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WHAT IS KANT'S REFUTATION OF IDEALISM DESIGNED TO REFUTE?

Bernhard Ritter

The passage that Kant added to the Postulates of Empirical Thinking in the second edition of the *Critique of Pure Reason* can be approached by way of two of his designations. The first appears in a lengthy footnote to the preface and reads "a strict proof … of the objective reality of outer intuition," or, more explicitly, "[a proof of] the existence of things outside us."[36] The second is the actual heading of the passage: "The Refutation of Idealism." Each instance can be taken, however heuristically, to correspond to a distinct task of clarifying the import of the argument.

The passage heading suggests that it is a matter of getting clear about the idealist's position, and how the argument is intended to disprove it. This may be termed the *negative import* of the Refutation of Idealism, as it consists of understanding what it refutes and how.

According to the footnote in the preface, the passage is a proof of "the existence of things outside us". This phrase seems unequivocal, although, it will be argued that there is no proof from Kant that establishes a *categorical* existential proposition ranging over things outside us. Because Kant's label is misleading, spelling out the conclusion may be useful. In any case, doing this and reconstructing how it is achieved is part of the *positive import* of the argument. Moreover, an account of the positive import should include an explanation of why external objects are required.

1. Cassam on Kant

Yet, there is a further question about the precedent step that leads to the cognition of external objects. It is not concerned with the Refutation of Idealism alone but with transcendental arguments in general: do they explain how empirical knowledge is possible? Cassim Cassam answers in the negative.[37] To see how he supports his claim it

[36] B XL.
[37] Cassam 2007 [= *The Possibility of Knowledge*]: vi, and section 2.

will serve to consider his outline of the Refutation as an instance of a transcendental argument, and how he comments it:

> Inner experience is a form of self-knowledge; it is knowledge of the temporal order of one's experiences. Outer experience is perceptual knowledge of the existence of objects in space. Kant's claim is that outer experience is a necessary condition for inner experience. So if the sceptic grants that he has inner experience, then he must also grant he has perceptual knowledge of external objects. (Cassam 2007: 54)

Identifying the sceptic with the idealist for a moment, the quotation gives a rough idea of how the Refutation-argument works. One premise links (the possibility of) self-awareness to the necessary condition that the subject be aware of external objects. Now, when the idealist denies direct awareness of external objects, he either suffers a *modus tollens* of self-awareness, which he thought independent of outer experience, or he must admit that he is aware of external objects. Obviously, this reasoning relies on demonstrating that the necessary condition really holds. Cassam comments:

> If this argument is successful, what it shows is that perceptual knowledge is *necessary* for inner experience but showing that perceptual knowledge is necessary for inner experience is not the same thing as explaining how perceptual knowledge itself is *possible* [.] (Cassam 2007: 55)

Cassam identifies a mismatch between Kant's how-possible questions and transcendental arguments that establish necessary conditions by way of answers. He suggests that transcendental arguments exceed the level of generality appropriate to yield an answer. Associated with, but not in direct support of this objection, Cassam argues that transcendental arguments are neither necessary nor sufficient to answer in particular the question of how *perceptual* knowledge is possible.[38]

Cassam's arguments in support of this latter claim will be considered in a moment. In reaction to the charge of excessive generality, I would like to suggest that it is due to asking too much of too brief a passage of the *Critique*. Taking even the transcendental deduction as a whole, why should it—considered in isolation—be the decisive unit for assessing Kant's explanation for how perceptual knowledge is possible? Consider the following remark, which occurs at the very end of the transcendental deduction (in §27):

[38] Cassam 2007: 52.

> [T]he categories contain the grounds of the possibility of all experience in general from the side of the understanding. But more about how they make experience possible, and which principles (*Grundsätze*) of its possibility they yield in their application to appearances, will be taught in the following chapter (*Hauptstück*) on the transcendental use of the power of judgment. (B 167)

Kant's reference to the "following chapter" is inexact. What comes after is the Analytic's second *book*, whose first chapter contains no statement of principles (*Grundsätze*). The chapter is exclusively concerned with what Kant calls the "schematism" of the categories. A schema is an aspect of our understanding of concepts. It is not a representation but a method of the imagination to engender a representation that is in accordance with the concept. The schema of e.g. "substance" gives rise to the representation of a permanent quantity of a something in time, "which … endures while everything else changes."[39]

The principles are only touched upon in the second chapter, by the application of the categories to appearances in general in accordance with their schematism. Thus I identify the "principles of [the] possibility [of experience]" in the quoted passage with the principles of pure understanding, among which the crucial explanatory work is done through the analogies of experience. Since Kant does not deem the possibility of perceptual knowledge to be conclusively established *after* the transcendental deduction (as the quoted passage indicates[40]), and seems to presuppose it in the Refutation, an assessment of his answer to the question of the possibility of perceptual knowledge needs to take into account the interrelation between the two and the principles of pure understanding. Within the constraints of this paper it will only be possible to say something about the analogies of experience (section V).

How does Cassam support his claim that transcendental arguments are not *necessary* for explaining the possibility of perceptual knowledge? Cassam argues that the specification of 'means of coming to know', and the removing of obstacles for these as sources of knowledge is a perfectly good answer for epistemological how-possible questions.[41] For example, to know that the tub is dipped is to possess a piece of empirical knowledge. We explain how empirical knowledge is possible by specifying

[39] B 179f.; B 183/A 143f.
[40] For Kant "experience" is "empirical cognition" (*empirische Erkenntnis*), cf. B 147. There is more on Kant's notion of experience in section V.
[41] Cassam 2007: 8.

empirical means of knowledge-acquisition. Since seeing that the tub is dipped is a means of coming to know that the tub is dipped, we have explained how knowing that the tub is dipped is possible by pointing out that seeing is an appropriate means for acquiring this piece of knowledge. This is a *means-response*, and Cassam believes that it is "in no obvious sense incomplete".[42] As a result, it is not necessary to go into transcendental reasoning to explain how perceptual knowledge is possible. Cassam recommends an approach he terms a *multi-levels response*. It consists of adding specifications of obstacle-removal to the means-response, as well as background conditions necessary for the means to be a source of knowledge.[43] To avoid the instrumentalistic implications of "means of knowing" Cassam newly prefers the term "ways of knowing".[44]

I see a difficulty in maintaining that a means-response is "in no obvious sense incomplete" and that how-possible questions are *obstacle-dependent*.[45] A how-possible question is related to the statement claiming that the state of affairs holds which the how-possible question questions. Let's call it statement *s*. That the question is obstacle-dependent means that it arises out of a conflict between *s* and a set of statements held true. The way in which *s* is precarious is determined by its relation to that set of statements. Consequently, for a means-response (with or without indications for obstacle-removal) to be "in no obvious sense incomplete" presupposes an obstacle. *Given* that the obstacle is 'worries about appropriate means of knowing', a means-response is in no obvious sense incomplete. But let *s* be "there is mathematical knowledge" and the set of statements the following:

1. mathematical knowledge is synthetic *a priori*
2. experience yields synthetic but not *a priori* judgments
3. analysis of concepts yields *a priori* but not synthetic judgments
4. intuition cannot precede the intuited object

Given the above, merely identifying pure intuition as a means for acquiring synthetic *a priori* knowledge is certainly an incomplete answer. It amounts to the bold assertion that it is possible by a "kind of experience before experience". But *that* cannot be clear from

[42] This phrase occurs repeatedly (cf. Cassam 2007: 48, 127, 218).
[43] Cassam 2007: 8f., 35, 51, 63 – 65.
[44] Lecture on the "Possibility of Self-Knowledge" at the University of Konstanz on 26th June 2008.
[45] Cf. Cassam 2007: 2.

intuition; or at least Kant would maintain that asking a philosophical question about the possibility of mathematical knowledge is not asking how mathematical calculations themselves work; instead, it means asking for a valid explanation of their objectivity. If, in addition, it is correct that in philosophy one proceeds *a priori* by means of concepts and not by intuitions,[46] only an *argument* could possibly yield an answer.

Thus, the more abstract propositions that you add to the list and the more intricate the obstacle, the more likely a means-response will look incomplete. That the example above was based on mathematics and not perceptual knowledge[47] should not matter, since what is to count as a complete answer is dependent on the obstacle, and thus, on the set of statements (perceptual or not) that are held true.

Still, *given* that the obstacle is 'worries about appropriate means', the Kantian approach is not necessary, and this is what Cassam claimed. However, it is doubtful whether Cassam actually wanted to claim this, because it would be arbitrary to assume that if Kant were asked e.g. how it was possible to know from the number of guests how many times they will clink glasses, he would add a transcendental deduction to his answer, or would think of it as incomplete if he did not. It is open to him to admit that there are other obstacles besides philosophical problems.

But if both the obstacle and the alternative answer, such as the multi-levels response, are philosophical, then the matter is not so straightforward. It will be argued later in this paper that toning down the instrumentalistic implications and talking more generally of "ways of knowing" deprives Cassam of the conceptual means for giving reasons for why the Kantian approach should not be a kind of a multi-levels response, since the difference depends on being means-specific or not. Certainly, this does not preclude that transcendental arguments may not be necessary for answering epistemological how-possible questions. But, if they are not, still they could be relevant for answering them.

How does Cassam support his claim that transcendental arguments are not *sufficient* to answer the question "how is perceptual knowledge possible?" (HP_{pk})? In Cassam's interpretation, the Kantian approach accounts for the possibility of synthetic *a*

[46] According to Kant, this is what distinguishes mathematical from philosophical cognition (cf. A 723f. /B 751f.).
[47] In response to Cassam 2007: 56.

priori knowledge, whereas the possibility of *a posteriori* knowledge is not one of its central concerns:

> Kant is an example of a philosopher who appears to think that (HP_{pk}) lacks *any* respectable motivation. In his terms, perceptual knowledge would be synthetic a posteriori knowledge, but 'the possibility of synthetic *a posteriori* judgments, of those which are gathered from experience … requires no special explanation; for experience is nothing but a continual joining together (synthesis) of perceptions' ([*Prol.*] 275) If the possibility of synthetic a posteriori knowledge requires no special explanation, then (HP_{pk}) simply doesn't arise; there is no obstacle for it to trade on. (Cassam 2007: 22)

In another instance where Cassam tries to justify this contention with reference to the quoted passage from Kant's *Prolegomena*, he adds that in Kant's introduction to the *Critique*, the possibility of experience is not included in the list of how-possible questions.[48]

However, Cassam qualifies his claim in order to account for the anti-sceptical orientation of the Refutation-argument. Since perceptual cognition of external objects is exactly what is questioned by the sceptic (whom we provisionally identified with the idealist), it is obvious that Kant cannot assume perceptual knowledge of an external world, if his goal is to refute scepticism. According to Cassam, the Refutation-argument is, in this respect, "a special case" in not merely positing actual empirical knowledge of external objects and moving to its preconditions, but also giving an argument in support of the claim that we experience external objects.[49] Cassam rightly remarks that to establish the empirical knowledge of external objects as a necessary condition for inner experience is not an explanation of the possibility of the latter.

To summarize, transcendental arguments, when dealing with the possibility of perceptual knowledge of external objects, either (a) assume it to be something actual or (b) prove it to be a necessary condition for experience in general; in neither case is an explanation for the possibility of perceptual knowledge itself achieved.

It can be agreed that (b) is an appropriate expression of the goal of the Refutation-argument. But no general conclusion that transcendental arguments are irrelevant for answering the question of how perceptual knowledge of external objects is possible, can be drawn. It has already been suggested that this is largely the design of the schematism and the principles of pure understanding. So the claim is that there is an

[48] Cassam 2007: 58; B 19 – 24.
[49] Cassam 2007: 56f.

answer but not where Cassam is searching. There will be more on this matter in section V when touching on the analogies of experience.

Cassam refers to (a) as the interpretation of transcendental arguments as "regressive arguments".[50] The somewhat excessive claim that the possibility of experience is not one of Kant's central concerns means taking a further step, since (a) only presupposes that perceptual knowledge is possible; transcendental arguments could still address the question of *how* that is possible. But, according to Cassam, regressive transcendental arguments are not used by Kant to that end, particularly since, in the *Prolegomena,* he finds that "the possibility of synthetic *a posteriori* judgements … requires no special explanation".[51]

Granted, it is true that the *Prolegomena* are not concerned with the possibility of *a posteriori* judgments; still it could be a concern for the *Critique*, since the former proceed following the analytic or regressive method whereas the latter is laid out synthetically or progressively. The analytic method "proceeds from that which is sought as if it were given, and ascends to the conditions under which alone it is possible";[52] but "the work itself [i.e. the *Critique*] absolutely had to be composed according to the *synthetic method*".[53] Kant explicitly states that the *Critique* "takes no foundations as given except reason itself, and … therefore tries to develop cognition out of its original seeds without relying on any fact whatever".[54] This rules out an essential dependence on the assumption of actual empirical knowledge, irrespective of whether Kant's "regressive method" and Cassam's "regressive arguments" are the same or not.[55] (One should note that there certainly are individual arguments and passages developed regressively in the *Critique*.)

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[50] Cassam 2007: 51 – 62 (section 2.1). The notion of "regressive arguments" is introduced in Cassam 2007: 57 with reference to Ameriks 2003: 51, 55; cf. fn. 20, below.
[51] *Prol.* 275.
[52] *Prol.* 276.
[53] *Prol.* 263.
[54] *Prol.* 274.
[55] In fact these notions are different. According to Karl Ameriks, a "regressive argument would show that *y* is a necessary condition of knowledge *x*"; he adds that "it is not a radical argument from a premise not assuming the possession of knowledge" (Ameriks 2003: 60f.). If this is all a regressive argument is supposed to be, one could readily agree that at least some of Kant's transcendental arguments are regressive. But thus defined, they could still be deductive arguments. The inference from "I know *x*, only if I know *z*" and "I know *z*, only if I know *y*" to "I know *x*, only if I know *y*" establishes deductively that my knowledge of *y* is a necessary condition of my knowledge of *x*, yet it is "regressive" in the sense explained above.

It may seem surprising that Kant omits the question "how is experience possible?" in the introduction to the *Critique*, especially when, in his posthumously published *What Real Progress Has Metaphysics Made in Germany?,* he calls it "the supreme problem of transcendental philosophy".[56] But taking into account the heading of the introductory passage in question, section VI "The General Problem (*Aufgabe*) of pure reason", a possible explanation emerges. The possibility of experience may not be a problem *of pure reason*, but be a problem—even the major problem—of transcendental philosophy. This is the case, if the solution of the problem of pure reason requires the solution of the problem of the possibility of experience. Here, it is not necessary to pursue the matter further. The passage quoted above from the end of the Deduction-passage already substantiates at least the *relevance* of the latter problem to the project of the *Critique*.[57]

This section has dealt with some objections against the indispensability of transcendental reasoning to answer the question how empirical knowledge is possible. It was largely an attempt to show that these objections, at least in their present form, are not conclusive. The following section deals more extensively with the Refutation of Idealism as a transcendental argument.

2. The structure of the argument

What is a transcendental argument? Kant gives three rules for permissible transcendental reasoning. First, a transcendental argument or proof does not show "that the given concept (e.g., of that which happens) leads directly to another concept (that of cause) …; rather it shows that the experience itself, hence the object of experience, would be impossible without such a connection."[58] Kant's example in brackets evokes the Second Analogy of Experience: "All alterations occur in accordance with the law of

[56] Ak. XX: 275.
[57] The quotation is from B 168; for further evidence see the lengthy footnote in the *Metaphysical Foundations of Natural Science* (Ak. IV: 474 – 476).
[58] A 783/B 811. The omitted comment preceding the semicolon gives the reason for the *non licet* stated by Kant: "for [the feasibility of] such a transition [from one concept to the other] nothing could be held responsible." This thought will be taken up by the explicit statement of the first rule a few pages further (A 786/B 814), though only in order to address the (illegitimate) "transcendental proofs" of the transcendental dialectic. Consequently the explicit formulation of the rule is negative and less instructive than the one quoted above.

… cause and effect." (B 232)[59] The connection between "alteration" and "causality" in this conclusion is derived by means of a principle that declares it to be necessary for the experiencing of an object. This is the first distinctive mark of transcendental arguments. The second and third rule states "that for each transcendental proposition only **a single** proof can be found," and "that [transcendental proofs] must never be **apagogic** but always **ostensive**."[60] An "apagogic" proof is a proof "by refutation of the opposite". It starts with searching out propositions that are known to be wrong (owing to inconsistency or other reasons), but implied by the negation of the desired conclusion. A *modus tollens* refutes the antecedent proposition and yields—"by refutation of the opposite"—the desired result. In contrast, an ostensive proof establishes its result directly, ideally by affirmative premises.[61]

The Refutation of Idealism meets the first criterion, which will become apparent from the presentation of the argument below. In Kant's view it certainly meets the second criterion too, for he claims it to be "the only possible [proof]" of things outside us.[62] But if the Refutation-argument meets the third criterion is not clear. Its underlying argument-structure allows for two negative premises, of which only one is actually stated. Kant presents the idealist as somebody who drops the premise that the perception of external objects is mediate and insecure, while self-awareness as a substance in time remains unaffected. Since the latter (that we possess self-knowledge) materially implies the former (that we sometimes perceive external objects), the idealist encounters a refutation of self-awareness. Dropping the denial that we perceive external objects, it follows that the perception of external objects is a necessary condition for self-awareness. Hence the Refutation-argument is an ostensive proof, but its force is in part due to an apagogic proof held in position. Therefore, it may not be altogether clear if the Refutation of Idealism is a transcendental argument, not because it falls in between categories, but because it is too many things at once.

The argument, then, can be paraphrased in a first attempt as follows:

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[59] This formulation of the second analogy gives the impression that Kant attempted to derive metaphysical claims from epistemological conditions; instead, it should actually be stated as a *regulative* principle (as an instruction on how to proceed) and as an *analogy* (*x* is related to a given alteration as cause to effect).
[60] A 787/B 815; A 789/B 817. The Guyer-Wood translation prefers to set Kant's spacing in bold type.
[61] Ak. XX: 288; cf. Ak. IX: 52.
[62] B XLI.

(P_1) to cognize my existence (*Dasein*) as a substance determined in time is possible, necessarily **only if** there is something permanent (*etwas Beharrliches*) in inner intuition (*Anschauung*) **or** outer perception (*Wahrnehmung*),

(P_2) **it is false** that there is something permanent in inner intuition;

(C_1) **hence** to cognize my existence as a substance determined in time is possible, necessarily **only if** there is something permanent in outer perception.

(C_1') To cognize my existence as a substance determined in time is possible, necessarily **only if** there are actual things in my outer perception.

Formally, in order to obtain conclusion (C_1) the antecedent of (P_1) has to be introduced as an assumption. A *modus ponens* yields the disjunction "there is something permanent in inner intuition or outer perception". According to (P_2), the first component proposition is false; hence the second must be true. Here the argument relies on two general claims of the *Critique*: first, the exhaustive disjunction of inner and outer intuition—there is only spatial and temporal sensitivity; second, since only concepts *and* intuition can engender knowledge, a kind of intuition is required, if consciousness of oneself is to be knowledge.[63] Since the statement "there is something permanent in outer perception" is derived on the basis of the assumption that "to cognize my existence as a substance determined in time is possible", the latter has to be written as a sufficient condition of the former, which equals (C_1). The specification "as a substance" only appears in the second note to the proof.[64] Its interpretative addition to the paraphrase above will be justified in a moment. As represented in (C_1'), Kant substitutes "actual things" for "something [permanent] in perception".[65] This should not be seen as an additional step but only as a gloss on conclusion (C_1).

As already touched upon in Cassam's outline above, the aim of the argument is not to prove that outer sense really represents external objects, "for outer sense is already in itself a relation of intuition to something actual outside me"; instead, the aim is to establish that both are "inseparably bound up".[66] This inseparability is due to the

[63] The second presupposition is made explicit in Kant's second note to the proof (B 277f.).
[64] B 277f.
[65] B 276f. I prefer "permanent" to "persistent" as a translation of *beharrlich*. What Kant is looking for is not this or that object, which is actually persistent when viewed against a permanent backdrop, but the backdrop itself, i.e., the totality of physical substances.
[66] B XL.

necessity of something permanent in order to cognize (to think *and* intuit) oneself as a *res* or substance. In support of (P_2), Kant writes "all grounds of determination that can be encountered in me are representations, and as such require something persistent that is distinct even from them, in relation to which their change … can be determined".[67] In the temporal succession of mere representations, no content determines the following content strictly; hence there is no unity to account for the subject as a substance.

It has been remarked that the Refutation is not presented as an apagogic proof in the text. This could have been done easily by adding the idealist's denial of immediate perception of permanent things in outer perception as a second negative premise. In that form, the Refutation-argument would have been

> a hypothetical inference, whose *consequens* is a disjunctive judgment. The hypothetical proposition whose *consequens* is disjunctive is the major proposition; the minor proposition affirms that the *consequens* (*per omnia membra*) is false, and the conclusion affirms that the *antecedens* is false. (Ak. IX: 130)

The quotation is from paragraph 79 ("Dilemma") of the *Jäsche Logic*. In the note adjoined the paragraph Kant finds "something deceptive" in dilemmata, for "not to refute propositions directly but rather only to show difficulties [and to infer from difficulties to falsity] is feasible in many, indeed, most things".[68] It may have been for this reason that Kant presented his argument as a *direct refutation*, based on formerly established premises.

The closing passage in the proof starts with the first complete sentence after the page brake B 275 to 276. The component after the "i[d] e[st]" is definitely a gloss on the conclusion, but the rest is difficult to assess.

> Now consciousness in time is necessarily combined with the consciousness of the possibility of this time-determination: Therefore it is also necessarily combined with the existence of things outside me, as the condition of time-determination; i.e., the consciousness of my own existence is at the same time an immediate consciousness of the existence of other things outside me. (B 276)

Taking a hint from the theorem,[69] the consciousness in question is "empirical", but not in the sense of including cognition of corporeal objects, otherwise the argument would presuppose what it is about to establish. In Kant's terminology, "empirical

[67] B XXXIX/B 275.
[68] Ak. IX: 131. Note that the term "dilemma" is not used in its ordinary sense by Kant.
[69] It starts with: "The mere, but empirically determined, consciousness of my own existence…" (B 275)

consciousness" of oneself is empirical in that it is not only conceptual or rational but relies on inner sense, that is, it contains empirical representations through which the subject temporally determines itself.[70] Considered in itself, the *ego* of empirical consciousness is purely formal; it is precisely and exclusively that which ascribes (intuitive) representations to itself. It is a structural feature of all representation in empirical consciousness: *ego cogito cogitatum*.

The problem of interpreting the quoted passage lies in that to be conscious of something usually does not include the consciousness of whatever makes it possible. Moreover, the transition from consciousness in time to "things outside me" appears rather abrupt. This is where the conjecture from above becomes relevant that temporal consciousness has to be specified as "consciousness as a substance in time". The empirical consciousness of oneself is necessarily related to a substance, since this is in what it must inhere. In order to *cognize* itself as a substance in time the subject has to view its intuitive representations as caused by spatio-temporal substances, of which its representations systematically depend. Consequently, the subject has to view itself as a spatio-temporal substance too, that is, as a body.

That this thought, derived from the analogies of experience, is pertinent to the Refutation-argument is supported by a passage in Kant's General Note on the System of the Principles.[71] The quoted passage, then, can be reconstructed as a piece of hypothetical reasoning. Here, conclusion (C_1') reappears as premise (P):

(P_3) my actual empirical consciousness is necessarily an actual cognition of my existence in time as a substance, necessarily **only if** it is possible for me to cognize my existence as a substance determined in time,

(P) for me to cognize my existence as a substance determined in time is possible, necessarily **only if** there are actual things in my outer perception;

(C_2) **hence** my actual empirical consciousness is necessarily an actual cognition of my existence in time as a substance, necessarily **only if** there are actual things in my outer perception.

[70] On the notion of "empirical consciousness" cf. B XL, 207f., 217f.; Ak. XVIII: 617; Guyer 1983: 343 – 345; Allison 2004: 276 – 279, 289 – 291.
[71] B 291f.

Following Kant, the adverb "necessarily" in the antecedent of (P_3) ought to be considered as governing the relationship between the predicate term "actual cognition of my existence in time as a substance" and the subject term "actual empirical consciousness",[72] and the second instance of "necessarily" as governing the conditional. What accounts for the necessity in the first premise (in the view I ascribe to Kant) is the relational category of accident and substance; in the second premise it is the relational category of causality.[73]

However, on this reading Kant's reasoning may appear needlessly complicated, since the expression of possibility occurring through out the reasoning is not present in the conclusion (C_2). A simpler proof can be given by writing premise (P_1) with the antecedent of (P_3), and dropping the adverb "possible".[74] If this reconstruction is judged superior, the passage quoted above ought to be seen as a *clarification* and not as an additional step in the argument.

For the concern of this paper it is not required to decide which reading is to be preferred. The important point is that Kant regards the necessary connection of antecedent and consequent as involving epistemic immediacy. This is clear from Kant's gloss on the final conclusion:[75]

> Therefore [consciousness in time] is also necessarily combined with existence of the things outside me, as the condition of time-determination; i.e. the consciousness of my own existence is at the same time an immediate consciousness of the existence of other things outside me. (B 276)

The same thought is expressed in the preface of the *Critique*.[76] This certainly supports the argument that Kant's strategy is not to demonstrate that consciousness of external things is not mediate because it leads to inconsistency, but that it is necessarily, hence, immediately, combined with inner experience, and *therefore* not mediate. His argument is a direct refutation of the "powerful objection against [the] rules for proving [the]

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[72] Cf. "[T]he absolute necessity of the judgement is only a conditioned necessity of the thing, or of the predicate in the judgement." (A 593f./B 621f.)
[73] On the necessity of the relational categories cf. B 201, fn.
[74] Dominique Kuenzle pointed this out to me.
[75] It would be beside the point to criticise that the conclusion does not mention the necessary relationship between empirical consciousness and consciousness as a substance in time. Kant's notion of "empirical consciousness" is a reconstruction of the Cartesian consciousness. The reading presented here is precisely a clarification of the relationship between the conclusion quoted above and what it is intended to refute.
[76] "[T]he reality of outer sense is necessarily bound up with that of inner sense, i.e., I am just as certainly conscious that there are things outside me to which my sensibility relates, as I am conscious that I myself exist determined in time." (B XLI, fn.)

existence [of things] mediately … made by **idealism**."[77] These principles, referred to as "rules for proving existence mediately", may include the analogies of experience. If so, the passage contains information regarding the way the Refutation-argument goes beyond the analogies. But the following argumentation only relies on the contrast between "inferential" and "immediate".

The doubts of the idealist about "proving existence mediately" can be related to the objection against "inferring outer things" in the first note to the proof: "Idealism assumes that the only immediate experience is inner experience, and that from that outer things could only be **inferred**, but, as in any case in which one infers from given effects to **determinate** causes, only unreliably." (B 276) Consequently, one could not understand the Refutation's purpose if its object was to prove that empirical self-consciousness proves the existence of external things, since this is precisely what the quoted objection challenges. Instead, it has to establish that their connection is non-inferentially immediate. If this is correct, Kant's formulation of the theorem of the Refutation of Idealism is inappropriate: "The mere, but empirically determined, consciousness of my own existence proves the existence of objects in space outside me." (B 275) This proposition is neither what is nor what ought to be established.

Instead, the proper reply to the idealist is the following. In order to comprehend the entire flow of actual representations and recollections as *my* experience of something, I need to cognize these representations as determinations of my existence as something permanent. Obviously, the idealist cannot *infer* from his intuitive representations a permanent thing as possessor of these representations, for he could not infer external objects from inner experience, if he was himself an inferred external object. The subject as a substance has to be brought into the reach of intuitive cognition, and, consequently, to be located in time. But to locate oneself as a substance with ones representations as accidental modifications in time one needs to view these modifications as systematically dependent from other substances. Hence, it is not that one has inner experience and can conclude on this basis that there are outer objects, but that in order to comprehend ones intuitive representations as experience in the first place one has to view them as causally dependent from external substances.

[77] B 274f. In contrast, Henry Allison, in his seminal work *Kant's Transcendental Idealism*, views the Refutation expressly as a *reductio* (cf. Allison 2004: 288f.)

However, this reasoning only yields a conditional for a conclusion. It does not amount to a proof of the external world. So, why don't we add the categorical premise that we have inner experience and reason to the conclusion that there are actual things in our outer perception? That this would be inappropriate can perhaps be best supported by reading again how Kant rephrases his result: "[T]he consciousness of my own existence is at the same time an immediate consciousness of other things outside me." (B 276) The conclusion expresses a conceptual dependency of "inner experience" and "external world". What the Refutation of Idealism establishes then, is that there is no purely inner experience. If this is correct, there is no independent basis for a proof of the external world either.

This result should not be viewed as a disappointment. It's just that Kant's strategy of obstacle-removal does not overcome the veil of ideas but rather dissipates it; he deprives the idealist of the requisite conceptual means for developing his "powerful objection".[78] In the third note to the proof, Kant underlines that its conclusion does not make all intuitive representations of external objects true; it merely draws a boundary for self-knowledge in the face of massive error: inner experience cannot be entirely veridical when outer experience is entirely illusory.[79]

3. What the Refutation-argument is designed to refute

Giving an account of the positive import of the argument involves elaborating its conclusion, how it is achieved and, more specifically, answering why external objects are required (for inner experience). This, I believe, has been accomplished in the last section. However, we have only seen *ad limine* how transcendental arguments explain the possibility of empirical knowledge. The experience-enabling function of the categories has to be set out in more detail, which will occur later in this paper.

An account of the negative import of the argument consists in explaining what it refutes and how. Since the idealist's position is disproved by means of a direct refutation, that is, by establishing that consciousness of external object is immediate, the

[78] The contrast between obstacle-overcoming and obstacle-dissipating responses is Cassam's. The first involves accepting an obstacle and showing a way how to deal with it; the second consists in arguing that the obstacle is in some way spurious (Cassam 2007: 25, 30, 162).
[79] B 278f.; cf. Allison 2004: 297.

how-part has already been covered. So what is still at issue is to expound the idealist position more thoroughly.

It may seem somewhat late to ask what it is that the Refutation-argument is designed to refute. But a more detailed exposition of idealism will serve as further confirmation and clarification of what has been said about the aim of the argument. The Refutation of Idealism is often presented with an emphasis on an alleged direct relation between the perception of things outside us and the consciousness of the temporal order of representations in inner experience. According to the view supported here, it is the idealist's conception of the *subject* that raises the difficulty, which, as a consequence, undercuts the status of the series of representations and recollections as a whole. Put simply, if the subject is dubious, inner experience as somebody's experience will be dubious too. Besides, if Kant did not consider the subjective temporal order of representations as given, it would not only be insufficient ground for determining the subject itself in time; it would be no ground at all.[80]

Cassam remarks that the Refutation of Idealism won't have any force against a sceptic who is prepared to question inner experience, and that it does not eliminate the possibility that we are brains in a vat.[81] It is, I believe, important for the comprehension of the Refutation-argument to see that this is essentially correct. It has no force against one who is sceptical about inner experience, and, for that very reason, does not eliminate the possibility of a brains-in-a-vat scenario. However, as will be argued in this paper's conclusion, this does not leave us without means for finding out if we are brains in a vat or not. But Cassam's remark is also relevant for our present concern, since it clearly states for whom the Refutation-argument is *not* designed.

Before stating his theorem, Kant declares that it is directed against Descartes's "problematic idealism". Exploiting the first edition's fourth paralogism, problematic or empirical idealism can be characterized using four empirical propositions:

(EI_1) our cognitive faculties are such that we cannot immediately perceive the existence of outer appearances but only infer it as causes of what is in us

(EI_2) only the existence of what is in us can be immediately perceived

[80] "[A]ll grounds of determination of my existence that can be encountered in me are representations, and as such require something [permanent] … in relation to which their change … can be determined." (B XXXIX/B 275)

[81] Cassam 2007 54f.; Cassam 2008 [= "Reply to Stroud"]: 533f.

(EI_3) the existence of outer appearances is doubtful

(EI_4) I exist as a thinking substance

If we add the principle to the list that whose existence must be inferred from its effects is doubtful, the proposition (EI_3), the uncertainty of the existence of outer appearances, can be justified as the conclusion of an argument. This is the argument that defines problematic idealism. Idealism is the doctrine of the doubtfulness or uncertainty of outer appearances.[82] It is this reasoning Kant referred to as a "powerful objection against [the] rules for proving existence mediately".[83] But to recognize the target of the Refutation-argument accurately, the fourth claim is decisive—"I exist as a thinking substance". The target is not Descartes' altogether sceptical First Meditation, but rather the *Second* Meditation after securing the existence of the subject as thinking substance. Here only are both of the claims, (EI_3) and (EI_4), which are required for the Refutation to start, achieved.[84]

According to Kant, idealism, the doctrine of the uncertainty of outer appearances, presupposes transcendental *realism*. Kant identifies this position with the claim that what *he* views as connections between certain concepts necessary for enabling experience are, according to transcendental realism, necessary connections in principles determining things in themselves.[85] In a less abstract way, transcendental realism claims that

(TR_1) space and time, and therefore outer appearances, are things in themselves

(TR_2) to cognize objects in themselves they need to be given as they are in themselves

Kant does not state (TR_2) explicitly, but I follow Allison in taking it to be an expression of the transcendental realist's tacit epistemological ideal against which human cognition can never measure up.[86] What connects both claims is the notion that for things to be cognized is purely accidental and, since what things are is given independent of all cognitive activities, full cognition is mere reproduction. Now, if certainty is to be attained, things in themselves have to be grasped on the model of ideas in our own

[82] A 366 – 369; A 491/B 519; *Prol.* 293.
[83] B 274f.
[84] A.T. VII: 23 – 29.
[85] This description is extracted from A 297/B 353 and A 369.
[86] Allison 2004: 28.

mind, since every processing implies mediacy and uncertainty. A corresponding cognitive power would be intellectual, since it would need to grasp the inner properties of its object, yet at the same time non-discursive and immediate, like intuition.

It has been said that, according to Kant, problematic idealism "presupposes" transcendental realism. This notion has been adopted in order to not include a logical inference. For an inference to flow, human cognition has to be *contrasted* with the ideal of an intellectual intuition of things in themselves. Thus, the two transcendental claims do not logically imply problematic idealism because such an inference has to use a proposition about human cognition from the EI-list as a premise.

A word about transcendental *idealism* is unavoidable. Many interpreters understand Kant's thesis on the transcendental ideality of space as denying that things which we perceive as spatially extended really are extended.[87] While this is a conflation of the transcendental ideality of space with the empirical ideality or mind-dependency of space,[88] what is required is the attempt to understand how "the reality (i.e. objective validity) of space in regard to everything that can come before us externally as an object" is compatible with "its transcendental ideality … as soon as … we take it as something that grounds the things in themselves".[89] Admittedly, this is one of the most difficult problems in Kant's *Critique*, and there is no space to discuss it here.[90]

4. The Cartesian *ego*

Kant views the thinking substance's lack of intuitive cognition as the only imperfection within problematic idealism.[91] Accordingly, if the purely conceptual "I think", which can accompany all representations, were to be combined with the subject's intellectual intuition, problematic idealism would be irrefutable. This underlines the importance of the presupposition of the Refutation-argument that any cognition requires concepts as well as intuitions.

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[87] "[Kant's] transcendental idealism commits him to denying that the objects which we perceive as spatio-temporal really are spatio-temporal." (Cassam 2007: 79)
[88] A 45f./B 62f., B 69 – 71.
[89] A 27f./B 43f.
[90] For a discussion cf. Prauss 1974: 12 – 61; Allison 2004: 50 – 73 (chap. 3).
[91] B XL.

But if the latter is legitimate with regards to Descartes is not clear. According to Descartes, it is not by imagination or perception that we grasp the nature of an object, but by means of the intellect.[92] This is relevant to the aim of the Second Meditation to establish the meditator as a substance and thinking as its internal determination, since at this stage in his reasoning, Descartes only allows necessary truths,[93] which cannot be captured by the senses.

However, Kant's presupposition is less demanding than it may appear. It only requires immediate consciousness of the thinking substance as determinable in the temporality of inner intuition. Since Descartes cannot *infer* the existence of the ego with thinking as its essential property, it is unavoidable that he claims immediate consciousness of oneself as a substance in time. Existence and essence of the self have to be cognized immediately, if the external world is to be repudiated as accessible only by inference. According to Kant, Descartes could only believe that this is feasible because he mistook a purely structural feature of consciousness for an essential property of a substance. In reality this substance is not to be met at all in the temporality of inner sense (for it is spatial). Here the introductory passage of the Paralogisms is pertinent:

> At the ground of [the pure doctrine of thinking beings] we can place nothing but the simple and in content for itself wholly empty representation **I**, … a mere consciousness that accompanies every concept. Through this I, or He, or It (the thing), which thinks, nothing further is represented than a transcendental subject of thoughts = *x*. … The proposition "I think" is … taken here [i.e. in the pure doctrine of thinking beings] only problematically … If more than the *cogito* were the ground of our pure rational cognition of thinking beings … [it] could [not] serve to teach apodictically about thinking beings in general something touching on their nature[.] (A 345 – 347/B 403 – 406)

It has to be kept in mind that only apodictic truths are allowed in the Second Meditation . This is why thinking has to be a universal and necessary feature of the *ego*. Now, the "I think", Kant says, can be taken either in its pure meaning, which is suited to accompany every representation of consciousness in general, or as claiming something about an empirical person. If it is taken in the former sense, it is apodictically true about a first-person perspective in general, but entirely empty. In the latter sense it has propositional content, it contains "I exist", but it cannot serve as a determination of

[92] A.T. VII: 30 – 34.
[93] A.T. VII: 27.

consciousness in general. The "I think" in the former sense is empty precisely because it is so general, yet it is the only universal trait of all subjective content. Since it cannot be intuitive, it is not in itself cognition and certainly not cognition of a substance.

"[T]his I, or He, or It (the thing), which thinks", it was claimed, cannot be determined in the temporality of inner sense alone. In other words, it is not temporally determinable from the first-person perspective without presupposing spatial objects. This can be seen more clearly through making an attempt. Thus, we grant that the problematic idealist is able (a) to identify and recall representations and memorize their temporal order, (b) that he is able to ascribe these representations to his purely logical self, and (c) that he can, at will, unite a set of intuitive ideas and their recollections to a purely theoretical object.

Now, first we let him say: "I *must* have a permanent existence, since as long as there are perceptions I have to be there too as the perceiver."

But, that personal pronoun, "I", cannot refer to a representation in the inner sense. Since the subject is precisely that which ascribes these representations to itself, it cannot itself be a representation. But if it is not a representation, the problematic idealist's subject cannot be experienced by him at all, or, as Allison puts it, inner sense does not have any data on the "soul as such".[94] This is supported by the fact that the temporal relations "before", "after", "at the same time" etc., which hold between the ideas in inner intuition, cannot be applied by the problematic idealist to his own subject. He cannot say (in the same sense as we do) "before, I was at my desk"—for in relation to what? His "desk" is only a series of ideas.

To this the idealist replies: "I may not be able to relate to my subject 'before' or 'after'. But it is undeniable that I exist *presently* or *as long as* I perceive something and this sufficiently demonstrates my permanence."

We object that the present is not sufficient for determining the subject as a substance in time. Since "there is **only one** time,"[95] the subject has to be relatable to "before" and "after" if it is relatable to "now". For the same reason, it is doubtful that the present is genuinely related to the subject as a substance. This doubt is confirmed when recognizing that the present is related jointly to the subject and to everything there is over and above the subject. Thus, it is not that the idealist cannot relate the present to

[94] Allison 2004: 278.
[95] A 188/B 232.

himself but that he cannot avoid relating it to too many things at once. Consequently, no backdrop remains in relation to which the subject could determine itself as being in the present.

Put another way, the idealist claimed that he has immediate consciousness of himself as a substance in time, and argued that he must be a persistent thing as long as he perceives something. This "as long as" is intended to determine his subjecthood in time and to prove that he has immediate consciousness of himself. But this appears compelling only because he treats the thin concept of the *ego* as if it were an empirical person. If the ego is already an empirical person, the idealist could view experience as the temporally structured totality of modifications to his substance, that is, as mere ideas or representations. But since the *ego* is only an empty, determinable something and everything else (i.e. the whole "world") is its "modifications", it is no help to say that as long as these modifications occur it has to be "present", since these are viewed in turn as being *relative* to the subject. Consequently, the result of his reasoning amounts to no more than this: "I perceive, therefore I am—the world."

In order to determine itself as a substance in time, the problematic idealist, in inner sense, needs to distinguish changes that are due to him from changes that are due to the way an independent world is. This is precisely the role of the analogies of experience. Kant describes them as "principles of the determination of the existence of appearances in time". Since the application of the analogies results in acknowledging spatial objects, the problematic idealist would cease to be one. But if he refuses to distinguish objective from subjective change, he is left without the possibility of determining himself as a substance in time, simply because there is no other thing left in relation to which that could be done.

The idealist may reply: "I can compound sets of intuitive ideas to theoretical objects, and determine myself as a thinking substance with regard to them."

To this one would reply that assuming hypothetical objects is viable, if the idealist's subject was an empirical person, and the posited objects were in accordance with the unity of experience. But, since the thinking substance *is a theoretical object itself*, it cannot be determined through other theoretical objects compounded of ideas, that is, if the possibility of independent confirmation remains precluded.

5. A reply to Cassam

In connection with the preceding section, a few words on the analogies of experience are necessary. This will outline a reply to Cassam's charge that transcendental arguments are irrelevant for answering the question of how experience is possible. As stated, applying the analogies draws the line between objective and subjective changes of representations. The second edition of the *Critique* presents a proof for each one of the three analogies of experience. It would be unproblematic to show that these are all transcendental proofs. Accordingly, it is more pressing to clarify their experience-enabling function.

"Experience", Kant explains, is a "kind of cognition requiring the understanding …, whose … rule is expressed in concepts *a priori*, to which all objects of experience must … necessarily conform."[96] Experience, therefore, presupposes the pure concepts of the understanding (i.e., the categories). This is an indication of the experience-enabling function of the categories. Other passages underscore the role of sense-perception: "Experience … is a cognition that determines an object through perceptions." (A 176/B 218) Here, the opposition between the singular of "experience" (*Erfahrung*) and the plural of "perceptions" (*Wahrnehmungen*) suggests the relationship between the two accounts: experience is the *unity* of perceptions in accordance with the rule of understanding.[97] Kant will sometimes even insinuate that talk of "experiences" is derivative and improper, for there is only one experience, of which "experiences" can be no more than parts.[98] It is this "unitary" reading I would like to stress.

We turn then, to the analogies of experience. It is through them that the relational categories (inherence/subsistence, causality and interaction) are applied to objects in time. The third analogy can be phrased like this: "To ascertain a state of affairs as co-present I have to view myself as a substance in space that interacts with them."[99] The following is an illustration of the pertinence of this rule.

A person is standing on a planet and observes a star. It slowly wanders at an acute angle towards the horizon and vanishes. Another star appears and after some time

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[96] B XVII.
[97] Cf. the phrase "synthetic unity of perceptions, i. e., … experience" (A 183/B 226).
[98] A 110/A 230/B 282f.
[99] This formulation departs from Kant's in that it is narrower for reasons of exposition. I prefer Kant's wording in the first edition rather than the second: "All substances, insofar as they are **simultaneous**, stand in thoroughgoing community (i.e., interaction with one another)." (A 211)

it occupies the exact same spot as the first star. It is possible that, contrary to appearance, these two stars (assuming they are not identical) are objectively co-present. This would be the case if the observer moved or was moved by the revolving planet. This situation would be similar to one in which somebody standing in a rectangular room could not bring the opposing corners into one perspective because the room was too large. To experience them as co-present one would have to let the eyes roam from one angle to the other. Despite the fact that only succeeding perceptions of the opposite angles are available, they are there "at the same time".

To achieve such an objective time determination of situations, the subjective and reversible order of perceptions can be helpful only if other sequences are viewed as necessarily fixed. This is where Kant's relational categories come in. The objective temporal order of states of affairs can be ascertained only if one's order of perceptions is viewed as causally dependent on the movements of oneself as a spatio-temporal substance. This "dependency" is the "interaction" in the formulation of the third analogy above. The analogies of experience are rules for how to proceed with passively received perceptions. How the categories make experience possible, that is, what their role is in a systematic and objective unification of perceptions becomes tangible in the analogies, since they can be phrased as instructions on how to proceed.[100] It is hard to see why they should not be, in a radical sense, "ways of knowing" or "pathways to knowledge". And since their validity is established using transcendental arguments, the Kantian approach is no less "means-specific" than Cassam's.

6. Brains in a vat

In this final section an outline of the Refutation's relationship to Hilary Putnam's brains-in-a-vat scenario will be offered. The way in which a Kantian attitude relates to a more radical sceptic who is prepared to question the inner experience will also be examined. The corresponding problem is introduced in the sole footnote to the Refutation-passage, thus raising the question "do we only have an inner sense but no

[100] Note that the analogies are not applied to "inner representations" in the usual sense. Instead they allow one to draw the distinction between the inner and the outer in the first instance, and to locate the subject as a corporeal substance in the latter.

outer one, rather merely an outer imagination".[101] Put another way, we concede that we perceive outer things and deal with our perceptions according to the analogies of experience, and ask whether or not we could nevertheless be brains in a vat.[102] The answer is that, obviously, we can.

At first sight, this seems to be a counter example for the conclusion of the Refutation-argument. But, according to the view supported here, the conclusion is a conditional, and being a brain in a vat renders the antecedent just as false as the consequent. It precludes perceptions of external objects as well as self-consciousness as a substance in time.

This first becomes evident when allowing for the possibility of massive deviation between time as it is experienced by the person whose brain is captured and the time the brain really is in a vat. It could be just as is the case when dreaming: a dreamed course of events is experienced as being much longer than the corresponding time of rapid eye movement sleep. Second, to be a brain in a vat undercuts the immediate consciousness of one's body and its parts. If such a person's brain was reconnected with real sense organs, she could learn for example that "her" brain is really the brain of a person who is very similar to somebody she believed to be her father, whereas the person she believed herself to be, was never born.

What is Kant's reaction to the problem of an imaginary outer sense? His answer in the footnote is generally considered to be insufficient.[103] The sketch of a more cogent (and modest) rejoinder can be found in a passage from the Fourth Paralogism of the A-edition: "[I]f [the perceived objects] were not real in space, i.e., immediately given through empirical intuition, then it could not also be invented, because one cannot just think up the real in intuition *a priori*." (A 375) The thought is that empirical content cannot be made up without involving our receptivity. This is true even in the case of dreams and in brains-in-a-vat scenarios. The difference here is that our receptivity is involved in a way that makes it impossible to engender empirical knowledge. But, this is not a strict impossibility, since empirical content can in principle always be retraced

[101] B 276.
[102] The *locus classicus* reads: "The person's brain … has been removed from the body and placed in a vat of nutrients which keeps the brain alive. The nerve endings have been connected to a super-scientific computer which causes the person whose brain it is to have the illusion that everything is perfectly normal. There seem to be people, objects, the sky, etc." (Putnam 1981: 5f.)
[103] Cf. Allison 2004: 294f.

to its origin, the real.

Here, it is important to note a fundamental difference between the debates. From the start, Putnam concedes the central issue between Kant and Descartes, namely our bodily existence. Consequently, for the person being a brain-in-a-vat, reality is transcendent (empirically inaccessible) only for reasons of physical arrangement. It is in principle accessible if the brain is reconnected with functioning sense-organs. For a subject caught in such an arrangement, the empirical method is the best method for finding out whether the perceived world is real or not, because there could be programming errors causing breaks in the virtual reality so that the subject could begin to suspect that 'reality' is not what it seems to be. In contrast, Descartes's *genius malignus* at least *suggests* that the delusion could be realised by means of supernatural and consequently undetectable influence.[104]

The subject is fooled either causally as in Putnam's thought experiment or by supernatural powers. In the first case, empirical methods would in principle be able to discover the delusion; in the second case, it would remain inscrutable, but without affecting the immanent truth of the assertions that are justified according to our standards. Where everybody is fooled, the unity of nature collapses; the fooling lies beyond possible experience, it is a "transcendent fooling" and therefore inconsequential. As a result, only Putnam's sceptical scenario remains in the field. The Refutation of Idealism is inappropriate for proving that we are not in fact brains-in-a-vat or in similar distress. That question can only be resolved by means of empirical methods. It does not lie within the scope of a transcendental approach.[105]

Bernhard Ritter
Zürich University
ritter@philos.uzh.ch

[104] Descartes's *genius malignus* is not to be seen as a hypothesis governing the methodical doubt of every stage (consequently not analogous to Putnam's super-scientifc computer); instead the *genius malignus* is the epistemologist's heuristic model whose function is to block propositions from being allowed prematurely due to habit (cf. A.T. VII: 22f.). This is wholly disregarded here.

[105] I would like to thank Vanessa Morlock for her patience and Reinhard Heckmann for discussions on Kant's philosophy and some ideas of this paper.

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