

## TRANSCENDENTAL DEDUCTION AGAINST HUME'S CHALLENGE TO REASON

### A Dedução Transcendental contra o desafio de Hume à razão

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**Abstract:** From the second half of the last century there is a widespread view in the Anglophone world that Kant's transcendental deduction (aka TD) aims to vindicate our common-sense view of the world as composed of public and objective particulars against some unqualified forms of skepticism. This widespread assumption has raised serious doubt not only about the success of TD but also about the very nature of its argument in both editions of the *Critique*. Yet, if there is a connection between TD and global skepticism, the intriguing question is: Who is this skeptic? According to Strawson, "the skeptic" is a hypothesis of a purely sense-datum experience. In contrast, the fact that TD turns on the key notion of self-consciousness has induced several other scholars to assume that the skeptic is no none but a Cartesian external-world skeptic. None of those readings find textual support or are compatible with the very structure of the first *Critique*. The question is: Does this mean that TD aims only to undermine empiricism as Guyer suggests? I do not believe so. I am pretty convinced that TD addresses a peculiar form of global skepticism, namely "Hume's challenge to reason." Assuming that we cognize (*erkennen*) and experience (*erfahren*) appearances as objects as a requirement Newtonian physics, TD aims to provide a justification of the principle that nature is uniform that is superior to Hume's justification.

**Keywords:** Transcendental Deduction; Hume's Challenge to Reason; The Principle of Uniformity of Nature.

**Resumo:** Desde a segunda metade do século passado, vige no mundo anglófono a compreensão de que a Dedução Transcendental de Kant objetiva defender nossa visão compartilhada de mundo de senso comum como composto de particularidades públicas e objetivas contra algumas formas não qualificadas de ceticismo. Essa suposição generalizada levantou sérias dúvidas não apenas sobre o sucesso do TD, mas também sobre a própria natureza do seu argumento em ambas as edições da *Crítica*. No entanto, se há uma conexão entre a Dedução Transcendental e o ceticismo global, a pergunta pertinente que se coloca é: quem seria esse cético? De acordo com Strawson, "o cético" é o nome da hipótese de que a nossa experiência se reduziria puramente de dados dos sentidos. Assumindo, em contrapartida, que a noção capital na Dedução Transcendental é a noção de autoconsciência, vários outros estudiosos foram induzidos erroneamente a supor que "o cético" não seriam ninguém menos do que o cético cartesiano do mundo externo. Entretanto, nenhuma dessas leituras encontra suporte textual ou é compatível com a própria estrutura da primeira *Crítica*. Isso significa que a Dedução Transcendental visava apenas minar o empirismo, como sugere Guyer? Essa não é a minha posição. Estou plenamente convencido de que a Dedução Transcendental é endereçada a forma peculiar de ceticismo global, ou seja, o que Kant denominava "o desafio de Hume à razão". Assumindo que conhecemos (*erkennen*) e experimentamos (*erfahren*) as aparências como objetos como um requisito da física newtoniana, a Dedução Transcendental visa fornecer uma justificação para o princípio da uniformidade da natureza que seria superior àquela fornecida por Hume.

**Palavras-chave:** A Dedução Transcendental; O Desafio de Hume à Razão; O Princípio da Uniformidade da natureza.

## 1. Introduction

From the second half of the last century, there is a widespread view in the Anglophone world that Kant's transcendental deduction (aka TD) aims to vindicate our common-sense view of the world as composed of public and objective particulars against some unqualified forms of global skepticism. This widespread assumption has raised serious doubts not only about the success of TD but also about the very nature of its so-called "transcendental argument" in both editions of the first *Critique*: is Kant's proof that all objects of our sensible intuition a successful refutation of "global skepticism?" And if it is, what is the structure of its "transcendental argument?" Moreover, if there is any connection between TD and global skepticism, we face an overlooked question in the literature is: Who is this putative global skeptic?

According to Strawson (1966), "the skeptic" is a hypothesis of a purely sense-datum experience. To prove that categories apply to all objects of sensible intuition is at the same time a *reductio* of the Hume-like hypothesis that our sensory experience could be reduced to fleeting mind-dependent sense-data. In contrast, assuming that TD turns on the key notion of self-consciousness has encouraged several other scholars to assume that the skeptic is no none but a Cartesian external world skeptic. Thus, according to Stroud in his seminal paper: "the transcendental deduction is supposed... to give a complete answer to the skeptic about the existence of things outside us" (1968, p. 242). Even claiming that Kant is ambiguous about the target of his TD, Guyer assumes Kant's opponent is either the classic empiricist or the Cartesian external world skeptic who questions "the possibility of knowledge of objects external to the self" (1987, p. 67).

None of those readings of TD find textual supports in Kant or are compatible with the very structure of the first *Critique*. Yet, does that mean that TD only aims to undermine classical empiricism, namely the claim that "empirical knowledge also employs conceptual structures which cannot be derived from such sensation", as Guyer suggests (1987, p. 67)? I am pretty convinced that TD addresses a peculiar form of skepticism of Humean provenance. Yet, this is not Hume's skepticism about the senses, but rather what Kant in his *Prolegomena* calls Hume's "challenge to reason" (*Prol*, 4: 275-77), namely the challenge in providing a justification for the so-called principle of uniformity of nature that underlies all inductive inferences. Assuming that we cognize

and experience objects as a requirement Newtonian physics, TD aims to justify our belief that nature is uniform that is superior to Hume's.

The paper is conceived as follows. After this introduction, the following section is devoted to presenting the Why of Kant's TD. My only concern in this section is with the different readings of the key passages of *KrV*, A94/B126-127. Now, as Kant claims that the "possibility of experience" is the principle of his TD (*KrV*, A94/B126-127) and the so-called *Beweisgrund* of transcendental propositions, section numbers 2, 3, 5, and 6 are devoted to exploring different meanings of "possible experience" in connection with the corresponding varieties of skepticism. The exception is section number 4, where I expose the so-called "skeptic" as merely a dialectic figure.

## 2. The why of a Transcendental Deduction

In his statements at *KrV*, A90-1/B122-3 Kant explains what makes TD unavoidable:

Objects can indeed appear to us *without necessarily having to be related to functions of the understanding*. (*KrV*, A89/B122. Emphasis added)

What Kant states in those introductory remarks to TD is crystal clear: categories of the understanding are not conditions of what appears to our senses as the objects of sensible representations, namely sensible intuitions. Therefore, objects can appear to us without being subjected to a lawlike connection prescribed by categories as concepts of the necessary unity of sensible intuitions. This raises the reasonable suspicion that the categories of the understanding might be empty, nugatory concepts.

The question is: how we should read Kant's statement at *KrV*, A90-1/B122-3? According to Cassirer (1911) and Paton (1936), Kant's statement at *KrV*, A90-1/B122-3 does not express his view of the relation between sensible intuition and categories. At *KrV*, A90-1/B122-3, Kant is not stating a *real metaphysical hypothesis* as his doctrine: we do not sensibly represent mind-independent things albeit we do not know that what we represent let alone that what we do represent exists mind-independently. Instead, as Gomes has put recently (2014), Kant is contemplating "a mere epistemic possibility to be eliminated later as an unreal metaphysical possibility" (2014, p. 6). In support of his

reading, after Paton, Gomes calls attention to the fact that Kant uses the indicative “can” (*können*) at *KrV*, A89/B122, as opposed to the subjunctive “could” (*könnten*) at *KrV*, A90–1/B122–3 (Gomes 2014, p. 3). The first tense is supposed to be a hint that Kant is taking the possibility of objects appearing without categories as real, while the second indicates a mere epistemic possibility to be eliminated later.

Paton’s reading was tacitly endorsed by the mainstream of Kant’s scholarship. Vaihinger (1902), for example, rejects Kant’s statement that categories do not represent the conditions under which the objects are not given in intuition (1902, pp. 53-31). The Neo-Kantian Cohen claims: “Pure intuition supposes the mediation of thought, of the understanding to which the unification of the diverse must be attributed” (1918, 66n / 22n). Kemp Smith endorses Vaihinger’s critical stance: the “primary function” of the categories is “to make intuitions possible” (1918, p. 133). Yet, De Vleeschauwer is even blunter when he claims “that it is necessary to logically conclude that categories are also the *a priori* conditions of intuition, and that intuition is also conditioned by intellectual functions” (1934, p. 191), and adds that: “the intellectual function must intervene in the simplest intuition so that every empirical element is already covered by one of the modes of spontaneity.” (1934, p. 244).

But we also find the tacit rejection of the Kantian statement in scholars of the second half of the twentieth century. According to Robinson, for example, “we will learn in Deduction, that the categories apply not only in the formation of judgments but also in the formation of intuitions” (1984, p. 48). Along the same lines, Waxman claims that “space and time, together with the diversity they contain, are for Kant entirely products of the imagination, and by no means data of meaning” (1991, p. 33). Longuenesse endorses the same claim: “these [logical] functions ... are conditions for the very presentation of appearances in sensitive intuition” (1998, p. 28). Van Cleve also rejects Kant’s statement when he claims: “the representation of even the tiniest spatial extension or temporal duration would, in Kant’s view, be achieved through synthesis” (1999, p. 85). More recently Ginsborg states that “Kant makes it clear that the pure intuitions of space and time that he describes in Aesthetics ... depend on the imaginative synthesis, which is responsible for its unity.” (2006, p. 66).

Now, the assumption that at *KrV*, A89/B122 Kant is entertaining a mere epistemic possibility to be ruled out at the end of his TD is what has induced the

Anglophone scholars of the second half of the twentieth century to connect the destiny of TD to a refutation of some unqualified form of global skepticism. For one thing, if things could appear to us without necessarily having to be related to functions of the understanding is a mere epistemic possibility that TD aims to rule out, Kant's proof of the objective validity of categories is at the same time (i) a proof that we do cognize and experience public and objective particulars and (ii) a refutation of some unqualified form of global skepticism that challenges such commonsensical worldview. Strawson was perhaps the first to connect Kant's statement to a skeptical hypothesis and the argument of TD to a refutation of such global skepticism. According to him:

*If appearances were not such as to allow of knowledge expressible in objective judgments, they would be "for us as good as nothing" (KrV, A111) they would be mere "a blind play of representations, less even than a dream" (KrV, A112). Or again, in an awkwardly expressed passage, Kant says that if it were accidental that appearances should fit into a connected whole of human knowledge, then it might be that they did not so fit together, were not "associable" in the required way; and "should they not be associable, there might exist a multitude of perceptions, and indeed an entire sensibility, in which much empirical consciousness would arise in my mind, but in a state of separation, and without belonging to a consciousness of myself. This however is impossible. (STRAWSON, 1966, pp. 99-100, emphasis added)*

In the same vein Wolff claims:

The crux of the argument is the assertion that appearances could be given in such a way that the pure concepts would find no application to them. In the words of William James, we would experience a "buzzing, blooming confusion." ...Now, when the problem is posed in this way, it has no solution, for what Kant aims to prove is precisely that appearances cannot be given to us unless they conform to the pure concepts (1963, p. 93-94).

Rather than dwell on the inconsistency of the Deduction, we may simply view this passage as an introduction that assumes a theory whose essentials *Kant eventually intends to disprove*. (1963, p. 94, emphasis added)

According to Allison:

The possibility which Kant here alludes calls to mind Descartes's notorious specter of a malignant genius, who systematically deceives us regarding our most evident cognitions....

Kant's worry in the former is analogous to the Cartesian one, in that both are concerned with what might be termed a "cognitive fit." Nevertheless, they differ radically in their understanding of the ingredients of fit. ...For Kant, the ingredients are two species of representations, and the worry is that the deliverances of sensibility might not correspond to the *a priori* rules of thoughts. Accordingly, the Kantian specter is one of cognitive emptiness rather than global skepticism. (2004, p. 160).

Are Kant's statements only an epistemic possibility to be ruled out or are they a real metaphysical claim that Kant endorses as his? In this section, I limit myself to making the following remarks. First, even in the course of TD, Kant reiterates the independence of appearances from categories in several passages. Consider these:

That representation that can be given prior to all thinking is called **intuition** (B132, original emphasis)

Appearances are the objects that can be *given to us immediately*, and **that in them which is immediately related to the object is called intuition.** (A108-109, emphasis added)

[I]n **experience** they (intuition) must stand under conditions of the necessary unity of apperception just as **in mere intuition** they must stand under the formal conditions of space and time. (*KrV*, A110, emphasis added)

Now I assert that categories that have just been adduced are nothing other than conditions of thinking in a possible experience, just as space and time contain conditions of the intuition for the very same thing. (*KrV*, A111)

Moreover, Kant reiterates his non-conceptualism at the end of TD:

Sensibility gives us forms (of intuition), but the understanding gives us rules. It is always busy **poring through the appearances** with the aim of finding some sort of rule in them. (*KrV*, A126, emphasis added)

Thus the way in which the manifold of sensible representation (intuition) belongs to a consciousness **precedes cognition** of the object [whose conditions are the categories] (*KrV*, A129, emphasis added)

Kant summarizes this by claiming:

The pure understanding is thus in the categories the law of the **synthetic unity** of all appearances, and thereby first and originally makes experience possible as far as its form is concerned. (*KrV*, A128, emphasis in bold added)

Kant's official position is couched as follows:

Intuition is the immediate relation of the power of representation to a particular object. A concept is the representation of it through a mark that is common to it and others. Intuition belong to the senses a concept to the understanding. (*Refl*, 18: 282-84)

It is quite hard to swallow Cassirer, Paton, and Gomes's suggestion that in those passages, Kant is entertaining "a mere epistemic possibility" to be eliminated latter at the end of TD. Kant's doctrine is that categories of the understanding are not conditions for the representation of particular as particulars. They are not necessary or sufficient conditions for appearances. Rather, they are conditions for (1) the *synthetic unity of appearances* (*KrV*, A128 above) or for *the cognition* of objects (*KrV*, A129). For example, categories of the understanding are not conditions for intuiting the cinnabar-appearance or the red-appearance. Those appearances arise from our senses and hence are independent of categories of the understanding.

### 3. The possibility of sensibly representing objects

Let us assume for the sake of argument the intellectualist reading according to which that categories are conditions for what appears to our human senses. Thus, no object whatsoever could ever be represented without necessarily having to be related to the functions of the understanding (categories). Let us focus now on the following §14 where Kant announces the "principle" of his proof:

The transcendental deduction of all *a priori* concepts, therefore, has a principle toward which the entire investigation must be directed, namely this: *that they must be recognized as a priori conditions of the possibility of experiences* (whether of the intuition that is encountered in them, or of the thinking). (*KrV*, A94/B126-127, emphasis added)<sup>1</sup>

<sup>1</sup> This passage echoes Kant's Transcendental Doctrine of Method: "Through concepts of the understanding, however, it certainly erects secure principles, but not directly from concepts, but rather always indirectly through the relation of these concepts to something contingent, namely possible experience; since if this (something as an object of possible experience) is presupposed, then they are of course apodictically certain, but in themselves they cannot even be cognized *a priori* (directly) at all.

If the conceptual or intellectualist reading is right, and no object whatsoever could ever appear without necessarily having to be related to functions of the understanding, “possible experience” must mean “the possibility of *sensibly representing* objects.” Kant adds that: “the conditions **of the possibility of experience** in general are at the same time conditions of **the possibility of the objects of experience**” (*KrV*, A158/B197, original emphasis). In this light, TD aims to prove that categories necessarily apply to the objects of sensible intuitions by arguing that categories make possible the experience or cognition of objects in the first place.

The first question is: what remains from our experiences without categories? The expected answer well known: “sensory data” But what are those? Such data are characterized quite differently by intellectualist interpreters. A first group denies that those data are even extensive, claiming thereby that even space and time are products of spontaneity. Bergson, for example, claims that, for Kant, “the sensations by which we came to form the notion of space are themselves without extension and simply qualitative” (1910, p. 45). Smith states that “the manifold as a given is not in space and time”, and that “sensations have no spatial attribute of any kind” (1918, pp. 85-86). Waxman speaks of the synthesis of “completely amorphous data” (1991, p. 220). Longuenesse speaks of the synthesis of a “qualitative manifold” that is “present in an undifferentiated way”, and that it is a “manifold (of sensations, perceptions, but not of intuitions ...)” (1910, pp. 37, 221). De Vleeschauwer, Sellars, and Pippin claim that such “data” are not only lack extension, they are also simple or atomic (see De Vleeschauwer 1934, p. 242), Sellars (1968, pp. 7-8) and Pippin (1982, pp. 29, 33).

Other intellectualist readers do not go so far as making space and time products of spontaneity. Rather, they argue that such data would be spatiotemporal, but would not yet have unity or structure, as this would be up to the synthesis of understanding to provide. Robinson argues that one cannot speak of “data” or anything that suggests unity or uniqueness, since every unity would necessarily be due to understanding,

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Thus no one can have fundamental insight into the proposition “Everything that happens has its cause” from these given concepts alone. Hence it is not a dogma, although, from another point of view, namely that of the sole field of its possible use, i.e., experience, it can very well be proved apodictically. But although it must be proved, it is called a principle and not a theorem because it has the special property that it first makes possible its ground of proof (*Beweisgrund*), namely experience, and must always be presupposed in this.” (*KrV*, A737/B765)



maintaining then that this sensory manifold should be understood as “a (still) undifferentiated and non-individual, which provides the material for differentiation and individuation” (1984, p. 406). In the same vein, Höffe speaks of “unstructured sensations” (2000, p. 82), Allison of “sensory data” (2004, p. 79), Ginsborg of “sensory material,” “sensory manifold” and “sensory elements” (2006, pp. 65-7).

The temptation here is to assume that “this mere epistemic possibility” is some skeptical hypothesis that Kant entertains in §13 to refute it at the end of TD by showing once and for all that categories apply necessarily to all objects of sensible intuitions. In this regard, Allison suggests that at *KrV*, A90–1/B122–3 Kant is evoking a “specter” to be exorcised at the end of TD: “I refer to this possibility as a specter because its realization would result in cognitive chaos, and I argue that the Transcendental Deduction can be regarded as Kant’s attempt to exorcise it.” (2015, p. 54). However, as Allison emphasizes such specter should not be confused with the famous Cartesian specter because: “while the problem in the Cartesian specter is that everything would appear to be exactly as if our experience were genuine, ... in the Kantian specter the problem is precisely the opposite since nothing would be recognizable and our experience would be nothing but what William James famously referred to as “one great blooming, buzzing confusion.” (2015, p. 9).<sup>2</sup> Indeed, according to Allison: “the deduction assumes that we do have experience in the sense of empirical cognition of an objective phenomenal world” (2015, p. 435). He suggests that, if categories are conditions of sensibly representing objects, the assumption is that without categories our sensory experience would be reduced to “one great blooming, buzzing confusion.” Yet, if Allison’s specter is not the famous Cartesian one, it is still some unqualified skeptic that challenges us to vindicate the common-sense picture of the world composed of public objective particulars.

This reading underlies deep exegetical problems. To start with, “experience” (*Erfahrung*), “cognition” (*Erkenntnis*), and “object” are technical notions. Kant’s “*Erkenntnis*” is something in-between the English word “cognition” (in German “*Kenntnis*” or what Russell has famously called “knowledge by acquaintance”) and

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<sup>2</sup> In his book of 2004, Allison states that: “the Kantian specter is one of cognitive emptiness rather than of global skepticism.” (2004, p. 160). However, there are various forms of global skepticism that do not appeal to the famous Cartesian specter.

propositional knowledge in the proper sense (roughly epistemically justified true propositions), namely a fact-awareness: *knowing that* something is the case.

Likewise, “experience” does not mean either sensible intuition of something or ever apprehending something at all, but also cognition, namely the propositional awareness that something is the case; e.g. awareness that the cinnabar is red; that is the longest day of the year the land is covered with fruits; that humans have a particular animal shape, etc.<sup>3</sup> Finally, “object” does not mean what since Brentano has been called intentional or accusative object, something that mental states are directed at, that may be a *res* (*de re* attitude such as “conscious of,” “thinking of”), or a *dictum* or clause (*de dicto* attitude such as experience that, judging that, and so on). “Object” in Kant is the *lawlike necessary connection of appearances*: “An object is that in the concept of which the manifold of a given intuition is united” (B137).

I experience (*erfahre*) an object when I am aware of the cinnabar-appearance and red-appearance as necessarily connected, or when I am aware of the-longest-day-of-the-year-appearance and the-land-covered-with-fruits-appearance as necessarily connected, etc. I believe that this is more than enough to exclude for good the reading that the possibility of the experience of objects is the possibility of sensibly representing intentional objects. Nonetheless, in the next section, I will add the key additional remark: conceptualist readers mistake the *empirical sense* of appearances (something in space) for *the empirical sense* of representation (mental states).

But what about Allison’s suggestion that without categories our experience is reduced to what James famously called “one great blooming, buzzing confusion?” I believe that the exegetical mistake here is even blunter than before. To be sure, Kant mentions the word “confusion” when he states that without categories “everything might lie in such confusion” (*KrV*, A93/B123). Still, what he has in mind is certainly not “one great blooming, buzzing confusion,” but rather that “appearances could very well be so constituted, that the understanding could not find them to be in accordance with the conditions of its unity” (*KrV*, A93/B123). That becomes clear when Kant claims in the sequence that: “in the succession of appearances nothing would offer itself that would furnish a rule of synthesis and thus correspond to the concept of cause and effect” (A90/B123). What Kant has in mind is as simple as that: without categories, we

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<sup>3</sup> Those are Kant’s examples. See *KrV*, A 100-101.

have no reason to assume that the observed regular connection between the cinnabar-appearance and the red-appearance are lawlike connected. But this is far from being one great blooming, buzzing confusion.

The possibility of experience (the principle of TD) does not and cannot mean “the possibility of sensible intuition of objects.” And that is enough to discredit the assumption that at *KrV*, A90–1/B122–3 Kant is only contemplating “a mere epistemic possibility” to be eliminated later as an “unreal metaphysical possibility.” Categories are not conditions for what appears! Objects can appear without having to be related to the functions of the understanding.

#### 4. The possibility of experiencing objective items

In this section, I focus on an alternative reading of the Kantian notion of “possible experience of objects” as the principle of TD (or as *Beweisgrund* of transcendental propositions). This alternative reading is as follows. “Object” might be taken as meaning “objectivity” (“object” in Strawson’s “weighty sense”), rather than merely the accusative of our sensible intuitions.<sup>4</sup> Accordingly, “experience” might be taken as meaning experiencing order and arrangement of items rather than sensible intuitions. Thus, categories are conditions of the “possible experience of objects” not in the sense that they are conditions for intuiting objects. Instead, they are conditions for experiencing items connected objectively. In his “austere” reconstruction of Kant’s TD, Strawson eliminates all reference to the Kantian threefold synthesis of imagination, which according to him belongs to what he pejoratively calls “Kant’s psychology.” However, he recognizes that what he is claiming is that categories are conditions for objective apprehension of what appears:

There are passages in the first edition of the Deduction which might almost be read as comments on such a suggestion... *in an awkwardly expressed language, Kant says that if it were accidental that appearances should fit into a connected whole of human knowledge, then it might be that they do not so fit together, were not associable in the required way...* (1966, p. 99, emphasis added)

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<sup>4</sup> Regarding the “weighty” sense of objects in Kant, see Strawson 1966, p. 88

Without categories, one cannot know whether those appearing objects are objects in the “weighty sense,” that is, objects connected in a way that allows the crucial distinction between the order and arrangement of items and the order and arrangement of our experience of them in the first place. Given this, even if Kant’s statements at *KrV*, A90–1/B122–3 are not alluding to a mere epistemic possibility to be ruled out, the destiny of TD is inexorably connected to the refutation of another “skeptic:”

No doubt, it might be said, the contents of possible experiences might be unified in some way and must be brought under concepts. But why should not the objects (accusatives) of awareness of such a consciousness be a succession of items such that there was no distinction to be drawn between the order and arrangement of the objects (and of their particular features and characteristics) and the order and arrangement of the subject’s experiences of awareness – items, therefore, which would not be the topics of objective judgments in Kant’s sense? Such objects might be of the sort which the earlier sense-data theorists spoken of – red, round patches, brown oblongs, flashes, whistles, tickling, sensations, smells. (1966, pp. 98-99)

Some passages of Kant’s *Prolegomena* seem (*prima facie*) to support Strawson’s reading. Consider this:

I say: Experience teaches me something, I always mean only the perception that is in it – e.g., that upon illumination of the stone by the sun, warmth always follows – and hence the proposition from experience is, so far, always contingent. That this warming follows necessarily from illumination by the sun is indeed contained in the judgment of experience (in virtue of the concept of cause), but I do not learn it from experience; rather, conversely, the experience is first generated through this addition of a concept of the understanding (of cause) to the perception. Concerning how the perception may come by this addition, the *Critique* must be consulted, in the section on transcendental judgment, pp. 137ff. (*Prol*, 4: 305ff)

In this passage, Kant states that we can take the notion of experience in at least two different senses. In the first sense, “experience” without categories of the understanding means *perception*, more specifically, *the consciousness that appearances are connected in the subject* but not in the object. For example, without the category of causality, something appears warm to me following something that appears illuminated by the sun to me in a contingent connection. That is what Kant, in-between the two editions of the *Critique*, called “judgment of perception.” In the second sense,

“experience” means the consciousness that what appears warm is necessarily connected with what appears illuminated by the sun. In this case, the relevant category of causality is presupposed. That is what Kant, in-between the two editions of the *Critique*, called “judgment of experience.”

“Judgment of perceptions” and “judgments of experience” do not refer to two propositional contents, one (“judgment of perception”) *presupposing* the other (“judgment of experience”). Rather, Kant’s idea is that the same propositional content (*Satz*), namely *that the sun warmed the stone*, is accepted in different, but complementary ways.<sup>5</sup> First, the proposition (*Satz*) is accepted as a mere judgment of perception, that is, the simple finding that the warm-appearance and the illumination-appearance are somehow connected. Second, the same proposition is accepted under the assumption that the warm-appearance and the illumination-appearance are connected in accordance with the category of causality.

Now, assuming that so-called Strawsonian “skepticism” takes the form of an objection against Kant’s view, the potential of experiences as belonging to the same subject entails the Kantian distinctions, namely:

[i]ndividually, the distinction between the subjective component *within* a judgment of experience; collectively the distinction between the subjective order and arrangement of a series of such experiences on the one hand and the objective order and arrangement of the items of which they are experiences on the other” (1966, p. 101, original emphasis).

This Strawsonian reading of TD is known in the literature as the *contrastive argument*. The idea is quite clear: “the potential self-attribution of experiences” entails the contrast between subjective order and arrangement of experiences and objective order and arrangement of what those experiences are of. Now, whether Strawson’s contrastive argument is sound and successful against his skeptical hypothesis of a purely sense-datum experience is not my concern here. My only concern is whether Strawson’s reading of TD has Kantian provenance.

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<sup>5</sup> Consider this: “E.g., if I say: the air is elastic, then this judgment is, to begin with only a judgment of perception; I relate two sensations in my senses only to one another. If I want it to be called a judgment of experience, I then require that this connection be subject to a condition that makes it universally valid. I want therefore that I, at every time, and also everyone else, would necessarily have to connect the same perceptions under the same circumstances.” (*Prol*, 4: 299)

Let us take stock. According to Allison's Cartesian specter, our experience might be reduced to "one great blooming, buzzing confusion." In contrast, according to Strawson, our experience might be reduced to "disconnected impressions ... which neither require nor permit of, being 'united in the concept of an object'" (1966, p. 99). The reader might wonder: what is the big difference? Well, for my concern, there is no relevant difference. Is that what Kant had in mind?

That is certainly not the case. My diagnostic is as follows. Kant's scholars fall prey to the same fallacy of ambiguity of the notions of appearances and representations that Kant denounces in his Fourth Paralogism of the first edition: they are tacitly taking "representations" in the empirical rather than in the transcendental sense. Likewise, they are tacitly taking "appearances" in the transcendental rather than in the empirical sense. Let me explain in detail what is at stake.

Both notions - appearances and representations - have both an empirical and transcendental sense. "Representation" *in the transcendental sense* is nothing but what lies within our cognitive powers. It is in this transcendental sense of representation that Kant is a phenomenalist: "We have said above that appearances themselves are nothing but sensible representations, which must not be regarded in themselves, in the same way, as objects (outside the power of representation)" (*KrV*, A104). Kant's phenomenism is the doctrine that "appearances in the empirical sense" are nothing but "representations in the transcendental sense." In contrast, representations *in the empirical sense* are nothing but states of mind of directing at something. Now, appearances in the empirical sense are nothing but things that the mind represents as existing in space. In contrast, *in the transcendental sense* appearances are *manifestations of noumena* (inside or outside the mind).

Thus, by assimilating Kant's "confusion" to James's "confusion," Kant's scholars are mistaking "appearances in the relevant empirical sense" (in TD) for "representations in the empirical sense." The cinnabar-appearance connected with the red-appearance, the longest-day-appearance connected with the land-covered-with-fruits-appearance, the warm-appearance connected with the illumination-appearance, etc. are not connected representations in the empirical sense. Without categories, they are just concrete particulars (objects, events, and particular instances of properties)

regularly connected in space and time. With categories, they remain the same particulars, but now lawlike connected in what Kant calls nature.

### 5. “The Skeptic” as a straw figure

Does this mean that TD does not address any sort of skepticism? That is certainly not the case. I believe that it is beyond any reasonable doubt that by proving that categories of the understanding necessarily apply to all objects of sensible intuitions Kant is addressing some skepticism of Humean provenance.<sup>6</sup> Now, the question is: which Humean skepticism does Kant address in his TD? When we remember that in TD what it is at stake are “appearances” in the empirical sense, a closer look at some key passages of TD reveals that Kant is rather concerned with the uniformity (*Gleichförmigkeit*) of nature and that is what he calls the lawlike *necessary connection between appearances*. Consider those passages:

Thus we ourselves bring into the appearances that *order and regularity* in them that we call **nature**, and moreover we would not be able to find it there if we, or the nature of our mind, had not originally put it there. For *this unity of nature should be a necessary, i.e., a certain unity of the connection of appearances*. (*KrV*, A125, original emphasis in bold, and additional emphasis in italic)

Thus as exaggerated and contradictory as it may sound to say that the understanding is itself the *source of the laws of nature, and thus of the formal unity of nature*, such an assertion is nevertheless correct and appropriate to the object, namely experience. (*KrV*, A127, emphasis added)<sup>7</sup>

Kant’s idea of a “formal unity of nature” (a necessary connection between appearances) is nothing but what Hume called the assumption that “the course of nature

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<sup>6</sup> Consider this: “But since he (David Hume) could not explain at all how it is possible for the understanding to think of concepts that in themselves are not combined in the understanding as still necessarily combined in the object, and it never occurred to him that perhaps the understanding itself, through these concepts, could be the originator of the experience in which its objects are encountered, he thus, driven by necessity, derived them from experience (namely from a subjective necessity arisen from the frequent association in experience, is subsequently falsely held to be objective, i.e., custom), however, he subsequently proceeded quite consistently in declaring it to be impossible to go beyond the of experience with these concepts and the principles that they occasion. (*KrV*, A95/B127)

The first of these two famous men [Locke] opened the gates wide to enthusiasm, since reason, once it has authority on its side, will not be accepted within limits by indeterminate recommendations of moderation; the second (Hume) gave way entirely to skepticism, since he believed himself to have discovered in what is generally held to be the reason a deception of our faculty of cognition.” (*KrV*, A97/B128, original emphasis in bold)

<sup>7</sup> The idea is everywhere in the A-Deduction: *KrV*, A108, A110, A112-113, A113-114, A122, A123, etc.

continues always uniformly the same.” In his *Enquiries*, Hume claims that inductive inferences rely on transitions taking the following form: “I have found that such an object has always been attended with such an effect, and *I foresee, that other objects, which are, in appearance, similar, will be attended with similar effects*” (E. 4. 2: 16, emphasis added). In his *Treatise*, Hume says that: “if Reason determin'd us, it would proceed upon that principle that instances, of which we have had no experience, must *resemble those*, of which we have had experience, and that *the course of nature continues always uniformly the same*” (T. 1.3.6: 4). Following the literature, I will refer to this claim of similarity or resemblance between observed and unobserved regularities as “the Principle of Uniformity of Nature.” Sometimes it is also called the “Resemblance Principle,” or the “Principle of Uniformity.”

Now, before proceeding, I can imagine that the reader might be wondering: what is the relationship between Hume's skepticism about induction with Allison's specter, Strawson's sense-datum skeptic, and Gomes's skeptic of Humean provenance? On closer inspection, the “skeptic” that TD is supposed to address and to refute emerges from a mix of quite different skeptical issues in Hume's theoretical philosophy. The first is Hume's skepticism about senses. The second is Hume's skeptical solution to this skepticism about senses. The third is Hume's skepticism about induction, namely the problem of uniformity of nature. The fourth is Hume's skeptical solution for this problem of uniformity. Let me explain each of them one by one.

“Hume's skepticism about the senses” is the Humean version of Cartesian external-world skepticism.<sup>8</sup> The reasoning is as simple as it is compelling. First, we assume that our senses provide us with cognitive access only to what appears inside our minds: sense impressions are not appearances of outside things. Second, any attempt to attribute causal inferences from what we experience to their probable outside causes is doomed to fail. Therefore, there is no way of justifying our beliefs about outside things by appealing to our senses.

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<sup>8</sup> According to him: “Thus to resume what I have said concerning the senses; they give us no notion of continu'd existence, because they cannot operate beyond the extent, in which they really operate. They as little produce the opinion of a distinct existence, because they neither can offer it to the mind as represented, nor as original. To offer it as represented, they must present both an object and an image. To make it appear as original, they must convey a falshood; and this falshood must lie in the relations and situation: In order to which they must be able to compare the object with ourselves; and even in that case they do not; nor it is possible they shou'd, deceive us. We may, therefore, conclude with certainty, that the opinion of a continu'd and of a distinct existence never arises from the senses.” (T. 1. 2. 4. 11: 191-192)



Kant takes issue with external world skepticism both in his Fourth Paralogism of the first edition as well in his Refutation of the idealism of the second edition. In his Refutation, he famously claims that inner experience is only possible under the presupposition of outer experience. However, there is no such argument in TD. Moreover, there is no hint whatsoever in TD that the problem of cognitive access to outer things, that is, to things outside us, is what motivates Kant's TD. Likewise, there is no hint whatsoever in TD that Kant is targeting Hume's skeptical solution/accounts for the commonsensical beliefs in bodily changes and his skepticism about the senses (external-world skepticism). In TD the contrast between consciousness in me and consciousness of something outside me plays no role whatsoever. Rather, the key role is played by the contrast between the contingent/regular and necessary/lawlike connection of what appears in the empirical sense in space and time. Finally, if TD has proven that the empirical consciousness in me entails the objective consciousness of things outside me, why would Kant take issue with the same problem all over again in his Fourth Paralogism as well as in his Refutation?

We are back at what we said at the end of the last section. Now it is quite clear why Kant's scholars mistakenly assume that by addressing Hume's skepticism about induction Kant is thereby also addressing Hume's external world skepticism. They mistake "representations" in the transcendental sense for "representations" in the empirical sense as mental states, and "appearances" in the empirical sense with "appearances" in the transcendental sense (just as Hume does in his naturalist skeptical account for the belief of bodies). In TD "appearances" should be taken empirically as what appears outside us in space and time, while "representations" should be taken transcendently as what lies within our cognitive powers and abilities. For example, when Kant claims that the cinnabar-appearance/representation is necessarily or lawlike connected with the red-appearance/representation, he is taking "appearances" in the empirical sense and representations in the transcendental sense and not the other way around, namely representations in the empirical sense.

All things considered, the so-called "skeptic" opponent of Kant's TD comes closest to Hume's skeptical solution to his skepticism about the senses, namely Hume's naturalist account for beliefs in bodies and bodily changes. According to Hume: "*What causes induce us to believe in the existence of body? But 'tis in vain to ask, Whether*

*there be body or not?* That is a point, which we must take for granted in all our reasoning” (T. 1. 2. 4. 1: 187-188, original emphasis). We naturally believe in the existence of bodies because we inwardly experience “a peculiar constancy” between qualitatively identical impressions as if they were appearances of numerically identical bodies outside us. Along similar lines, we believe in the existence of bodily changes because we inwardly observe coherent qualitatively different sense-impressions as if they were appearances of bodily changes.<sup>9</sup>

Now, if the Kantian manages to prove that this Humean account for our beliefs in bodies and bodily changes is somehow conceptually incoherent, has Kant thereby successfully rebutted Hume’s external world skepticism? Not! Again, Hume’s external-world skepticism is based on the assumption that our senses provide us with no information whatsoever of what lies outside us. Sense-impressions are not appearances of something outside. Thus, even if Hume’s naturalist account for beliefs in bodies and bodily changes is unsound, Hume’s external world skepticism still stands: our beliefs in outside things remain epistemically unjustified as long as impressions are not appearances of outside things. To address Hume’s external world skepticism Kant has to show that inner experience is only possible under the presupposition of outer experience (Refutation).

The moral to be drawn is that the so-called “skeptic” opponent to TD (of either Cartesian or Humean provenance) is nothing but a straw figure, merely conceived to make Kant’s TD “interesting.” Therefore, Kant’s putative refutation of this “skeptic” is nothing but a case of the straw man fallacy.

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<sup>9</sup> In Hume’s own words: “After a little examination, we shall find, that all those objects, to which we attribute a continu’d existence, have a peculiar constancy, which distinguishes them from the impressions, whose existence depends upon our perception. Those mountains, and houses, and trees, which lie at present under my eye, have always appear’d to me in the same order; and when I lose sight of them by shutting my eyes or turning my head, I soon after find them return upon me without the least alteration.” (T. 1. 2. 3. 19: 195)

“This constancy, however, is not so perfect as not to admit of very considerable exceptions. Bodies often change their position and qualities, and after a little absence or interruption maybe come hardly knowable. But here ‘tis observable, that even in these changes they preserve a coherence, and have a regular dependence on each other; which is the foundation of a kind of reasoning from causation, and produces the opinion of their continu’d existence. When I return to my chamber after an hour s absence, I find not my fire in the same situation, in which I left it: But then I am accustom’d in other instances to see a like alteration produc’d in a like time, whether I am present or absent, near or remote. This coherence, therefore, in their changes is one of the characteristics of external objects, as well as their constancy.” (T. 1. 2. 4. 19: 195)

## 6. Observed regular connection of appearances

Now when we purge TD of the marked ambiguity and assume that what is at stake are appearances in the empirical sense (or representations in the transcendental sense), the “skeptic” as a straw figure becomes a real skeptic figure, namely in the sense of Hume’s skepticism about induction. Regarding this, the destiny of TD is inextricably bounded to providing an answer to what Kant called Hume’s “challenge to reason” (*Prol*, 4: 275-77). In other words, by proving that categories necessarily apply to all objects of our sensible intuition, Kant is also thereby showing that we have the epistemic right to assume the uniformity (*Gleichförmigkeit*) of nature (under the transcendental idealist assumption that knowable nature is not the totality of things in themselves, but rather the totality of what appears to us in the empirical sense). This is the principle of induction of the nature of science (physics).

Now let me examine Hume’s challenge in detail. He starts with a distinction between “relations of ideas” and “matters of fact” and claims that “all reasonings may be divided into two kinds, namely, demonstrative reasoning, or that concerning relations of ideas, and moral reasoning, or that concerning matter of fact and existence” (E. 4. 2: 18). With this distinction, he considers the possibility of each of those types of reasoning in justifying the assumption that nature is uniform. His challenge to reason takes the form of a dilemma.

On the first horn, he argues that such reasoning cannot possibly be demonstrative, because demonstrative reasoning only establishes conclusions which cannot be conceived to be false. Yet, there is no contradiction whatsoever in the thought that the course of nature may change. So, according to the first horn of the dilemma, it is possible to clearly and distinctly conceive of a situation where the unobserved case does not follow the regularity so far observed.

On the other horn, Hume argues that the reasoning also cannot be “such as regard matter of fact and real existence” (he calls this “probable” reasoning). All such forms of reasoning “proceed upon the supposition, that the future will be conformable to the past” (E. 4. 2: 19).<sup>10</sup> Now, in the chain of this second type of reasoning, it will again be taken “for granted, which is the very point in question” (E. 4. 2: 19). So, according to

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<sup>10</sup> This is what I, following the literature, have called the principle of uniformity of nature.

the second horn, the second type of reasoning is viciously circular.<sup>11</sup> The moral to be drawn is that our natural tendency to project past regularities into the future (the principle of uniformity of nature) is not underpinned by reason.

Hume's skeptical solution to this skepticism about induction is similar but also different to his skeptical solution of beliefs in bodily changes. This consists of an explanation of why the inductive inferences are not driven by reason. According to him: "When the mind, therefore, passes from the idea or impression of one object to the idea or belief of another, it is not determin'd by reason, but by certain principles, which associate together the ideas of these objects, and unite them in the imagination" (T.1.3.6.12). The imagination is responsible for underpinning the inductive inference, rather than reason. The idea is that if one has seen similar objects or events constantly conjoined, then the mind is naturally inclined to expect a similar regularity to hold in the future. That is what Hume calls habit or custom.

Hume's problem with the uniformity of nature raises a great controversy in Hume's scholarship. The controversy here turns on the two Humean projects: his epistemological skepticism versus his naturalized theory of cognition. Readers of the "old school" take Hume's stance as a form of classical skepticism about induction: there is no justification at all for the assumption that nature is uniform. In contrast, other scholars claim that Hume's stance is a cognitive rather than an epistemological problem. Rather than raising a skeptical doubt about the legitimacy of the assumption that nature is uniform, Hume is providing a superior account for the assumption that nature is uniform, based on imagination.<sup>12</sup>

However, I believe that the controversy hinges less on the tension between Hume's two philosophical projections and more on two different meanings of "skepticism." Those who deny Hume's stance towards the problem of uniformity of nature take "skepticism" in the Cartesian sense of raising doubts or suggesting skeptical hypotheses. Nonetheless, both Hume and Kant understand Hume's stance towards the

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<sup>11</sup> In his *Treatise*, he adds the following conclusion: "Thus, not only our reason fails us in the discovery of the ultimate connection of causes and effects, but even after experience has inform'd us of their constant conjunction, 'tis impossible for us to satisfy ourselves by our reason, why we shou'd extend that experience beyond those particular instances, which have fallen under our observation." (T. 1.3.6.11: 91–2)

<sup>12</sup> That is the view that Allison supports: "[T]he central question that Hume poses in T 1.3.6, namely, whether the inductive inference is to be understood as a product of reason or the associative procedures of the imagination, is to be viewed as a question in cognitive psychology rather than normative epistemology" (2008, p. 112).

problem of uniformity of nature as a form of “skepticism” in the sense of the old Pyrrhonists, namely as a challenge to reason. While skepticism of Cartesian provenance can only be addressed by a refutation, as a challenge to reason, Pyrrhonian skepticism cannot be addressed by some refutation. That is why I believe that Kant’s way of addressing Hume’s challenge is to provide an account for the assumption of the uniformity of nature that is superior to Hume’s account based on imagination in the face of the requirement of Newtonian physics.

### 7. Possible experience as cognition of necessary connections

Now, we are back to our original problem: what does Kant mean with the possibility of experience? Here we must remind the reader that “experience” (*Erfahrung*) and “cognition” (*Erkenntnis*) are technical terms for Kant. In *KrV*, A104 Kant tells us that cognition carries *something of necessity*. Then he adds that this necessity is what provides the *unity* to appearances. Finally, he adds that this unity is what establishes *the relation* to objects. In this light, the experience is cognition (*Erkenntnis*) of what appears as necessarily connected: “Experience is possible only by means of the representation of a necessary connection of perceptions” (*KrV*, B128).

Now according to Beck: “the Deduction of the Categories and the section on the Principles have as their goal the refutation of this possibility. But it is questionable whether they succeed” (1981, p. 11). In the putative refutation of Hume’s skepticism, the crucial conceptual step is between empirical affinity and transcendental affinity. What Kant calls “empirical affinity” is nothing but what Hume calls the observed contingent regular connection between appearances. In contrast, what Kant calls “transcendental affinity” is what Hume calls the (putative) lawlike necessary connection of appearances. Regarding this, Kant states:

Now, however, representation of a universal condition in accordance with which a certain manifold (of whatever kind) **can** be posited is called a **rule**, and, if it **must** be so posited, a **law**. All appearances therefore stand in a thoroughgoing connection according to necessary laws, and hence in a transcendental affinity, empirical affinity is mere consequence. (*KrV*, A113-114, original emphasis in bold)

The problem is: there is no conceptual entailment between the notion of the observed regular connection of appearances and the notion of a lawlike necessary

connection of appearances. In Kant's words:

Without consciousness that that which we think is the very same as what we thought a moment before, all reproductions in the series of representations *would be in vain*. For it would be a new representation in our current state, would not belong at all to the act through which it had been gradually generated, and its manifold would never constitute a whole since it lacks unity only consciousness can obtain for it. (*KrV*, A103)

Kant claims that without such transcendental affinity, the lawlike necessary connection of appearances, the observed regular connection of the same appearances “would be in vain.” The question is: would be in vain for what? The answer is obvious: *it would be in vain* for cognizing (*erkennen*) what appears in space and time as necessarily lawlike connected. Here the Kantian faces Hume's charge of circularity: rather than proving that nature is uniform, Kant is assuming it. The moral is that as a refutation of Hume's skepticism TD is doomed to fail.

The lurking question is whether in his TD Kant is thereby rebutting Hume's skepticism about the uniformity of nature. The answer is not! As I said in the last section, Hume's challenge to reason does not invite a refutation in the same sense that a Cartesian scenario or a Strawsonian hypothesis invites. Kant's way of addressing Hume's challenge is by overcoming Hume's naturalist account. Kant's official answer to Hume's challenge to reason is this:

If a body is illuminated by the sun for long enough, then it becomes warm. Here there is of course not yet a necessity of connection, hence not yet the concept of cause. **But I continue and say: if the above proposition, which is merely a subjective connection of perceptions, is to be a proposition of experience, then it must be regarded as necessarily and universally valid.** But a proposition of this sort would be: The sun through its light is the cause of the warmth. The foregoing empirical rule is now regarded as a law, and indeed as valid not merely of appearances, but of them on behalf of a possible experience, which requires universally and therefore necessarily valid rules. (*Prol*, 4: 312, emphasis added)

Kant is not attempting to rebut Hume's skeptical solution to the problem of induction. If that were Kant's intention, he would have claimed that the observed regular connection between appearances *presupposes* the lawlike connection between

them. But how could Kant overcome Hume's naturalist account? The common ground of the controversy between Kant and Hume is the Newtonian physics considered by both as a mature science of nature. Given this, Kant's TD overcomes Hume's naturalist account of the uniformity of nature under the presupposition that it can better account for the objectivity of Newtonian physics as a mature science.<sup>13</sup>

The argument of TD can be outlined as follows:

0-Objects can appear without necessarily being brought under categories (categories are not conditions for what appears empirically in space and time).

1-*Beweisgrund*: to prove that categories necessarily apply to all objects of experience is to prove that I could not *cognize* or *experience* appearances as lawlike connected without categories (that is what Kant calls "possible experience"). This cognition of appearances as lawlike connected is what Newtonian science requires. Moreover, the cognition of appearances as lawlike connected is the *tertium* that connects the understanding to the sensibility and justifies the so-called transcendental propositions.

Those are synthetic *a priori* propositions because (i) they are true of nature and because (ii) their truths cannot be recognized only through the concepts/meanings involved. Yet, they are not "dogmata" because (iii) they are not direct synthetic propositions from concepts: they are proven as conditions of the *tertium*. But they are not "mathemata" either because (iv) they are not propositions through the construction of concepts. This is Kant's way of circumventing Hume's dilemma of the last section.

2-The *tertium* (the cognition) requires that the "I think" must be able to accompany all my appearances, that is, I must be able to be aware of what appears since something can always appear independently of any concepts whatsoever.

Kant's transcendental apperception has nothing to do with the usual contemporary sense of self-consciousness as self-attribution of mental representations.

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<sup>13</sup> Regarding this, see De Pierris and Friedman 2018. Interestingly, as they indicate Newton seems to be philosophically closed to Hume's empiricism rather than to Kant's transcendentalism.

Several of Kant's scholars have adopted Tugendhat's semantic analyses of psychological I- $\varphi$  sentences as the best model for Kant's transcendental self-consciousness. Accordingly, the Kantian "I think" is couched in terms of: "I know that I  $\varphi$ " (where " $\varphi$ " stands for a predicate describing a generic conscious state, a representation). However, since appearances should be taken in the empirical sense (rather than representations in the empirical sense), this is a complete mistake. Kantian identity of self-consciousness is the identity of the thinking agency in apprehending what appears as lawlike connected in space and time. That is why Kant (obscurely) claims that the "thoroughgoing identity of the apperception of a manifold given in intuition contains a synthesis of the representations, and is possible only through consciousness of this synthesis" (*KrV*, B133).

3-Nonetheless, reflection on what appears is not enough. It also requires the apprehension of what appears as connected regularly in time.

4-Again, this apprehension of what appears as regularly connected is still not enough for the awareness of what appears as lawlike connected.

5-Only the categories of the understanding (as concepts of *a priori* unities) can account for the cognition of what appears as lawlike connected.

6-Since Newtonian science is as successful as it is objective, we cognize what appears as lawlike connected (a fact), therefore,

7-Categories necessarily apply to all objects of experience insofar as we cognize those appearances as lawlike connected.

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Artigo recebido em: 16.09.2020

Artigo aprovado em: 03.10.2020