§1. Introduction

Kant distinguishes the form of experience, which is determined by the subject’s mind, from the matter of experience, which is determined by how the subject is causally affected by objects. The form of experience is determinable and a priori knowable: I know a priori that objects of outer experience are spatial and obey deterministic causal laws. The matter of experience, however, is determinate and knowable only a posteriori: I know only through experience that objects have the determinate sizes and shapes they do, and which causal laws they obey.1, 2 The form of experience is subjective: outer objects are spatiotemporal and obey causal laws because space and time, and the categories, are the forms of intuition and understanding, respectively, for human cognitive subjects. The matter of experience, by contrast, is not wholly determined by my forms of experience: I experience objects as having the determinate spatiotemporal properties and sensible qualities (e.g. colors, tastes, textures) I do partly because of how I am causally affected by them.

This distinction between the form and matter of experience raises an obvious question: Which are the objects that causally affect us,

1. I am using ‘determinable’ and ‘determinate’ in the contemporary sense. In the Amphiboly section of CPR, Kant describes matter as ‘the determinable in general’ [das Bestimmbare überhaupt] and form as ‘determination’ [Bestimmung] (A266/B322). I take his point there to be that representations have no determinate content until they are ordered and thereby determined by a form. But this does not affect my point in the body of the text. The matter of experience has a determinate content only because it has been synthesized and thus determined by the forms of experience. Nonetheless, that matter has a more determinate content, in the contemporary sense, than the forms of experience do: the matter of experience represents its object as having, for instance, a particular (determinate) size and shape rather than merely the very general (determinate) property of being spatial. At the end of this essay can be found a guide to the abbreviations (e.g. CPR) by which I refer to the works of Kant.

2. In some passages, Kant claims that all empirical causal laws are a posteriori (e.g. B164, Ak. 5:183); in the Preface to Metaphysical Foundations, he claims that certain laws (e.g. the law of inertia) are a priori. For a fuller discussion of Kant’s views on the epistemic status of particular causal laws, see Michael Friedman, Kant and the Exact Sciences (Cambridge, Mass.: Harvard University Press, 1992), ch. 3–4.
giving rise to the matter of experience? The most natural answer is that empirical spatiotemporal objects are the causal source of the matter of experience. I experience objects as having the determinate spatiotemporal properties I do because those objects causally affect my perceptual system, and there is a law-like connection between the spatiotemporal properties those objects possess and the way they are represented in the resulting perceptual experience. This “empirical affection” also explains the non-spatiotemporal component of the matter of experience. In addition to spatiotemporal properties, my experience represents objects as having various sensible qualities: color, taste, texture, etc. This “sensory matter” of experience is determined by the way in which empirical objects affect my sense organs.

On the other hand, it might be thought that the matter of experience cannot come exclusively from causal affection by empirical objects, because empirical objects are appearances. Since appearances have their properties in virtue of how they are represented in experience, empirical objects depend partly upon the matter of experience, and thus cannot themselves be the source of that matter. This line of reasoning suggests that the objects that causally produce the matter of experience by affecting subjects are non-empirical objects, things in themselves. On this view there is a “noumenal affection” in which things in themselves causally affect subjects. This noumenal affection produces sensations, which are synthesized by the subject’s mind into experiences of empirical objects.

A third view would be that both kinds of affection are present in Kant’s theory of experience: the subject is affected by empirical objects and by things in themselves. This view attributes to Kant a doctrine of “double affection” and, as such, it is the conjunction of the “empirical affection” and the “noumenal affection” views. Given that there are a number of passages that support empirical affection, and many that support noumenal affection, double affection would appear to be the interpretation best supported by Kant’s texts.

However, the doctrine of double affection has long stood in ill repute. It has found few defenders among major Kant commentators.

5. Kant clearly endorses the thesis that our minds are causally affected by empirical objects at A28, A92/B125, B208, A168/B210, A213/B260, Prolegomena §13 Remark II (Ak. 4:289), Groundwork (Ak. 4:457), and the Preface to Metaphysical Foundations (Ak. 4:476). Furthermore, I take it to be implicit in Kant’s examples, in the Second Analogy, of perceiving parts of a house (A191/B236) and of perceiving a ship sailing downstream (A192/B237), as well as the argument of the Refutation of Idealism (B274–79). However, since Kant usually discusses the causal origins of sensation to make the Lockean point that sensory qualities depend upon the subjective constitution of our sensory organs and do not reveal corresponding properties in objects (e.g. A28), explicit endorsements of the Empirical Affection premise (as I have formulated it) are harder to find. Nonetheless, he makes clear in several places that sensory content in general is caused by objects (A92/B208, A168/B210); since the determinate spatial content of our experiences cannot be determined wholly by the forms of experience (in which case it would be a priori knowable), this means that it must partially depend upon sensory content and thus upon how we are affected by empirical objects. At A213/B260 Kant claims that we experience outer objects through the light that “plays between our eyes and heavenly bodies”, which entails that heavenly bodies, in reflecting light that reaches our eyes, are the causal antecedents of the determinate content of our experiences. Finally, in Metaphysical Foundations, Kant claims that the motions of bodies affect our sensory organs; since bodies do have motions (unlike sensory qualities), this provides a natural set of instances of the Empirical Affection premise: the motions of bodies cause us to experience them as having those motions (in a sense of ‘experience’ that will be explained below). Erich Adickes discusses these texts and others in Kant’s Lehre von der doppelten Affektion unseres Ichs als Schlüssel zu seiner Erkenntnistheorie (Tübingen: Verlag von J.C.B. Mohr, 1929), 5–15.

6. In the third chapter of Kant und das Ding an Sich (Berlin: Pan Verlag Rolf Heisse, 1924), Erich Adickes assembles an impressive array of textual evidence for this claim. See especially A190/B235, A387, A454/B252, Prolegomena (Ak. 4:289, 4:314, 4:318), Groundwork (Ak. 4:451), and On a discovery (Ak. 8:215).

7. Thus, the fundamental motivation for a “double affection” interpretation is textual, not philosophical, a point not sufficiently appreciated in Moltke S. Gram, “The Myth of Double Affection”, in W.H. Werkmeister (ed.), Reflections on Kant’s Philosophy (Gainesville: University Press of Florida, 1975). However, I also think there are powerful philosophical reasons for Kant to accept both noumenal and empirical affection, as I will explain shortly.
since Erich Adickes forcefully defended it in the 1920s. The Historical Dictionary of Kant and Kantianism’s entry on “double affection” nicely summarizes the standard view:

Double Affection: a theory proposed by the Kant-scholar Erich Adickes to account for the multiple relationships holding between the self as it appears to us and as it is in itself as well as between the appearance of an object and the thing-in-itself. ... The textual evidence for such a reading of Kant is slim, not only in the Critique of Pure Reason, but also in the Opus Postumum, on which Adickes’ conjecture is largely based. Not surprisingly, the theory does not enjoy much support among Kant scholars, though it is still occasionally mentioned.9

One reason double affection is unpopular is that one of its conjuncts is noumenal affection, which has been controversial ever since the


9. Helmut Holzhey and Vilem Murdoch (eds.), Historical Dictionary of Kant and Kantianism (Oxford: Scarecrow Press, 2005), 108. The claim that Adickes’ argument is based largely on the Opus Postumum is inaccurate; Adickes assembles extensive textual evidence from the first Critique itself for double affection. In order to demonstrate the falsity of this charge, in this paper I will not include any textual evidence from the Opus Postumum.

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publication of the first edition of the Critique of Pure Reason in 1781.10 It is problematic for Kant to posit a noumenal affection, for two related sorts of reasons. First of all, it requires attributing the category <cause-effect> to non-sensible objects, which appears to violate Kant’s restriction of the legitimate use of the categories to objects of possible experience.11 Second of all, it appears to conflict with Kant’s doctrine that we are in principle ignorant of things in themselves.12 Many of Kant’s readers, from 1781 to today, have sought to free him from the perceived albatross of noumenal affection.13, 14


11. Concepts are denoted by angle brackets; e.g. <red> is the concept that would normally be expressed by the term ‘red’.

12. As James Van Cleve has pointed out, it is not inconsistent for Kant to claim p and I cannot know whether p. But Kant does not merely claim that things in themselves affect us; he claims this follows from the mere concept of an appearance: ‘In fact, if we view the objects of the senses as mere appearances, as is fitting, then we thereby admit at the very same time that a thing in itself underties them, although we are not acquainted with this thing as it may be constituted in itself, but only with its appearance, i.e. with the way in which our senses are affected by this unknown something’ (Prolegomena, Ak. 4:314f.). Kant here claims for noumenal affection an epistemic status at least prima facie incompatible with the doctrine of our irremediable ignorance of things in themselves.

13. In his discussion of the problem of affection, Vaihinger lists Fichte, Beck, Maimon, and Hermann Cohen, among others, as ‘Kantianer’ who denied noumenal affection.

14. Although Henry Allison and Gerold Prauss criticize the traditional doctrine of double affection, as formulated by Adickes, their views include a modified form of double affection. Empirical affection and noumenal affection are two different ways of describing one and the same relation of causal affection. Empirical affection is the causal relation between the object and the subject’s mind described from within the empirical standpoint, which takes the spatiotemporal object and its categorial determinations as a given. Noumenal affection is the same causal relation described within the transcendental standpoint, which abstracts from the spatiotemporal character of the outer object. As I understand their views, noumenal affection is simply a highly abstract characterization of the relation between object and subject: for finite subjects like us, empirical knowledge requires causal input from some outer object. Consequently, they can accept both empirical and noumenal affection, although in a very different sense than Adickes does. See Allison,
With respect to the first alleged problem, Kant’s “restriction” of the categories to experience means that we cannot know through theoretical means whether things in themselves fall under the categories. However, he allows that we can still coherently think of things in themselves as falling under the categories. Kant does not deny the coherence of attributing categorial determinations to things in themselves; in fact, his theory of freedom requires attributing causal powers to rational agents considered as things in themselves. The second alleged problem for noumenal affection is not a problem specific to noumenal affection. Noumenal affection is not the only Kantian doctrine that appears to conflict with the doctrine of noumenal ignorance. Kant repeatedly claims that things in themselves are not spatiotemporal, and that we cannot know anything about them. Whatever the correct explanation is for why Kant took his doctrine of the ideality of space and time to be compatible with his doctrine of noumenal ignorance, it is likely that this will also be (or be closely connected to) the explanation of why he took the doctrine of noumenal affection to be compatible with the doctrine of noumenal ignorance. In this respect, the doctrine of noumenal affection is no more or less suspect than the doctrine of the ideality of space and time.

However, this paper will not focus on these problems with the doctrine of double affection, for they are problems that double affection inherits from one of its conjuncts, noumenal affection. These are problems for double affection, but not the problem of double affection. The main problem with double affection per se is specific to double affection, because it purports to show that noumenal and empirical affection are incompatible. It is a problem of causal exclusion: the causal role of the thing in itself in producing experience appears to exclude any causal role for the empirical object in producing experience. The reason for this apparent causal exclusion of empirical objects by things in themselves is that empirical objects are appearances of things in themselves.

15. See Bxxvi, A88/B110, B167n, A254/B309, and CPrR (Ak. 5:43, 55). Cf. Desmond Hogan, ‘Noumenal Affection’, *Philosophical Review* 2009: 118(4), 501–32. Hogan also refers to several recent works that defend the application of categories to things in themselves; see ‘Noumenal Affection’, 504 and note 11 on that page. It must be admitted, though, that Kant does claim that the non-empirical use of the categories “has no sense, and is entirely empty of content” (A239/B298). I read Kant, in this and similar passages, as claiming that non-empirical uses of categories lack cognitive sense: we cannot know whether it is really possible for non-empirical objects to fall under categories, and consequently we do not know whether the resulting judgments (in which we predicate categories of non-empirical objects) are true. He is not claiming that it is meaningless or incoherent to attribute categorial properties to non-empirical objects.


17. Readers concerned with attributing the doctrine of noumenal affection for either of these reasons should see the first section of Hogan’s “Noumenal Affection” for a convincing case that Kant in fact held that view. However, I find the rest of Hogan’s paper, in which he tries to show how noumenal affection and noumenal ignorance are compatible, highly problematic; see my “Freedom, Knowledge and Affection: Reply to Hogan”, *Kantian Review* 2013: 18(1), 99–106.

18. More precisely, it appears to exclude any role for the empirical object in producing experience of the properties empirical objects possess (see below).
What it means for empirical objects to be appearances of things in themselves is a highly contested question in Kant scholarship, and it is not my intention to address it directly in this paper. However, I think most partisans to the dispute about Kant’s idealism can agree to the following principle: For any appearance x, if x is F, then x is F in virtue of subjects experiencing x as F, as long as we appropriately constrain what counts as “experience” and as long as we restrict F to “empirical” properties, i.e., properties objects are represented as having in experience.19, 20 What various interpretations of Kant’s idealism differ on is what makes this claim true.

This means that Kant is committed to the following two theses:

(Empirical Affection) For some appearance x and empirical property F, in standard cases, x’s having F causes subjects to experience x as F.21

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(Transcendental Idealism)22 If x is an appearance and F is an empirical property, if x is F then x is F in virtue of the fact that subjects experience x as F.

The first principle is just a restatement of empirical affection: the matter of experience is produced by causal affection by the empirical object. For instance, I experience the bust of Marx on my mantel as having the shape it does because the bust’s having that shape causes me to experience it as having that shape. The second principle is just the principle I discussed earlier, restricted to empirical properties. But these two principles are incompatible. Intuitively, they are incompatible because, if an object has a property in virtue of being experienced as having that property, then the fact that it has that property cannot cause it to be experienced as having that property. To make this incompatibility more vivid, consider the following highly plausible claim:

(Exclusion) If [p] obtains in virtue of [q], then [p] does not cause [q] to obtain, where ‘[p]’ stands for the fact that p.

This principle — which I will call the “Exclusion” principle — invokes the in-virtue-of relation. The in-virtue-of relation describes a non-causal order of metaphysical dependence between facts (or propositions, or states-of-affairs, etc.).23 If [p] obtains in virtue of [q], then [q] is a metaphysically more basic fact than [p] — [q] can be cited to explain [p], but [p] cannot be cited to explain [q]. If [q] lies at a deeper level than

19. The restriction of F to empirical properties is necessary because empirical objects are appearances of things in themselves, but are not represented in experience as being appearances of things in themselves.

20. I expect that the main source of resistance to this claim will be those who think that the empirical properties of empirical objects are grounded in facts about (i) how it is possible to experience those objects, or (ii) how those objects would be experienced under appropriate conditions. In section two I argue against what I there dub the “modal” and “counterfactual” analyses, respectively. There is of course the additional question of who the “subjects” are whose experiences determines the empirical properties of objects, and what “subjects experience x as F” means. Does it mean all subjects experience x as F? Is it a generic claim? I address these issues in section two.

21. The qualification “in standard cases” is meant to rule out two cases: (1) cases where, although the object has F, its having F does not cause the subject to experience it as F (either because of pre-emption, or because of veridical hallucination, etc.), and (2) cases where the object is not F although the subject experiences it as F. The most important class of cases of the second kind will be “secondary qualities”, since Kant holds the Lockean view that empirical objects possess only primary qualities, in virtue of which they cause subjects to experience them as having secondary qualities. For a discussion of Kant’s views of primary qualities and how they relate to the problem of double affection, see Van Cleve, Problems from Kant, 167–71.

22. I am not claiming that this is all that Kant’s transcendental idealism amounts to; I am merely using ‘Transcendental Idealism’ to label one of the many commitments of that complex doctrine, namely, that appearances depend for their empirical properties upon experience.

[p], then [p] cannot cause [q] to obtain. Since [p] obtains in virtue of
[q], causing [q] to obtain just is causing [p] to obtain. Therefore, if [p]
were to cause [q], [p] would cause itself to obtain. Perhaps there are
self-causing facts, but facts about the properties of empirical objects
surely are not among them.

If we accept the Exclusion principle, we see that two aspects
of Kant’s theory of experience are incompatible with one another:
the empirical story, according to which the empirical object causes
experience, and the transcendental story, according to which the outer
object is merely the appearance of things in themselves to subjects.24
This is the problem I will focus on in this paper. I want to make clear
that this problem for double affection is not a problem of causal over-
determination. There is no reason in principle why Kant could not
admit that subjects’ perceptual states are causally over-determined,
having both a phenomenal cause and a noumenal cause. The Exclusion
principle shows that it is not a matter of over-determination but a
matter of simple metaphysical impossibility that prevents appearances
from being causes of the very perceptual states in virtue of which they
have their properties, including their causal properties. The same
reasoning shows that noumenal affection excludes the possibility of
empirical affection.25

The Exclusion problem has a long history in the reception of Kant’s
Critical philosophy. Although he is better known for the remark that
“without this assumption [the thing in itself] I could not enter into
the system, but with this assumption I could not remain within the
system”, F.H. Jacobi also raised the Exclusion problem, and may
have been the first to do so. In his 1788 work David Hume über den

24. Alternately, one might read Kant as identifying the fact that a particular em-
pirical object x is F with the fact that it is experienced as F. The Transcen-
dental Idealism premise would need to be appropriately modified, but the
Exclusion problem would still arise: for a fact [p] cannot cause a fact [q],
where [p]=[q].

25. Some readers will wonder who exactly are the “subjects” mentioned in the
Empirical Affection and Transcendental Idealism premises. I address this be-
low in section two.

26. Werke II, 108. Eckart Förster also reads this as an anticipation of the Exclusion
problem (although he does not call it that): “The course of Jacobi’s thought
is clear: because the objects of experience, according to Kant, are themselves
constructions out of representations of sensibility, they cannot themselves be
causes of these representations” (Die 25 Jahre der Philosophie: Eine Systematische
Rekonstruktion [Frankfurt am Main: Vittorio Klostermann, 2011]). Also, Fich-
te’s Second Introduction to the Wissenschaftslehre takes up this point exactly;
cf. Fichte, Werke I, 488.
determinate representations of them; thus they exist before [ehe] they exist.27

I do not think that Vaihinger intends ‘ehe’ and ‘erst’ to refer to relations of temporal priority; his point is that the representations are explanatorily or metaphysically prior to the appearances, but given empirical affection, the appearances are causally prior to the representations. While Vaihinger does not formulate his point as precisely as I have, I think his objection to empirical affection — which he admits is a Kantian doctrine — is the Exclusion problem: empirical objects cannot cause the very representations in virtue of which they have those causal powers (in Vaihinger’s terminology: the very representations by which they are “posited”).28

27. Vaihinger, Commentar, II, 43. Vaihinger formulates the problem in terms of the existence of empirical objects. Because I want to remain neutral in this paper on whether the existence of appearances is grounded in the contents of experience, I have formulated the Exclusion problem in terms of the properties of empirical objects. Vaihinger further identifies this as a problem specifically for empirical affection. However, as I argue later in the body of the paper, this is equally a problem for double affection because it shows that noumenal affection excludes empirical affection. One reason Vaihinger does not identify this as a problem for double affection is that he closely identifies double affection with Erich Adickes’ version of that doctrine, and the problem he raises for double affection is specifically a problem for Adickes; for more, see Stang, “Adickes on Double Affection.” The doctrine of double affection I defend in the present paper does not face the problem Vaihinger raises for Adickes.

28. Patricia Kitcher offers a quite different perspective on this problem in “Kant’s Epistemological Problem and Its Coherent Solution”, Philosophical Perspectives 1999: 13, 415–41. I think Kitcher gives inadequate weight to the dependence of phenomena upon experience, and fails to account for noumenal affection. On Kitcher’s view, we ‘project’ two-dimensional sensory arrays into representations of three-dimensional objects, and then ‘project’ those objects back to explain the sensory states with which we began; this may make sense of the epistemology of contemporary psychology, but it does not do justice to Kant’s repeated claims that phenomena would not exist without subjects to experience them (e.g. A42/B59, A383, A3741). Furthermore, Kitcher denies that Kant is committed to noumenal affection, without discussing the (to my mind, overwhelming) evidence that supports it; see the texts cited above (and by Adickes, Kant und das Ding an Sich).

More recently, James Van Cleve takes the Exclusion problem to be fatal for the doctrine of double affection. He takes appearances to be “logical constructions” of perceptual states of subjects,29 and raises the following problem:

[...] constructions can be causes ... but how can they be causes of the very items out of which they are constructed? If As [appearances] are constructions out of Bs [perceptual states] (or reducible to Bs or logically supervenient on Bs – the differences among these do not at present matter), how can they be causes of Bs [perceptual states]? It is a compelling thought that the cause of an item must have some being and constitution over and above that which it causes.30

The final sentence is a clear invocation of the Exclusion principle. He takes this problem to be insuperable, and concludes: “I find the theory of double affection intriguing but in the end untenable.”31

What Jacobi’s, Vaihinger’s, and Van Cleve’s discussions bring out is that the Exclusion problem is faced by any interpretation of Kant that attributes to him both Empirical Affection and Transcendental Idealism (as understood above). However, it is especially acute for the doctrine of double affection, for it purports to show that noumenal and empirical affection are incompatible. According to the noumenal-affection conjunct of double affection, things in themselves causally affect human cognitive subjects, producing sensations which are then processed and synthesized by the subjects’ minds into experiences of empirical objects. What the Exclusion argument brings out is that this leaves no room for empirical affection: noumenal affection, plus synthesis by the subject’s mind, determines the content of experience, both material and formal. Since the content of this experience

29. Problems from Kant, 8–12.
31. Problems from Kant, 171.
determines the properties of empirical objects, those empirical objects cannot be among the causes of the content of that experience. Empirical objects cannot reach back to causally affect the very experiences in virtue of which they have their empirical properties. It would appear that noumenal affection excludes any empirical affection. Furthermore, although the Exclusion problem arises for any view that attributes both Transcendental Idealism and Empirical Affection to Kant — and is thus in the first place a problem for Empirical Affection — my solution to the problem will show how to accommodate both empirical and noumenal affection. It thus constitutes a defense of the doctrine of double affection.

My solution to the Exclusion problem depends on distinguishing the sense of “experience” involved in the Empirical Affection premise from the sense involved in the Transcendental Idealism premise. In the next section, I argue for this distinction and argue that the latter kind of experience is what Kant calls “universal experience”. In section three, I use this conception of “universal experience” to develop a version of the doctrine of double affection that solves the Exclusion problem. In sections four and five, I reply to various objections.

§2. Universal Experience

“Experience”, in the Empirical Affection premise, refers to the particular perceptual experiences of individual subjects. To return to the example from the introduction: my present perceptual experience of the bust of Karl Marx on my mantel is caused by the bust of Marx, an appearance. However, the bust of Marx does not have its determinate shape in virtue of that present perceptual episode, because my present perceptual episode could misrepresent its shape. Nor does the bust of Marx have its determinate shape in virtue of any of my, or anyone else’s, particular perceptual experiences. In this section I will clarify the notion of “experience” in the Transcendental Idealism premise — which, following Kant, I call “universal experience” — and how it determines the empirical properties of empirical objects.

We started with the idea that appearances have the properties they do in virtue of being experienced as having those properties. There are at least two ways in which this claim needs to be qualified. First, it cannot possibly apply to all properties of appearances, for appearances are appearances of non-spatiotemporal things in themselves, but they are not (presumably) experienced as being such.32 Let us say that an appearance derives its “empirical properties” from how it is represented: shape, size, mass, causal powers, duration, etc. I do not know how to precisely delimit the range of the empirical properties of appearances, but that is not the focus of this paper.33 The second problem is that appearances do not have their empirical properties in virtue of how they are represented by individual subjects. This shows that the experiences whose contents determine which properties appearances have are not the particular experiences of individual subjects.

Kant is not particularly forthcoming about how experience determines the empirical properties of empirical objects, but he does suggest an answer in this passage from the Antinomies:

In space and time, however, the empirical truth of appearances is satisfactorily secured, and sufficiently distinguished from its kinship with dreams, if both are correctly and thoroughly connected up according to empirical laws in one [einer] experience. Accordingly, the objects of experience are never given in themselves, but

32. See A30/B45, where Kant writes that the “true correlate” of empirical objects, the thing in itself, “is never asked after in experience [nach welchem aber auch in der Erfahrung niemals gefragt wird].”

33. I suspect that the following is the correct account: a property is an empirical property just in case it is a determinate of some determinable categorial or spatiotemporal property of empirical objects. A categorial property of empirical objects is the property of falling under a given category in the way in which empirical objects fall under that category, e.g. the property of being a substance that persists through time with changing accidents, or being a positive reality with an intensive magnitude. Thus, being a particular kind of persisting substance or having a determinate degree of some positive reality are empirical properties. However, to fully develop this account lies outside the scope of this paper.
Kant here claims that the “empirical truth of appearances”—which I take to mean the empirical truth about appearances, or the truth about what empirical properties appearances have—depends upon how they are represented in “one experience” which is unified by empirical law. This passage makes sense only if “experience” here means something stronger than just any perceptual episode with objective purport. In this ordinary sense, even a dream is an experience. I take Kant’s point here to be that a particular experience is part of the “one” experience and therefore is veridical—i.e. is distinguished from a dream, hallucination, or other non-veridical perceptual episode—if and only if it coheres with this “one” experience as a whole. The “one” experience is grounded in experiences that cohere with one another.

It is important to distinguish several different senses in which Kant uses the term “experience” [Erfahrung]. Consider Kant’s claim in the A Deduction that “there is only one experience, in which all perceptions are represented as in thoroughgoing and lawlike connection, just as there is only one space and time, in which all forms of appearance and all relation of being or non-being takes place. If one speaks of different experiences, they are only so many perceptions insofar as they belong to one and the same universal experience” (A110; Kant’s emphasis).

Kant here distinguishes between “universal” experience—which I take to be the “one experience” of A493/B521—and experiences, individual perceptual episodes that cohere with “universal experience”. But not every perceptual episode is an experience in the second sense: perceptions are experiences only insofar as they “belong to one and the same universal experience”. I take this to mean that a perception (in the sense of A110) is an experience only insofar as its content is retained in the content of the “one” universal experience. For instance, my perceptual hallucination of a pink elephant is not an experience, because its representational content is not retained in the representational content of the “one” experience. Its representational content is not retained within the “one” experience because it does not cohere with the rest of the “one” experience: it represents its object as violating a law that is otherwise obeyed in the “one” experience (elephants are gray, not pink).

However, this distinction between “perception” and (universal) “experience” is not the only perception-experience distinction Kant draws. As every reader of the Analogies of Experience knows, that section of CPR is structured around a contrast between mere perception of objects and experience of them. I interpret this as the distinction between consciously apprehended manifolds of empirical intuition (perception, Wahrnehmung) and thinking of those perceptions as perceptual appearings of objects in space that exist independently of our present perceptions of them (experience, Erfahrung). This corresponds to the distinction between mathematical and dynamical

34. The referent of “both” [beide] is unclear in this passage. Does it refer to both space and time? Or to both “empirical truth” and “dreams”? From the larger context of the passage, and from grammatical considerations (‘den Raum’ and ‘der Zeit’ are in the dative, while ‘beide’ is nominative), I think it’s clear that “both” refers to both inner and outer appearances. So the sentence should read: “In space and time, however, the empirical truth of appearances is satisfactorily secured, and sufficiently distinguished from its kinship with dreams, if both [inner and outer appearances] are correctly and thoroughly connected up according to empirical laws in one experience.” I also take this to be compatible with my reading: what distinguishes dreams from experience is that in experience there is law-like coherence among my inner appearances and the outer objects they represent, as well as among the outer objects themselves. The point is that experience is internally lawfully coherent in a way that dreams are not.

35. See especially B218–9. On this point, I have learned a great deal from Clinton Tolley’s unpublished paper “Kant on the Distinction Between Perception and Experience”. Tolley argues convincingly that Kant’s term ‘perceptio’ should be sharply distinguished from ‘Wahrnehmung’: the former refers to intuition as such, while the latter refers to conscious apprehension of intuited manifolds.

36. “[...] the first thing that is given to us is appearance, which, if it is combined with consciousness, is called perception [Wahrnehmung]” (A119–20). Cf. B202–3, B207, B160, B162. For more on this notion of Wahrnehmung, see Tolley “Kant on the Distinction”.

37. See B161, B218–9, A160/B199.
principles; the mathematical principles apply to all empirical
manifolds that are consciously apprehended (all objects of perception),
because every empirically given manifold has extensive and intensive
magnitude; but only objects of experience stand in causal relations
and have modal properties. So we really have three different levels of
representational content, each more highly determinate and structured
than the previous one:

1. Perception (Analogies). Consciously apprehended manifolds
   of empirical intuition.

2. Experience (Analogies)/Perception (A110). Collections of
   perceptions represented as perceptual appearances of
   objects in space that can be perceived by other subjects.
   Experiencing an object is consciously combining perceptions by using (the schemata of) the relational
categories: <substance-accident>, <cause-effect>, and
<community>. I will refer to this as "perceptual experience" to indicate its intermediate position between "perception" and "universal experience"; there can be multiple
perceptual experiences, and some perceptual experiences can prove to be inaccurate to their objects. Ordinary examples of perceptual contact with objects that exist in
space, and which can be "perceived" by multiple subjects,
are, in Kantian terms, examples of perceptual experience, not mere perception sensu stricto.

3. Universal experience (A110). A law-governed totality, which is
   necessarily singular. Its exact content and grounding I will
discuss further below.39

Applying the distinction between #1 and #2 to Kant’s distinction at A110,
I think we can see that the “experiences” which are “so many perceptions
insofar as they belong to one and the same universal experience” are
what I am calling “perceptual experiences”: synthesized unities of
mere perceptions (#1) that represent their objects as existing in space
outside me, because perceptions as such do not have any reference
to such an object. However, these perceptual experiences count as
experience in the sense of A110 only to the extent that they "belong
to one and the same universal experience." None of this yet tells us
what universal experience is or what it is for a perceptual experience
to “belong to” it; it only serves to make some preliminary distinctions
between different notions within Kant’s system.40

To return to the passage from the Antinomies, Kant continues:

That there could be inhabitants of the moon [đaß es
Einwohner im Monde geben könne], even though no human
being has perceived them, must of course be admitted;

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38. A160/B199.
39. Cf. Kant’s discussion of the “the sum total [Inbegriff] and the context of a single
   experience, of which each perception is a part” (A230/B283) in the Postulates
   and the “one, all-encompassing experience” (A582/B610) in the Transcendental
   Ideal. I take it that the “universal experience” of the A Deduction, the
   “single experience” of the Postulates, the “all-encompassing experience” of the
   Transcendental Ideal, and the “one experience” of the Antinomies (see main
text) all refer to the same thing. Kant is contrasting individual perceptual
experiences with universal experience.
40. In fact, I think there is a third sense of “experience” in Kant’s writings, in
   which it is supposed to be a neutral term between Kant and his interlocutors.
   This emerges most clearly in contexts where Kant is agreeing with the
   empiricist view that concepts of necessary connections (more generally, a priori
   concepts) cannot come from sensation. For instance, in describing Hume’s
   problem, Kant claims that “experience teaches me what there is, and how it
   is, but never that it necessarily must be so and not otherwise” (Prolegomena
   §14; Ak. 4:294). “Experience” here refers to something that is acceptable in an
   empiricist epistemology, something like Lockean ideas of sense and reflection.
   But it cannot mean the same thing as “experience” in the sense of the
   “one” experience (A110) (universal experience), because universal experience
   represents laws, and thus does represent necessity. Nor can “experience” here
   mean perceptual experience. Kantian perceptual experiences are “categorically
   loaded”; they represent their objects as substances, as having causal
   powers, etc. So in contexts in which Kant is agreeing with one basic empiricist
   view — we do not receive impressions of necessity — “experience” means
   something different; in Kantian terms, it refers roughly to the sensory matter
   our faculty of sensibility receives. Pulling apart all of the different senses in
   which Kant uses the term “experience”, however, lies far outside the scope of
   this essay.
but this means only that in the possible progress of experience we could encounter them \(\text{auf sie treffen könnten}\); for everything is actual that stands in one context with a perception in accordance with the laws of the empirical progression. Thus they are real when they stand in empirical connection with my real consciousness, although they are not therefore real in themselves, \(i.e.\) outside this progress of experience. (A493/B521)

We can now understand what Kant means in this passage. Whether the moon is inhabited depends upon whether universal experience represents it as inhabited. There might be perceptual experiences that represent the moon as inhabited (\(e.g.\) dreams or hallucinations) even though it is not; a perceptual experience of the moon as inhabited entails that it is inhabited only if that experience is incorporated into universal experience. This passage also sheds light on how universal experience is grounded in individual perceptual experiences. When Kant writes that “everything is actual that stands in one context with a perception in accordance with the laws of the empirical progression”, I take him to mean that universal experience does not only include objects that are directly perceptually experienced; universal experience also includes objects that cannot be directly perceptually experienced but which are posited in accordance with empirical laws in order to explain perceptual experiences had by subjects. Universal experience includes objects that are unobserved and even objects that are not (directly) observable.\(^{41}\)

This is confirmed by Kant’s discussion of magnetic matter in the “Postulates of Empirical Thinking in General”:

\(^{41}\) Some care is required here. Kant’s claim is not merely that there are objects we do not perceive, for, strictly speaking, existing objects in space are not perceived (sensory manifolds are perceived by being apprehended). By “direct” perceptual experience, I mean perceptual experience synthesized from perceptual appearings of such objects. In the case of the magnetic matter (see the main text), I do not “directly” perceptually experience this object, because none of my perceptions are taken to be perceptual appearings of it (they are appearings of the iron filings moved by the magnetic matter).

The postulate for cognizing the actuality of things requires perception, thus sensation of which one is conscious—not immediate perception of the object itself the existence of which is to be cognized, but still its connection with some actual perception in accordance with the analogies of experience, which exhibit all real connection in an experience in general. […] However, one can also cognize the existence of the thing prior to the perception of it, and therefore cognize it comparatively \(a\ priori\), if only it is concerned with some perceptions in accordance with the principles of their empirical connection (the analogies). For in that case the existence of the thing is still connected with our perceptions in a possible experience, and with the guidance of the analogies we can get from our actual perceptions to the thing in the series of possible perceptions. Thus we cognize the existence of a magnetic matter penetrating all bodies from the perception of attracted iron filings, although an immediate perception of this matter is impossible for us, given the constitution of our organs. For in accordance with the laws of sensibility and the context of our perceptions we could also happen upon the immediate empirical intuition of it in an experience if our senses, the crudeness of which does not affect the form of possible experience in general, were finer. Thus wherever perception and whatever is appended to it in accordance with empirical law reaches, there too reaches our cognition of the existence of things. If we do not begin with experience, or proceed in accordance with laws of the empirical connection of appearances, then we are only making a vain display of wanting to discover or research the existence of any thing. (A225–6/B273–4)\(^{42}\)

\(^{42}\) Cf. Kant’s discussion in \textit{On a discovery} (Ak. 8:205) of bodies and parts of bodies that are too small to be seen. Kant points out, contra Eberhard, that
Kant is doing a lot in this passage, but I want to focus on a few of the most important claims. He claims that the limits of experience are not set by the contingent limitations of our sense organs. Just because I cannot physically perceive (have a perceptual experience of) an object, because it is either too small, or too large, or does not interact with the visible-light portion of the electromagnetic spectrum, does not mean it is not an object of experience. Universal experience includes all of the objects we directly perceptually experience, as well as objects that are posited by our best justified scientific theories to causally explain perceptually experienced phenomena.\(^{43}\)

This shows that universal experience is not merely the collection of all perceptual experiences of subjects, or even the most coherent subset of that collection. As Kant reminds us in the Prolegomena, “heed well this distinction of experience from a mere aggregate of perceptions” (Ak. 4:310). In context his remark is best read as claiming that (what I am calling) perceptual experiences are not mere aggregates of perceptions; to perceptually experience an object in space, it is not enough to merely have an aggregate of perceptions, because we must also think of those perceptions as perceptual appearings of objects in space, using the relational categories. But the same point applies to the relation between perceptual experience

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\(^{43}\) My interpretation of universal experience is further confirmed by Kant’s definitions of actuality in experience. His discussion of the postulate of actuality itself is somewhat misleading, because it focuses on the conditions under which we can verify whether something is actual rather than what actuality consists in for empirical objects, but various other statements about actuality are more helpful. For instance: “if [the object] is in connection with perceptions (sensation, as the matter of the senses), and through this determined by means of the understanding, then the object is actual” (A234/B286). This should be compared to his remark in the Refutation of Idealism that “whether this or that putative experience is not mere imagination must be ascertained according to its particular determinations and through its coherence with the criteria of all actual experience” (B279). Since the criteria of all actual experience is “connection” (which I take to mean connection according to empirical laws) with actual sensation, I take this to be confirmation of my interpretation.

and universal experience: to have universal experience of magnetic matter is not to have a series of perceptual experiences of it, because we cannot perceptually experience such an object, but we can universally experience it (see above).

At this point one might expect that I would offer my own theory of the content of universal experience and how that content is grounded in the content of perceptual experiences (and how this, in turn, is grounded in the content of mere perception — see above). However, for my purposes in this paper, I do not need such a theory. All I will need to solve the Exclusion problem in section one are some plausible principles about the relations among the contents of universal experience, perceptual experience, and mere perception.

Universal experience has a matter and a form. Its form is given by space and time, and by the \textit{a priori} categories and their principles. For instance, universal experience will represent its objects as accidents of persisting substances in causal interaction. Since this paper is about the problem of affection, though, I am mainly interested in the \textit{matter} of universal experience. While it might be difficult to spell out exactly what the form of universal experience is (\textit{e.g.} the precise notion of \textit{law} that defines universal experience, whether regulative principles of reason are part of the form of universal experience, etc.), I take it to be relatively clear that:

1. Universal experience has the content it does partly in virtue of the content of the perceptual experiences of subjects (its matter), and partly in virtue of the \textit{a priori} form of universal experience as such.

Note that this does \textit{not} entail that the material content of universal experience is \textit{identical} to the material content of subjects’ perceptual experiences, even to the totality of the material content of all perceptual experiences of all subjects. If no subject has sense organs fine enough to perceptually experience magnetic matter, then magnetic matter is not in the material content of any perceptual experience, but it is in the material content of universal experience.
Perceptual experience, too, has a form (space, time, and *a priori* principles) and a matter. It has its content partly in virtue of the material content of the perceptions from which it is synthesized. For instance, my perceptual experience of my bust of Karl Marx represents it as having the determinate size, shape, and volume it does in part because of the content of my perceptions (which I synthesize into a perceptual experience of an object existing outside me in space); the fact that I represent its changes as governed by the principle of causation, and as interacting causally with other objects in space, is due to the *a priori* form of perceptual experience as such.

2. Perceptual experiences of subjects have the content they do partly in virtue of the content of subjects’ perceptions (matter), and partly in virtue of the *a priori* form of perceptual experience as such.

We can also ask about the matter and form of perception itself. As I interpret Kant’s technical notion of perception, a perception is a consciously apprehended empirical sense-manifold. This means that a perception is not merely a manifold of empirical intuition, but a manifold of empirical intuition that we consciously apprehend as the intuition of a manifold. This means that any perception will be in either inner or outer sense, will apprehend some manifold (plurality), and will consciously represent that manifold as a manifold. Kant argues, in the Axioms of Intuition and Anticipations of Perception, that perception requires representing that manifold as having both an extensive magnitude (a determinate degree of sensory content) and an intensive magnitude (a determinate degree of sensory content). This means that perception as such will have an *a priori* form: space, time, and extensive and intensive magnitude. But we can, again, ask about the matter of perception. Since perception is conscious apprehension of empirical intuition, its matter is empirical intuition. The difference between empirical intuition and perception is that perception is consciously apprehended empirical intuition; we could in principle have (and Kant thinks we do have) empirical intuitions we do not consciously apprehend and which are thus not perceptions. Or, to put it in Kantian terms, a perception involves the activation of both sensibility (empirical intuition) and a low-level activity of the understanding (consciously apprehending that empirical intuition as a manifold), while empirical intuition is merely the former. So we can say, in line with (1) and (2) above, that:

3. Subjects’ perceptions have the content they do partly in virtue of the content of subjects’ empirical intuitions (matter), and partly in virtue of the form of perception in general (conscious apprehension, extensive and intensive magnitude).

Finally, we can ask of empirical intuitions why they have the content they do. Empirical intuition has a form (space in the case of outer intuition, time in the case of inner intuition) and a matter. The matter of empirical intuition is what Kant calls “sensation” (*Empfindung*).

4. Subjects’ empirical intuitions have the content they do partly in virtue of the content of subjects’ sensations (matter), and partly in virtue of the form of intuition in general (space and time).

The presence of sensation is what distinguishes empirical from pure intuition; the point of the Anticipations of Perception is that there is a continuous gradation between empirical intuition (the presence of

44. On this point I am especially indebted to Clinton Tolley’s paper.
45. See A119–20, B202–3, B160, B162, B204, and B207, as well as Tolley, “Kant on the Distinction”.
46. For the distinction between perception and intuition, see especially A119–20 and B160 (which, as Tolley points out, make no sense if intuition is identified with perception). For the identification of perception with “apprehension”, see the latter text, as well as B162. Cf. “On the synthesis of apprehension in intuition” in the A Deduction (A98–100).
sensation) and pure intuition of space and time (the zero degree of sensation). Since perception is conscious apprehension of empirically intuited manifolds, and sensation is the material content in empirical intuition that makes it empirical intuition, perception is conscious apprehension of the sensory content in a manifold of empirical intuition. Sensation is the lowest-level representation in this hierarchy, for it has the least determinate and least highly structured content. In fact, sensation per se does not even have intentionality; it has “relation to an object” only insofar as the intellect apprehends it in perception (by which it becomes the sensory content of a perceived manifold) and combines it into a perceptual experience (by which it becomes the sensory content of a perceptual experience of an object in space). Sensation is the means by which matter is “injected” into the whole structure and the explanation of why, ultimately, higher-level perceptions, perceptual experiences, and even universal experience have the material content they do. This is why Kant sometimes writes as though sensation is the matter of experience, whereas, in truth, the hylomorphic structure of experience is more complex (see figure one, below).

49. B208.
50. A145/B184, B208, A167/B208–9, A225/B272. There is also conscious apprehension of the a priori manifolds of space and time, as Kant argues at A99–100. It is not appropriate to call this perception, though, for it has no sensory matter; cf. Kant’s claim at B207 that space and time cannot be perceived (wahrgenommen) in themselves (as Tolley points out).
51. See the distinction between “objective” and “subjective” sensation in the Cj (Ak. 5:206), as well as Kant’s claim at B208 that “sensation is not in itself an objective representation”. Cf. A320/B376.
52. See Kant’s identification of sensation as the “material condition of experience” at A218/B266. To be clear, I read the form of universal experience as grounding what is possible for objects of experience (A218/B266), while the matter of universal experience grounds what empirical properties they actually have, and the matter of universal experience is due (ultimately) to sensation. For more on sensation’s foundational role, see A373–4, A381/B609, A723/B751.
53. E.g. A223/B270.

If we accept the doctrine of noumenal affection, then it must be located at the level of sensation. It is not right to say, for instance, that noumenal affection is the ground of the content of empirical intuition, because empirical intuition has a form contributed by the subject (space, time) and a matter. Its matter, sensation, is contributed from “outside” the subject, by noumenal affection. The same argument applies at each higher level of representational content: the form is contributed by the subject, while the matter is a lower-level representational kind. Since sensation per se (rather than the sensory content that is apprehended in a perception) has no form (sensation formed is already the matter of empirical intuition), the matter-form analysis ceases at this point. Sensation is not a compound of matter and form; it is the “prime matter” of Kant’s hylomorphic theory of the mind.

We can summarize these relations of grounding in the following chart:
Each of the arrows represents the relation of partly grounding the content one level higher in the hierarchy, except for the arrow on the lower right-hand side, which represents the relation of causation. For instance, perceptions have their content partly in virtue of the *a priori* form of perception, and partly in virtue of the content of empirical intuition, but empirical intuition has its content in part because of sensation. Sensation is the ultimate source of all matter in this account; so the content of universal experience is partly grounded in some complex theory of various levels of *a priori* form and some basic underlying matter supplied by sensation. Consequently, we can abbreviate figure one as the more compact figure two.

In the next section, I will embed figure two within some more complicated networks of dependence, but it should be understood as an abbreviation of the more complete story told in figure one.

In the passage from the Antinomies quoted at the very beginning of this section, Kant claims that appearances exist in virtue of how they are experienced. If I am correct about my identification of universal experience as the representation whose content determines the empirical properties of appearances, this means that the second premise of the Exclusion argument should read:

*(Transcendental Idealism)* For any appearance \( x \) and empirical property \( F \), if \( x \) is \( F \), \( x \) is \( F \) in virtue of the fact that universal experience represents \( x \) as \( F \).

Another way of putting this would be to say that appearances are the *intentional objects* of universal experience, with the proviso that this applies only to their empirical properties, not to whether they exist.

Now that we have distinguished universal experience from the perceptual experiences (and from perceptions, sensations, etc.) of subjects at particular times, and identified appearances as the intentional objects of universal experience, we are in a position to

\[\text{(Figure two)}\]

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54. See A374–5: “One must note well this paradoxical but correct proposition, that nothing is in space except what is represented in it. For space itself is nothing other than representation; consequently, what is in it must be contained in representation, and nothing at all is in space except insofar as it is really represented in it. A proposition which must of course sound peculiar is that a thing can exist only in the representation of it; but it loses its offensive character here, because the things with which we have to do are not things in themselves but only appearances, *i.e.* representations.” Cf. A506/B534, Ak. 4:342, 4:506.

55. The reason I do not want to claim that the existence of an appearance depends upon the content of universal experience is that some “one object” readers will find this claim incompatible with their understanding of Kant’s Transcendental Idealism. After all, if every appearance is numerically identical to a thing in itself, and the existence of a thing in itself does not depend upon universal experience, it would seem to follow that the existence of an appearance cannot so depend. In this paper, I want to remain neutral on the “one object”/“two object” debate; however, see A375n and A493/B521 for some evidence that Kant did hold that empirical objects would not exist without being experienced. See Nicholas F. Stang, “The Non-Identity of Appearances and Things in Themselves”, *Noûs* 2014: 48(1), 106–36, for my argument against the “one object” reading.
solve the Exclusion problem. But before I do this, I want to counter several potential objections.

I have argued that empirical objects have their empirical properties in virtue of how they are actually represented by universal experience. I anticipate that some readers will be tempted by an alternate, counterfactual understanding of how empirical objects depend upon experience. The idea behind this view is that it is not necessary that we actually experience an empirical object (or have perceptual experiences that ground a universal experience that posits the existence of that object); it is sufficient that, if we were in the right conditions, we would experience this object. There are many ways of working out the counterfactual view in detail, but I think we can reject it without going into its details. At first glance, the counterfactual view is suggested by Kant's claim, quoted earlier: “That there could be inhabitants of the moon [daß es Einwohner im Monde geben könne], even though no human being has perceived them, must of course be admitted; but this means only that in the possible progress of experience we could encounter them [auf sie treffen könnten]” (A493/B521). Kant here claims that the fact (if it is a fact) that there could be inhabitants of the moon is the fact that inhabitants of the moon could be experienced. This is compatible with two ways of understanding the fact (if it is a fact) that there are inhabitants of the moon. Compatibly with what Kant says here, this fact can be identified either as the fact that inhabitants of the moon are experienced, or as the fact that we would experience them if we were, for instance, to go to the moon. But the latter, counterfactual interpretation is not borne out by the rest of the passage; Kant writes in the next paragraph: “To call an appearance a real thing prior to perception means either that in the continuation of experience we must [müssen] encounter such a perception, or it has no meaning at all” (A493/B521). Kant is saying that, prior to a perceptual experience that would justify positing the existence of inhabitants of the moon, to say that there are inhabitants of the moon is to say that we will eventually have such an experience. This is flatly incompatible with the counterfactual reading; if Kant held the counterfactual view, he would have written, “To call an appearance a real thing prior to perception means either we would encounter [treffen würden] such a perception if we were appropriately situated, or it has no meaning at all”.57

Similar to the counterfactual view, some readers will propose what I will call a “modal” account of how empirical objects depend upon experience: empirical objects have their empirical properties not in virtue of how we do experience them (my view) or how we would experience them (the counterfactual view), but in virtue of how we could experience them. To paraphrase Kant, to call an appearance a real thing prior to perception means either that in the continuation of experience we could encounter such a perception, or it means nothing at all. This interpretation receives some encouragement from Kant's claim, in the Postulates of Empirical Thinking in General (quoted earlier), that “in accordance with the laws of sensibility and the context of our perceptions we could also happen upon the immediate empirical intuition of [magnetic matter] in an experience if our senses, the crudeness of which does not affect the form of possible experience in general, were finer” (A226/B274). But Kant is not here identifying the fact that there is magnetic matter with the fact that we could perceptually experience it, if our senses were finer (or just different, i.e. if we could see electromagnetic fields). In the context


57. The counterfactual reading is also suggested by Kant's discussion of the “transcendental object” (which, in this context, I think refers to noumena) at A494/B522–3. However, I take his remark later that “we have nothing to do with that” transcendental object (A496/B524) to mean that although counterfactuals of the form “in circumstance C, I would experience object O” are made true by the causal powers of noumena, this is not what grounds the empirical properties of empirical objects, because noumenal grounds are unknowable by us, while the grounds of empirical properties of empirical objects are knowable.
of the larger passage, he is identifying the fact that there is magnetic matter with the fact that we do have perceptual experiences that justify the positing of the existence of magnetic matter. In the sentence quoted, he is merely pointing out one consequence of this: if our sense organs were finer, we could directly perceptually experience the magnetic matter. The point of this sentence is: which empirical objects exist does not depend upon contingent facts about the grain of our sense organs. Furthermore, the “modal” interpretation is incompatible with the very same textual evidence that defeats the counterfactual interpretation; in all of those passages, Kant describes empirical objects as dependent upon how we actually experience them, not on how we could experience them. I have argued that the relevant notion of experience is universal experience.

Aside from these textual problems, there are serious philosophical difficulties with the modal interpretation. They center on the notion of “possibility” used to define the determination relation between empirical objects and experience. Kant's official definition of possibility in the Postulates reads: “whatever agrees with the formal conditions of experience (in accordance with intuition and concepts) is possible” (A218/B265). On this notion of possibility—which I will call “formal” possibility—an empirical state of affairs is possible just in case it is compatible with our forms of intuition, space and time, and the categories that we experience it. But this is too broad a notion of possibility. If empirical objects have their empirical properties in virtue of how we could experience them, and “could” here is understood in terms of formal possibility, then objects have contradictory empirical properties. It is compatible with the forms of experience that I experience this table as rectangular, and it is compatible with the forms of experience that I experience this table as octagonal. We need a more restricted notion of possibility for the modal interpretation to even make sense. The natural move is to understand “possible” in the modal interpretation as compatible with the way empirical objects are. But that renders the modal interpretation equivalent to the claim that empirical objects have their empirical properties in virtue of how we could experience them, compatible with the empirical properties they have. It provides no non-circular account of what it is in virtue of which empirical objects have their empirical properties. The modal interpretation is ultimately even less tenable than the counterfactual interpretation.58

Some readers may have noticed that, initially, when I formulated the Transcendental Idealism premise of the Exclusion argument, I formulated it in terms of “subjects’ experiences”, which I have now replaced with “universal experience”. This raises the question: Who are the subjects of universal experience? We are all the subjects of universal experience, because all subjects’ perceptual experiences constitute the set whose contents ground the content of universal experience (see above for a more precise statement of that relation). In terms of the contrast drawn at A110 between “universal experience” and “perceptions insofar as they belong to one and the same universal experience”, each of us is a subject of a variety of perceptual experiences, perceptions, empirical intuitions, etc., because these are individual mental states of individual subjects. Furthermore, each of us is a subject of universal experience (equivalently, is having universal experience) insofar as, and to the degree to which, the contents of our individual perceptual experiences are retained within the content of

58. The section of CPR under discussion, “Transcendental idealism as the key to solving the cosmological dialectic”, is quite complex, and it must be admitted that there are passages that appear to support a modal or counterfactual reading of the dependence of empirical objects upon experience (rather than my view, on which empirical objects depend upon actual experience and hence upon actual perceptions). For instance, the long discussion of past objects at A495/B523 suggests a modal analysis. However, after that passage, Kant writes: “but to say that they exist prior to all my experiences means only that they are to be encountered in the part of experience to which I, starting with my perception, must first of all progress” (A495–6/B524). This suggests that Kant’s view is that facts about empirical objects in the distant past (before there were human beings) are grounded in facts about perceptions we have had or will have, and the experience those perceptions ground. The earlier discussion was about my representation of “all existing objects of sense in space and time”, that is, the thought of past objects, which is implicitly the thought of an experience of such objects. Actual facts about such objects, however, are grounded in the actual progress of experience.
universal experience. Consequently, none of us has any special role to play in determining the content of universal experience, nor any privileged epistemic access to its content. So explicit reference to the subjects of universal experience can be omitted in the formulation of the Transcendental Idealism premise.\(^{59}\)

§3. A Solution

I have argued that the sense of “experience” involved in the Transcendental Idealism premise, universal experience, is distinct from the sense of “experience” involved in the Empirical Affection premise, which I identified above as mere perceptual experiences. This, by itself, is not a solution, because the contents of universal experience are themselves grounded in perceptual experiences, giving rise to the Exclusion problem: empirical objects cause the very states whose contents are among the grounds of their empirical properties. The basic idea of my solution to the Exclusion problem is to distinguish two different senses of “perception”: first, as the grounds of the contents of universal experience (perceptual experience, perception, etc.), and, second, as objects of universal experience itself, inner appearances. I will argue that if we understand these inner appearances as themselves grounded in universal experience, we can maintain both Empirical Affection and Transcendental Idealism without violating the Exclusion principle.

To solve the Exclusion problem, we need to distinguish carefully the various relationships of dependence within Kant’s transcendental theory of experience.

1. Things in themselves causally affect subjects, producing sensations, the matter of empirical intuition. This first relationship of dependence is a causal one: it holds between

59. Furthermore, the set of subjects’ perceptions whose content grounds the content of universal experience is tenseless: all perceptions that will have ever been had or will ever be had. Otherwise, the further progress of experience (perception) would bring empirical objects into existence, which is absurd.

things in themselves (unknowable by us) and sensations in subjects.\(^{60}\)

2. The totality of sensations (the matter of empirical intuition), together with \textit{a priori} contents (space, time, categories, principles of experience), ground the content of universal experience. The second relationship of dependence is a metaphysical one, an instance of the “in-virtue-of” relation. There is, of course, a much more complicated story to tell about how sensation, together with the \textit{a priori} form of intuition, grounds the content of empirical intuition, which in turn, together with the \textit{a priori} form of perception, grounds the content of perception, and so on. This more complicated story is represented by figure one in section two, but now I will operate with the condensed version, figure two.

3. Various empirical objects have their empirical properties in virtue of being represented as existing and having those properties by universal experience. The third relationship of dependence is a metaphysical one, an instance of the “in-virtue-of” relation: it holds between the content of universal experience and the empirical properties of appearances.

4. The appearances whose empirical properties are determined by being represented in universal experience include both inner perceptual states of subjects and outer empirical objects. In some cases, these perceptual states represent their objects as having a certain property and are caused to have that content by their objects having that property. This fourth dependence relationship is a causal

60. In my original formulation of the problem, I took the “in-virtue-of” relation and the causal relation to be relations between facts. However, at this point in the exegesis, I don’t think it’s crucial to distinguish between, for instance, empirical objects and facts about them. I take it that the reader will see how to appropriately translate everything into fact talk.
At no point in this network of dependence relations do we have one set of facts obtaining partly in virtue of the very set of facts they cause to obtain. In other words, we have no violations of the Exclusion principle:

\[(\text{Exclusion}) \text{ If } [p] \text{ obtains partly in virtue of } [q], \text{ then } [p] \text{ does not cause } [q] \text{ to obtain, where } ['[p]' \text{ stands for the fact that } p].\]

We also retain the truth of both Transcendental Idealism and Empirical Affection:

\[(\text{Transcendental Idealism}) \text{ For any appearance } x \text{ and empirical property } F, \text{ if } x \text{ is } F, \text{ } x \text{ is } F \text{ in virtue of the fact that universal experience represents } x \text{ as } F.\]

\[(\text{Empirical Affection}) \text{ For some appearance } x \text{ and empirical property } F, \text{ in standard cases, } x \text{'s having } F \text{ causes } S \text{ to perceptually experience } x \text{ as } F.\]

Transcendental Idealism is made true by 3, and Empirical Affection is made true by 4: 5 shows that the causal relationship in 4 obtains in virtue of 3. Straightening out this complicated network of relationships of dependence shows that whatever other problems Kant’s theory of experience faces, it does not face the problem we originally started with. There may be problems with double affection, but “the problem of double affection”, as conceived by James Van Cleve and others, is not, in fact, insuperable.

Furthermore, it solves a closely related problem raised by Van Cleve. As we saw in the Introduction, Van Cleve argues that Transcendental Idealism excludes Empirical Affection. His reason is that he takes appearances to be logical constructions of perceptual states, and he quite correctly draws the conclusion that an object cannot cause the very items of which it is a logical construction (an instance of the Exclusion principle, from above\(^6\)). Our discussion so far has shown

61. I am taking it that ‘x is a logical construction of the ys’ entails ‘x exists in virtue of facts about the ys’. 
where Van Cleve went wrong: although appearances depend upon experience, namely universal experience, they do not depend upon the particular perceptual states of individual subjects. Van Cleve failed to distinguish the sense of “experience” involved in universal experience from the sense of “experience” involved in Empirical Affection.

However, Van Cleve raises another problem. In his discussion of Kant’s theory of primary and secondary qualities, he correctly observes that Kant holds the familiar Lockean view that empirical objects possess primary qualities (e.g., extension, shape, size, etc.) but lack secondary qualities (color, taste, smell, etc.). Empirical objects, in virtue of their primary qualities, cause us to experience them as possessing various secondary qualities. But Van Cleve thinks that Kant’s “Lockean” empirical psychology is incompatible with this transcendental idealism, for the former requires that “a phenomenal cause (a body in space, existing only as the intentional object of a conscious state) would have a noumenal effect (one of those very states, which presumably must belong to a noumenal self)”.

My version of double affection shows why Van Cleve’s argument is mistaken; there is no need to posit “downward” causation from phenomena to noumena, which would indeed be deeply problematic. A phenomenal object — for instance, a body in space with a given surface reflectance profile (to invoke some vision science unknown to Kant) — causes a perceptual experience of red in me, but this perceptual experience is not a “noumenal” state. It is an inner appearance and, as such, is determined by universal experience just as much as the body in space is. In general, the inner appearances determined by universal experience will include perceptual experiences of colors, tastes, smells, etc. The outer appearances will include spatial objects with various micro-structural surface properties. Universal experience will represent those outer objects as causing those inner appearances in virtue of their micro-structural surface properties (e.g., causing visual experiences of color in virtue of their surface reflectance profiles). No downward causation from phenomena to noumena is needed.

As is clear from the way I set up the Exclusion problem initially, my view owes a lot to Van Cleve. It might be worthwhile, therefore, for me to explain where my interpretation differs from Van Cleve’s. On Van Cleve’s view, appearances are “virtual objects”. I take this to mean that appearances exist, and have their empirical properties, in virtue of facts about mental states of subjects. Van Cleve distinguishes three different “in-virtue-of” relations that might hold among appearances and mental states. It might be that statements about appearances are meaning-equivalent to statements about mental states of subjects; since Kant’s idealism is not a thesis about meaning, it is not plausible that this is Kant’s view. On the view Van Cleve favors, facts about appearances are identical to facts about mental states of subjects. According to Van Cleve, the only objects there are in Kant’s ontology are things in themselves, including subjects and their mental states. This seems to fly in the face of much of what Kant has to say about appearances as empirical objects in the Critique.

On the third view, empirical objects are what Van Cleve calls (misleadingly, I think) “supervenient entities”: they are genuine objects (legitimate values for variables bound by quantifiers) that exist and have their empirical properties in virtue of the contents of subjects’ mental states. My interpretation is a version of the “supervenient-entities” interpretation. First of all, I take the relevant “in-virtue-of” relation to be the “grounding” relation, a relation of non-causal metaphysical dependence that, I think, is ubiquitous in Kant and the Rationalist tradition, but which has only recently become an explicit topic of research in contemporary metaphysics. See above for some recent discussions of it. It is misleading for Van Cleve to call this the “supervenient-entities” view because the claim is stronger than the claim that empirical objects supervene on the mental states of subjects; supervenience is a relatively weak relation that is compatible with dependence in the opposite direction, or no dependence at all. Thirdly, in this paper, I am defending only the claim that appearances have their empirical properties in virtue of the content of universal experience. I also think that, on Kant’s view, appearances exist in virtue of the content of universal experience, but I do not have the space to argue for that here. That more controversial claim has significant textual evidence to overcome, such as Kant’s claim that “representation in itself does not produce its objects in so far as existence is concerned” (A92/B125). Since I do not identify appearances with mental states of subjects, my interpretation

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62. Of course this is not, strictly speaking, Locke’s own view, or at least does not correspond to his terminology. On Locke’s view, bodies possess both primary and secondary qualities, because these are merely powers to produce certain ideas in us. The distinction is that the ideas of primary qualities resemble ideas in bodies, while the ideas of secondary qualities do not. For ease of exposition, in the body of the paper, I follow the standard contemporary use of the terms, using “primary quality” to refer to properties like being extended, having a certain size, etc. and “secondary quality” to refer to properties like having a color, smell, etc. See Locke, Essay Concerning Human Understanding II.8.9–26.


64. Problems from Kant, 171.
Although I have presented this version of the doctrine of double affection in a “two object” fashion, it is fully compatible with a “one object” reading. While my “two object” view has treated the appearance and the thing in itself as numerically distinct objects playing distinct causal roles, a “one-object” reading would distinguish the causal roles played by two different kinds of properties possessed by one and the same object: properties the object has in itself (call them the N properties), on the one hand, and properties the object appears to have (call them E properties), on the other. On the “one object” version of double affection, objects causally affect subjects in virtue of their N properties. This affection produces sensations in subjects. These sensations, together with the a priori forms summarized in figure one, ground universal experience, which represents the subject and the object as having certain E properties. The E properties universal experience represents the subject as having include properties of enjoying various perceptual experiences. Call these the S properties. The E properties universal experience represents the object as having include various spatiotemporal and causal properties. Call these the O properties. Furthermore, universal experience represents the object, in virtue of its O properties, as causally affecting the subject and producing the S properties. Now we identify the thing in itself with the object qua possessor of N properties, and we identify the outer appearance as the object qua possessor of E properties (specifically, O properties). It follows that the thing in itself (the object qua possessor of N properties) causally affects the subject, and so does the appearance (the object qua possessor of E properties). In standard cases, the subject has the perceptual experiences it does (S properties) because of this causal affection by the appearance (the object qua possessor of E properties).

Double affection does not require a “two-object” reading of Kant’s transcendental idealism.66

Before responding to various objections to my view, I would like to reiterate that, although I have my own view about exactly what universal experience is and how it is grounded, ultimately, in the matter of sensation and the a priori forms of experience (as well as all of the intervening levels of hylomorphic analysis — see figure one), my solution to the Exclusion problem does not depend upon the details of that conception. All that my solution requires is that (a) the content of universal experience is grounded partly in sensation (and partly by a priori form), and (b) various inner and outer appearances have their empirical properties in virtue of how they are represented in universal experience. Any notion of universal experience that can play the role assigned to it in figure three is a conception of universal experience on which my solution to the Exclusion problem can work.

§4. Objections and Replies

It may seem to some readers that, in the course of defending the doctrine of double affection, I have committed myself to interpretive claims that are at least as bad, if not worse. In this section, I reply to what I take to be the most pressing objections.

One aspect of my interpretation that will give pause to some readers is the claim that the inner representational states of individual subjects have their empirical properties (e.g. temporal duration, representational content, etc.) in virtue of being represented by universal experience. Although this is a counter-intuitive claim, it should not be controversial that it represents Kant’s position, since it is a fairly direct consequence of the ideality of time, and of the doctrine that I know myself only as I appear to

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66. See above for an alternate account of “double affection” within the “one-object” reading of Henry Allison and Gerold Prauss. I am not sure my version of double affection is compatible with their “epistemological” reading of Kant’s idealism.
myself, not as I am. This means that the inner states I am aware of in inner sense are appearances, and, as Kant repeatedly reminds us, appearances “are never given in themselves, but only in experience” (A492/B591). I take this to mean that temporal entities, inner states as well as outer objects, have their empirical properties in virtue of how they are represented in experience. The question is: What is the relevant notion of “experience” that determines the properties of inner states? One natural answer is “inner perception”, conscious apprehension of manifolds of inner sense. If my inner states have their empirical properties in virtue of how I perceive them in inner sense, it follows that I have infallible knowledge of my inner states. It is infallible because the properties of those states are determined by the content of my very perception of them. Furthermore, this view entails that my knowledge of my inner states does not depend upon my knowledge of outer objects; since the empirical properties of my inner states are determined by the contents of my acts of inner perception, introspection alone provides knowledge of those empirical states that does not depend upon my knowledge of outer objects.

First of all, it is simply highly implausible that my knowledge of my inner states is infallible. Nothing is more commonplace than some inner state seeming to last longer than it in fact did (e.g. a dream). Secondly, on Kant’s view, my knowledge of my inner states does depend on my knowledge of outer objects. Although the correct interpretation of the argument in the Refutation of Idealism is a matter of some controversy,\(^{67}\) it is clear that he there claims that our knowledge of the temporal determinations (order, duration, etc.) of our inner states depends upon our knowledge of outer objects. The argument is directed against the “problematic idealist”, who takes our epistemic access to our own inner states to be immediate and non-inferential, but holds that our knowledge of the external world is based on an inference to the cause of our inner states. Since different causes can produce the same effect, this gives rise to the “problem” of idealism: how do we know that our experiences correspond to objects outside us? Kant claims to have reversed the order of epistemic dependence claimed by the problematic idealist: my knowledge of the temporal determinations (order, duration, etc.) of my inner states depends upon my knowledge of external objects. For instance, I know that, although it seemed an eternity, my experience of listening to the philosophy talk lasted only an hour, because I know that my wristwatch keeps reliable time. Kant contrasts the “I think”, the bare awareness of myself as a thinking subject, with “inner experience”, determinate awareness of the temporal properties of my inner states based partly on inner perception and partly on my experience of outer objects and how they causally influence those inner states. My knowledge of my inner states depends upon my knowledge of the outer world.

By itself, this does not yet vindicate my claim that inner states possess their empirical properties in virtue of how they are represented in universal experience. However, it does show that the experience in virtue of which my inner states have the empirical properties they do cannot be mere “inner perceptual experience”, the “inner analogue” to perceptual experience of outer objects. My inner perceptual experience is mediated by my experience of outer objects, and, as we have already seen, that outer experience can be mistaken. For instance, I might experience the talk as beginning at 3:30 and experience it as ending at 4:30 and thus experience my inner state of hearing the talk as lasting for an hour — and this would be a paradigm instance of inner experience — but, if the clock on the wall were fifteen minutes fast, then my inner experience of the temporal duration of my inner

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\(^{67}\) There is an extensive literature on the Refutation of Idealism. See especially Jonathan Vogel, “The Problem of Self-Knowledge in Kant’s ‘Refutation of Idealism’: Two Recent Views”, *Phenomenology and Phänomenologische Forschung* 1993: 53(4), 875–87; Paul Guyer, *Kant and the Claims of Knowledge*: 279–329; and Georges Dicker, *Kant’s Theory of Knowledge: An Analytical Introduction* (New York: Oxford, 2004), 194–211. For an incisive critique of Guyer and Dicker, see Andrew Chignell, “Causal Refutations of Idealism”, *The Philosophical Quarterly* 2010: 60(240), 1–21. I take it that all of my claims in this paper are independent of debates about the argument of the Refutation.
state would be incorrect. The more general lesson here is that inner states are appearances, appearances have their empirical properties in virtue of the content of some set of representations, and the only set of representations whose content is guaranteed to be veridical is what I have called “universal experience”.

On my view, empirical objects affect the representational states of subjects in virtue of being represented by universal experience as affecting them. Some readers will object that this gives empirical affection short shrift. A causal relation, they might claim, that obtains in virtue of being represented to obtain is not a real relation of causal efficacy. For Kant to vindicate empirical affection, he must show that empirical affection is grounded in real forces in the outer empirical object. However, I do not think that a causal relation’s obtaining in virtue of being represented to obtain is incompatible with its being grounded in real forces. If universal experience represents outer objects as having forces, and as standing in causal relationships grounded in these forces, then they do. There is no sense to the further question Yes, but do they really have forces? Because they are intentional objects, that is all there is to their having forces.

Some readers might object that Kant’s argument in the Refutation is that knowledge of empirical objects is a necessary condition for knowledge of the order of my subjective states, not of their duration. However, I am merely pointing out that if the experience whose content determines the properties of inner appearances were mere “inner perception”, this would have the obviously false consequence that I could infallibly know the duration of my subjective states by consulting how long they seemed to me to last.

With the important qualification that only their empirical properties depend upon universal experience. See note 55 for an important qualification on my use of the term “intentional object.”

Kant suggests at several points that the forces possessed by empirical objects are manifestations or appearances of forces in things in themselves. For instance, he claims that our empirical character is an appearance of our intelligible character (A538/566–A558/B586); in the Groundwork, he claims that “the world of understanding contains the ground of the world of sense and of its laws” (Ak. 4:453); and in the Prolegomena, he writes that “reason is the cause of these natural laws and is therefore free” (Ak. 4:346). This might help relieve the worry that, on my account, empirical objects do not really have forces, but are merely represented as having them: they have forces because they are represented as having forces, and because they are appearances of things in themselves whose forces appear as the very forces they are represented as having.

This relates to another qualification I want to make regarding my formulation of the Transcendental Idealism premise in the original argument. I formulated that premise so that it gives the conditions under which an appearance has a given empirical property; it does not give the conditions under which a given object is an appearance, or the conditions under which a given appearance exists. This is because I do not want to claim that all there is to being an appearance is being the intentional object of universal experience. If this were the case, things in themselves would be the external causes of empirical objects, but Kant claims something stronger: empirical objects are appearances of things in themselves. While it is not clear what more he intends by this claim, this issue lies outside the scope of this paper.

§5. Exclusion Strikes Back?

Readers will have noticed that, while I carefully distinguished sensation, perception, and various notions of experience in section two, in giving my solution to the Exclusion problem I was somewhat blithe about the identity of the inner appearances that are the causal relata of empirical affection (relation 4 in figure three). This is potentially problematic, for if they figure anywhere else in the relations of grounding, the Exclusion problem arises all over again. In particular, if we combine figure three with the complete classification of Kantian representations from figure one, we get the following picture:
as persisting substances in causal interaction. Empirical affection (represented by the top horizontal arrow in figure four) is between objects in space and the matter of perceptual experience. But the same argument applies at the level of perception: our perceptions have the same form (space, time, extensive and intensive magnitude) regardless of how objects in space affect us. So outer appearances causally determine the content of perception by causing its matter. But, mutatis mutandis, the same reasoning applies at the level of the matter of perception, empirical intuition. The form of empirical intuition does not depend upon outer appearances; only its matter. The result of this line of reasoning is that the causal contribution of empirical affection is to be located at the level of sensation. Outer objects can be said to be partial causes of the content of higher-level representations (perceptions, perceptual experiences, etc.), but only in virtue of their contribution of the “original” matter of all experience, sensation.

If the inner appearances that are caused by outer appearances are identified with any of the representational kinds lower in the hierarchy than universal experience, then we have one kind of representation partially grounding objects that cause that very kind of representation.

It is incoherent to describe outer appearances (objects in space) as causing universal experience, except insofar as they cause the perceptual experiences that are the matter of universal experience. But even in the case of perceptual experience, it is not entirely correct to say that objects in space cause the content of perceptual experience tout court (as I did in the previous section), because some of the content of perceptual experience is determined by its form alone; regardless of how objects in space affect us, we will perceptually experience them...
But this appears to bring back the Exclusion problem, precisely the problem my interpretation tried to avoid. We have one set of facts—facts about the material content of empirical intuition, sensation—among the grounds of a second set of facts—facts about the empirical properties of outer objects—which cause the first set of facts to obtain. Even worse, the facts about sensation obtain in virtue of the content of universal experience, which has its content partly in virtue of those very facts about sensation! Not only do we have the Exclusion problem, but we have one set of facts (indirectly) partly grounding itself. This is merely an example; the same problem arises if we take any of the representations lower in the hierarchy (perceptual experiences, perceptions, sensations) to be among the inner appearances that are the causal relata of Empirical Affection.

The Exclusion problem was formulated in terms of causal and grounding relations between facts. Thus, these figures need to be interpreted as asserting relations of causal and metaphysical dependence among facts. The top vertical arrow in figure five asserts a causal relation between facts about outer appearances and facts about inner appearances (call these the A-facts). The previous paragraph showed that if the A-facts about sensation (the facts causally grounded in outer appearances) are identical to the facts about sensation that partly indirectly ground the content of universal experience (call them the B-facts), then the Exclusion problem arises. But it might be that A-facts and B-facts are distinct sets of facts about sensations. So we might have one and the same set of sensations, and two different sets of facts about them: one set of facts that is caused to obtain by outer appearances, and a distinct set of facts that partly ground the content of empirical intuition and, indirectly, the content of universal experience.

I will now argue that this is the case: no A-fact is a B-fact, and vice versa. The A-facts about sensations are facts about the empirical properties of sensations, or, equivalently, about the material sensory content of empirical intuition. The B-facts about sensations are facts about the sensory content of empirical intuition that is taken up and consciously apprehended in perception; the sensory matter of empirical intuitions that is not consciously apprehended is not part of any perception and thus plays no role in grounding the content of universal experience. The B-facts about sensations are thus facts about the material content of empirical intuition, insofar as this material content is apprehended in what Kant calls “perception” [Wahrnehmung]. This shows two things. First, the B-facts are not facts about all sensations, only about those that are apprehended consciously and thus play a role in perceptual experience and universal experience. This just means we need to focus our attention on the A-facts and B-facts about “conscious” sensation, or, more precisely, the material content of consciously apprehended empirical intuitions. But it also shows that, restricted to these sensations, the A- and the B-facts about them are distinct facts. The A-facts are facts about their actual empirical properties (temporal duration, intensive magnitude, etc.), while the B-facts are about how they seem to subjects (how they are consciously apprehended).

To show that they are distinct sets of facts, it suffices to reiterate a point made in the previous section: it is possible that the properties of sensations as I am aware of them in conscious apprehension will differ from the properties those sensations are represented as having in universal experience. To use the example from the previous section: my introspective awareness of my sensory state may represent it as having a longer or shorter temporal duration than it actually has. I may learn through natural scientific reasoning that my sensory state has different properties than, through introspection, it seems to me to have. To take a slightly different example: the sensory content of my empirical intuition may be more or less intense (as an intensive magnitude, it has a degree) than it seems when I consciously introspect. Consider the following argument:

(1) Let P be a sensory state of a subject S, and F be an empirical property that perceptual experiences can have.

(2) It is possible for the fact [P is F] to obtain while the fact [P seems to be F] does not obtain.
(3) Therefore, the fact \([P \text{ seems to } S \text{ to be } F]\) is not identical to the fact \([P \text{ is } F]\).

(4) A-facts are of the form \([P \text{ is } F]\), and B-facts are of the form \([P \text{ seems to be } F]\).

(5) Therefore, no A-fact is a B-fact.

where \('[p]'\) stands for the fact that \(p\). This argument is simply an application of the principle that if \(x\) and \(y\) are the same fact, then necessarily, \(x\) obtains if and only if \(y\) obtains. The conclusion follows even where both the fact \([P \text{ seems to } S \text{ to be } F]\) and \([P \text{ is } F]\) obtain; because it is possible for one fact to obtain without the other, they are not one and the same fact.

Nonetheless, the properties involved in the A-facts will typically be among the properties involved in the B-facts; my conscious awareness does not massively distort the empirical properties of my sensory states (as it sometimes does the empirical properties of outer objects). However, the reason for this convergence is not that the same set of facts and properties are playing two different roles, thus reproducing the Exclusion problem. The reason for this is the nature of the grounding relationship between facts about how subjects’ sensations seem to them (B-facts) and facts about the content of universal experience. In almost all cases, a universal experience that represents my inner states as being the way I am consciously aware of them is going to be overall more coherent and better justified by the totality of subjects’ perceptual experiences than a theory that represents my inner states differently. This is not always going to be the case; as I have mentioned, in some cases, it will not hold. But this shows that, although the properties involved in the A-facts are going to largely overlap with the properties involved in the B-facts, the A- and B-facts are not identical.

Some readers might object that (2) is false for some values of \(F\); some values of \(F\) have the following property: any sensation that seems \(F\) is \(F\), and vice versa. For instance, if some sensation seems painful, then it is painful. While this seems correct about pain, I don’t think it undermines my argument, for two reasons. First of all, we are primarily concerned with the sensory matter of empirical intuition that, ultimately, determines the material content of perceptual experiences (the “prime matter” of experience, so to speak), because we are trying to leave room for empirical affection: those perceptual experiences are caused to have that sensory matter by outer objects. As my discussion so far has made clear, we are primarily concerned with the sensory matter of empirical intuition insofar as that sensory matter is eventually taken up by consciousness and related to an object, e.g. the redness of an empirical intuition insofar as the perception is a perception as of redness (the “objective” sensation “referred” to the object, in Kant’s terminology).\(^{72}\) This will not include purely “subjective” properties of sensory states, like their painfulness. Secondly, even if there are values of \(F\) for which (2) is false, I would still insist that the facts \([P \text{ is } F]\) and \([P \text{ seems } F]\) are distinct facts. Even if, necessarily, either both of these facts obtain or neither does, it seems clear they are distinct facts: one is a fact about how \(P\) seems; the other is not. I think this is sufficient to defend the argument (1)–(3) against the objection.\(^{73}\)

Substantial textual evidence supports attributing to Kant both conjuncts of double affection: empirical affection and noumenal affection. However, the doctrine of double affection faces several significant problems. Some of these problems it shares with other doctrines that Kant universally held. For instance, it is unclear

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\(^{72}\) Cj, Ak. 5:206.

\(^{73}\) A reader might object: what about the case of the B-fact \([P \text{ seems } F]\) and the A-fact \([P \text{ is } G]\) where \(G\) is the property ‘seems \(F\)?’ That would appear to be a case in which one and the same fact is both an A-fact and a B-fact. However, we need to bear in mind that the properties involved in A-facts are the properties universal experience represents inner appearances as having. I think it is very plausible that the property ‘seems \(F\’\) is not going to be among the empirical properties universal experience attributes to inner appearances; it is highly plausible that universal experience will limit itself to attributing temporal and representational properties to inner appearances, since (on my view, which I have not tried to defend here) it is the idealized psycho-physical theory of outer and inner appearances.
how the doctrine of double affection is compatible with Kant's doctrine that we are, in principle, ignorant of things in themselves. This is a problem it shares with various other Kantian claims about things in themselves, especially the doctrine that they are nonspatial and nontemporal. Furthermore, the doctrine of double affection inherits many of these problems from its more controversial conjunct, noumenal affection. The Exclusion problem, however, is the most significant problem faced by double affection per se. I have argued that the solution to this problem consists in distinguishing the sense of experience in which the empirical properties of empirical objects depend upon “experience” — which I call “universal experience” — from the representational content that is the result of empirical affection, which I identify as sensation.  

List of abbreviations for Kant’s Works (and translations consulted)

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<td>Anthropology</td>
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<td>CPR</td>
<td>Kritik der reinen Vernunft (A:1781, B:1787). Ak. 3 (B) and 4:1–252 (A).</td>
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<td>CPrR</td>
<td>Kritik der praktischen Vernunft (1788). Ak. 5:1–164.</td>
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<td>CPrR</td>
<td>Grundlegung zur Metaphysik der Sitten (1785). Ak. 5:385–464.</td>
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74. I have presented this paper on various occasions over the years, so I would like to thank various audiences and commentators: Ralf Bader and the other members of a workshop at the Eleventh International Kant Congress in Pisa, Italy; an audience at a NAKS Southern Study Group at Tulane University in spring 2011; and Tim Jankowiak, my commentator at the 2011 Pacific APA, as well as Paul Guyer and Michael Friedman, who were in the audience. I would also like to thank all of the people who read and commented on it over the years: Karl Schafer, Colin Marshall, and two anonymous referees for this journal.

On a discovery Über eine Entdeckung, nach der alle neue Kritik der reinen Vernunft durch eine ältere entbehrlich gemacht werden soll (1790). Ak. 8:185–252.


Prolegomena Prolegomena zu einer jeden künftigen Metaphysik die als Wissenschaft wird auftreten können, Ak. 4:253–384.

Prolegomena to Any Future Metaphysics That Will Be Able to Present Itself as a Science (Gary Hatfield, trans.). In Theoretical Philosophy after 1781 (Henry Allison and Peter Heath, trans. and ed.). Cambridge: Cambridge University Press, 2002.