THE *ENS RATIONIS* AND THE TRANSCENDENTAL PROBLEM IN KANT'S *OPUS POSTUMUM*

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Abstract. The concept of *ens rationis* is widely used by Kant in some drafts of his *Nachlasswerk*. In the first *Critique*, at the end of the Transcendental Analytic, Kant defines the *ens rationis*, or "thought-entity" (*Gedankending*), as a "concept without an object". My aim is to show that, in *Opus postumum*, we find a significant shift of the notion of *ens rationis*, which lead to a redefinition of the transcendental philosophy itself. In the sections named A *Elemen. System 1-6* and *Übergang 1-14*, this notion is used when referring to the ether, thought as a necessary material foundation of the collective unity of experience. The ether is thus not to be understood not as substances existing outside the subject, but rather as the result of a true *act* of positing. However, it would be quite problematic to conceive it as a mere fiction created by an imaginative action of the subject or, indeed, as a simple concept without an object. Kant writes for example that, although it exists only in thought, the ether has reality (*Realität*). Therefore, my point is that the status of the transcendental philosophy significantly shifts from a mere inspection of the formal conditions of possibility of experience to an activity which *construct* experience even from a material standpoint. The "thought-entities" are exactly what conveys this genetic function, and they therefore reveal a status which would be not comprehensible only with the speculative tools of the first *Critique*.

Keywords: transcendental, thought-entity, ether, moving forces, indirect appearance, collective unity.

Kant's *Opus postumum* has been, for a very long time, among the least studied works of the philosopher's entire production[1]. Even though skepticism

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[1] Most of the responsibility for the initial disinterest of scholars lies in the judgments that began to circulate during the nineteenth century regarding the manuscripts, which were considered the fruit of a mind debilitated by senility. Andreas Cristoph Wasianski admits that the philosopher considered the manuscripts the preparation for his most important work, but adds that "probably [...] his weakness played an important role in this judgment" (Felix Groß, *Immanuel Kant. Sein Leben in Darstellung von Zeitgenossen. Die Biographien von L.E. Borowski, R.B. Jachmann und E.A.Ch. Wasianski*, Darmstadt, Wissenschaftliche Buchgesellschaft, 1993, p. 260). Even more blunt is the

toward this text has not yet been completely subsided, nowadays the number of studies that intend to reevaluate Kant's *Nachlasswerk* is increasing significantly. The aim of this paper is to give a little contribution to the attempt to enhance the speculative interest of Kant's last project, trying to show on the one side the possibility to find some coherence in the themes and in the conceptual tools acting through the various *Konvolute*, and on the other side underlying the undeniable evolution that these same tools provided to Kant's own system. In this sense, my goal is to demonstrate that it is possible to read the *Opus postumum* as a unified project, in spite of the difference in the topics covered in the various fascicles[2]. Indeed, most contemporary studies seem to have abandoned the pretense of a systematic reading of the manuscripts, dwelling rather on specific problems and individual parts of the text. While this approach is useful and indeed required in order to clarify in detail Kant's tortuous and often shocking arguments, it also risks underestimating the close relationship between the fascicles. Thus, while being aware of the need for a more in-depth analysis of the problems I will discuss in this text, I will attempt to show how, from a programmatic point of view, it is possible to rehabilitate a systematic reading of the last Kantian work. In particular, my contribution will focus on the evolution of the concept of *ens rationis* (*Gedankending*) from the first *Critique* to the *Opus postumum*, which, as far as I know, is a theme that has not been sufficiently underlined by the secondary literature[3], and which constitutes, in my reading, one of the main cores of Kant's late reflections.

I will thus proceed as follows: in the first paragraph, I will briefly show what the project of the *Opus postumum* consists of and what issues it aims to solve. In order to do this, I will focus mainly on the first fascicles (1796-1799), and I will attempt to highlight the difficulties Kant encounters in developing his arguments.

In the second paragraph, I will focus on a specific topic that has received particular attention in the contemporary literature, namely that of the relationship between the "transition" and the "gap" problems in Kant's last project. I will thus develop my own interpretation regarding this issue, based on the results gained from the first paragraph.

opinion of Kuno Fischer, who states that "one may doubt the value of this writing, as far as the novelty of the though, the sharpness and conciseness of the exposition are concerned, if one considers the decrepit state in which Kant was at that time" (Kuno Fischer, *Geschichte der neuern Philosophie III*: *Entstehung und Grundlegung der kritischen Philosophie. Die Kritik der reinen Vernunft. Immanuel Kant. Entwicklungsgeschichte und System der kritischen Philosophie*, München, Bassermann, 1860, p. 93).

[2] Nevertheless, it will not be possible for me to consider the entirety of the manuscripts. Therefore, my analysis will stop before the last two fascicles, namely VII and I, where topics in practical philosophy are mostly addressed. However, in the Conclusions I will attempt to briefly note that the conceptual tools at work in the earlier fascicles seem to be present in the last two as well.

[3] The only scholar who has pointed out in the most lucid and precise manner Kant's establishment of this new role assigned to the *ens rationis* is certainly Mathieu (see Vittorio Mathieu, *L'Opus postumum di Kant*, Bari, Laterza, 1991, pp. 117–133).

In the third paragraph, I will show that the concept of the "thought-entity", introduced in the section *Übergang 1-14* (May – August 1799), is functional in solving exactly the difficulties the philosopher had faced in the earlier drafts. At the same time, I will try to note its radical difference from the concept of "thought-entity" that Kant introduced in the Table of Nothing of the first *Critique.*

In the fourth paragraph, I will briefly show that this reformulation of the concept of "thought-entity" can help us in understanding the meaning and the function of one of the most puzzling notions of the entire *Opus postumum*, namely that of "indirect appearance", which appears in the drafts immediately following *Übergang 1-14*, namely *Konvolute* X and XI (April 1799 – April 1800). Lastly, I will try to hint at the consequences that these developments could have for the very meaning of transcendental philosophy itself.

1. KANT'S PROJECT IN THE EARLY FASCICLES OF THE *OPUS POSTUMUM*

As it is widely known, the title that Kant would have given to his last work is: "Transition from the metaphysical foundations of the natural science to physics". His intention was indeed to bridge the gap he detected between the a priori dimension of the metaphysical investigation of nature and the a posteriori dimension of empirical physics. The first drafts thus deal mainly with problems regarding philosophy of nature and the foundation of physics as an empirical system.

In the so-called *Oktaventwurf* and in the drafts immediately following, written between 1796 and 1799, Kant's intention is to systematize a priori the moving forces of matter, in an attempt not just to analyze the properties of "matter" in general (as it was done in the *Metaphysical Foundations*), but to deduce the attributes of *specific kinds* of matter. In the very beginning of this fascicle, the philosopher writes, for example, that the transition from the metaphysical principles to physics is to be understood as the transition "from the moving forces that make matter in general possible, to those that give it a determinate connection […], that is: density, cohesion, movability, or comparative immovability of the parts that cohere"[4]. This is actually something Kant had already attempted to do within the *Metaphyisical Foundations* itself, and specifically in the General Remark to Dynamics, albeit in a less systematic way[5]. In this section the philosopher tried to

[4] Immanuel Kant, *Opus postumum* (from now on: *OP*), AA XXI:273. I will quote from the English translation by Eckart Förster (Cambridge, Cambridge University Press, 1993). Since this is not a complete translation of the *Opus postumum*, the passages that are not available will be translated by me.

[5] For a comprehensive study on the relationship between Kant's project in the first fascicles of the *Opus postumum* and the General Remark to Dynamics, see Dina Emundts, *Kants Übergangskonzeption im Opus Postumum*, Berlin-New York, De Gruyter, 2004.

expound the ground for some particular attributes of matter like cohesion, fluidity, and chemical solutions. Regarding for example the latter, Kant refers to the concept of caloric (*Wärmestoff*) as a substance that can exemplify a chemical-type bond with the matter to which it inheres, making it impossible for empty spaces to exists within bodies[6]. The same could be said about the fluidity of matter: The change in the state of aggregation can be explained not through a change in the amount of empty space within a body (more empty space = more fluidity; less empty space = more rigidity), but as a consequence of addition or decrease of a matter such as the caloric that penetrates substances causing them to expand or contract.

On the other hand, regarding cohesion of bodies, in the General Remark to Dynamics Kant merely notes that it should be regarded as a surface attractive force (*Flächenkraft*) that acts only in contact, and not at distance, unlike the original *Anziehungskraft*, making no further arguments regarding its origin[7]. Nevertheless, the question reappears in the subsequent General Remark to Phenomenology, in reference to the discussion of the possibility of empty space in the context of a dynamic theory of matter. Kant admits that he cannot logically, and thus a priori, prove the impossibility of empty space. Yet, he believes that:

> Nevertheless, even if no merely logical reason for rejecting this kind of empty space were to be found here, there could still be a more general physical reason for expelling it from the doctrine of nature – that of the possibility of the composition of a matter in general, if only this were better understood. For if the *attraction* assumed in order to explain the cohesion of matter should be only apparent, not true attraction, and were merely the effect, say, of a *compression* by external matter (the ether) distributed everywhere in the universe, which is itself brought to this pressure only through a universal and original attraction, namely, gravitation (a view that is supported by several reasons), then empty space within matter, although not logically impossible, would still be so dynamically, and thus physically, since any matter would expand of itself into the empty spaces assumed within it (since nothing resists its expansive force here), and would always keep them filled.[8]

Postulating the existence of a cosmic matter (the ether) would thus be a useful operation in order to demonstrate: 1) the formation of bodies, and thus their cohesion, by means of the external pressure of a matter whose "repulsive force must be thought as incomparably larger in proportion to its inherent attractive force"[9], and therefore endowed with negligible density; and 2) the impossibility of

[6] See Immanuel Kant, *Metaphysische Anfangsgründe der Naturwissenschaft* (from now on: *MAN*), AA IV:532. I will quote from the English translation by Michael Friedman (Cambridge, Cambridge University Press, 2004).

[7] See *MAN*, AA IV:526.

[8] *MAN*, AA IV:563-564.

[9] *MAN*, AA IV:534.

empty space being arranged between the bodies themselves, thus refuting the corpuscular theory of matter.

What should be noted, however, is that both with respect to caloric, understood as an imponderable matter that penetrates bodies, and with respect to the ether, conceived as a substance endowed with a very low density acting mechanically from the outside on the surface of bodies, Kant does not feel entitled to provide a proof of their existence. They remain mere physical *hypothesis*, which could be useful in order to explain the origin of some properties of matter but whose existence cannot be attested through the conceptual tools of transcendental philosophy. Such arguments therefore seem to reflect, as Pecere notes, a certain "methodological prudence"[10] that the philosopher will decide to force – albeit gradually – only in the *Opus postumum*.

Indeed, in the *Oktaventwurf* ether and caloric both assume a more systematic role in the justification of various attributes of matter, such as density, cohesion, fluidity, and rigidity. Kant writes, for example:

> [Cohesion] is *only possible* by original perpetual vibration of the ether [...]. This vibration of the ether must, in the absence of heat, give cohesion to all the scattered types matter, according to the difference of their specific gravities [*Schweeren*] [...].[11]

Kant resumes here the argument he had introduced within the General Remark to Phenomenology, but with a fundamental shift: he now assumes the ether as the *only possible explanation* for the cohesion of bodies. Indeed, the existence of this matter is defined in terms of an "inevitably necessary hypothesis [*eine unvermeidlich nothwendige Hypothese*], for, without it, no cohesion, which is necessary for the formation of a physical *body*, can be thought"[12]. The only way in which attractive force in contact can be explained thus lies in the assumption of the mechanical action of an external matter on bodies, so that their parts can cohere to each other. The ether thus remains a *hypothetical* element, yet it is now considered the only possible explanation for the formation of bodies themselves.

Concerning the possibility of the different states of aggregation of matter, Kant states that they are made possible by the action of the caloric, understood as "matter which, insofar as it penetrates all other matter, at the same time expands it"[13]. Unlike the ether, and in consonance with the theses expressed in the *Metaphysical Foundations*, the *Wärmestoff* is therefore not thought of as a substance that acts from the outside on physical bodies by producing the cohesion

[10] Paolo Pecere, *La filosofia della natura in Kant*, Bari, Edizioni di Pagina, 2009, p. 580.
[11] *OP*, AA XXI:374 (my emphasis).
[12] *OP*, AA XXI:378.
[13] *OP*, AA XXI:380.

of their parts. It is considered instead as a matter that *penetrates* these same bodies by causing their expansion or contraction, and thus determining their state of aggregation. As such, it must be both imponderable and incoercible, since otherwise its ability to penetrate other matter would not be explained[14].

In the last sheets of the *Oktaventwurf*, Kant also sketches for the first time an attempt to classify the qualities of matter following the table of categories, thus marking a significant departure from the General Remark to Dynamics, where there was no trace of this kind of procedure. The philosopher states: 1) that the *quantity* of matter can only be measured by an instrument, such as compressing a steel spring; 2) that according to *quality* matter is either fluid or rigid; 3) that the different *relations* of liquid matter to itself, of solid matter to liquid, and of solid matter to itself determine specific properties of bodies such as their figure, chemical dissolution, and crystallization; 4) that, according to *modality*, the existence of bodies presupposes their complete determination (*durchgängige Bestimmung*), so that "the unity of all determinations emerges in the relation of all things"[15].

The radical differences with respect to the General Remark to Dynamics thus seem to consist: 1) in a more steady reference to ether and caloric as necessary principles for the explanation of certain physical properties, and 2) in an attempt to systematize these same properties through the table of categories.

It is then no coincidence that, in a sheet taken from the III fascicle (summer 1797), Kant writes that he wants to explain "a set of appearances from one principle"[16]. This is hardly surprising, given the fact that if Kant's goal is to comprehensively systematize the properties of matter, then he must first identify that principle from which to derive these same properties. In my reading, the principle, or rather the *principles*, that in these drafts perform this function are in fact the ether, understood as a matter acting mechanically on the surface of bodies, and the caloric, which instead acts dynamically on them. Both the ether and the caloric are indeed conceived as "inevitable and necessary hypotheses" for the explanations of these phenomena, and no more as mere useful but only possible conjectures, as seemed to be the case in the *Metaphysical Foundations*.

However, Kant soon realized that, according to the foundations of his own critical philosophy, neither the ether, nor the caloric could play the role of that principle he was seeking. The problem could be summarized as follows: the rigid distinction between a priori and a posteriori makes it complicated to establish the status of the two materials assigned to the genesis of empirical properties. The mechanical ether, in order to act on empirical bodies, must itself be endowed with a certain density, and must therefore be ponderable. However, our senses cannot

[14] See *OP*, AA XXI:388.
[15] *OP*, AA XXI:411.
[16] *OP*, AA XXI:319.

provide us with evidence of its existence[17], and its status cannot go beyond the rank of a mere hypothesis, making it unfit to serve as the principle of *Übergang*. As Kant stated in the General Remark to Dynamics, a mere hypothesis cannot indeed "claim the role of a principle"[18]. The fact that Kant still fails to overcome the merely hypothetical status of the ether accounts for the problematic nature of the attempt to explain through its action some fundamental properties of matter, first and foremost cohesion.

The caloric instead, as an *imponderable* matter, cannot be empirically perceived under any circumstance[19]. Yet it is not comprehensible how a substance that is so ineffable can cause changes in the states of aggregation of empirical bodies. One can thus conceive this kind of matter in two ways, both equally unsatisfying:

1) One can radicalize its difference from empirical matter, making it a transcendental and a priori principle for the explanation of certain phenomena. However, in this case the problem would be that, as a pure *formal* principle, the caloric would be wholly unsuitable to serve as a structural and explanatory ground of the properties of matter;

2) One can assume it as a *physical hypothesis* on a par with the mechanical ether, yet causing it to lose the characteristics (imponderability, incohesibility, etc.) that enable it to penetrate empirical substances and preventing a true a priori demonstration of its existence.

I thus argue that the conceptual tools at Kant's disposal were not functional in finding a solid principle that would be able to lead the investigation and allow the empirical attributes of matter to be derived from it, thus making also the classification of the latter according to the table of categories a mere enumeration lacking organic coherence.

This difficulty led Kant, around 1798, to recognize the need to revise some basic assumptions of his own critical system, in order to avoid the problems he faced in the first drafts. Not surprisingly, then, formulations such as the following begin to appear:

[17] As Kant states in §91 of the *Critique of the Power of Judgment*, "matters of opinion [*Meinungssachen*] are always objects of an empirical cognition that is at least intrinsically possible (i.e., they are objects of the sensible world), even though that cognition is impossible for us because our cognitive power is so weak" (Immanuel Kant, *Kritik der Urteilskraft*, AA V:467. From now on: *KU*). In other words, it must be possible for physical hypotheses to refer to an empirical matter that, though very subtle, must *potentially* be perceptible, if not directly through our senses, at least by some particularly refined instrument. It is no coincidence that, immediately afterwards, Kant cites the case of the "ether of modern physicists".

[18] *MAN*, AA IV:524.

[19] Indeed, Kant writes that imponderable matter "could not be known through any experience" (*OP*, AA XXI:388).

> The transition from one discipline to another [from the metaphysical foundations of natural science to physics] cannot occur directly. Between the concepts of the former, which are conceived a priori, and the empirical ones […], there are intermediate concepts [*Zwischenbegriffe*] which make the transition from one to another scientifically possible.[20]

If my previous reconstruction is correct, the introduction of these curious concepts, which Kant calls *Zwischen-* or *Mittelbegriffe*, is meant to solve the trouble in which the philosopher was entangled before 1798: the principles he is seeking cannot be neither merely formal nor material, but must instead occupy a position in *between* these two dimensions, making then possible to fill the gap between the a priori metaphysical foundations of natural science and the a posteriori empirical physics. In a sheet dated September 1798, Kant specifies the status and the function of these concepts. He writes for example:

> These concepts must not be taken as given [*gegebene*] by reason or experience, but only as made [*gemachte*]: [they must be taken] as problematic in regard to their objective reality, […] but they nonetheless form the a priori basis of natural research and therefore, in regard to physics in general, they must be necessary propaedeutic principles of this research in order to arrive at it empirically.[21]

So, Kant is here very clear in pointing out the essential role of the intermediate concepts, conceived as that speculative tool that would have to provide the possibility of a systematic empirical physics. These concepts must therefore be thought of as *both* a priori and material: on the one side, they must be rationally and systematically deducible, and on the other they must be the very "grounds of the appearances [*Ursache der Erscheinungen*]"[22]. In other words: we can give an a priori classification of the various empirical appearances and properties of matter only if we think a principle which is not merely formal, but still transcendentally necessary, and which constitutes the ground for the existence of the former.

Now, even if Kant often speaks of *Zwischenbegriffe* in the plural, the role of the intermediate concept *par excellence* seems to be attributed to the ether[23] (which from here on will no longer be distinguished from the caloric), conceived as a universal matter endowed with specific moving forces:

[20] *OP*, AA XXI:528-529.
[21] *OP*, AA XXI:358.
[22] *OP*, AA XXI:505.
[23] I argue that when Kant speaks of *Zwischenbegriffe* in the plural, he wants to refer to the moving forces of ether itself.

> The intermediate concept, however, which had to lead from that purely a priori founded science to physics as an empirical science, had to underlie a concept of matter, which in one respect would be empirical but in another would be an a priori concept, and this lies in the concept of matter in so far as it has moving forces.[24]

Thus, the pressure to which the structures of transcendental philosophy are subjected now becomes evident: Kant is here for the first time alluding to the existence of a *matter* as the *transcendental ground* for the explanation of empirical appearances which would embody the "supreme principle of the transition"[25].

In the next paragraphs I will discuss in more detail the status of this particular matter and the demonstration Kant put forth in order to prove its existence. However, before doing so, I believe it is necessary to make a brief interlude that, in the light of what I have argued so far, allows me to take a stance on a rather widespread debate in the context of the more recent secondary literature.

2. AN INTERLUDE. THE "TRANSITION" PROBLEM AND THE "GAP" WITHIN KANT'S SYSTEM

The problem I would like to deal with in this paragraph, before proceeding in analyzing the central fascicles of the *Opus postumum*, has become dominant in contemporary reception of the manuscripts thanks to Förster's *Kant's Final Synthesis*[26].

It might appear at first glance a purely technical issue, which could interest only an audience accustomed to the most debated problems in the secondary literature. I believe, however, that it represents a fundamental juncture in order to fully understand the intentions, aims and means underlying Kant's last project. What I will argue in this paragraph is that Förster's interpretation, despite being correct at its core, manifests some problems that could be solved through the reconstruction of the first drafts that I tried to offer in the first paragraph.

As mentioned, Kant's problem is to build a transition from the metaphysics of nature to physics in order to bridge the "gap" between these two dimensions. Förster correctly points out, however, that the term "gap" (*Lücke*) does not begin to appear in the drafts and in private letters until 1798, whereas Kant is said to have planned the project of the transition as early as 1790, when he first discussed with his friend Kiesewetter the need for an *Übergang* from the metaphysical foundations of natural science to physics[27].

[24] *OP*, AA XXI:289.

[25] *OP*, AA XXI:594.

[26] Eckart Förster, *Kant's Final Synthesis. An Essay on the* Opus Postumum, Cambridge, Harvard University Press, 2000, pp. 48–74.

[27] Eckart Förster, *Kant's Final Synthesis*, p. 51.

Förster thus believes that the "transition" and the "gap" problem are meant to refer to completely different problems. The first concerns the aforementioned possibility of moving from the a priori domain of the metaphysics to nature to the a posteriori domain of physics. The "gap" problem would instead specifically concern the objective validity of the categories and the construction of the concept of "body", which in Förster's opinion, were not adequately justified in the first *Critique* and in the *Metaphysical Foundations*.

According to the scholar, the doctrine of Schematism had not sufficiently specified the conditions for the applicability of the categories to experience, and the aim of the *Metaphysical Foundations* was therefore to fill this gap by attempting to construct a priori the concept of the object of external sense (to which the categories must apply), i.e. the concept of "matter"[28]. However, the result of the *Metaphysical Foundations* turned out to be unsatisfactory, due to the circularity of the argument developed therein, which Kant himself acknowledges in the notes written on a letter received from Beck in 1792[29]. Also unsuccessful was the attempt developed in the *Oktaventwurf* to overcome the difficulties still present in the *Metaphysical Foundations* by introducing a systematic reference to the concept of ether, in an attempt to avoid the circularity of the previous argument[30].

It was at this point that Kant would notice a "gap" in his system, due to the difficulty of constructing the concept of matter and thus of demonstrating the applicability of categories to objects of experience. The year 1798 therefore represents a *Wendepunkt* of the Kantian project that forces the philosopher to reformulate his theory through a new Schematism of pure concepts. Following Förster, the "gap" should thus not to be understood as the space to be filled between metaphysics of nature and empirical physics, but as a "lack" or as a partial "failure" in Kant's Schematism doctrine.

Now, I believe that Förster is right in identifying in '98 a turning point in the Kantian project but at the same time I consider to be erroneous his uncoupling of the gap problem from the transition problem, and his reconstruction of the meaning of the former. Authors such as Friedman and Pecere have already sharply shown

[28] "Since the Schematism chapter dealt exclusively with time determinations and inner sense, it did not specify the 'sufficient' conditions for the application of the categories; it required supplementation by a work that laid out the forms and principles of outer intuition in their entirety, and thus related the categories to possible objects of outer intuition" (*Ibidem*, p. 59).

[29] See *Kants Briefwechsel*, AA XI:361-362. The philosopher assumed the attractive force and the repulsive force as the only two original forces that make matter possible. Furthermore, the different ratio between these two *Kräfte*, that is, the varying value of one or the other, should have accounted for the different levels of density of matter itself. However, Kant had conceived the intensity of the attractive force as dependent on the density of the matter to which it inheres, and, at the same time, had assumed density to be an effect of the attractive force. Density was therefore a presupposition and consequence of the value of *Anziehungskraft*, invalidating the attempt made in the section on Dynamics to construct a priori the concept of "matter".

[30] *Ibidem*, p. 66.

how Förster's solution is not convincing from a theoretical standpoint. The former notes that, according to what Kant states in the Postulates of Empirical Thought within the first *Critique*, the concept of matter cannot be constructed in pure intuition[31]. The second agrees with this objection and, at the same time, points out Förster misinterpretation with respect to the whole project of the *Metaphysical Foundations*. In this work, Kant's aim is not to "prove" the objective reality of the categories, as it was the case in the Transcendental Deduction and in the Transcendental Schematism, but rather, more modestly, to "show" or "exhibit" their reality by providing concrete examples[32].

Regarding these points, I cannot but agree with their observations, and for this reason I believe that there is in fact no gap conceived as a failure of the Transcendental Schematism. Rather, my intention is to show that the "gap" problem is in fact not at all independent of the "transition" problem.

From an exegetical point of view, the separation of the problems has also proved rather difficult to justify. Indeed, in *Konvolut* IV Kant seems to completely identify the two issues, when he states that "there is a gap [*Lücke*] to be filled between the metaphysical foundations of natural science and physics; its filling is called a transition [*Übergang*] from one to the other"[33]. Here the *Lücke* is explicitly identified with the gap between the a priori dimension of metaphysics of nature and the a posteriori dimension of physics that must be bridged. Similarly, in a passage from taken from *Farrago 1-4* (1798–1799), Kant notes:

> The transition [*Übergang*] from one doctrine to the other, like that between the metaphysical principles of the science of nature to physics [...] cannot be explained unless one thinks of a gap [*Lücke*] between the two, which must be filled through a medium [*durch ein Mittleres*], and this [medium] is the doctrine of the moving forces of matter, insofar as they are unified according to a principle (*coniunctim*).[34]

As Howard correctly notes, the "gap" thus does not indicate an error within the critical system that needs to be fixed, but rather, in a more neutral sense, a "space between two things, a space that is not a failing or a troublesome lack but simply a separation"[35]. Put differently: it must be understood as the still-empty space within the "system of critical philosophy", determined by the absence of an architectural element that allows the transition from one dimension to the other. But then, if the two problems are so intimately connected, and if Kant speaks to

[31] Michael Friedman, "Eckart Förster and Kant's *Opus postumum*", in *Inquiry: Interdisciplinary Journal of Philosophy*, vol. 46, nr. 2, 2003, p. 223.

[32] Paolo Pecere, *La filosofia della natura in Kant*, pp. 674–684.

[33] *OP*, AA XXI:382.

[34] *OP*, AA XXI:642.

[35] Stephen Howard, *Kant's Late Philosophy of Nature. The* Opus postumum, Cambridge, Cambridge University Press, 2023, p. 20.

Kiesewetter about the problem of the "transition" surely already around 1790, why should 1798 be considered a turning point in the context of the new Kantian project? Well, I believe that within these years it is the problem of *Übergang* itself that changes, so that a gap is discovered between the two disciplines.

What I intend to argue is that in *Oktaventwurf*, the "transition" is not assumed as a bridge that must be lowered between two territories that are completely dissimilar to each other and thus separated by a *Lücke*, or, as Kant calls it in other places, by an "abyss" (*Kluft*). Rather, it is conceived as a simple "step" (*Schritt*) from one dimension to another. Let us read, for example, the following passages:

> The transition [*Übergang*] (*transitus*) from one form of knowledge to another must be a step [*Schritt*] (*passus*) only, not a leap [*Sprung*] (*saltus*). [...] The rule herein will be […] to proceed like elephants, which do not put one of their four step further until they feel that the other three stand firm.[36]

Similarly, a little further on, Kant writes again:

> The transition from one system to another, if it is not introduced by any affinity [*Verwandschaft*], is not a transition [*Überschritt*] (*transitus*), but a leap [*Sprung*] (*saltus*), which destroys what is systematic, and therefore scientific, in a doctrine, and cannot be tolerated [...].[37]

In the passages where Kant thematizes the problem of *Übergang* in the *Oktaventwurf*, he thus makes no reference to a gap between the two disciplines. Indeed, in the second passage quoted above, the philosopher seems to rule out the possibility of a "leap" between them, since the latter would invalidate the systematic and scientific nature of his project. The transition, Kant writes, must presuppose an "affinity" between metaphysics and physics. It thus seems that the two territories need to share a common border in order for a *Schritt* to be possible between them. But then how must we understand this affinity? Right above the passage just quoted Kant states that physics is divided into a *physica generalis*, which "expresses only the properties of matter in outer objects of experience"[38], and in a *physica specialis*, which instead constructs a system of specific bodies formed from that same matter. And it is precisely the *phyisica generalis* that

> … also contains the necessity of the transition from the metaphysical principles of natural science to physics, due to the affinity [*Verwandschaft*] that has to be found between a priori rules with the knowledge of their application to empirically given objects.[39]

[36] *OP*, AA XXI:387.
[37] *OP*, AA XXI:407-408
[38] *OP*, AA XXI:407.
[39] *Ibidem*.

Kant makes it clear here that the necessity of the transition is already present in the *physica generalis*, which in the Preface to the *Metaphysical Foundations* was identified with the pure part of the science of nature, containing both the metaphysical concepts of such a science (examined in the same 1786 text) and its mathematical constructions[40]. Having Kant already at that time a priori analyzed the properties of the *empirical* concept of matter in general, he believed that he had already laid the ground for the possibility of a transition to *physica specialis*. Indeed, immediately below he states that the *Metaphysical Foundations* "already undertook some steps in this field"[41]. It is very likely that the reference is precisely to the General Remark to Dynamics, where the attempt was to trace back certain attributes of matter to the a priori forces of attraction and repulsion, with the intention of showing how a dynamic conception of matter might be able to justify the different configurations of the latter, albeit not in their complete variety[42]. What interests us to note is the fact that, both in the General Remark of Dynamics and in the *Oktaventwurf*, which takes up the overall project of the latter, no mention of a gap between the metaphysics of nature and physics is made, as if the transition between the two disciplines were complicated to establish, but at the same time *possible* because of their *contiguity*, brought about by the common attention devoted to the concept of *matter*[43].

In other words, the transition to *phisyca specialis* would have required an extension of categorical analysis beyond the concept of "matter" in general to its empirically determined properties. However, this operation was not (yet) understood by Kant in the terms of a real qualitative "leap". A passage contained in the V *Konvolut* (Summer 1798), is emblematic with respect to this change. Here Kant writes:

[40] See *MAN*, AA IV:473.

[41] *OP*, AA XXI:408.

[42] See *MAN*, AA IV:525.

[43] Kant makes no mention of a gap between the two disciplines even in the *Metaphysics of Morals*, when, in §45 of the Doctrine of Virtues, he mentions the transition from the metaphysics of nature to physics and stresses the need for a similar transition in the practical sphere, from the metaphysics of morals to concrete morality (see Immanuel Kant, *Die Metaphysik der Sitten*, AA VI:468-469). I also think that Emundts argues for something similar when she writes that, in the General Remark to Dynamics, Kant had "a relative unproblematic representation of a transition to empirical physics" (Dina Emundts, *Kants Übergangskonzeption im* Opus Postumum, p. 58n.). We both think that the transition became problematic due to the discovery of the "gap", even if we disagree on the origin of the latter. I argue that Kant discovered the presence of a gap between metaphysic of nature and physics because of the difficulty in defining the status of the ether according to the conceptual tools of critical philosophy. On the other side, Emundts asserts that the gap was opened by Kant's acknowledgment of the aforementioned circularity of his theory of matter, which led the philosopher to assign to the ether an essential function in order to avoid this problem (see *Ibidem*, p. 15). However, as we have seen, Kant first talked about the circularity problem as early as 1792, while the first mentions of the gap problem appear only in 1798, with no reference to it in the drafts written in the previous two years. This temporal distance leads me to think that the two problems cannot be identified.

> The transition from one science to the other must have certain intermediate concepts [*Zwischenbegriffe*], which are given in the one and applied to the other, and which thus belong to both territories alike. Otherwise, this advance is not a lawlike transition but a leap [*Sprung*] [...]. One might think that the transition from the metaphysical foundations of natural science to physics requires no bridge, for the former, as a system constituted by concepts a priori, exactly adjoint the ground [*Boden*] of experience onto which it could alone be applied. But this very application creates doubts and contains difficulties which should be embarrassing for physics […].[44]

The impression is that Kant is here attempting to correct his earlier conception of transition, according to which it took place exclusively through a *Schritt* from one discipline to another, having he already shown in his 1786 work how the a priori metaphysical principles "adjoint" (*grenzt*) the empirical concept of matter. He now explicitly recognizes the existence of a *leap* between metaphysics of nature and empirical physics. I believe that this leap became evident precisely because of the difficulty to find a principle of the "transition" through the classical tools of critical philosophy. As we have seen, the problem was no more to systematically analyze the properties of the concept of "matter" in general, but rather to deduce its specifical and various attributes. In order to accomplish this task, he relied on the ether and the caloric as their true explanatory grounds, though struggling in defining the ontological status of these particular kinds of matter. Therefore, it seems that he needed to define an intermediate territory between the a priori dimension of metaphysics and the a posteriori territory of physics that would clarify their transcendental role. It is then no coincidence that here also emerges the instrument on which Kant later reflections will hinge, namely that of the "intermediate concept" (*Zwischenbegriff*, or *Mittelbegriff*).

Moreover, this interpretation seems to be confirmed by another draft, with respect to which the literature has amply highlighted the significance for the entire *Übergang* project. This is *Loses Blatt* 6 of the fascicle IV, originally traced back by Adickes to 1796, but whose dating was later corrected by Tuschling[45], who attributed it to the summer of 1798:

> Between metaphysics and physics there still exists a broad gulf [*Kluft*] (*hiatus in systemato*), across which the transition cannot by a step [*Schritt*], but requires a bridge of intermediary concepts [*eine Brücke von Zwischenbegriffe*] which form a distinctive construction.[46]

[44] *OP*, AA XXI:525-526.

[45] See Burkhard Tuschling, *Metaphysische und transzendentale Dynamik in Kant's* Opus postumum, Berlin-New York, De Gruyter, 1971, p. 91.

[46] *OP*, AA XXI:476.

Within this passage we can see all the elements that allow us to define the turn taken by Kant. They are: 1) the explicit acknowledgment of the presence of a gap between metaphysics and physics; 2) the rectification of his own position prior to '98, through the rejection of the possibility of a *Schritt* from one dimension to the other; 3) the introduction of the necessity of *Zwischenbegriffe* to bridge the gap.

To conclude, this reconstruction of the relationship between the problem of *Übergang* and the problem of *Lücke* has a twofold advantage: on the one hand, it makes it possible to identify the two issues as one, as Kant explicitly states, making it unnecessary to look for an additional problem to that of the "transition". On the other hand, it still allows us to recognize a turning point in Kant's reflections, signaled by the sudden appearance of the terms *Lücke* and *Kluft* in letters and manuscripts of 1798. Indeed, authors such as Beiser, Busche, and Howard correctly identify the two issues, but they do not recognize any specific relevance to the emergence of the *Lücke* question, as if its appearance *ex abrupto* were to be conceived as an event with no particular significance[47]. In my view, what they fail to note is the very change that invests the *Übergang* problem itself.

After this brief detour from the central problem, I will now return to the question of the status of the ether as an intermediate concept and its meaning for the status of transcendental philosophy itself.

3. ETHER AS A THOUGHT-ENTITY

In the preceding two paragraphs, I have tried to briefly show the problems Kant is confronted with in the first fascicles of the *Opus postumum*. We have seen how in the *Oktaventwurf* the typical distinction between a priori and a posteriori made it difficult to establish the status of the ether as the principle of the "science of transition". Now, the space opened by the *Kluft* between metaphysics of nature and physics probably suggested to Kant the possibility of an alternative solution, one that would allow the ether (or the caloric, because, as we have seen, Kant seems now to identify their functions) to be assumed as a *transcendental principle* of experience, albeit not in the exclusively formal terms of pure intuitions or categories. The ether is indeed a *Mittelbegriff*: it occupies a position *in between* the pure forms of cognition and the matter of the latter.

This is exactly the problem the philosopher is confronted with between May and August 1799. In this period Kant writes the most relevant section of the entire *Opus postumum*, namely *Übergang 1-14*, where the ether definitively assumes the

[47] Frederick C. Beiser, *German Idealism. The Struggle Against Subjectivism. 1781-1801*, Cambridge, Harvard University Press, 2002, p. 634; Hübertus Busche, "Der Äther als materiales Apriori der Erfahrung. Kants Vollendung der Transzendentalphilosophie im *Opus postumum*", in Hübertus Busche, Anton Schmitt (eds.), *Kant als Bezugspunkt philosophischen Denkens*, Würzburg, Königshausen & Neumann, 2010, pp. 56–60; Stephen Howard, *Kant's Late Philosophy of Nature*, pp. 20–23.

role of "supreme principle of the transition"[48]. In these drafts, the philosopher seems to start addressing issues directly pertaining to transcendental philosophy as such, pushing aside mere physical problems. These kinds of issues will keep him busy until the end of the manuscripts.

The establishment of an entirely new space of competence to be assigned to the ether as a transcendental principle could not in fact be an innocuous operation. From here on, Kant feels that he must revise the presuppositions of his own critical system in the light of the new conceptual tools projected to bridge the gap between metaphysics of nature and physics. This comes, however, at the price of a renouncement of an exhaustive and meticulous treatment of individual physical problems, such as cohesion, fluidity, rigidity, elasticity, etc., in favor of a broader view that thematizes the function and status of the conditions of possibility of experience[49]. In this section, written between May and August 1799, Kant exposes the problem as follows:

> The question regarding the caloric is if it is to be considered not just as a *hypothetical material* in order to explain certain appearances, but as a *real* world-material – given a priori by reason, and counting as a principle of the possibility of the experience of the system of moving forces.[50]

These few lines alone account for Kant's new programmatic intent and for the fracture with respect to previous fascicles: the ether cannot be a hypothetical material anymore, because otherwise no scientific transition between the metaphysical foundations of nature and physics could be built. The only possible way of giving it the status of a true principle is by furnishing *an a priori proof of its existence*. However, this means rendering it a transcendental condition for the possibility of experience. In other words, we can prove the existence of the ether only if we can demonstrate that its function is essential in guaranteeing the possibility of an objective unitary experience. This is indeed what the philosopher will try to do in this entire section, with various demonstrations and arguments all of which aim to show the actuality of this matter. "The ground of demonstration", Kant writes, "is subjective, derived from the conditions of possible experience"[51]. Despite their differences, the core of these arguments seems to be as follows: If the experience must be one, it must be conceived as a *collective* and *organic* unity of perceptions. If so, then the matter that grounds this experience must also be conceived as an organic whole which does not allow for the existence of empty spaces within it:

[48] *OP*, AA XXI:594.

[49] As Mathieu writes, "the necessity of the ether no longer intervenes in the explanation of individual appearances [...], but exclusively with regard to the unity of experience" (Vittorio Mathieu, *L'*Opus postumum *di Kant*, p. 114).

[50] *OP*, AA XXI:216.

[51] *OP*, AA XXI:222.

> There is only one space, one time, and one matter […]. The real and objective principle of experience, which, in its form, amount to a unified whole [*ein Einiges Ganze*] leaves no space (inside or outside itself) unfilled. All the moving forces are present in it. [...] The basis of the whole of the synthesis of all the moving forces of matter is the caloric, [...] [understood as a] principle of the possibility of the unity of the possible experience as a whole.[52]

In other passages, the demonstration seems to start directly from the assumption of the unity of experience, leaving in the background the question of the existence of empty spaces. We can thus assume it as an abbreviated form of the demonstration I reported above. It can be succinctly summarized as follows: according to Kant, there is only one experience, which is possible only in the terms of an organic and systematic experience; thus, once again, as a collective unity. "There is therefore", Kant writes, "only one experience, and if one speaks of *experiences*, this signifies only the *distributive* unity of manifold perceptions, not the *collective* unity of its object itself in its thoroughgoing determination"[53]. Now, if experience, understood as a collective unity, is one, then the matter that constitutes its condition of possibility is also one:

> What, however, belongs to experience (which can only be single) as its ground of determination, is likewise *objectively* given – that is, *actual* [*wirklich*]. So, there *exists*, as an absolute whole, a matter with those attributes, as the *basis* of its moving forces of the same, insofar as they are moving.[54]

Kant asserts several times that this demonstration is an analytic one, which is based on the principle of identity, "one experience = one matter", and not a synthetic one, since it is not derived from experience, but constitutes a condition for the very possibility of the latter. In other words, the concept of the one matter is already analytically contained within the concept of the one experience[55]. For given that experience *exists*, then the matter which constitutes its condition of possibility, likewise *exists*[56]. As can be seen, the question of the ether is now completely far from the concerns that kept Kant occupied both in the General Remark to

[52] *OP*, AA XXI:224.

[53] *OP*, AA XXI:549. It is rather interesting to note that the distributive unity, guaranteed in the first *Critique* by the joint activity of sensibility and understanding, now seems to be lowered to the rank of a mere multiplicity of perceptions. Experience now requires a complete determination of the individual objects it contains, and thus the possibility of their organic organization and systematic placement, because otherwise it would not be a *unitary* experience.

[54] *OP*, AA XXI:601.

[55] See *OP*, AA XXII:551: "It [the caloric] is an element provable a priori from a universal principle of experience (not from experience), according to the principle of identity (analytically), and given a priori in the concepts themselves".

[56] See also Bryan W. Hall, "A reconstruction of Kant's Ether Deduction in *Übergang 11*", in *British Journal for the History of Philosophy*, vol. 14, no. 4, 2006, p. 738.

Dynamics of the *Metaphysical Foundations* and in earlier fascicles. The problem is no longer to demonstrate how the ether can serve as a physical principle for the properties of bodies, such as cohesion or states of aggregation.

The question is now to demonstrate, first of all, its existence as a *transcendental principle*, that is, as a condition of a possible experience. Now, I believe it is not necessary to dwell at length on this topic in order to highlight the oddity of the proof in the context of the critical philosophy. Moreover, it is an oddity that the philosopher himself – despite accusations of mental weakness – notes quite lucidly. Kant indeed admits that the demonstration of the existence of a cosmic matter has "something strange [*befremdlich*] in itself"[57]. The difficulty, as it is easy to understand, lies in the intention to deduce a priori something "material": An operation that, according to the critical principles, would not be permitted. In my view, it is precisely to address this problem, and thus to clarify the status of the matter the philosopher is deducing, that Kant introduces the concept of *ens rationis*, whose evolution from the first *Critique* is a crucial point for the entire project of the *Opus postumum*. Kant states, for example, that the ether is a

> … thought entity [*Gedankending*] (*ens rationis*), but not just a mere hypothetical matter, as one is wont to call the all-distributed matter of caloric, but its assumption as a principle of the possibility of experience is an inevitable necessary a priori assumption [*Annahme*] […] for the purpose of bringing about the unity of the moving forces in a system, […] for the possibility of experience.[58]

Or:

> … for [the ether] is merely a thought entity [*Gedankending*]: not an object of possible experience, but the concept of the only possible mean for making the experience.[59]

So, Kant is here very clear in stating that the ether, or the caloric, are not to be assumed as physical hypotheses in order to explain certain appearances, but rather as transcendental principles that make the experience itself possible in its collective unity. Also, in passages where the term "*Gedankending*" or "*ens rationis"* does not directly appear, Kant is explicit in assuming the ether as something produced by our own reason, and not as a material that exists, so to say, as a mind-independent entity. He thus writes that "this original element [*Urstoff*], which exists only in thinking [*der blos in Gedanken da ist*] […] is not a hypothetic thing […], but it has actuality, and its existence can be postulated"[60]. The problem

[57] *OP*, AA XXI:221.
[58] *OP*, AA XXI:231.
[59] *OP*, AA XXI:606.
[60] *OP*, AA XXI:219.

consists therefore in understanding how a mere thought-entity can properly *exist*, and why Kant is tempted by this solution in his last philosophical project.

Before doing this, I think it is necessary to focus on the technical concept of "*ens rationis*" that Kant is referring to in these drafts. As known, unlike the *Mittelbegriffe*, it is not a new concept in the framework of Kant's production. At the end of the Transcendental Analytic, in the so called "Table of nothing", Kant introduces the concept of "*ens rationis*", or *Gedankending*, as referring to an "empty concept without object"[61], which cannot "be accounted among the possibilities because it is a mere invention [*bloss Erdichtung*] (although not self-contradictory)"[62]. Kant gives us then the example of *noumena*, "which cannot be counted among the possibilities although they must not on that ground be asserted to be impossible"[63]. I think that here Kant means by the term "noumena" the objects of special metaphysics, like the soul, world and God[64]. Noy surprisingly, then, in the Transcendental Dialectic, Kant states:

> Such transcendent ideas have a merely intelligible object, which one is of course allowed to admit as a transcendental object, but about which one knows nothing; but for the assumption of such an object, in thinking it as a thing determinable by its distinguishing and inner predicates, we have on our side neither grounds of its possibility […] nor the least justification, and so it is a mere thought-entity [*Gedankending*].[65]

Kant asserts here that the moment we assume the objects of ideas as something that lies beyond the sensible world, we are rendering these ideas *transcendent*, making them lose their *transcendental* function as regulative principles[66]. However, although we cannot assert that these ideas correspond to an

[61] Immanuel Kant, *Kritik der reinen Vernunft* (from now on: *KrV*), A 292-B 349. I will quote from the English translation by Paul Guyer and Allen W. Wood (Cambridge, Cambridge University Press, 1998).

[62] *Ibidem*.

[63] *Ibidem*.

[64] I thus agree with de Boer when she states that "for Kant, both material things such as roses and immaterial things such as monads, the soul, and God, can be treated as noumena, but […] he uses the term primarily with regard to the latter, that is, in the context of his critique of former metaphysics" (Karin de Boer, *Kant's Reform of Metaphysics. The* Critique of Pure Reason *reconsidered*, Cambridge, Cambridge University Press, 2020, p. 115).

[65] *KrV*, A 565-B 593.

[66] Kant also assigns the status of "*ens rationis*" to the Ideal of pure reason (*KrV*, A 681-B 789). In that occasion he nonetheless uses the German word "*Vernunftwesen*" instead of "*Gedankending*". It seems that the *Vernunftwesen*, like the *Gedankending*, cannot correspond to an actual object. However, unlike the latter, the *Vernunftwesen*, as a *transcendental* idea, has an indispensable regulative value from a theoretical standpoint, and a moral one as a practical postulate. This seems to mirror the distinction Kant thematizes in the third *Critique* between an *ens rationis ratiocinatae*, as a thought-entity whose reality can be demonstrated from a practical point of view, and *an ens rationis ratiocinantis*, which is the object of pure "reverie [*dichten*]" (see *KU*, AA V:468).

actual object, we are at the same time allowed to think of them as thought-entities, because they are not a "*nihil negativum*", the fourth figure of the "Table of nothing", which instead is a concept that contradicts itself, like a rectilinear figure with two sides. Unlike the *nihil negativum*, which is impossible to think for both formal and transcendental logic, the thought-entities are possible for the former but impossible for the latter. We can therefore *think* of an *ens rationis*, but never affirm its actuality, its *Wirklichkeit*, because otherwise we should hypostatize an idea of reason, thus falling back into errors of dogmatic metaphysics.

As we have seen, in the manuscripts this position undergoes a major shift, because Kant is not at all reluctant to assign an "actuality" to the concept of *ens rationis*[67]. If what we have so far said is correct, it is not possible to ignore that this new configuration of the concept of the *ens rationis* represents a major challenge for the solidity to the entire critical structure, because it seems to undermine the dualism between form and matter, between a priori and a posteriori, on which this same structure rests. As Kant writes in the Second Postulate of Empirical Thought, we can assign the category of "actuality [*Wirklichkeit*]" to an object if the latter "is connected with the material conditions of experience (of sensation)"[68], i.e. if end only if it is *given* (a posteriori) to our perception. There is no way in which we could cognize a priori, and thus *before* experience, the actuality of an object. As we have seen, the ether, being not an empirical object, but rather a thought-entity, cannot be perceived. According to the principles of the first *Critique* we could then in no way affirm its actuality. Nevertheless, this is exactly what Kant does in his last manuscripts.

The problem thus lies in the attempt to understand what it means for an *ens rationis*, which claims the status of a transcendental principle of experience, to properly *exist*, and what changes this brings for the entire structure of transcendental philosophy.

In summary, we have seen that in 1798, after the great struggle in finding the principle that would guide the research in the foundation of empirical physics, Kant recognized the necessity of a *Mittelbegriff* that should bridge the gap between the a priori dimension of the metaphysics of nature and the a posteriori dimension of physics itself. But, if this *Mittelbegriff* has to accomplish its role, it must also belong to both dimensions. Or rather: its *borders* must belong to both dimensions, in order to bind them together. That's why the ether cannot be a mere *Gedankending* in the meaning described in the "Table of Nothing" of the first *Critique*, but neither can it be an empirical matter. In the next paragraph, I will thus try to clarify in more detail the status if this concept by referring to the drafts following *Übergang 1-14*. By doing this, I will also examine another curious notion that Kant introduced for the first time in his manuscripts, namely that of the "indirect appearance".

[67] See also the quotation proposed earlier from *OP*, AA XXI:601.
[68] *KrV*, A 218-B 266.

4. THE RELATION BETWEEN SENSIBILITY AND UNDERSTANDING AND THE "INDIRECT APPEARANCE" IN FASCICLES X AND XI. SOME SUGGESTIONS

As I have briefly mentioned, the new function of the *ens rationis* comes to question classical Kantian distinctions, such as those between form and matter, a priori and a posteriori, for the reason I have already specified. Moreover, the fascicles following *Übergang 1-14* seem to confirm the impression of a structural evolution of transcendental philosophy itself. My intention in this paragraph is not to propose an exhaustive treatment of the problems that emerge in the context of these fascicles, which would naturally deserve more space and in-depth analysis[69]. More modestly, I would suggest that there are indeed many passages, within the last drafts, that can be consistently read considering the development of the conceptual structures which began in the previous fascicles.

In particular, what I intend to argue is that in fascicles X and XI there are many hints suggesting that this same evolution had clear repercussions regarding the difference between the spontaneity and the passivity of the subject. In some fragments, spontaneity seems no longer limited to organizing a content that is *given* to the subject through sensibility, as it was in the first *Critique*, but actively contributes to the *genetic production* of this same content[70].

This is a point that was first analyzed by Thomson in a recent article, where he states that in fascicles X and XI of *Opus postumum* Kant is trying to reverse the architectonic order between sensibility and understanding. This means that the understanding now *inserts* into the experience that "material" which will *then* be grasped by the senses[71]. As Thomson writes:

[69] For a more comprehensive examination of the topic, see Davide Puzzolo, *Kant e l'*Opus postumum*. Verso una nuova concezione del trascendentale*, Milano-Udine, Mimesis, 2024, pp. 90–148.

[70] It is an expression that Kant never uses in his manuscripts and that I take from Lord's work on this topic (see Beth Lord, "The Virtual and the Ether: Transcendental Empiricism in Kant's *Opus Postumum*", in *Journal of the British Society for Phenomenology*, vol. 39, nr. 2, 2008, pp. 147–166; Id., *Kant and Spinozism. Transcendental Idealism and Immanence from Jacobi to Deleuze*, Basingstoke, Macmillan, 2011, pp. 155–174). By "genetic production" I mean the process by which we specify the a priori rules that produce the material of our experience in its concrete variety. In the case of *Opus postumum*, this means identifying the moving forces of matter that allow an object to have *these* particular properties and not others. By accounting for the genetic production of an object we would be able, in Kant's view, to reconcile the a priori dimension with the sensible one, thus filling the gap between the transcendental and the empirical territory. In other words, the properties of an empirical object would not be merely *given* to the subject, but authentically *constructed* by the latter.

[71] Of course, the seriality between sensibility and understanding musty not be understood, neither in the first *Critique* nor in the manuscripts, as a chronological seriality, as if the subject "activated" its cognitive functions at different times. Rather, it must be conceived as a *transcendental* seriality. In the first *Critique*, sensibility is a condition of possibility for the operation of the understanding; in the *Opus postumum*, on the other hand, it seems that the understanding can create its own material apart from the intervention of sensibility.

> In a crucial and final step Kant sees the object not as *given*, but as thought or perhaps *created*. This last phase is dubious but demonstrates a crystallization of the new understanding/sensibility relation. Kant now contends that objects are made by the understanding to such a degree that they are only thought, rather than given […]. Sensibility becomes entirely subordinate and reliant on the understanding as the seat of possibility, receiving only what the understanding has inserted. Hence, the object is thought instead of passively given[72].

I agree with the main points of his reconstruction, even though I believe that such an analysis should be expanded over the limits of the fascicles X and XI, on which Thomson's article rests, to comprehend also what precedes, namely *Übergang 1-14*, and fascicles VII and I (April 1800 – February 1803). As I have said, I will not exhaustively pursue this objective here, but what I want to argue is that the new configuration of the concept of *ens rationis* could play a pivotal role in this reversion. The point could be summarized as follows: If the spontaneity of the subject must actively concur to the production of the material that is offered to senses, then the *ens rationis* could be conceived as that transcendental structure that the subject "inserts" into experience in order to "construct" our empirical intuitions. Kant writes for example:

> Understanding must therefore insert [*hineinlegen*] the elements of sensible knowledge into a system of the moving forces in order to construct an experience; thus, not *from* experience, but *for* experience and the possibility of it as an empirical whole.[73]

> The understanding cannot proceed from perception (empirical cognition with consciousness) to determine […] a collection of representations as cognition of an object. It [i.e., the understanding] contains a priori the formal element of a system of perceptions before these empirical cognitions.[74]

> The understanding anticipates the influences of the senses.[75]

Within these passages – and other similar fragments – Kant seems to emphasize once again the fact that it is the understanding that must insert within experience elements that are *not* drawn from experience and that are therefore a priori. Experience thus does begin with empirical perception, but with an act of the spontaneity by which we create what is necessary to *produce* an experience. In a

[72] Terrence Thomson, "The Understanding in Transition: Fascicles X, XI and VII of *Opus postumum*", in *Con-Textos Kantianos. International Journal of Philosophy*, vol. 9, 2019, p. 34.
[73] *OP*, AA XXII:316-317.
[74] *OP*, AA XXI:439.
[75] *OP*, AA XXII:509.

passage taken from fascicle VII Kant rapidly states, for example, that reason is "intuition-constructing [*Anschauung construirende*]"[76].

If what I have argued so far is correct, then what the understanding produces in order to concrete experience to be possible are the ether and its moving forces, conceived both as that thought-entities that should function as the very "grounds of the appearances"[77].

As Beth Lord correctly states, the ether, and so this particular kind of *ens rationis*, is an entity that is at the same time *ideal* and *real*, and whose task is to genetically produce the content of our own intuitions[78]. Of course, this is not the same actuality possessed by the empirical appearances, because otherwise the *Mittelbegriff* would merely belong to the territory of empirical physics. Its *Wirklichkeit* is that of a transcendental structure that *precedes*, i.e., that *makes possible*, the dimension of empirical objects, and which allows the latter to be determined even from the material standpoint.

This interpretation could also shed light into a very obscure concept introduced by Kant in the context of these reflections, namely that of "indirect appearance". Its name is actually quite varied: Kant also defines it as "appearance of an appearance", "second-order appearance" or "subjective appearance". Regardless of the name, its function seems to be to clarify the status of this new order of existence, which stands *between* the empirical existence of appearances and the conceptual dimension of pure a priori forms. As I will try to show, unlike the former, the existence of the indirect appearance cannot be attested directly through senses; unlike the latter, the indirect appearance does not have a purely formal validity consisting in synthesizing a given manifold, but rather contributes to the very *genetic production* of this same manifold.

What is surprising, however, is the fact that Kant never defines with absolute precision the meaning of "indirect appearance", despite the prominent role it plays within the *Übergang* project. Lehmann himself writes that "it would have been better if Kant had thematized the degrees of the appearance, if he had presented a doctrine of the degrees of the appearance, and if he had treated it within a specific section"[79]. Such a lack of perspicuity has therefore given rise to a certain

[76] *OP*, AA XXII:117.

[77] *OP*, AA XXI:505.

[78] Beth Lord, *Kant and Spinozism*, p. 163. Lord proposes a very interesting parallelism between Kant's idea of ether and Maimon's ideas of understanding (i.e., the differentials), because both are conceived not just *formal* conditions for the *possibility* of experience, but as *genetic* conditions for a *concrete* experience. In fact, I find Maimon's own project in the *Versuch über die Transzendentalphilosophie* (1790) and Kant's project in the *Opus postumum* to be very similar, because both consist in the attempt to bridge the gap they detected between the transcendental and the empirical, between a priori and a posteriori, trough what we can call a true "ontology of the differences". For an exhaustive explanation of this expression, especially with regard to Maimon's philosophy, see Gaetano Rametta, "Filosofia trascendentale e ontologia della differenza in Salomon Maimon", in *Discipline filosofiche*, vol. 29, nr. 1, 2019, pp. 177–200.

[79] Gerhard Lehmann, *Beiträge zur Geschichte und Interpretation der Philosophie Kants*, Berlin, De Gruyter, 1969, p. 375.

arbitrariness of interpretation regarding the status and function of indirect appearance.

In my reading the "indirect appearance" consists of another conceptual tool introduced in fascicles X and XI (August 1799 – April 1800) to clarify the status of the ether and the thought-entities in relation to empirical appearances. I think it suffice to quote here two passages in which the role of this concept is quite clear. In the first of these, Kant speaks of two kinds of appearances:

> 1. that of the objects which we ourselves place in it (a priori) and is metaphysical, 2. that which is given to us empirically (a posteriori) and is physical. The latter is direct appearance the former indirect, i.e. appearance of an appearance.[80]

In another passage Kant notes: "Subjective appearance that precedes the objective. Indirect that precedes the direct and makes the space an object of experience"[81]. The indirect appearance seems thus to be introduced to better understand the role and the function of the *ens rationis* and the *Mittelbegriff*: It is a subjective appearance that precedes the objective appearance in order to genetically produce it, i.e., in order to account for the production of its particular empirical properties. It is then no coincidence that the philosopher, in these same drafts, writes:

> The amphiboly of the concepts of reflections: to confuse the composite [*Zusammengesetzte*] in appearance with the composition [*Zusammensetzung*] as a concept of the understanding […] and the empirical of intuition (perception) with the principle of the connection of appearances for the possibility of experience. […] The amphiboly of the concepts of reflection: that which […] permits in physics the distinction of direct and indirect *appearances;* of the appearance of the first order and the appearance of the second (of the appearance).[82]

So, Kant seems worried that one might confuse or conflate, with an amphiboly, the indirect appearance – also called appearance of the second order, or appearance of an appearance – with the direct appearance. This would mean conflating the *Zusammensetzung* as a product of the understanding, and so, I would argue, as an *ens rationis*, with the *Zusammengesetzte* as the proper object of sensible perception. This seems to confirm my earlier claim that *ens rationis* has an actuality distinct from the actuality of empirical objects, made necessary to institute the transition from metaphysics to physics.

[80] *OP*, AA XXII:340.
[81] *OP*, AA XXII:339.
[82] *OP*, AA XXI:331.

The ether and its moving forces are thus merely indirect objects, such that they cannot be perceived directly by the subject's senses but nevertheless must necessarily exist in order for us to have a systematic cognition of objects. As we have already seen, they are not properly *given*, in the way that direct appearances are given to our senses, but *produced* as a condition of the possibility of a collective unity of experience, and for this very reason their existence can only be understood in the terms of an *indirect* existence. Kant now affirms for example that:

> [the eter] cannot be established as a hypothetical, i.e., properly empirical [*eigentlich empirisch*] matter, drawn from physics [...], since it is only a thought-entity [*Gedankending*]: it [is] not an object of possible experience, but [is] the concept of the only possible means of constructing experience.[83]

And also:

> The all-penetrating caloric [i.e., the ether] is the first condition for the possibility of every outer experience.[84]

Direct appearance, i.e. the sensible manifold that is given to our senses, and indirect appearance, i.e. the ether and its moving forces as thought-entities, does not belong to the same empirical dimension, as for example Hall seems to argue[85]. On the contrary, they refer to two different ontological levels: the first is empirical and a posteriori, the second is transcendental and a priori, and is posited by the subject in order to genetically construct concrete experience.

I thus think that the reversal of the architectonic order between sensibility and understanding can be properly understood only when read in the context of the Kantian attempt to distinguish between direct and indirect appearance[86]. The latter

[83] *OP*, AA XXI:606.

[84] *OP*, AA XXI:551.

[85] Bryan W. Hall, *The Post-Critical Kant. Understanding the Critical Philosophy through the* Opus postumum, New York-London, Routledge, 2015, p. 134.

[86] In this regard, I believe that one of the weaknesses of Thomson's proposal lies in the failure to thematize the difference between direct and indirect appearance. Indeed, the scholar believes that "Kant's notion of appearance in *Transition* diverges from an immediate sensible element which affects the subject externally to reflect the fact of its intermediary concept [*Mittelbegriff*/ *Zwischenbegriff*] status, sandwiched between both sensible and conceptual elements without clear boundaries between them" (Terrence Thomson, *The Understanding in Transition*, p. 40). However, Thomson fails to acknowledge that, in his manuscripts, Kant actually maintains the original meaning of the term "appearance" as a sensible object which affects our senses. The only difference lies in the fact that now it is called *direct* appearance. In my reading, the appearance Thomson is referring to, the one that stands between sensible and conceptual dimension, is the *indirect* appearance.

is exactly What the subject inserts into experience *before* having an experience, i.e., an a priori product of the activity of our understanding. The direct appearance, on the contrary, is the sensible manifold that is given to our senses, but which, in the moment we perceive it, is already organized by that transcendental structure that anticipates our sensibility.

In my reading, it is by these new conceptual tools that Kant tries to overcome the difficulties within which his argumentation had remained entangled in the *Oktaventuwrf*, thus before the discovery of the *Lücke*. Since he had not yet discovered the transcendental principle that could stand between the domains of the a priori and the a posteriori, the classification of the moving forces was necessarily fragmentary, and therefore so complicated to unfold. Instead, the deduction of the ether as the principle of *Übergang* allows the understanding to work on a matter that is not *given*, but a priori *produced* by the subject.

Indeed, Kant writes that "only the appearance of the whole of the moving forces of matter […] provides an a priori principle for specifying those"[87], where the "appearance" is of course to be understood as the *indirect* appearance, i.e., the ether. Therefore, through this activity the understanding creates those objects that enable us to anticipate the material component of our intuitions and to build a bridge between metaphysics and physics. That's why Kant affirms that experience is not received, but authentically *produced*:

> Experience cannot be received without making it, and therefore to its possibility belongs an a priori principle of the exhibition of sensible objects, which determines beforehand of what species the perceptions will be [...] and which will be required in the construction of experience for the complete determination of the object of perception, that is, for its existence. […] The faculty of making an experience is the understanding.[88]

In this passage, Kant states again the general goal of the science of *Übergang*: To determine perceptions in advance, so that their contingent dimension is reduced, if not completely eliminated. This operation would be functional to thoroughly determine the object of perception, i.e., to identify how many and what its specific properties are, and what place it occupies within our system of experience. As I have tried to show in this paragraph, in order to accomplish this goal, Kant had to deeply revisit some pivotal assumptions of his system, such as the difference between matter and form, a priori and a posteriori, and the architectural order between sensibility and understanding.

[87] *OP*, AA XXII:338.
[88] *OP*, AA XXII:497.

5. CONCLUSIONS

This traversal of some of the central themes of the *Opus postumum* has enabled me to show that, despite the fragmentary nature of this work, a common thread can be found running through transversally its parts. In particular, my aim was to show that the evolution of the concept of the *ens rationis* plays a pivotal role in the weaving of this thread: If we fail to acknowledge the hybrid status of the thought-entities, we would not be able to understand the direction that Kant would have given to his last project. The reformulation of the concept of *ens rationis* also shows that the conceptual tools present in the *Opus postumum* cannot be flattened to those of the first *Critique*. In this sense, it is not possible to conceive the ether neither as a mere regulative idea, as for example Eckart Förster does[89], nor as an *empirical material* condition for the possibility of experience, as Edwards and Hall seem to suggest[90]. In other words: the caloric is not a mere form that permits us to systematize the given content of our experience, nor is an empirical matter that is given to our senses. As I tried to show, it occupies a space *in between* these two dimensions, being conceived as the transcendental structure that is posited by the spontaneity of the subject in order to genetically construct the reality of our sensible experience.

The fact that this concept plays a pivotal role throughout the manuscripts is also confirmed by Kant's extensive use in the last two fascicles, namely *Konvolute* VII and I, where the concept of *ens rationis* is introduced to refer both to the thing-in-itself and God. Regarding the former, Kant finally sets aside the ambiguities still present in the first *Critique*, repeatedly asserting that the thing-in-itself does not exist as an object beyond the domain of appearances, but rather as a thought-entity posited by the subject[91]. Regarding the latter, the identification of God with a thought-entity allows for an identification between pure practical reason and God himself, eventually leading to the establishment of an analytical, and no longer synthetic, link between religion and morality[92].

These themes would of course need more attention to be explored further, but I think that their overall result, which has its speculative ground in the ether proof, lies in a sensible restructuring of the core structures of transcendental philosophy itself. This implies a decisive rethinking of typical Kantian distinctions such as between form ad matter, a priori ad a posteriori, spontaneity and receptivity.

[89] See Eckart Förster, *Kant's Final Synthesis*, p. 91.

[90] See Jeffrey Edwards, "Der Ätherbewis des *Opus postumum* und Kants 3. Analogie der Erfahrung", in Siegfried Blasche (ed.), *Übergang. Untersuchungen zum Spätwerk Immanuel Kants*, Frankfurt, Klostermann, 1991, pp. 77–104; Bryan W. Hall, *The Post-Critical Kant…*, pp. 93–122.

[91] See *OP*, AA XXII:31.

[92] See *OP*, AA XXI:145. For a broader analysis of the status of the thing-in-itself and God in the *Opus postumum*, see Davide Puzzolo, *Kant e l'*Opus postumum*…*, pp. 103–128, 206–250.

To be clear, what I want to argue does not lie in the assertion of a complete loss of value of these very distinctions: The a posteriori, the matter, the receptivity, are not to be understood, so to speak, as mere *epihenomena* produced by the activity of an absolute subject. The subject, even in *Opus postumum*, *is* receptive, it *is* affected by some external and a posteriori matter. At the same time, both of these dimensions find their *genetic* foundation in an act of the spontaneity by which the subject inserts those thought-entities that ground a collective and organic unity of experience. As Kant writes in a sheet contained in the last fascicle

> One cannot philosophize about an object as an already given being, but first about it as a mere thought-entity which proceeds from the subject itself, and the philosophy which creates these ideas from itself according to a priori principles is the transcendental philosophy.[93]

That is to say, the subject must conceive the very givenness of an object, and so its a posteriori dimension, as derivable from an original productive activity, in order to be able to determine a priori also its particular empirical properties. This does not mean that the empirical object becomes itself a mere illusion. "Ideas", Kant writes in this same fascicle, "precede the appearances in space and time"[94], but they *do not* dissolve appearances in the pure spontaneity of an absolute subject.

In other words, if a transition from a priori to a posteriori, from understanding to sensibility, is to be constructed, then there can be no more discontinuity between these two territories: the "bridge" constituted by the *Mittelbegfriff* will have to allow a gradual but steady and continuous transition from one dimension to the other. At the same time, this same bridge, while connecting these two poles, keeps them separate, avoiding the risk of a total collapse of one onto the other[95].

The general aim of this text was thus to show how the problem posed in the early fascicles, seemingly confined to particular questions regarding philosophy of nature, eventually led Kant to reflect on the core structures of critical philosophy. I also wanted to emphasize the possibility of establishing a robust connection between the fascicles: The necessity to find a *Mittelbegriff* that would bridge the gap between metaphysics of nature and physics in the earlier fascicles led Kant to demonstrate the existence of the ether, understood as a particular thought-entity possessing *Wirklichkeit*. At the same time, the obvious originality of this proof convinced Kant to dwell on the consequences it would bring to his own system. The reflections around the relationship between sensibility and understanding and

[93] *OP*, AA XXI:96.

[94] *OP*, AA XXI:88.

[95] As Beiser states, "while it is the purpose of the transcendental dynamic to bridge the gap between the transcendental and the empirical, it is important to see that it does so only by preserving that dualism within itself. There can be a science of transition, Kant argues, only if it mediate between the form and matter by containing these elements within itself and doing justice to both of them" (Frederick C. Beiser, *German Idealism…*, pp. 198–199).

the thematization of the difference between direct and indirect appearances can be read as clear evidence of this fact. Finally, I have tried to briefly argue that the radicality of the new function assumed by the *ens rationis* allows for a reshaping of the very meaning of transcendental philosophy itself, which could be no longer regarded as an analysis of the pure forms that make *experience in general* possible, but rather as that activity by which we construct *concrete experience* from a material standpoint.