, that here the terms active, activity, when associated here – as Husserl does – primarily with the logical activity of predication, relation, etc., run the risk of becoming misleading, especially since Husserl uses the term passive synthesis to denote the sphere of pre-logical lawfulness).

In this way, the ideal domain of a priori laws is completely displaced by the phenomenologist *in* experience itself, providing it with a foundation *in rebus*. The textural grammar of experience thus becomes part of the domain of sensible experience itself, overcoming the architectural separation between transcendental aesthetics and transcendental logic. The a priori synthetic laws governing the constitution of experience fall entirely within the realm of ideal entities, and do so exclusively by virtue of the ideal lawfulness proper to pre-categorical experience, i.e. without waiting for logical performance in the proper sense, which belongs to the purely egological sphere of active synthesis. From this perspective, one can better understand the Husserlian doctrine of eidos and essences, which grounds the possibility of a *material a priori*, whereas Kant for Husserl would only recognise the analytical side of the a priori (cf. Husserl 1956, 369). From this it can be concluded that even if the dualism between sensible *matter* and synthetic *form* remains in force in phenomenology, it no longer corresponds to the duality between the receptivity of sensibility and the spontaneity of understanding, since matter and form are already present in the sphere of sensibility itself.

3.2. Recognising the experiential basis of thought

If all this helps to clarify the assertion that Husserlian phenomenology does not allow for the assumption of a dimension that can be defined as *absolute sensibility*, one can also assume that, for the same reasons, by overcoming the rigid separation between the sensible and the intellectual, an *absolute intelligible* sphere will not exist either. Indeed, for Husserl, the realm of pure understanding cannot be separated from the realm of sensible experience, since the latter – in a way that will be soon specified – constitutes its ground. The conncetion between the two is essential. In *The Crisis of European Sciences and Transcendental Phenomenology*, Husserl is very explicit in rejecting as illusory (there he uses the word *Schein*) the postulate of pure thought, which in principle would have nothing to do with sensible intuition (cf. Husserl 1976a, 137).

If, on the one hand, sensibility is traversed by a somewhat proto-logical grammar, on the other hand, every categorial act of understanding is based on — and thus essentially interwoven with — sensible experience. While the phenomenologist accepts the legitimacy of speaking of a field of ideal entities, distinct from sensible objects, these idealities constitutively refer back to some sensible experience, on which they are based. The distinction between the two dimensions does not imply a radical isolation of one from the other.

Thus, the question of the existence of a purely intelligible sphere and of the epistemic access to it cannot even be raised. For the phenomenologist, it is not a matter of finding access to a supersensible world, and then understanding how it is possible for this to interact with the world of the sensible, but, on the contrary, of showing how ideal entities (including purely syncategorematic-formal ones) are constituted in an intuitive synthetic-categorial act that is structurally *founded* (*fundiert*) in sensible experience (cf. the *VI Logical Investigation*, Husserl 1984). The Kantian top-down procedure is thus replaced by a bottom-

up phenomenological procedure (cf. Piana 1979, 217)⁵ aimed at discovering the foundational relations between the ideal and the real.

One can clearly see here the centrality of the notion of foundation (Fundierung) (see the III Logical Investigation, § 14, Husserl 1984; cf. Rota 1993, 178-187), which in its general sense denotes a relationship of ontological dependence between a given element and its founding elements, e.g. the dependence of a whole on its parts or of a qualitative property (such as colour) on another property (such as extension). In the present case, this concept is suitable for constituting higher-order objectivities (Gegenständlichkeiten) - such as the categorial ones – on the basis of underlying levels, without requiring the reduction of the former to the latter. This notion is not to be confused with that of foundation understood as a top-down logical-deductive derivation (cf. De Palma 2001, 248), which concerns the systematic connections of a theory and which Husserl calls Begründung (cf. Husserl 1975, §§ 6 ff.). The latter term is the one which has commonly been used for purposes of metaphysical foundation and does not concern what Husserl has in mind when he speaks of Fundierung. It should be remembered that the general project of phenomenology – in the Husserlian sense – is not to justify empirical truth from above, from first principles, but to clarify its descriptive content and foundation relations at the various levels of empirical reality (cf. Tugendhat 1967, 181; cf. Husserl 1976a, 193). The Kantian procedure thus moves constructively from judgement to experience. The Husserlian procedure is exactly the opposite: it does not seek to reconstruct experience retrospectively by arriving at principles that lie behind experience – in order to justify (in the sense of begründen) its objectivity – but to investigate and explain (aufklären) the existing lawfulness that lies in and is immanent to experience itself at the various constitutive levels.

4. Towards a clarification of the genesis of logical categories from experience

It is from this general philosophical strategy that one understands the elaborate and meticulous analyses of the genesis of the logical from experience prepared in Formal and Transcendental Logic (Husserl 1974), and which will find full realisation in Experience and Judgement (Husserl 1939). Such an account cannot be given here, even in summary form. What is of interest here is only the inversion that Husserl gives to the Kantian movement of thought. It is no longer a question of presenting the categories as pure concepts of the understanding as constitutive conditions of experience, according to the guide of the forms of judgement. The fundamental division between sensibility and understanding imposes on Kant, in the following terms, the central task of a critical philosophy and of a transcendental logic as its driving force: If the categories of understanding have no essential connection with sensible experience, nor do they originate from it - since they are completely heterogeneous to experience - then it is a matter of legitimising their application to such experience, the possibility of their reference to empirical objects. Hence the "juridical" sense of Kant's transcendental deduction (cf. Kant 1911a, § 13), precisely as a justification of the use of categories to speak about reality and ultimately to make something like natural science possible. It is only on the assumption of this separation that the difficult problem of mediating between the formal-categorial (universal and extratemporal) element and the material-intuitive (individual and spatio-temporal) element arises. In other words, the problem of the temporalisation of the category, which the doctrine of transcendental schematism is called upon to address, can only be posed once the

⁵ Summa (2019), on the other hand, finds the distinction between Kant's method *von oben* and Husserl's method *von unten* problematic, because both Kant and Husserl deal with the context of the dynamic unfolding of meaning-making experience as a complex and integrated unity.

presupposition of a sharp division of human faculties has been assumed. Where this division is called into question, as in Husserl's phenomenological system, such a mediating performance is no longer necessary, at least in these terms.

For Husserl, the point is rather to show the emergence of the categories of judgement themselves from the pre-given elements (Vorgegebenheiten) of experience (cf. Husserl 1939, § 16), from their pre-categorial structures, given in experience itself before any logical formation. The direction of the movement of thought is no longer from the logical categories as forms of judgement to the experience they "form", but vice versa, from experience to judgement and its forms. It is not the concepts of understanding - as the residue of a rationalist prejudice – that remedy the lack of structure of sensible experience a lack that would be the empiricist prejudice. By affirming that experience is already structured by itself in a pre-logical way, without waiting for the activity of the understanding, Husserl overcomes the rationalist prejudice, and since this pre-logical structuring is regulated a priori – and not merely according to associative empirical laws – he also overcomes the empiricist prejudice. The inversion that leads from experience to the forms of judgement means, in fact, that the categories of the latter, far from representing the intelligible conditions of experience, are nothing more than the explication at the level of the apophantic logos - of the activity of thinking in the full sense - of a passive, but nevertheless stringent lawfulness; which is certainly pre-logical (If the term "logical" is taken in its proper sense) but which nevertheless already has a proto-logical germ in itself.

In this sense, sensible experience and the sphere of logical lawfulness are not the fixed object domains of the respective human faculties of sensibility and intellect. According to Husserl's critique of Kant's alleged psychologism (cf. Husserl 1956, 401), the latter would lead Kant's transcendental system to explain not knowledge in its universal and necessary structures, but only human knowledge, determined by such a contingent division of faculties. (It will not be possible here, however, to enter into the question of whether the criticism of psychologism and anthropologism directed at Kant is well-founded; Husserl himself tends to weaken this criticism anyway, as reported by Kern, 1964, 74 f. However, the thesis can be defended that the Husserlian approach, by rejecting the anchoring of the structures of knowledge to finite subjectivity, configures a sort of "anti-Copernican revolution"; cf. Pradelle 2015).6 This leads, in Husserlian phenomenology, to a decisive resizing of the scope of the subjective function in relation to logic. Subjectivity is no longer - through the understanding - the ratio essendi of the logical lawfulness of experience, the principle of its very possibility. The subject is reduced – in the Husserlian perspective – to a mere function of merely activating the logical lawfulness that is already passively inscribed in experience without the participation of the subject. The function of the ego as a pole of logical activity is that to activate the structures of passive syntheses, to make them explicit in an active synthesis, to progressively reveal the horizon of potentialities of determination that are passively given but potentially activatable in the process of experience (cf. Husserl 1963, § 19), to lead them to the clarity of judgement.

4.1. A more precise characterisation of the method of the foundation of logic: *Fundierung* and Anti-Platonism

The description of the emergence of the sphere of the logical – in its *noematic*-objective character – from its rootedness in experience requires, on the *noetic*-subjective side, the

⁶ Schnell (2016) disagrees with Pradelle's position in that for him, within the framework of his perspective of a generative phenomenology, the overcoming of the Copernican revolution opens up a dimension beyond subject and object, where a mutual relationship between a pre-subjective constitution and a pre-empirical foundation of being takes place.

retracing of the stages of the genesis of categorial thinking: from affection in perceptual passivity, to the turning of the ego and its consequent receptive activity (cf. Husserl 1939, § 17 ff.), up to explicit consideration and thematization in the sphere of thought that is now explicitly articulated, with the explicative synthesis from which the judgmental categories finally emerge (cf. Husserl 1939, § 24). This is how the judgement of attribution (cf. Husserl 1939, § 55), the judgement of identity (cf. Husserl 1939, § 57), the modalities of predicative judgement (cf. Husserl 1939, §§ 66 ff.), etc. find their foundation in experience. The discussion can then be extended to cover another class of objectivities of understanding, namely the *general objectivities* (*Allgemeingegenständlichkeiten*), for which Husserl develops the method of eidetic variation (cf. Husserl 1939, Part III).

In all this, the theoretical and methodological instrument of foundation (*Fundierung*) works to mediate the relationship between the sensible base and the categorial objectivities that emerge from it. In fact, foundation makes it possible to respond simultaneously to two fundamental demands: on the one hand, to clarify the emergence of higher-order objectivities and, on the other, to account for their genetic connection to the empirical base. It is thus possible to affirm, as it were, the novelty, the *ontological* autonomy of the objects of understanding, while at the same time affirming their *genetic* link to experience. In fact, foundation allows both demands to be satisfied, since it has no reductionist value, neither upwards (in an idealistic-platonic sense) nor downwards (in an empiricist-nominalist sense).

This is a central point for understanding the phenomenological doctrine of formal or general objectivities such as essences. On the one hand, they are the correlate of a categorial intuition and as such have their own objective status and are irreducible, which is the antinominalist moment. But insofar as this categorial intuition is a synthetic operation that is itself based on sensible intuitions, Platonism (even in Kant's transcendental version) and its supposed epistemic correlate as *intellektuelle Anschauung* are also avoided, insofar as the autonomy of such objectivities bears traces of their genesis, precisely because they are correlates of a founded act (cf. Tengelyi 2014, 529).

If the three moments of the intuition of non-individual objectivities - common to both categorial objects and essences - are to be listed as follows: 1) perception; 2) generation of variants from perception and consequent identification synthesis; 3) extraction and intuition of the invariant moment (cf. Lohmar 2003, xxii), then it is clear that the ideality of the intuited object inherits and incorporates an operational moment, that of variation and synthetic apprehension of empirical variants. In other words, the ideal objectivity is given not as the correlate of immediate intuition (which would expose Husserl to the empiricist critique), but as the correlate of a synthetic operationality, and can only be described within this operationality. This objectivity is not given as an object that can be grasped in an image, but only as a rule of invariance extracted from the play of variations. After all, there is no thing to be grasped, because the traditional correspondence of the cognitive act to the object is not possible here (cf. Tugendhat 1967, 130; Schnell 2007, 114), and vice versa, adequation is not possible because there is nothing "thing-like". Remaining dialectically linked to the operational dynamic of variation, this objectivity is in fact constituted only in the dynamic of variation, as the identical of the different moments. This works in an anti-Platonic sense in two ways: on the one hand, because such an objectivity – given only in a synthetic-categorial act, not as a thing, but as a rule – cannot be reified or hypostatised7 (cf. Ströker 1978, 19); and on the other hand, because the synthetic act – as the basis of the synthesis – must ultimately lead, in a more or less mediated way, to objectivities given in a monothetical act. No matter how distant an objectivity may be from the immediacy of the

⁷ In the sense of, for example, the realism of universals.

empirical datum, no matter how mediated a theory may be, in the end everything must refer to a world of individuals, as Husserl (1974) states.

5. Concluding remarks on the phenomenological and foundational significance of transcendental logic

From all the previous discussion it should now be clear what meaning transcendental logic has for Husserl. It has not only the function of restricting formal logic by taking into account the non-formal conditions of the reference of thinking to experience. It wants to and must be linked to the project of a transcendental foundation of formal logic itself. If the latter, as we saw at the beginning, could not be questioned by Kant in the universal validity of its laws - nor, of course, was there any reason for him to do so, since the very project of its foundation would have been absurd at the time -, the new theoretical situation in which Husserl finds himself imposes a change of attitude. From the Critique of Pure Reason to the beginning of the twentieth century, revolutions have indeed taken place, not only in the empirical sciences, but also in mathematics and logic itself. It is not the task of this contribution to go into this investigation, but it would be interesting to examine - also far beyond the Husserlian horizon - to what extent the task of a transcendental foundation of logic has since become not only possible, but also necessary. As long as logic was just the only possible logic, the classical logic of Aristotle – whose categories Kant certainly exposed in a more rigorous and systematic way - the problem could not even arise, as we have seen. But since the landscape of formal disciplines has become more complicated and diversified, so that there is no longer just one logic, but more logics, "deviant" logics that are incompatible with the classical one (such as paraconsistent logics), since classical logic itself seems to have lost its universality, no longer adapting itself to all areas of reality (hence, for example, the need to introduce a specific logic for the quantum world), the field of logic as such can no longer be considered exempt from questions about its meaning, the scope of its legitimacy, and the foundation of its validity. However, since this foundation cannot itself be a technical performance of logic (if one does not want to fall into a vicious circle), who else but philosophy – understood as an "intensive" investigation of the foundations of the sciences - must take on the task of illuminating the foundations of logic itself?

For Husserl, this need is already explicitly present in the very fact that, through the epoché, he subjects pure logic itself - just like all other "worldly" disciplines - to the methodological instrument of phenomenological reduction (cf. Husserl 1976b, § 59). Instead of naively maintaining its validity, according to the mundane-natural attitude, this validity is suspended, not in the sense of a sceptical gesture, but in the sense of that "step back" proper to the philosophical attitude, which is necessary to make thematic the field of enquiry, which otherwise remains not thematic because it is constantly before the eyes. Only in this way is it possible to question the presuppositions of logic, an analysis that must be carried out in a capillary way and that requires the study of the genesis of the categories of the logical from the lawfulness of experience, which thus leads back to the theme of Experience and Judgement briefly discussed above. This overcomes the naivety of the natural attitude, which never questions the origin and the scope of the concepts it constantly uses, and allows logic to once again serve as a guide to the sciences. A phenomenon of our time (which touches a central point of the Crisis), is in fact the increasing specialisation of the particular sciences, in which logic has lost its guiding role. In the resulting process of autonomisation of the sciences, they have lost the ability to find an "ultimate" legitimation of the meaning of their practice, which therefore risks becoming obscure to itself. Formal logic itself has increasingly become just one of the sciences that populate the horizon of the pre-philosophical attitude. What is needed, according to Husserl, is precisely a transcendental foundation of logic, which will restore it to the position of constituting the normative measure of the sciences, thus making it possible to overcome the fragmentary and one-side character of the positivity of the particular sciences by recognising their place within a renewed universal rationality.

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