

## Kant on Phenomenal Substance

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**Abstract:** In this paper, I offer a systematic account of Kant's view on 'phenomenal substance'. Several studies have recently analyzed Kant's notion of substance. However, I submit that more needs to be said about how this notion is reconceptualized within the critical framework to vindicate a genuine and legitimate sense of substance in the phenomenal realm. More specifically, I show that Kant's transcendental idealism does not commit him to a rejection of substantiality in phenomena. Rather, Kant isolates a general notion of substance (as ultimate subject) and argues that (i) the relationality of phenomena is compatible with this notion; and that (ii) matter and all its parts are the ultimate subjects of everything existing in space (as what is independently movable in space). I suggest that vindicating a genuine and legitimate notion of phenomenal substance has far-ranging consequences for the interpretation of Kant's empirical realism.

**Keywords:** Kant, substance, space, relational properties, empirical realism.

### 1. Introduction

After long abeyance, several studies have analyzed Kant's notion of substance (e.g. Ameriks, *Kant's Theory of Mind*, 27–83; Bennett, *Kant's Analytic*, 181–201; Friedman, *Kant's Construction of Nature*, 143–54, 311–55; Hahmann, *Kritische Metaphysik der Substanz*; Langton, *Kantian Humility*; Messina, "The Content"; Oberst, "Kant über Substanzen"; Van Cleve, *Problems from Kant*, 105–21). These studies have provided informative perspectives on the various meanings of this notion in Kant's philosophy, on its development from the pre-critical to the critical period, and on its implications for Kant's project as a whole. Despite this renewed interest, a crucial issue remains uncertain to this date. Although the concept of substance plays a central role in Kant's critical project (as one of the twelve categories that make experience possible) and Kant frequently mentions phenomenal substances (*substantiae phaenomenon*, i.e. 'phenomenal substances', e.g. A265/B321; what he also calls "substances in the appearance", *Substanzen in der Erscheinung*, e.g. A181/B225),<sup>1</sup> it is less than clear whether phenomena can be substances, and if so, how they can fulfil this role.

While Kant officially establishes the substantiality of phenomena through transcendental arguments in the *Critique of Pure Reason* (especially via the First Analogy of Experience), further reflection reveals a pressing problem regarding the status of phenomena as substances. More specifically, phenomena seem hardly compatible with the concept of substance that they are supposed to fulfil. Namely, the pure category of substance, according to which substance is 'ultimate subject'. To be an ultimate subject, it seems necessary for something not to depend

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<sup>1</sup> References to the *Critique of Pure Reason* follow the standard A/B pagination. Quotations from the *Inaugural Dissertation*, *Jäsche Logic*, *Metaphysics L<sub>2</sub>*, *Metaphysics Mrongovius*, and *Metaphysical Foundations of Natural Science* are to the volume and page in the *Akademie-Ausgabe*. Translations are from the *Cambridge Edition of the Works of Immanuel Kant*.

on anything else, and therefore to be (in jargon) ‘simple’ or to have ‘intrinsic properties’. However, Kant’s transcendental idealism leads to a form of ‘relationalism’ about phenomenal things, i.e. the view that phenomena are nothing but relations and possess only relational (non-intrinsic) properties.<sup>2</sup> If phenomena are relational things, how can they be ‘ultimate subjects’ in any meaningful sense and therefore genuine substances?

This uncertainty has received attention in the literature. For many, phenomena are simply incompatible with Kant’s category of substance. Interpreters such as Ameriks, Hahmann, and Van Cleve have claimed that nothing in the world of phenomena qualifies as substance *sensu* the pure category—it seems to them that the demand of substantiality is, or can only be, fulfilled at the noumenal level.<sup>3</sup> Since things in themselves can be simple and have intrinsic properties, the latter are also the only things that can qualify as genuine substances. I shall call this view ‘noumenal realism’. A particularly clear proponent of this view is Langton, who bases her conclusion on philosophical considerations and on textual evidence from pre-critical texts and from key passages in the *Critique of Pure Reason*, especially from the Amphiboly.

Noumenal realism has far-reaching consequences for the interpretation of Kant’s philosophy of nature. Since phenomenal substances are mere surrogates or images of substances, this view results in a deflationary account of the ontic status of phenomena. Although a metaphysics of nature that does away with substances is certainly justifiable (for some, it may even be preferable), it is questionable whether it is adequate as an interpretation of Kant’s project of a metaphysics of nature. Kant presents his view on phenomena as a form of ‘empirical realism’ (where it is possible to identify “self-sufficient and persistent” phenomena; A285/B341) and the concept of substance plays a crucial role in his special metaphysics of nature, as evidenced in the *Metaphysical Foundations of Natural Science* (MFNS).

Some scholars, including Friedman, Messina, and Oberst have taken seriously the numerous assertions of phenomenal substantiality that can be found in Kant’s corpus, offering detailed reconstructions of Kant’s view and its development.<sup>4</sup> While recent rehabilitations of phenomenal substances are an important interpretative step towards understanding Kant’s view of substance, I believe that more needs to be done to vindicate genuine substantiality at the level of phenomena. (i) First, one needs to respond to philosophical considerations and textual evidence (especially from the Amphiboly) that may seem to force Kant to accept that phenomenal substances must depend on noumenal substances and thus cannot be genuine substances. (ii) Second, one needs to show how it is possible for something at the level of phenomena to answer to Kant’s notion of substance as ultimate subject, given the relationality of phenomena. In this paper, I argue that Kant’s critical philosophy does not commit him to a rejection of genuine substantiality at the level of phenomena. Instead, I will show, based on

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<sup>2</sup> In the rest of this paper, I follow the literature in using ‘relations’ and ‘relational properties’ interchangeably without committing to any specific account of how the two are related. It is generally agreed that Kant does not clearly distinguish between these concepts; see e.g. Langton, *Kantian Humility*, 34 and Allais, *Manifest Reality*, 222, 248.

<sup>3</sup> See Ameriks, *Kant’s Theory of Mind*, 67; Hahmann, *Kritische Metaphysik der Substanz*, 185; Langton, *Kantian Humility*, 54; Van Cleve, *Problems from Kant*, 120.

<sup>4</sup> See Friedman, *Kant’s Construction of Nature*, 143–54; Messina, “The Content”; Oberst, “Kant über Substanzen”.

textual evidence and philosophical considerations, (i) that the relationality of phenomena is compatible with Kant's genuine notion of substance (as *ultimate subject*); and (ii) that matter and all its parts fulfil this notion (as what is *independently movable in space*). I suggest that this analysis illuminates key aspects of Kant's empirical realism.

In what follows, I will offer a systematic account of Kant's critical views on phenomenal substance. First, I review Kant's various conceptions of substance in the critical period (section 2). I then introduce a powerful objection to the claim that phenomenal substances are genuine substances based on what I shall call the 'internalist principle' (section 3). In section 4, I take a closer look at an argument Kant provides in the *Amphiboly* against this principle and, in section 5, I defend my reading of Kant's argument from possible objections. I then explore Kant's positive treatment of matter as substance in MFNS (section 6). Finally, I conclude by drawing some implications for his empirical realism (section 7).

## 2. Concepts of 'substance'

In this section, I wish to offer a brief overview of the various concepts of substance employed by Kant in the *Critique of Pure Reason*.<sup>5</sup> In his transcendental project, 'substance' plays a privileged role as one of the twelve categories or "ancestral concepts" of the understanding (A81/B107). More specifically, substance is the first category of relation ("of Inherence and Subsistence; *substantia et accidens*"; A80/B106). As is well known, categories are meant to correspond to the basic functions of thinking that Kant lists in his Table of Judgements. The category of substance corresponds to the logical relation "of the predicate to the subject" (A73/B98). Kant's category of substance thus continues the long tradition in Western philosophy (from Aristotle to Wolff) that conceives of substance in terms of 'subject'. Following a fairly established terminology in the literature (introduced by Bennett, *Kant's Analytic*, 182–4; see also Van Cleve, *Problems from Kant*, 106), I refer to this notion of substance as *substance 1*: something that is a subject and not a predicate.

Two clarifications are in order. First, the logical derivation of this notion of substance might seem to limit the scope of Kant's definition of substance 1 to the domain of judgments. But this is not necessarily the case. For the present purposes, suffice it to say that 'subject' in this highly abstract sense means a bearer of predicates (which is not itself a predicate), where 'bearer' can be both a logical subject (in a judgement) and an existing thing; and 'predicates' can be both conceptual marks and ontic features of it.<sup>6</sup> Second, Kant usually qualifies substance 1 as what must exist as a subject and never as a predicate (see e.g. A242/B300). But in other passages, he uses weaker formulations: "something that could exist as a subject but never as a mere predicate" (B149), "something that can be thought as a subject (without being a predicate of something else) (A147/B186), and he even says: "of any thing in general I can say that it is a substance, insofar as I distinguish it from mere predicates and determinations of things" (A349).

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<sup>5</sup> For more exhaustive treatments of the various conceptions of substance and its properties or powers see Bennett, *Kant's Analytic*, 181–201; Langton, *Kantian Humility*, 48–56; Messina, "The Content"; Van Cleve, *Problems from Kant*, 105–21.

<sup>6</sup> For a similar observation see Allison, *Kant's Transcendental Idealism*, 149.

It therefore seems appropriate to distinguish between a modally weak and a modally strong version of the definition of substance 1.<sup>7</sup>

*substance I<sub>weak</sub>*: a substance is something that *can* be a subject and not a predicate.

*substance I<sub>strong</sub>*: a substance is something that *must* be a subject and never a predicate.

These two definitions have very different extensions. For while one can concede of anything that it can be subjects (relatively to something else), substance I<sub>strong</sub> is a much harder criterion to fulfil. Relatedly, one can talk of substance as subjects in merely relative terms or as ‘absolute’ or ‘ultimate’ subjects of predication. Given that substance I<sub>weak</sub> is an extremely concessive concept of substance (*anything* can be substance), I take substance I<sub>strong</sub> to be Kant’s genuine notion of substance.<sup>8</sup>

Substance 1 (in its two modal versions) is not the only concept of substance that can be found in Kant’s system. Kant attributes different characterizations to substances at the level of phenomena and noumena. Phenomenal substantiality corresponds to the schematized category of substance. The schema of the pure category of substance, i.e. the “sensible determination” (A147/B186) that allows us to apply the category to appearances, is “the persistence of the real in time” (A144/B183):

Therefore in all appearances that which persists is the object itself, i.e., the substance (*phaenomenon*).  
(A183–4/B227)

In the Postulates of Empirical Thinking in General, Kant claims that we can only establish the objective reality of the categories through outer intuitions (B291). In the specific case of substance, the reality of the persistent in time is established via the intuition in space of matter (*ibid.*)—a connection Kant later clarifies in the MFNS. Again, following established terminology, I shall call this conception *substance 2*: something that persists in appearance.<sup>9</sup>

To these two notions we must add a third. This third notion is noumenal substance, i.e. the notion of substance that Kant often uses to qualify substances at level of things in themselves.

As object of the pure understanding ... every substance must have inner determinations and powers that pertain to its inner reality. (A265/B321)

Substances in general must have something inner, which is therefore free of all outer relations, consequently also of composition. The simple is therefore the foundation of the inner in things-in-themselves. (A274/B330)

Although noumenal substance is usually conflated with substance 1, note that it contains a characterization (possession of intrinsic properties, i.e. simplicity) that does not appear in either

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<sup>7</sup> This has also been noted by Allison, *Kant’s Transcendental Idealism*, 148–9.

<sup>8</sup> This is a common assumption. Bennett and Van Cleve just take substance 1 to correspond to substance I<sub>strong</sub> (Bennett, *Kant’s Analytic*, 183; Van Cleve, *Problems from Kant*, 106). My approach differs from Allison who takes substance I<sub>weak</sub> to be strong enough for the purposes of the First Analogy (*Kant’s Transcendental Idealism*, 148).

<sup>9</sup> See e.g. Bennett, *Kant’s Analytic*, 182 and Van Cleve, *Problems from Kant*, 106.

version of substance 1. I therefore agree with Messina (“The Content”) that noumenal substantiality must be distinguished from the pure category of substance (or substance 1). Like substance 1, noumenal substance does not appeal to a schema (it is likewise ‘unschematized’), but it has a more specific content which “arises in conjunction with the thought of what Kant calls a positive noumenon” (“The Content”, 3). Namely, it is the notion of substance that derives from thinking of things in themselves in purely conceptual or intellectual terms.<sup>10</sup> Let’s call it substance 3: something that does not result from composition and has intrinsic determinations or properties. In a word, something that is “simple” (a typical example of simple substances being the Leibnizian monads).

If substance 1<sub>strong</sub> is Kant’s genuine notion of substance, we need to understand whether substance 2 and substance 3 can fall under it. In the case of noumenal substance, the answer is relatively straightforward. As a specific unschematized concept of substance 1, substance 3 qualifies as genuine substance—it fulfils the strong version of substance 1 because simple substances are the kind of substances that our intellect thinks as things that are not predicated of anything else.<sup>11</sup> The much more controversial question is whether substance 2 can be regarded as substance 1<sub>strong</sub>. One can legitimately argue that phenomenal substances are subjects in some sense.<sup>12</sup> But I also think that an opponent of this view has good reasons to resist the claim that phenomenal substances are genuine substances. What is not clear is how something persistent in appearance (phenomenal substance) can be an ultimate subject (i.e. a subject that is never a predicate). In other words, the fact that substance 2 falls within the definition of substance 1 does not tell us whether it is something that cannot be predicated of anything else. But without such a specification, it is questionable whether Kant is availing himself of any genuine notion of substantiality. In fact, as I will show in the next section, scholars dispute this claim.

### 3. The internalist principle

One influential opponent of the view that phenomenal substances are genuine substances is Rae Langton (*Kantian Humility*). On her account, phenomenal substances are substantiated phenomena (*phenomena substantiata*),<sup>13</sup> i.e. phenomena that are made substances. According to the terminology I introduced in the previous section, phenomenal substances are substances 1<sub>weak</sub>. Phenomenal substances, she continues, are comparable to analogical or figurative substances, such as “the battle”, “the rainbow”, etc. The rainbow is subject of certain properties,

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<sup>10</sup> Whether we can make positive noumena intelligible is a notoriously thorny question. One can find passages to support either a positive (e.g. A440/B648; A525/B553) or negative answer to it (e.g. A287/B343). For a defence of the former see Marshall, “Never Mind the Intuitive Intellect” and Messina, “The Content”; for a defence of the latter see Kohl, “Kant on the Inapplicability”. I assume that it is possible for our categories to represent things in themselves.

<sup>11</sup> For a more exhaustive discussion of this point see Messina, “The Content”, 12–5.

<sup>12</sup> This strategy can be found in Watkins, *Kant and the Metaphysics of Causality*, 351 and Messina, “The Content”, 17.

<sup>13</sup> This term is not found in Leibniz but can be traced back to his philosophy. It appears in Wolff (e.g. *Cosmologia*, §299) and Baumgarten (e.g. *Metaphysics*, §193). The term usually denotes something that is regarded as substance. Kant sometimes uses this term with the same meaning (e.g. R4494). In this paper, I distinguish *phenomena substantiata* from ‘phenomenal substance’, which I take to refer to phenomena as substances, not merely as surrogates of substances.

but it is itself predicated of more fundamental phenomena. One could say, still somewhat figuratively, that rain is the real substance and rainbow is predicated of it (see A45/B63).

Let's briefly assess Langton's position. She claims that phenomenal substances cannot be included in the concept of substance (i.e. substance as ultimate subject or substance 1<sub>strong</sub>; see e.g. *Kantian Humility*, 54) since they must be predicated of something else. But why is this the case? Phenomenal substances cannot be substances because they do not pass the test of 'loneliness':

A substance is a thing that can exist absolutely, independently of its relations of other things. A substance is the kind of thing that can exist on its own: it can exist and be lonely. But nothing can exist without having properties. If a substance can exist on its own, it must have properties that are compatible with its existing on its own. If a substance can be lonely, it must have properties compatible with loneliness. So a substance must have intrinsic properties. (Langton, *Kantian Humility*, 19)

Substances can pass the test of "loneliness" only if they have intrinsic properties, i.e. properties compatible with their existence on their own. Formalizing this criterion requires some qualification. Langton's account builds on Kim's definition of intrinsic property (as interpreted by Lewis).<sup>14</sup> Kim defines an intrinsic property as a property that an object *x* can possess without coexisting with any (i.) contingent object (ii.) wholly distinct from *x*; (i.) allows for the property of an object to count as intrinsic even if *x* coexists with some necessary object, such as God; given (ii.), a property of *x* is intrinsic if *x* is accompanied by an object with which it shares parts. For example, being heavier than all of *x*'s parts counts as an intrinsic property of *x* since *x* can possess it without coexisting with wholly distinct contingent objects.

For Langton, the above definition is a good approximation of Kant's, although—quite importantly—the word 'wholly' should be omitted from it. Part-dependent properties are not intrinsic because they are regarded as dependent on distinct things, i.e. the parts of an object (*Kantian Humility*, 18, 75). But if a property depends on distinct things, it cannot be lonely for Kant. In other words, Kant's version of intrinsicness excludes any possible relation to wholly or partially distinct things: it is a concept that "signifies no relation but merely inner determinations" (A283/B339).

Phenomenal substances do not possess properties compatible with loneliness so defined. Kant often remarks that phenomenal substances possess only relational properties. Kant, for example, writes:

In an object of the pure understanding only that is internal that has no relation (as far as the existence is concerned) to anything that is different from it. The inner determinations of a *substantia phaenomenon* in space, on the contrary, are nothing but relations, and it is itself entirely a sum total of mere relations. (A265/B321)

Matter is *substantia phaenomenon*. What pertains to it internally I seek in all parts of space that it occupies and in all effects that it carries out, and which can certainly always be only appearances of outer sense. I

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<sup>14</sup> See Kim, "Psychophysical Supervenience" and Lewis, "Extrinsic Properties".

therefore have nothing absolutely but only comparatively internal, which itself in turn consists of outer relations. (A277/B333)

If all the properties of phenomena are relational, it follows, on Langton's account, that they are not genuine substances. Let's take stock here. Langton claims that a substance must pass the test of loneliness. To pass the test of loneliness, something must exist independently of relations to other things, i.e. it must possess intrinsic properties. I take the relation between loneliness and intrinsicness to be analytic. To be lonely implies possession of intrinsic properties. What deserves further attention is the initial conditional: something is a genuine substance only if it passes the test of loneliness. It is not obvious how one might try to argue from something's not being a substance in the sense of not being lonely that it cannot be a genuine substance.<sup>15</sup>

What justifies the assertion that only lonely substances can be genuine substances? Recall that, for Kant (and for Langton too), to be a substance means to be an ultimate subject, i.e. something that cannot be the predicate of anything else. Langton thus claims that only things that are lonely and possess intrinsic properties are not predicated of anything else. Or, conversely, non-lonely things, i.e. things that possess relational properties, are predicated of the intrinsic properties of things. Since inherence (the relation between predicate and subject) is an instance of grounding,<sup>16</sup> Langton is making the following (apparently plausible) assumption:

relational properties must be grounded in the intrinsic properties of things.

I call this assumption the 'internalist principle'. In other words, to be a genuine substance is to possess intrinsic properties since, according to the internalist principle, to possess relational properties would make something depend on the intrinsic properties of things, and the grounding relation between a relational property and an intrinsic property is that of inherence.<sup>17</sup> The internalist principle is therefore a necessary condition of the loneliness test for substantiality. And if this principle and the identification of the grounding relation with inherence are correct, Langton would be right to say that phenomena cannot be genuine substances.

Importantly, if phenomena are not genuine substances, Kant's metaphysics of nature cannot include substances as objects of empirical investigation. Langton introduces a degree of "seriousness" in taking something as a subject so that the ways in which 'battle', 'rainbow', or 'matter' are taken as substances can be distinguished (*Kantian Humility*, 55). In particular, matter plays a privileged role among *phenomena substantiata* in virtue of its persistence in time, which allows it to serve as a relative subject for the other phenomena (ibid. 56–7). Despite this

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<sup>15</sup> I thank an anonymous referee for urging clarification on this point.

<sup>16</sup> I take 'grounding' to mean a general relation of metaphysical dependence. For further discussion see Willaschek, "Kant on the Sources", 73–83.

<sup>17</sup> Note that one might accept the internalist principle without committing oneself to the claim that the grounding relation between relational and intrinsic properties is that of inherence. I take this to be Allais's position (*Manifest Reality*). She does not deny phenomenal substantiality (although she does not focus on it and claims that substantiality is just a terminological problem in Langton's account; 233 n. 3). However, also note that from the acceptance of the internalist principle follows that phenomena are not ontologically fundamental since they must be grounded in things that possess intrinsic properties.

differentiation, however, all phenomena remain mere “pictures” of ultimate subjects (ibid., 60).<sup>18</sup>

Note that these claims are by no means peculiar to Langton. That genuine substances can only be found in things possessing intrinsic properties is a widespread claim in the literature and can be found, as I mentioned in section 1, in Ameriks, Hahmann, and Van Cleve. Although scholars do not explicitly discuss what I have called the internalist principle, they seem to rely on some version of it to justify their claims.<sup>19</sup> In the recent literature, Allais provides the most extensive defense of the internalist principle (*Manifest Reality*, 231–58). Note also that the result that phenomena are not genuine substances does not depend on the assertion that noumena are indeed genuine substances. Langton argues for this strong thesis (*Kantian Humility*, e.g. 20), but one can hold the weaker claim that only noumenal things possessing intrinsic properties would pass the loneliness test.<sup>20</sup>

In what follows I will criticize this result by questioning the textual and philosophical cogency of the key assumption on which this result is based, namely the internalist principle. I will do this by first taking a closer look at a key argument in the Amphiboly of concepts of reflection. My reading of the argument shows that Kant has conceptual resources to defend the claim that phenomenal substances are genuine substances.

#### 4. Kant’s argument in the Remark to the Amphiboly

The Amphiboly is often quoted to support the internalist claim that the properties of phenomena are grounded in intrinsic properties of objects. Langton (*Kantian Humility*) and Allais (*Manifest Reality*) make extensive use of this text, while acknowledging that it contains difficult and ambiguous passages. One of its main difficulties is to clearly draw a line between Kant’s reconstruction of Leibniz’s positions and his own critical views. My purpose in this section is not to offer an exhaustive interpretation of the text but to isolate an argument appearing in the Remark, which, if correctly reconstructed, I take to cast serious doubts on Kant’s acceptance of the internalist principle. Interpretation of the key premises of the argument and a discussion of possible objections to my reading will be in order.

In short, Kant is objecting to (what he takes to be) Leibniz’s principle that “whatever is not contained in a general concept is also not contained in the particular ones that stand under it” (A281/B337). Kant does accept that whatever pertains to a general concept also pertains to what that concept contains. Whatever ‘mammal’ contains is also contained by the particulars that

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<sup>18</sup> Cf. Friedman, *Kant’s Construction of Nature*, 169–70 n. 108.

<sup>19</sup> “Ultimately, schematized or phenomenal substance can’t be a kind of substance for Kant, because it is essentially relational whereas genuine substances are essentially non-relational” (Ameriks, *Kant’s Theory of Mind*, 67); “eine Substanz kann nicht nur aus Verhältnissen bestehen. Jede Substanz muss etwas Inneres haben, wenn sie für sich bestehen soll” (Hahmann, *Kritische Metaphysik der Substanz*, 177); “appearances are virtual objects. Virtual objects are logical constructions out of perceivers, and perceivers are noumenal beings. But logical constructions are precisely modes and not substances—they are adjectival on the entities out of which they are constructions” (Van Cleve, *Problems from Kant*, 120).

<sup>20</sup> See e.g. Hahmann, *Kritische Metaphysik der Kausalität*, 177–85, 199.

stand under it.<sup>21</sup> But the converse does not hold. Particulars ‘contain’ more than what is thought in their general concepts. According to Kant, the entire Leibnizian system falls with the rejection of this principle. For example, the Leibnizian principle of identity of indiscernibles, on Kant’s reconstruction, is based on an application of this principle: the principle asserts that if there is no distinction in the general concept of two things, no distinction is to be found among those things either. But this is an unwarranted conclusion for the concept of things abstracts from the conditions of intuition under which particulars are possible at all, for Kant. If we do not abstract from such conditions, a distinction is to be found in the spatial conditions of their intuition (the places they occupy). Let’s take a closer look at how the argument works when applied to the present case.

At A283–6/B339–42, Kant applies this general critique to the specific notion of “inner”—our present concern. The first leg of the argument is meant to conclude from a definition of the concept ‘inner’ and an analytic truth related to it, that everything has “something absolutely internal”, i.e. intrinsic properties grounding its relations:

P1. The ‘inner’ is the concept of the substratum of all relations (*definition*).

C1. If I abstract from all relations, I obtain the concept of something that is absolutely internal, i.e. has only intrinsic properties (*analytic truth*).

C2. In every thing (or substance), there is something that is absolutely internal grounding all relations (*internalist principle*).<sup>22</sup>

C2 corresponds to the internalist principle that interpreters like Langton and Allais take Kant to endorse. Kant further qualifies the ‘something’ postulated by the principle as follows. Since it contains no relation, it is by definition “simple” (A283/B339). Recall that simplicity characterizes the definition of substance 3 introduced above, i.e. noumenal substance. In fact, for Kant, this is the basis for the Leibnizian conclusion that “all things would really be monads”

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<sup>21</sup> Kant’s talk of “general concepts” (*allgemeine Begriffe*) and “particular ones” (*besondere Begriffe*) in the formulation of Leibniz’s principle may be confusing. First, we can observe that for Leibniz there are “incomplete concepts” such as the concept of ‘sphere’, which do not contain all the specific content of complete concepts, such as the concept of an individual sphere (e.g. *Letter to Arnauld*, June 1686). On this basis, one might remark that for Leibniz a general concept is an incomplete concept, and that Leibniz cannot accept the principle as Kant formulates it. However, I submit that what Kant means by ‘general concepts’ in this context is just ‘concepts that are general’, and that he is targeting Leibniz’s doctrine of complete concepts (it would be difficult to understand how the principle could be the central assumption of Leibniz’s system if it dealt with incomplete concepts). Second, in explaining this principle, Kant seems to be using the “particulars” (*Besonderen*), i.e. particular things, and “particular concepts” (*besondere Begriffe*) interchangeably. Kant, however, must mean the former since, for him (in contrast with Leibniz), particulars are given in intuition and cannot be simply equated with concepts. These difficulties arise from the fact that, whereas for Leibniz a complete concept is an individual, for Kant a concept is always general, and intuition must be added to it to cognize any particular. Thanks to an anonymous referee for urging me to make these clarifications.

<sup>22</sup>“(P1) According to mere concepts the inner is the substratum of all relation or outer determinations. If, therefore, (C1) I abstract from all conditions of intuition, and restrict myself solely to the concept of a thing in general, then I can abstract from every outer relation, and yet there must remain a concept of it, that signifies no relation but merely inner determinations. Now it seems as if it follows from this that (C2) in every thing (substance) there is something that is absolutely internal and precedes all outer determinations, first making them possible” (A283/B339). In this and in the following footnote, I have highlighted the portions of the text that I take to correspond to the premises and conclusions above.

(ibid.). It is clear that Kant does not support the inference to monads. But crucially, I suggest that the disagreement with Leibniz starts already in the first leg of the argument. As Kant puts it, C2 only “seems to follow”. He later provides a diagnosis of the mistake:

P2. Things of outer intuitions are given to us only in intuition, i.e. in space.

P3. Space (and what it contains) consists only of “formal or real relations”.

C3. In things of outer intuition, there is nothing absolutely internal grounding their relations (*contradictory of the internalist principle*).<sup>23</sup>

I take C3 to be *prima facie* incompatible with the internalist principle. For it says that at least with respect to some things, things of outer intuition, relations are not grounded in intrinsic properties. But if Kant accepts this result, the internalist principle must be deemed false. Of course, these claims require further defence. I will first explain this leg of the argument and then defend my interpretation from possible objections in the next section.

Let’s first unpack the key premises P2 and P3. Although I cannot provide a full assessment of these claims here, I want to briefly elucidate some aspects of them that are relevant to the present discussion. Starting from P2, as Kant famously puts it in the Aesthetic, “space is a necessary representation, a priori, that is the ground of all outer intuitions” (A24/B38) or what “necessarily grounds outer appearances” (A24/B39). Second, space is not a discursive concept, but a “pure intuition” (A35/B39). As an a priori non-discursive ground space only makes sense “from the human standpoint” (A26/B42), i.e. it is nothing in itself, but rather a subjective, transcendental condition under which humans can be affected by objects. As such, it “comprehends all things that may appear to us externally, but not all things in themselves” (A27/B43).

P3 is more difficult to decipher. For it is much less straightforward that space and everything that it contains consist only of relations. As we have just seen, for Kant space is not an objective entity. Famously, he does not endorse the Newtonian conception of absolute space. But he does not accept the Leibnizian conception of space as the order of relations among things (superadded by our mind) either. As Kant says, space is neither a “property of any things in themselves nor any relation of them to each other” (A26/B42); it is not “the general concept of relation of things in general” (A25/B39). Thus, space for Kant consists in relations in a specific sense. I take this specific sense to be grounded in the non-conceptual nature of space as intuition. For Kant, space can only be represented as a single space, and different spaces are only limitations of it. Spaces are not parts composing the whole. They can only be represented

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<sup>23</sup> “(P2) And this would all be correct, were it not that *something more than the concept of a thing in general belongs to the conditions under which alone objects of outer intuition can be given to us*, and from which the pure concept abstracts... But since something is contained in the intuition that does not lie at all in the mere concept of a thing in general, and this yields the substratum that cannot be cognized through mere concepts, namely *a space (P3) that, along with everything that it contains, consists of purely formal or also real relations*, (C3) *I cannot say that since without something absolutely inner no thing can be represented through mere concepts, there is also nothing outer that does not have something absolutely internal as its ground in the things themselves that are contained under these concepts and in their intuition ... but this necessity, which is grounded only on abstraction, does not obtain in the case of things insofar as they are given in intuition with determinations that express mere relations without having anything inner at their ground*, since these are not things in themselves but simply appearances. (A283–5/B340–1).

*in space*, i.e. by presupposing it as a “whole”. In technical terms, space is what Kant calls an “ideal compositum” (e.g. *Mrongovius*, 29: 825; *L<sub>2</sub>*, 28: 565). A real composite is a composite made of parts that can exist by themselves; in an ideal composite, instead, the whole precedes the parts and makes them possible.

What does it mean that space is an ideal composite? It means, as clearly put by Warren (“Kant and the Apriority of Space”) and Rosefeldt (“Kant on Decomposing Synthesis”), that we cannot represent any finite object without representing it as being *part of space*. For example, to represent a cubic foot, I cannot just represent the points and lines that make up the cube, I also need to represent the space in which the lines are drawn: as Kant puts it, we cannot represent a cubic foot “if not bounded in all directions by the space which surrounds it” (*Inaugural Dissertation*, 2: 402). And note that each part within the whole is not a part in the Leibnizian sense. It is itself a whole that can be divided into further parts. I take this mereological structure to be at the heart of the distinction between Leibniz’s and Kant’s conceptions of space, and key to the resulting relational nature of phenomena. For Leibniz, space is a system of relations that can be reduced to its parts, whereas Kant conceives of space as a whole whose parts and what they contain are irreducibly relational. For this reason, Kant says that space contains “principles of the relations [of appearances] prior to all experience” (A26/B42), and that “corporeal things are still always only relations” (A283/B339). If P2 and P3 hold, C3, the conclusion that there is nothing absolutely internal in appearances, follows. Whenever we look at what is inner among appearances, we cannot but find outer space and further relations.

I have not, however, clarified the most technical part of the argument, namely the difference between “formal” and “real” relations. Following Warren (*Reality and Impenetrability*, 47–8), and further clues Kant gives at other passages, especially A49/B66–7, I take formal relations to be purely spatial (mathematical) relations. These include relations of places (extension), alteration of places (motion), and other spatial relations.<sup>24</sup> The second group of relations concerns what space materially contains. It is plausible to equate them with the categories of relations (inherence, causality, and community) and the predicables resulting from their combination, including power or force (the “laws in accordance with which this alteration is determined (moving forces)”); A49/B67). Importantly, for Kant, real relations depend on formal relations. Formal relations of space are conditions of possibility of real relations in space (B293). For example, Kant argues, the possibility of community of substances in appearances can only be conceived if we represent them in outer intuition (otherwise, no mediation among them can occur without invoking some further entity, such as God; see *ibid.*).

To sum up, the relationality of phenomena is multi-layered and ultimately grounded in the specific mereological structure of the intuition of space. This complex picture, which I have only briefly sketched here and surely requires further elucidation to be exhaustive,<sup>25</sup> should allow to understand why Kant subscribes to a form of ‘relationalism’ concerning phenomena.

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<sup>24</sup> Such as the congruence and ratio of regions of space; see Warren, *Reality and Impenetrability*, 47.

<sup>25</sup> For instance, one may ask why we should regard ‘intensive magnitudes’ (such as ‘red’ or ‘warmth’) as relational at all. A proper reply deserves a separate treatment. Let me briefly note here that very concept of magnitude is, for Kant, related to the logic of parts and wholes (see A169–70/B211–2). Every magnitude is a continuous quantity so that “no part of them is the smallest (*no part is simple*)” (*ibid.*; my emphasis). Recall that for Kant ‘not simple’ is a synonym of relational. Intensive magnitudes are continuous because we can always delimit a greater or lesser

## 5. Saving phenomenal substances

If the diagnosis of the mistake in the Amphiboly is correct, Kant subscribes to two related claims: (i) that outer appearances have only relational properties (and therefore lack intrinsic properties); and (ii) that such relational properties have nothing intrinsic as their ground. Since (ii) is incompatible with the internalist principle, I take Kant to reject the internalist principle as false. However, the latter claim requires further support. For an advocate of the internalist principle could accept (i) and still resist (ii), at least in the way I spelled it out here. Let's take a closer look at the main strategy one could use to reconcile Kant's claims with the internalist principle.

An advocate of the internalist principle may defend this principle by reading Kant's diagnosis of the mistake as merely establishing that phenomena lack intrinsic properties (i). From the fact that phenomena lack intrinsic properties, however, one might argue that it does not necessarily follow that (ii) is true. Although phenomena lack intrinsic properties, their relational properties can still be grounded in the intrinsic properties of *things in themselves*. Textually, one could read the clause 'in things of outer intuition' in C3 above not as identifying a class of things of which the internalist principle is false, but rather as merely demarcating a domain where the internalist principle fails to obtain. This strategy can be found in interpreters such as Langton (*Kantian Humility*, 48–63) and Allais (*Manifest Reality*, 207–30). For Langton, the reason why phenomena lack intrinsic properties is that they are not substances; things in themselves are the genuine substances grounding the relational properties of phenomena. For Allais, (i) does not really challenge the internalist principle since phenomena are not things, but just appearances (*Manifest Reality*, e.g. 242).

What argument can an advocate of the internalist principle use to reject (ii) and claim that the relational properties of phenomena are grounded in the intrinsic properties of things in themselves? I think the best defence of this claim can be found in Allais (*Manifest Reality*, 240–1). As clearly put by Allais, while, for Kant, something's being logically possible does not show that it is really possible, i.e. complying with the conditions of possibility of its reality, something's being logically impossible *does* show that something is also really impossible. Metaphysics should not be read off logic, but logic does inform metaphysics (at least negatively). Apply this to the present case. For Allais, the idea that there are relations without intrinsic properties violates logical possibility; thereby, it is not really possible either. Allais's point is reasonable. For remember, Kant is not objecting to the principle that what pertains to a general concept also pertains to what stands under it. Thus, if it is a matter of general, logical truth that relations presuppose inner determinations, then this should apply to what falls within the concept of that thing too.

While I accept the premises of Allais's argument, I do not think they are correctly applied to the present case. Kant's main point in this section of the Amphiboly is that particulars contain 'more' than their general concepts. Now, if we take the internalist principle to be a logical truth

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degree of a sensation—in other words, we can never reduce a sensation to simple parts. I wish to suggest here (without proper argument) that the continuity of intensive magnitudes underwrites their relational nature.

*simpliciter*, then it would be valid for all objects, whether purely conceptual, such as things in themselves as (positive) noumena, or given in sensible intuition, such as phenomena. But note that what is logically true is not an unrestricted internalist principle. Rather, it is logically true that—conceptually—relational properties are grounded in intrinsic properties of things (see the first premise in the argument for the principle in the Amphiboly: the inner is the ground of all relation “according to mere concepts”; A283/B339). If that is correct, the internalist principle holds for entities whose nature is thoroughly conceptual, but it does not apply, for example, to objects given in sensible intuition.

One might reply, however, that pure concepts of understanding allow us to have insight into how things are in themselves independently of the way in which they are intuited. It is beyond the scope of this paper to provide an account of the relation between pure concepts and things in themselves in Kant, but the following brief remarks should be sufficient for the present purposes. First, in several passages Kant is clearly sceptical as to whether conceptual truths can inform us about what is *true* of things as such. For example, he says:

In fact, even after abstraction from all sensible condition, significance, but only a logical significance of the mere unity of representations, is left to the pure concepts of the understanding, but no object and thus no significance is given to them that could yield a concept of the object. (A147/B186; see also A254/B309)

Kant here denies that mere concepts, unaccompanied by intuition, can have any positive hold on objects. But the internalist principle requires precisely that we *know* that some objects, i.e. things in themselves, have simple, non-relational natures. Note that this does not rule out that Kant accepts weaker epistemic attitudes towards the principle (we may, for example, believe in the principle).<sup>26</sup> Importantly, Kant briefly applies this criticism to the concept of substance:

Thus, e.g., if one leaves out the sensible determination of persistence, substance would signify nothing more than a something that can be thought as a subject (without being a predicate of something else). Now out of this representation I can make nothing, as it shows me nothing at all about what determinations the thing that is to count as such a first subject is to have. (A147/B186–7)

Without sensible intuition, the concept of substance does not tell us anything about the type of determinations that a subject may have. As a result, we cannot conclude and thereby know that things in themselves possess *intrinsic* determinations or properties.

Note that the point made so far is epistemic. Namely, one can argue that, although we cannot know what type of determinations things in themselves have, it may still be the case that things in themselves have intrinsic determinations. If so, it may also be the case that phenomena are to be predicated of them and are not substances, after all. In other words, I have only shown that we don't know the truth value of the internalist principle, not that it is false. While this epistemic point is already sufficient to deny knowledge of the internalist principle and leave conceptual space for phenomena to be regarded as substances, I think Kant is also committed to the stronger claim that the internalist principle is false of phenomena.

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<sup>26</sup> Cf. Messina's claim that we can have conditional justified belief that, if positive noumena exist, they would be simple substances (“The Content”, 19).

For the sake of argument, assume that things in themselves in fact have intrinsic properties. Would we be warranted in claiming that the relational properties of phenomena are grounded in them? I submit the answer to this question must be negative. For to say that relational properties of phenomena are grounded in the intrinsic properties of things in themselves erroneously presupposes transitivity between two different grounding relations. The first grounding relation ( $r$ ) is the one holding between phenomena in space and time, say,  $r_1, r_2, r_3$ , etc. The second grounding relation ( $R$ ) connects things in themselves to phenomena. It is mistaken to think that the kind of relation holding between phenomena and things in themselves (holding outside of phenomena) can be applied to the series of relations holding within phenomena. The two grounding relations ( $r$  and  $R$ ) have different subjects (phenomenal objects vs. things in themselves) and different features (spatiotemporal vs. non-spatiotemporal features). More to the point, as we have seen above, Kant has a specific argument for establishing the relational nature of any property in space. Even if  $R$  is of the internalist kind, this relation would not enter and stop the series of relational properties  $r_1, r_2, r_3$ , etc. This series is regressively relational, given the nature of space, and cannot be grounded in any intrinsic property without conflating two different domains (*pace* the internalist reading).

Let's take stock here. The reconstruction of the argument has shown that Kant does not commit himself to the internalist principle nor to the rejection of the substantiality of phenomenal substances. However, we still need to clarify the positive side of the story, namely in what sense can Kant maintain that phenomenal substance is genuine substance, i.e. something that can only be thought as subject and never as predicate (substance  $1_{\text{strong}}$ )? I will answer this question by taking a closer look at Kant's treatment of matter in the MFNS.

## 6. Matter as substance

As we have seen, Kant defines something that contains no relation "simple" (substance 3). Despite long denying that anything non-simple could be substantial, Kant seems to change his mind in the critical period (see Oberst, "Kant über Substanzen", 15–8). As Kant puts it clearly in the MFNS, matter qualifies as substance even though it is infinitely divisible and therefore not simple. Recall that, on my reading, the relational nature of phenomenal substances is grounded in the specific part-whole structure of space (i.e. a mereological structure where the whole precedes the parts) as something that can always be further limited or divided. Divisibility and relationality are therefore closely related features of substances in space.<sup>27</sup> Kant says:

Matter is divisible to infinity, and, in fact, into parts such that each is matter in turn. (MFNS 4:503)

But all parts of matter must likewise be called substances, and thus themselves matter in turn, insofar as one can say of them that they are themselves subjects, and not merely predicates of other matters. (ibid.)

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<sup>27</sup> For Kant the divisibility of matter (the substance that fills space) follows from the mathematical divisibility of space; see MFNS, 4: 503–4. See Friedman's discussion of the infinite divisibility of matter (*Kant's Construction of Nature*, e.g. 148–54).

These passages suggest that each part of matter must be called substance inasmuch as it is a subject and not merely a predicate of other things. In other words, Kant openly concedes that the notion of substantiality can be applied to infinitely divisible, non-simple parts of matter. What is still unclear is how we can regard matter (and each of its parts) as substance  $1_{\text{strong}}$ . In other words, how can matter (and each of its parts) be an ‘ultimate’ subject, i.e. a subject that can never be a predicate?

Kant finally provides an answer to this question in the Dynamics of the MFNS. There he gives a specific argument showing that matter, as phenomenal substance, meets the requirement of strong substantiality:

[P1] The concept of a substance means the ultimate subject of existence, that is, that which does not itself belong in turn to the existence of another merely as a predicate. [P2] Now matter is the subject of everything that may be counted in space as belonging to the existence of things. For, aside from matter, no other subject would be thinkable except space itself, which, however, is a concept that contains nothing existent at all, but merely the necessary conditions for the external relations of possible objects of the outer senses. [C1] Thus matter, as the movable in space, is the substance therein. (MFNS, 4: 502–3)

P1 consists in the strong definition of the category of substantiality (substance  $1_{\text{strong}}$ ). Inasmuch as matter is the subject of everything in space belonging to the existence of things (P2), it falls within the definition and is therefore substance  $1_{\text{strong}}$  (C1). Note that, crucially, matter is the *only* thinkable existing thing that can act as subject of everything existing in space. But why is this the case? As Kant explains at the beginning of the Phoronomy, since matter is “the object of sensation” in all outer intuition, “every object of outer sense is matter” (ibid., 4: 481). From this, it seems to follow that matter is the subject of everything existing in space, since it is that of which all outer things are, as it were, composed. However, it is still unclear why matter must be the only subject of outer objects. After all, that matter is the object of sensation only establishes that it is the basic component of outer objects—not that it is the ultimate subject of all their predicates.<sup>28</sup>

I agree with Friedman (*Kant’s Construction of Nature*, 147–8) that matter is substance as the “movable in space” (MFNS, 4: 480), which in fact qualifies matter in the conclusion of the argument (C1). To be a genuine substance is to be an ultimate subject of predication; and Kant presents the movable in space as an ultimate subject in some key passages.<sup>29</sup> What remains largely unexplained in the literature is how exactly the movable in space is an ultimate subject.<sup>30</sup> It bears noting that, in the MFNS, movability is the defining characterization of matter—the one to which all other predicates of matter should be “traced back” (4: 476–7). I suggest that

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<sup>28</sup> This gap has been noted by Strawson, *Entity and Identity*, 276–7).

<sup>29</sup> Movability is “the ultimate subject of all accidents inhering in matter” or “the ultimate subject in space (which is in turn no predicate of another)” (MFNS, 4: 541–2).

<sup>30</sup> Friedman only briefly justifies the connection between movability and substantiality with a reference to transcendental idealism and the primacy of form over matter; see *Kant’s Construction of Nature*, 147–8. While I agree with Oberst’s account of how matter supplements the category of substance, his paper leaves unaddressed the relation between substance and the movable (“Kant über Substanzen”, 17).

matter is an ultimate subject as the movable in space because all (phenomenal) predicates can be connected to it as their fundamental basis.<sup>31</sup>

Kant has an obscure explanation for the fundamentality of movability—what is known in the literature as the ‘affection argument’. Roughly put, the argument is meant to show that movability is required for the senses to be affected (which is in turn required by outer experience; see MFNS, 4: 476–7). Some have contested that Kant is here providing a merely empirical argument based on the physiological excitation of outer senses (for a discussion see Watkins, “The Argumentative Structure”). However, there are more convincing ways of defending the argument.<sup>32</sup>

One defense of the affection argument, which is consistent with other claims in this paper, has been put forward by McLear (“Motion and the Affection Argument”). For McLear, the affection argument is enthymemic—for the argument to work, we need to make some implicit premises explicit. First, we need the familiar premise that all properties in space are relational (as we have seen in section 4) and a corollary of this claim, namely that any change in outer sense “is or supervenes on ... a change of spatial relations” (ibid., 4982).<sup>33</sup> Now, for Kant, motion of a thing is nothing other than “change of its outer relations” (MFNS, 4: 482). It follows that any alteration of outer or spatial relations requires motion, and therefore movability. To get to the desired conclusion that affection requires movability we need a final premise. To wit, that affection of outer sense requires alteration of spatial relations, and therefore an external change. With these premises in place, Kant’s affection argument is plausibly valid (at least *prima facie*). Any affection of outer sense, and therefore all phenomenal predicates, can be traced back to the movability of matter.<sup>34</sup>

If the analysis so far is correct, I submit that matter is substance 1<sub>strong</sub> in the following sense:

Material substance is that in space which is movable in itself, that is, in isolation from everything else existing external to it in space. (MFNS, 4: 502)

This definition is univocal between matter as such (since nothing else is external to it in space) and parts of matter (“they are themselves subjects, however, if they are movable in themselves, and thus exist in space outside their connection with other neighboring parts”; ibid., 4: 503).<sup>35</sup>

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<sup>31</sup> I understand the relation between the movable and phenomenal predicates as a supervenience relation.

<sup>32</sup> For Friedman, affection implies movability because being affected presupposes a relation to the embodied subject as a reference frame (*Kant’s Construction of Nature*, 40–5). However, Friedman’s explanation seems to rely on an element (‘body’) that Kant’s analysis does not presuppose at this stage (see MFNS, 4: 480).

<sup>33</sup> This is a premise that, for reasons of space, I cannot evaluate here. Textually, Kant is committed to the claim that all phenomena are relational. However, intensive magnitudes may be more difficult to reconcile with this claim; see Warren, *Reality and Impenetrability*, 50–1 and McLear, “Motion and the Affection Argument”, 4984–6.

<sup>34</sup> I have simplified McLear’s analysis. While this paper is consistent with the basic tenets of his reconstruction of the argument, my approach differs from McLear’s since the latter denies that Kant subscribes to genuine phenomenal substances (“Motion and the Affection Argument”, 4983 n. 9).

<sup>35</sup> It might be objected that parts of matter are mere accidents of matter as such, and therefore not ultimate subjects. I reply that matter (like space) is an infinitely divisible whole. As such, the substantiality of matter is ‘shared’ equally by all its parts. However, one can rightly point out that it does not follow that every part of matter is the

I therefore take Kant's considered definition of phenomenal substantiality at the global as well as local level to be *independent movability*. In the MFNS, Kant thus devises a characterization of substantiality that is compatible with the divisibility of matter and its structural relationality.

Let me conclude this section with a few clarifications. First, while I take independent movability to be Kant's considered view on matter as substance, this is not to be confused with the empirical criterion of substantiality. As Kant puts it in the *Critique*, "action" seems to be a much more usable criterion according to which we can identify substances (A204/B249). In fact, since movability is characterized as possible motion with respect to a reference frame (MFNS, 4: 481), it is not easily identifiable in experience. Second, independent movability is not to be taken as a complete definition of matter as substance. On the contrary, movability counts only as a primary characterization that needs to be further enriched and expanded (as Kant does throughout the MFNS). It is compatible with this characterization, for example, that matter is independently movable (and therefore, substance) only insofar as it has repulsive and attractive forces (see e.g. MFNS, 4: 536). Finally, while Kant applies the definition to matter and each of its parts, it does not immediately follow from this that we can speak of empirical substances such as 'water', 'rocks', or 'chairs'. The argument, if sound, only establishes the substantiality of these objects in purely material terms, i.e. as parts of matter. Some further argument is required to determine the existence of substances in non-material (e.g. chemical, biological, etc.) senses of the term.<sup>36</sup>

According to the analysis carried out so far, Kant preserves a notion of genuine substantiality with respect to phenomena in his critical system. Phenomenal substantiality is not a surrogate of genuine substantiality. Rather, he isolates a general notion of substance (as ultimate subject) and shows that (i) the relationality of spatial phenomena is compatible with this notion; and (ii) matter and all its parts are the ultimate subjects of everything existing as what is independently movable in space.

## 7. Conclusion: Kant's empirical realism

In this paper I have tried to show that Kant conceives of genuine substantiality at the level of phenomena in a way that is compatible with the epistemic and ontological restrictions of his mature philosophy. I will conclude by outlining some implications of my reading. More specifically, I want to emphasize that my reading does justice to Kant's idea that that his philosophy licenses a robust form of "empirical realism" (see, e.g., A371).

First, the proposed interpretation allows us to distinguish Kant's view from 'noumenal realism' about substances, i.e. the view that only noumena can be genuine substances. As I have argued, we fail to know whether noumena possess inner determinations of which relational properties must be predicated. Moreover, even if things in themselves possessed intrinsic properties, it would be unwarranted to presuppose transitivity between the noumenal and phenomenal

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ultimate subject of all predicates, but only that it can be an ultimate subject of certain predicates. Thanks to an anonymous referee for raising the objection.

<sup>36</sup> Strawson denies that there is a plurality of individual things satisfying the condition of permanence (*Entity and Identity*, 270). I maintain that we can talk about phenomenal substances if by that we mean parts of matter that are independently movable in themselves.

worlds. In other words, noumenal realism, even if true, would not jeopardize the substantiality of phenomena.

Second, my reading provides a promising framework for understanding Kant's project of a metaphysics of nature. While doing away with substances is not necessarily an undesirable aspect of a metaphysical account of nature,<sup>37</sup> I doubt that it is an adequate approach to Kant's views in the critical period—especially in the MFNS, where it is hardly deniable that Kant is committed to the substantiality of matter.<sup>38</sup> It is worth noting that Kant has not only a relationalist, but also a mind-dependence view of phenomena. If phenomena cannot be substances, but rather mind-dependent “pictures” of more fundamental entities (to borrow Langton's term; *Kantian Humility*, 60), it is not clear to me how Kant's philosophy can be deemed ‘realist’ *about phenomena* in any proper sense. Admittedly, one could argue that something ‘real’ need not be fundamental (it can, for example, be a relational construction that ultimately depends on things in themselves). But it seems to me that to outsource fundamentality to things in themselves is also to admit that phenomena are not real as such (after all, they are mind-dependent), but they are real insofar as they are grounded in the intrinsic properties of things.<sup>39</sup>

Does this view overreach Kant's epistemic limits? One might argue that the proposed reading leads to a fully relational ontology that leaves no room for epistemic humility. But that would be a hasty conclusion. For Kant is not saying that all properties are relational. He is rather committed to the much more modest (albeit controversial) claim that, given the specific mereological structure of space, anything in space is relational. This is compatible with there being an unknown ground of phenomena and its possibly being non-relational. Kant says:

The transcendental object, however, which might be the ground of this appearance that we call matter, is a mere something, about which we would not understand what it is even if someone could tell us. (A277/B333)

The ground of appearance is a mere something of which we cannot cognize anything. As Kant explains a few pages later, this is the concept of “noumenon” in a merely “negative sense” (A286/B342). It is a problematic concept, i.e. “the representation of a thing of which we cannot say neither that it is possible nor that it is impossible” (A287/B343). The reason for this, roughly put, is that we have no sort of intuition that allows us to represent an “extrasensible object”, nor do we know whether such an intuition is possible at all (*ibid.*). Kant continues:

If the complaints “*That we have no insight into the inner in things*” are to mean that we do not understand through pure reason what the things that appear to us might be in themselves, then they are entirely improper and irrational; for they would have us be able to cognize things, thus intuit them, even without

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<sup>37</sup> An influential contemporary account of nature that does away with substances is ontic structural realism.

<sup>38</sup> Thanks to an anonymous reviewer for encouraging clarity on this point.

<sup>39</sup> For a similar objection to Langton's view as a form of empirical realism see Brewer, “Realism”, 67. I think that these concerns also affect Allais's defense of realism-cum-internalist-principle. While I agree with her account of relational properties in science, her acceptance of the internalist principle leads to the view that “we cannot have a complete, coherent account of the status of appearances without a commitment to things in themselves” (*Manifest Reality*, 231; see also 242–55). It is not clear to me how this view can be regarded as realist *about phenomena* since phenomena, on this account, are not self-sufficiently ‘real’.

senses, consequently they would have it that we have a faculty of cognition entirely distinct from the human not merely in degree but even in intuition and kind, and thus that we ought to be not humans but beings that we cannot even say are possible, let alone how they are constituted. (A277–8/B333–4)

It is “improper and irrational” to complain that we cannot cognize what appearances may be in themselves and, thereby, that we cannot have insight into the “inner in things.” These complaints presuppose the ability or faculty to cognize objects without sensible intuition. Indeed, we would be complaining about not having a faculty of cognition that cannot be human at all, and of which we do not know even if it is possible. To put this point using the terminology I introduced in section 5, we would be confusing two different grounding relations: one is the series of relations holding within phenomena (r); the other is the relation holding between the whole of phenomena and things in themselves (R). We can cognize the empirical series of relations without leaving our finite perspective as human beings, and while remaining epistemically modest about the ultimate determinations of things in themselves.<sup>40</sup>

## Bibliography

### *Primary sources*

Kant, Immanuel. *Kants gesammelte Schriften*. Berlin: Preussischen Akademie der Wissenschaften, 1900–.

Kant, Immanuel. *Lectures on Logic*. Translated and edited by M. Young. Cambridge: Cambridge University Press, 1992.

Kant, Immanuel. *Theoretical Philosophy 1755–1770*. Translated and edited by D. Walford and R. Meerbote. Cambridge: Cambridge University Press, 1992.

Kant, Immanuel. *Lectures on Metaphysics*. Translated and edited by K. Ameriks and S. Naragon. Cambridge: Cambridge University Press, 1997.

Kant, Immanuel. *Critique of Pure Reason*. Translated and edited by P. Guyer and A. Wood. Cambridge: Cambridge University Press, 1998.

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MFNS = Kant, Immanuel. *Metaphysical Foundations of Natural Science*. Translated and edited by M. Friedman. Cambridge: Cambridge University Press, 2004.

*Other literature*

Allison, Henry. *Kant's Transcendental Idealism*. New Haven: Yale University Press, 2004.

Allais, Lucy. *Manifest Reality: Kant's Idealism and His Realism*. Oxford: Oxford University Press, 2015.

Ameriks, Karl. *Kant's Theory of Mind*. Oxford: Oxford University Press, 1982.

Bennett, Jonathan. *Kant's Analytic*. Cambridge: Cambridge University Press, 1966.

Brewer, Bill. "Realism and the Nature of Perceptual Experience". *Philosophical Issues* 14 (2004): 61–77.

Friedman, Michael. *Kant's Construction of Nature: A Reading of the Metaphysical Foundations of Natural Science*. Cambridge: Cambridge University Press, 2013.

Hahmann, Andree. *Kritische Metaphysik der Substanz*. Berlin: De Gruyter, 2009.

Kim, Jaegwon. "Psychophysical Supervenience". *Philosophical Studies* 41 (1982): 51–70.

Kohl, Markus. "Kant on the Inapplicability of the Categories to Things in Themselves". *British Journal for the History of Philosophy* 23, no. 1 (2015): 90–114.

Langton, Rae. *Kantian Humility: Our Ignorance of Things in Themselves*. Oxford: Oxford University Press, 1998.

Lewis, David. "Extrinsic Properties". *Philosophical Studies* 44, no. 2 (1983): 197–200.

Marshall, Colin. "Never Mind the Intuitive Intellect: Applying Kant's Categories to Noumena". *Kantian Review* 23, no. 1 (2018): 27–40.

McLear, Colin. "Motion and the Affection Argument". *Synthese* 195, no. 11 (2018): 4979–95.

Messina, James. "The Content of Kant's Pure Category of Substance and Its Use on Phenomena and Noumena". *Philosophers' Imprint* 21, no. 29 (2021): 1–22.

Oberst, Michael. "Kant über Substanzen in der Erscheinung". *Kant-Studien* 108, no. 1 (2017): 1–18.

Rosefeldt, Tobias. "Kant on Decomposing Synthesis and the Intuition of Infinite Space". *Philosophers' Imprint* 22, no. 1 (2021): 1–23.

Strawson, Peter F. *Entity and Identity*. Oxford: Oxford University Press, 1997.

Van Cleve, James. *Problems from Kant*. New York: Oxford University Press, 1999.

Warren, Daniel. *Reality and Impenetrability in Kant's Philosophy of Nature*. New York: Routledge, 2001.

Warren, Daniel. "Kant and the Apriority of Space". *The Philosophical Review* 107, no. 2 (1998), 179–224.

Watkins, Eric. "The Argumentative Structure of Kant's Metaphysical Foundations of Natural Science". *Journal of the History of Philosophy* 36, no. 4 (1998), 567–93.

Watkins, Eric. *Kant and the Metaphysics of Causality*. Cambridge: Cambridge University Press, 2005.

Willaschek, Marcus. *Kant on the Sources of Metaphysics*. Cambridge: Cambridge University Press, 2018.