

Kant on Essence and Nature

Abstract: This paper investigates Kant's account of "real essence" and of a thing's "nature". Notwithstanding their wide negligence in the literature, these concepts belong to the central ones of Kant's metaphysics. I argue that, on the one hand, Kant is in continuity with the Aristotelian-Scholastic tradition of essence. But, on the other hand, he also follows Locke in distinguishing between "logical" and "real" essence. Contrary to recent attempts of aligning real essence with contemporary approaches to essence, I will defend the thesis that Kant equates real essence and (formal) nature, and that real essence has a causal, but no constitutive role. I shall also respond to potential objections and discuss some developments of Kant's views.

For a long time, the notions of "essence" and (formal) "nature" have been largely neglected in Kant scholarship, even though they belong to the key concepts of his metaphysics. The negligence of these concepts, however, is at least in part due to the fact that there is virtually no discussion of it in the published writings; thus it is easy to overlook their significance. For this reason, we have to rely mainly on the remarks in Kant's *Reflexionen* and the transcripts of his lectures. There we find Kant situated between two traditions: on the one hand, he distinguishes, similar to Locke, between "logical" and "real" essence: whereas logical essence is the essence of concepts, real essence is the essence of things. On the other hand, Kant follows Wolff in the distinction of "essence" and "nature": essence is the "principle of being", nature the "principle of becoming". According to a recent interpretative trend, this amounts to a tripartite division of 1. logical essence, 2. real essence, and 3. nature.¹ This interpretation considers real essence akin to contemporary accounts of essence, according to which an essence constitutes what a thing is. Nature, by contrast, is taken to be the first causal ground causal ground or principle of a thing. In this paper, I take issue with this view. On the reading that I shall defend, the division is only twofold, namely between logical and real essence, where the latter is identical to nature. Put briefly, Kant combines Wolff's account of nature and Locke's account of real essence in a subtle and highly original way.

Let me articulate my view in more detail. Setting nature aside for a second, there has been increased interest in essences in contemporary metaphysics², and so it is no wonder that there is sort of a re-discovery of essences in Kant going on. Robert Hanna (2006: 166) conceives of real essence (on the microphysical level) as "a set of unobservable intrinsic non-relational dispositional properties". Sebastian Rand (2012: 116) thinks that "the real essence of an object is the property or set of

¹ See Stang 2016: 234, 239, Massimi 2017: 156f., Messina 2017a: 143f. Rand, on the contrary, appears to equate real essence and nature (see Rand 2012: 131 n. 24).

² See, e.g., Fine 1994a, Zalta 2006, Lowe 2008.

properties of that object picked out by those concepts truly predicated of it in synthetic a priori propositions". Nick Stang, finally, has recently provided a fascinating analysis of essence and nature and their connections to laws and modality. His view on real essence is as follows:

[W]here K is a kind [...] and x is a possible instance of that kind, the real essence of K is the complex of properties possessed by x that ground x's being an instance of kind K. (Stang 2016: 236)

I lack the space to discuss any of these views in detail. But what these authors have in common is that they think that essence consists of essential properties that make an object the thing it is. This is both a fairly traditional and a contemporary understanding of essence. But in the Scholastic tradition it was coupled to another aspect of essence, namely essence as the first ground, or even cause, of its properties. I shall call the former the *constitutive* role and the latter the *causal* role of essence.³ Kit Fine, a contemporary essentialist, claims that the causal role "is denied to any right-minded modern" (Fine 1994b: 19). Nevertheless, I contend in this paper that Kant, even though he may have room to accommodate the constitutive role within his system, only associates the causal role with real essence.

Our discussion of real essence should center around four questions⁴:

- 1) What is the *bearer* of real essence?
- 2) What are the *constituents* of real essence?
- 3) What is *dependent* on real essences?
- 4) What is the *grounding relation* between real essence and the dependent entities?

The best way to outline my interpretation of Kant, however, is by considering a further question:

- 5) Is real essence *identical* to the nature of a thing?

When early modern philosophers before Wolff speak of the "nature" of a thing, as opposed to nature as the sum of material substances, then they mean roughly the same as "essence", although it seems to have stronger connotations to causality. Wolff, however, draws a sharp distinction between "essence" and "nature", where the latter consists of the causal powers of a thing. Kant, on the contrary, inspired by Locke, distinguishes between logical and real essence and equates real essence to nature. So I think that real essence, qua being identical to formal nature, consists of powers and can be a real ground only through them. For this reason, all things that are not substances – including

³ There is also the modal role of essence, which I briefly discuss in sec. 2.4.

⁴ These are the most relevant questions for my purposes at least. There may also be other important questions, e.g., whether essence is alterable, or how much we can know about it.

space, time, and mathematical objects – have neither a real essence nor a nature. My answer to the first four questions is thus, 1) real essence belongs to substances, 2) it consists of powers, 3) the grounded entities are accidents of substances, and, 4) the grounding relation is causal. As a result, the conception of real essence given here fundamentally disagrees with the views of those who think that real essence is different from nature: on my reading, real essence does not have a constitutive, but only a causal role. This does not mean that Kant cannot accommodate the constitutive role within his system – in fact, as I argue in section 3.4, *real definitions* seem to take over this task. Nonetheless, this paper should put pressure on interpretations that attempt to closely align Kant’s views on essence, grounds, etc., to contemporary debates. At the same time, it may also serve as a useful reminder to think anew about the causal role of essences – given the recent revival of powers⁵ and potentialities⁶, it might not deserve the short shrift that Kit Fine gives to it.

The paper will begin with a brief overview of the tradition of essence and nature, focusing on Locke and Wolff, who had shaped Kant’s views on essence and nature most. The second section outlines the distinctions of logical and real essence and of formal and material nature, elucidates some other key metaphysical concepts, and then shows why real essence must be identical to formal nature. In the third section, lastly, I shall respond to a variety of possible objections, which will force me to acknowledge that some aspects of Kant’s account have changed over time.

1. The Historical Background

According to the Aristotelian-Scholastic tradition of metaphysics, the essence of a thing determines what the thing is.⁷ It consists of an “entelechy”, or “substantial form”, which makes it belong to a species. But essence is more than that – it is also the ground and organizational principle of all or at least many properties of a thing.⁸ A classic example is that of an oak tree: while the tree is subject to changes over time, its substantial form determines its development, the forms of the leaves, etc. This picture is commonly associated with final causes and teleology, which makes it unattractive for many philosophers. But note that those are not the only causes that have their ground in an essence. Amongst others, an essence includes efficient causes, the usual kind of natural causes. Therefore, essence has a constitutive as well as a causal role. By being the ground of properties, essence is also important for modal metaphysics in that it determines that some properties belong to a thing by

⁵ See, e.g., Anjum and Mumford 2011, Greco and Groff 2013.

⁶ See, e.g., Vetter 2015.

⁷ In this paragraph, I am generally following Ayers 1991: 18-25, Bolton 1999, Anstey 2011, and Pasnau 2011: ch. 24 and 27.

⁸ See Pasnau 2011: 557ff. for discussion of the two roles of essence. (He speaks of “substantial form”, but this comes to the same because the two notions were usually equated in the 17th century and thereafter.)

necessity, others are consistent with it, and yet others are excluded from belonging to the thing. This account of essence was widely present in the 16th and 17th century.⁹

Locke opposes the Scholastic conception of essence and departs from it in a number of ways. First, he famously distinguishes between *nominal* and *real* essence.¹⁰ Nominal essence consists of ideas¹¹, whereas real essence consists of the “primary qualities” of things, such as solidity and extension.¹² Second, Locke rejects the notion of “substantial form” as “wholly unintelligible” (Locke, E 3.6.10)¹³, and, in contrast to the traditional understanding of essences, Locke’s real essence is contingent and alterable.¹⁴ Third, nominal essence is dependent on the powers of a thing (the “secondary qualities”), and powers are grounded in primary qualities. But, at least at present¹⁵, we have no insight into the connection between powers and primary qualities.¹⁶ For this reason, real essence is to some extent unknowable. Locke’s answers to the four questions should then be: 1) real essence belongs to substances, 2) it consists of primary qualities, 3) it is the ground of powers, 4) we presently do not know how powers are grounded in real essences. The most crucial result, however, is that Locke breaks with the Scholastic view that essences constitute what a thing is, although, to some extent, he retains its causal role.

⁹ See Wundt 1939: 180, Adams 1994: 310, Mercer 2001: 227.

¹⁰ See Locke, E 3.3.15.

¹¹ See Locke, E 3.3.16, 3.3.18.

¹² A quality is “the Power to produce any *Idea* in our mind”, and an idea is “[w]hatsoever the Mind perceives in it self, or is the immediate object of Perception, Thought, or Understanding” (Locke, E 2.8.8). Locke distinguishes between three kinds of qualities (see Locke, E 2.8.10, 2.8.23). Primary qualities, such as extension and figure, are the cause of the ideas which resemble the primary qualities, whereas secondary ones are the cause of those ideas which do not resemble these qualities. So-called “tertiary” qualities (Locke himself embraces them, but has no proper name for them) are powers to change properties in other substances, such as the consistency of wax.

¹³ Kant seems to agree with Locke’s dismissive treatment of “substantial forms”. We find this term only once in a transcript and there it is rejected as inappropriate on the grounds that a form is no substance (M-Mrongovius 29:934f.). Nonetheless, Kant sometimes says that form is the essence of things (see M-L₂ 28:575, M-Mrongovius 29:847) and frequently uses the Scholastic formula *Forma dat esse rei* (“The form gives things their being”) in an aphoristic way (e.g., AT 8:404). However, this mainly refers to the forms of intuition and understanding and has a relation to logical essence at best, but not to real essence. If the reading I offer in this paper is correct though, the conception of a substantial form, insofar as its causal role is concerned, lives on in Kant.

¹⁴ See Locke, E 3.3.19, 3.6.4, 3.6.6.

¹⁵ See Locke, E 4.3.25, where Locke argues that we could understand how powers are grounded in primary qualities if we had knowledge of the microstructure of the objects.

¹⁶ See Locke, E 2.23.8, 2.23.9, 2.23.28, 3.3.18. In contemporary terms, powers must be grounded in “categorical bases”. While this view of powers (or, more generally, dispositions) is widely accepted nowadays, I agree with Massimi (2017: 161 n. 17) that Kant would not subscribe to it and, as I may add, nor would Leibniz or Wolff. See also sec. 2.4.

Leibniz defends the Scholastic account of essence against Locke¹⁷; and although his use of the term “essence” is fluid¹⁸, Leibniz seems to identify essences, or substantial forms, with powers¹⁹. But it is Wolff whose account of essence is the most influential one in the Germany before Kant’s day. Wolff argues that essential determinations (*essentialia*) constitute the essence of an *ens*, which is a possible thing (the most general kind of thing), attributes are those properties of the *ens* that are logically entailed by the essence, and modes²⁰ and relations are the properties that are not entailed by the essence but consistent with it.²¹ So essence is the first ground of the properties of a possible thing.²² For Wolff, 1) essence belongs to possible things (*entia*), 2) it consists of essential determinations (*essentialia*), 3) it is the ground of attributes, 4) the grounding relation is logical.

From this Wolff distinguishes *nature*, which “can be defined [...] by the principles of action and passion that are internal to a thing” (Cosm 145). Nature is thus the sum of the powers of a thing and the first causal ground of everything that happens in the “visible world”.²³ For this reason, Wolff thinks that essence and nature are (or have) different kinds of grounds: essence is the “principle of being”, nature the “principle of becoming”.²⁴ Essence has a ground through the principle of contradiction, nature through powers. Wolff’s account is therefore different from both Locke’s and Leibniz’s. He rejects Locke’s view that powers are grounded in the qualities of a substance, but, unlike Leibniz, he strictly separates nature from essence.²⁵ So the answer to the four questions applied to nature must be 1) nature belongs to substances, 2) it consists of powers, 3) it is the ground of the change of modes, 4) the grounding relation is causal.

¹⁷ For Leibniz’s reaction to Locke, see Jolley 1982, Goodin 1999, Look 2009; for helpful discussion of Leibniz’s account of essence, see Adams 1994, Mercer 2001, Look 2009.

¹⁸ See Adams 1994: 14.

¹⁹ Leibniz appears to think that the essence of a soul is sensation and appetite (see Mercer 2001: 14) and that our conception of substances must be based on this model – even God’s essence consists of his powers (see Leibniz, PPL 315).

²⁰ Modes are non-relational contingent properties.

²¹ For this terminology, see Wolff, LL 64, 65, Ont 143, 146, 148. Leibniz makes similar distinctions, albeit his terminology is different. See Leibniz, VI iii 574, and Adams 1994: 127f.

²² See Wolff, GL 48, GM 33, Ont 143.

²³ See also Wolff, GM 628, GM-C 231. By contrast, Leibniz only occasionally makes a distinction between essence and nature, and in a different way. See Leibniz, DM 28, and Adams 1994: 86-102 for discussion.

²⁴ See Wolff, Ont 874.

²⁵ The exact relationship between essence and nature in Wolff remains unclear though. Watkins argues that, according to Wolff, causal grounds are necessary by virtue of the law of contradiction (see Watkins 2005: 119, 125), which seems to be confirmed by some passages (see Wolff, GM 628, TN 143). However, Wolff also disputes that the essence determines the nature of a thing (see Wolff, GM-C 181, 222, Cosm 143). Ultimately, Wolff’s view might be that, although the essence does not directly determine modes and relations (which are contingent), it does determine the nature. Whether the nature is in itself sufficient to determine modes and relations (which would ultimately make them necessary, given that the nature is determined by the essence) is a question I cannot explore in this paper.

Baumgarten, whose *Metaphysica* was the compendium for Kant's lectures on metaphysics, closely follows Wolff with regard to his account of essence and nature²⁶, and so do other Wolffians. Even Crusius, who was not a Wolffian, presents an account of essence that has some resemblances to Wolff's.²⁷ He explicitly subscribes to the Scholastic tradition when he claims that "[o]ne thus rightly says that form [...] gives things the essence and [...] the ability to be efficacious" (Crusius, ENV 30). The pre-Critical Kant is definitely an heir to this tradition. He praises Aristotle and Leibniz for the view that every body has essential forces²⁸; and although he apparently uses "essence" and "nature" interchangeably in pre-Critical work²⁹, Herder's notes reveal that Kant endorses Baumgarten's distinction between essence and nature³⁰: whilst essence is "what distinguishes the thing from all other things", nature "must contain the real ground of all consequences of it" (M-Herder 28:49).³¹ Admittedly, the same transcript distinguishes between logical and real essence at one point (M-Herder 28:104), which indicates that Kant was already familiar with Locke's views at that time. But he nowhere attempts to deconstruct Wolff's account of essence as he shall do later. Soon after the time Herder attended Kant's lectures though, Kant appears to have lost his Baumgarten-Wolffianism about essence and nature.³²

2. Logical Essence, Real Essence, Formal Nature

In his mature account of essence and nature, Kant distinguishes between "logical" and "real" essence on the one hand, and between "nature" in a "formal" and a "material" sense on the other hand. In this section, I will first present how Kant talks about these distinctions and introduce some further relevant concepts. Then I contend that he equates real essence and formal nature and point out how this frames his account of causality.

²⁶ See Baumgarten, Met 39, 40, 41, 50, 53 for essences and the associated kinds of properties, 311 for the principles of being and becoming, 430, 431, 466 for nature. Baumgarten's account of "nature" is slightly different from Wolff's, for it includes powers plus essence (see Baumgarten, Met 430).

²⁷ Crusius distinguishes between three kinds of essences, namely "metaphysical essence" (Crusius, ENV 17), "logical essence" [*logikalisches Wesen*] (Crusius, ENV 30), and "fundamental essence" [*Grundwesen*] (Crusius, ENV 39). Only fundamental essence is the first ground of other properties, the other kinds of essences are wider. To the fundamental essence belong powers, but also non-causal "existential grounds" (see Crusius, ENV 39). Crusius does not distinguish between what Kant calls logical and real essence, but he sometimes comes close to it (see Crusius, ENV 43, 56).

²⁸ See TE 1:17.

²⁹ See, e.g., GNH 1:333, OPGP 2:131. Moreover, Kant ascribes forces to essences (see OPGP 2:98, 2:107).

³⁰ See M-Herder 28:49.

³¹ Although Kant uses Crusius's term "real ground", he states that his (i.e., Kant's) definition of nature agrees with Baumgarten's. See OPGP 28:49.

³² The first occurrences of Kant's mature, anti-Wolffian account of real essence are in 1769. See in particular R4096 17:414, where Kant identifies real essence with nature for the first time. The reasons why Kant abandons Wolff will be discussed later.

2.1. Logical and Real Essence

Kant once says that “the word *Wesen* is actually an old German word and means as much as ‘being’ [*Seyn*]” (M-Volckmann 28:411). As he points out, however, there are two senses of “*Wesen*” which correspond to two distinct words in Latin (and English as well): *ens* (being, entity) and *essentia* (essence).³³ *Wesen* in the first sense is very common in Kant, but the philosophically more interesting one is the second.³⁴ Generally speaking, essence is “the complex of the inner grounds of all the predicates that belong to a thing” (M-Schön 28:492). But Kant emphasizes that a distinction must be made between *logical* and *real* essence.³⁵ It is clear that this distinction is inspired by Locke, even though Kant uses the term “logical” instead of “nominal” essence. Logical essence is the essence of concepts, whereas real essence is the essence of things. As Locke, Kant accuses the philosophical tradition of having conflated the two kinds of essence. Consider the following passage from a letter to Reinhold:

And so the whole chapter on essence, attributes, etc., does not at all belong to metaphysics (where Baumgarten, together with others, has placed it), but merely to logic. For I can easily find the logical essence, namely that which consists of the first constitutive determinations [*constitutiva*] of a given thing, as well as the attributes, the logically grounded determinations [*rationata logica*] of this essence, through analysis of my concept into all that I think in it; but a human being can of no object cognize the real essence (the nature), i.e., the first inner ground of all that which necessarily belongs to a given thing; e.g., extension and impenetrability constitute the whole logical essence of the concept of matter, namely everything that is necessarily and primitively contained in my and any human being’s concept of it. But cognizing the real essence of matter, the first internally sufficient ground of all that which necessarily belongs to matter, far exceeds all human capacity [...]. (C 11:36f.³⁶)

An important aspect of this letter is that it equates real essence with nature, but let us focus on essence first. Logical essence consists of the essential marks of a concept, and I only need to analyze the concept in order to find out what its marks are and what logically follows from them. Thus, logical essence provides me only with analytic knowledge, but not with synthetic knowledge of

³³ See M-L₂ 28:559, where it is argued that *Wesen* can be either “substance” or “the first concept that I make of a thing” (see also R3528 17:36). The meaning of *Wesen* is usually unambiguous.

³⁴ But even then the words “essence” or “essential” (*wesentlich*) are often used only to point out that something is necessary or crucial. It is not always possible to figure out whether Kant is using “essence” in a specifically philosophical sense. I do not quote passages in which this is unclear.

³⁵ I focus on real essence here; helpful discussion of logical essence can be found in Vanzo 2010. Stang (2016: 234-8), Massimi (2017: 156f.), and Messina (2017a: 143f.) discuss the contrast between logical and real essence in a similar way.

³⁶ See also OD 8:238, L-Jäsche 9:61, R2321 16:314, L-Blomberg 24:116, L-Philippi 24:408f., L-Pölit 24:535f., L-Dohna 24:728, L-Wiener 24:839f., L-Bauch 112ff., L-Hechsel 342, L-Warschauer 562f., M-Herder 28:104, M-Schön 28:492f., M-L₂ 28:552f., M-Dohna 28:629, M-Mrongovius 29:820f. The references contain plenty of definitions of logical essence, real essence, and nature which differ in many details (for example with regard to modal aspects), but basically they come to the same. I lack the space for discussion of their subtle differences.

things.³⁷ For, as is well known, Kant holds that, in order to have synthetic knowledge, I must leave concepts and proceed to something given in intuition. For this reason, logical and real essence can deviate significantly in that logical essence can have marks that are not included in the corresponding real essence, and vice versa. For example, the real essence of matter includes attractive forces, but the logical essence of <matter> does not consist of the mark <attraction>.³⁸ Conversely, while the logical essence is necessary for the concept to which it belongs, the properties expressed by the logical essence may be only contingent for a thing that has these properties – although it belongs to the logical essence of <sphere> that a sphere is not angular, I can first make a sphere out of wax and later on a cube.³⁹ Thus, one cannot infer from logical to real essences, or vice versa.⁴⁰

Real essence contains the first grounds of the properties of a thing. That is, a real essence is necessary, unchangeable and has no further grounds.⁴¹ Every substance has its particular real essence, although particular essences can be of the same kind.⁴² The essence of gold, for instance, can be shared by multiple substances.⁴³ Kant adopts Wolff's and Baumgarten's terminology of "essentials" (*essentialia*), "attributes", etc. – that is, he holds that the constituents of an essence are essentials, attributes are non-essential, but necessary (by virtue of the essence), and modes and relations are contingent, i.e., they are not made necessary by the essence.⁴⁴ However, he also contends that the chapter on essence in Baumgarten's *Metaphysica* belongs to logic and not to metaphysics.⁴⁵ This is surprising because there is no obvious reason why there should only be logical essentials, attributes, etc., but not real essentials and the like – in fact, Kant himself once says that

³⁷ This even holds although we can know that everything to which the logical essence applies must have the marks expressed by the logical essence. For some logical essences may have no objects to which they apply – e.g., there is arguably no really possible thing to which the logical essence of <ghost> pertains.

³⁸ See MFNS 4:509, L-Blomberg 24:116f., also Prel-OD 20:376.

³⁹ See M-Volckmann 28:420. For this reason, Kant says that siliceous earth could change into alumina (see OD 8:236n) and that it might be possible to make gold (see M-Dohna 28:634) because we do not know in its entirety what is grounded by the essence of things.

⁴⁰ We can know some features of particular essences (see L-Blomberg 24:118, M-L₂ 28:553), either a priori when they are "given through pure reason" (L-Philippi 24:408), or comparatively, as far as our experience reaches (see M-Volckmann 28:411f., M-L₂ 28:553, M-Mrongovius 29:821). However, this does not mean, as Stang (2016: 237f.) takes it, that we can know from experience that some properties belong to a real essence. If we could know this, we could know that they belong to the substance with necessity, something experience can never teach us, according to Kant. As I take it, his notion of *comparative* knowledge means that we can know inductively by a certain degree of probability that, e.g., gold is essentially malleable. But we can never know for sure that there are no conditions under which gold is not malleable.

⁴¹ See M-L₂ 28:559. The kind of grounding relation will be discussed below.

⁴² See L-Jäsche 9:61, C 11:36f., L-Blomberg 24:118, L-Philippi 24:408, M-Volckmann 28:411f., M-L₂ 28:553.

⁴³ I am thus sympathetic to Stang's claim that real essences belong to what we nowadays call "natural kinds" (see Stang 2016: 236), although it may be preferable to say that they just *are* natural kinds.

⁴⁴ See OD 8:229, L-Jäsche 9:60f., L-Blomberg 24:113ff., and elsewhere.

⁴⁵ See C 11:36, M-Volckmann 28:411, M-L₂ 28:552, M-Mrongovius 29:820.

real essence belongs to metaphysics⁴⁶. I will argue later that the only constituents of a real essence are powers. Some properties are made necessary by the mere possession of powers, so they could be considered real attributes – for instance, the extension and impenetrability of material bodies is made necessary by repulsive forces⁴⁷. Lastly, there could also be real modes and relations – i.e., properties of a substance that are not made necessary by the substance’s real essence. However, we do not need to take Kant to deny that those metaphysical properties exist. The reason why Kant says that the chapter on essence belongs to logic may just be that the Wolffians’ division of properties into essentials, attributes, and modes and relations is solely based on logical grounds. This would still allow for a corresponding non-logical taxonomy based on real grounds.

2.2. Formal and Material Nature

Just as with essence, there are also two senses of “nature” in Kant. A footnote from the *Critique* reads:

"Nature" taken adjectivally (*formaliter*) signifies the connection of the determinations of a thing in accordance with an inner principle of causality. Conversely, by "nature" taken substantively (*materialiter*) is understood the sum total of appearances insofar as these are in thoroughgoing connection through an inner principle of causality. In the first sense one speaks of the "nature" of fluid matter, of fire, etc., and employs this word adjectivally; conversely, if one talks about the "things of nature," then one has in mind a subsisting whole. (A418f./B446n⁴⁸)

Nature in the adjective or formal sense – henceforth *formal nature* – belongs to substances⁴⁹, and is the “inner principle of causality”.⁵⁰ Qua being the “inner principle of causality”, formal nature is “the first inner real ground of the determinations of a thing” (M-Mrongovius 29:820⁵¹); and fluid matter and fire have different physical properties because they have different formal natures. This

⁴⁶ See M-Schön 28:492.

⁴⁷ See MFNS 4:496ff. One grain of caution though: Kant may think that real attributes (or also modes) would have to be restricted to certain kinds of properties, such as accidents (which inhere in substances). If true, it might turn out that no real attributes would fit in the framework of Kant’s metaphysics because all accidents are the result of contingent causal interaction. If this were the case, it could explain why Kant never speaks of real attributes.

⁴⁸ See also Prol 4:295f., MFNS 4:467, End 8:333n. My reading is similar to Stang 2016: 238ff., Massimi 2017: 156f., and Messina 2017a: 143f., and the discussion of laws of nature in Kant by Watkins (2005) and Kreines (2009) seem sympathetic to such an interpretation. However, arguably none of them are inclined to equate real essence and nature.

⁴⁹ Kant argues that all substances have powers and a nature. See M-Volckmann 28:431, M-L₂ 28:564, M-Mrongovius 29:823, 29:934.

⁵⁰ This may even apply to souls – in *Religion*, Kant speaks of human nature as “the first ground of the adoption of good, or the adoption of evil (unlawful) maxims” (Rel 6:21). The difference to material substances (or also to the souls of animals) would be that human beings can choose their nature freely. I lack the space to discuss this.

⁵¹ See C 11:36, R4095 17:413, M-Schön 28:492, M-L₂ 28:553.

conception of nature clearly corresponds to the accounts of Wolff and Baumgarten. Nature in the substantive or material sense, however – *material nature* – is the set of all substances insofar as they are connected through their inner principles of causality.⁵² (I will ignore material nature in the rest of the paper; when I speak just of “nature”, I am hence referring to formal nature.⁵³)

The parallels to real essence are striking. Not only is nature the first principle of the properties of a thing. Every substance also has its own particular nature, and the natures of different substances can nonetheless be of the same kind.⁵⁴ Moreover, we can know many aspects empirically of, e.g., common salt, when we infer “from the effects we are acquainted with” (M-Volckmann 28:412), but we cannot reach full knowledge of the nature because we cannot know causes from effects.⁵⁵ This sounds so similar to real essences that we have to presume that they are actually the same. Before we can address their relationship, however, we have to consider some of Kant’s key ontological concepts.

2.3. Substance, Ground, Faculty, and Power

Let us begin with substance and accident.⁵⁶ Kant argues that there are two kinds of relation between them:

In addition to its relation as *subject* to accidents (and their inherence), a substance certainly also has the relation to them of *cause* to effects; but the former is not identical with the latter. Power is not that which contains the ground of the existence of accidents (for substance contains that); power is rather the concept of the mere relation of substance to the latter, *insofar* as it contains their ground; and this relation is completely different from that of inherence. (OD 8:224n, see also Tel 8:180n, R3785 17:292, M-Schön 28:510, 28:514, M-L₂ 28:563, M-Mrongovius 29:770)

Thus, inherence and power both are relations between substance and accident. By virtue of a power, a substance is the cause of accidents.⁵⁷ This shows, as Watkins (2005: ch. 4) has argued, that Kant does not have an even-event model of causality, according to which an event (understood as a state

⁵² In the quote, Kant only speaks of appearances, but things in themselves have a nature too (see A845f./B873f.). Also note that there can be material nature in inner (the soul) or outer appearances (see A846/B874, MFNS 4:467).

⁵³ Aside from this, “nature” is often used loosely.

⁵⁴ See R5607 18:248.

⁵⁵ See R5630 18:262, M-Volckmann 28:411, M-Mrongovius 29:820f.

⁵⁶ I do not necessarily take Kant to hold that all properties are accidents; but since he has no worked-out theory of metaphysical properties, it is best to focus on accidents.

⁵⁷ Note that a substance is usually not the sole ground, or cause, of its determinations. Most powers are only contributory grounds (see M-Schön 28:490f., M-Mrongovius 29:817f.), or *concausae* (see M-L₂ 28:572, M-Dohna 28:648, M-Mrongovius 29:844), where multiple substances jointly determine an effect.

of a substance at a certain point in time) causes other events; rather, substances are the cause of accidents by virtue of their powers.⁵⁸

In the above quote, a substance is not only a cause, but also a “ground”.⁵⁹ Kant discusses the correct definition of “ground” at length in his lectures on metaphysics. The result is that “a ground is that through which something is posited determinately” (M-Volckmann 28:401).⁶⁰ More specifically, substances are *real* grounds. For Kant distinguishes between logical and real grounds: whereas a logical ground is a ground of concepts, a real ground is a ground of things, or their accidents.⁶¹ Now it is crucial that all real grounds are *causes*. Causes are not just a species of real grounds because Kant explicitly equates causes with them.⁶² For example, he says “a cause is that which contains the real ground” and is “completely identical with the real ground” (M-Volckmann 28:404).⁶³ Thus, if we apply the definition of grounds to causes, we get: if a cause is posited, a determinate effect is posited through a power.

Lastly, the distinction between *power* and *faculty* is important⁶⁴:

Power is the faculty insofar as it is sufficient for the actuality of an accident. The difference between power and faculty is difficult to determine. A faculty, insofar as it is determined in regard of an effect, is power, and, insofar as it is undetermined, it *becomes* a faculty. Power contains the ground of the actuality of an action; a faculty contains the ground of the possibility of an action. (M-Mrongovius 29:823f., see also R3582-6 17:72-5, R3588-90 17:75-6, M-Volckmann 28:434, M-Schön 28:514f., M-L₂ 28:564, M-Dohna 28:640)

Both power and faculty are relations of grounds to consequences – the former the ground of the actuality of an action, the latter the ground of its possibility. Although a detailed interpretation cannot be given here, the crucial difference between them is that a power is acting (something

⁵⁸ This is not to say that I accept all of Watkins’s views on Kant’s metaphysics of causality. I take a stance on this topic in further work.

⁵⁹ The word “principle” is also often used, or even defined (see M-Schön 28:522), as ground.

⁶⁰ The same (or an equivalent) definition is given in C 11:35, M-Schön 28:486, M-L₂ 28:549, M-Dohna 28:625, M-Mrongovius 29:806. That something is posited through a ground means, I take it, that a consequence is made necessary through it. That a ground posits a consequence *determinately* means that a concrete consequence is posited. By contrast, a consequence posits a ground only *indeterminately*; for it is necessary that, if something is a consequence, it must have some ground, but it is left open what this ground is. See, e.g., C 11:40n.

⁶¹ See OPGP 2:79, OD 8:195, C 11:35, M-Herder 28:11, M-Volckmann 28:403, M-L₂ 28:549, M-Mrongovius 29:807.

⁶² This claim is controversial and I will present a more nuanced interpretation in the next chapter.

⁶³ See also R3500 17:27, M-Herder 28:37, M-Mrongovius 29:809, moreover OD 8:195. There might still be a slight difference between cause and ground because Kant occasionally says that the cause “contains” the ground (see C 11:36, M-Volckmann 28:404). But Kant may then be referring to the substance by “cause” and to its function (with regard to the causal relation) by “ground”.

⁶⁴ The distinction is anticipated by Wolff (GM 117).

happens through the power), whereas a faculty only has the potentiality for acting. As we shall see, powers as well as faculties are causal real grounds.

With these resources at hand, we are now in a position to consider the identity of real essence and nature.

2.4. The Identity of Real Essence and Nature

In many passages, Kant explicitly equates real essence and nature (for instance, in the quoted letter to Reinhold).⁶⁵ And he never (at least not explicitly) distinguishes real essence from nature.⁶⁶

Furthermore, there is no apparent difference between real essence and nature, and we have seen that they have many properties in common: they are real grounds, they are not grounded in anything else, they are particular, although different things can have the same nature/real essence, etc. Thus, by the identity of the indiscernible, real essence and nature should be the same. So it does not come as a surprise that the definitions of real essence and nature turn out to be equivalent. Recall that a common definition of real essence is:

Real essence is the first internal ground of all that which belongs to the thing itself. (M-L₂ 28:553)

And the definition of (formal) nature is:

The general real ground of the determinations that inhere in a thing is nature; thus, that [is nature] through which is determined according to a universal law what belongs to the predicates of the existence of a thing. (R5432 18:180, 1773-8)

The first definition argues that real essence is the first internal ground; and, since real essences cannot have logical grounds, this can only be a real ground. The second definition emphasizes what is connoted to (formal) “nature”, namely that it is connected to laws, but it also holds that nature is the first real ground.⁶⁷ Since real grounds are causal grounds, it follows that real essence and nature are identical.

⁶⁵ See also OD 8:237f., R4096 17:414, R5706 18:331, Prel-OD 20:376, L-Pölitiz 24:536, L-Dohna 24:728, L-Wiener 24:840, M-Volckmann 28:411, M-Schön 28:493, M-Dohna 28:629, M-Mrongovius 29:820f. Plainly, if an identification of real essence with nature is to make any sense, it must be formal nature.

⁶⁶ To be sure, Kant often contrasts “essence” and “nature”, but “essence” can be read as logical essence in these cases (see sec. 3.1).

⁶⁷ It is worth emphasizing that these definitions are representative for many other passages, so Kant does not appear to change his view on the identity of real essence and nature at some point. See the references in the previous sub-sections.

Let us get a clearer picture of how substances are causal grounds. We have seen that power is a relation between substance and accident. Powers belong to a substance essentially.⁶⁸ Some powers are necessarily active, i.e., they are permanently the ground of determinations. Such powers are the forces of repulsion and attraction, of which Kant says that they belong to the real essence of a material substance.⁶⁹ On the contrary, the powers of the soul, such as the powers of imagination and judgment, are not permanently active, so they are at first mere faculties before they can become powers. Some of them are like natural powers, they become active only upon stimulation by another power. This clearly holds for the activity of the understanding with regard to our intuition.⁷⁰ The acts of our will, however, are free, i.e., we determine ourselves and do not need a stimulus to bring our faculty of acting into action. Nonetheless, our faculties to act belong to our nature.

This is just a short sketch of the role of real essence in causality that needs to be spelled out in more detail elsewhere – in particular, I have to explain how causal faculties can be causal grounds of real possibility. But the sketch suffices to see how Kant perpetuates the tradition of essences as first grounds. The essence of a substance consists of its powers and faculties; they determine how a substance acts and reacts, and ultimately what properties it has. So Kant's answer to the four questions is 1) real essence (= formal nature) belongs to substances, 2) it consists of either powers or faculties⁷¹, 3) it is the real ground of determinations of substances, 4) the grounding relation is causal.

Now remember that Wolff's account of essence was that 1) essence belongs to possible things (*entia*), 2) it consists of essential determinations (*essentialia*), 3) it is the ground of attributes, 4) the grounding relation is logical. His account of nature, on the contrary, was that 1) nature belongs to existing substances, 2) it consists of powers, 3) it is the ground of the change of modes, 4) the grounding relation is causal. Although the pre-Critical Kant accepts Wolff's account of essence, the Critical Kant had to abandon it because, on Kant's view, Wolff mixes up the logical with the real realm. Unlike Wolff, Kant distinguishes between logical and real grounds, logical and real modality,

⁶⁸ Nonetheless, God could change the powers by a miracle, so powers are not constitutive for a substance. For discussion of miracles in Kant, see Chignell 2014.

⁶⁹ See MFNS 4:508, 4:509, 4:511, 4:512, 4:514, 4:516. See also Rand (2012: 122-4) and Stang (2016: 251).

⁷⁰ Kant argues that, with regard to perception, the understanding "proceeds unintentionally and necessarily according to its nature" (CPJ 5:187). And when Kant famously argues that "the cognitive faculty" could not be otherwise "be awakened into exercise if not through objects that stimulate our senses and in part themselves produce representations, in part bring the activity of our understanding into motion" (B1), I take it that those faculties of the understanding can only be activated through the affection by an outer object.

⁷¹ Here I disagree with Massimi (2017: 160f. fn. 16), who argues that nature is not identical to powers, but is their ground. One reason why I am forced to reject this is, of course, that the relation between nature and powers would be a non-causal grounding relation. More importantly, Kant says that powers *belong* to a nature (or real essence), not that they are grounded by it. See the references mentioned in fn. 69.

and also logical and real essence. In particular, Kant has to reject 4), that essence is a logical ground, with regard to real essence: since Kant identifies real grounds with causes, he is forced to equate real essence with nature and to hold that only substances have a real essence. For solely substances are real grounds because they alone have powers; and then the way to saying that real essence consists of powers is short. Some subtleties aside, Kant takes Wolff's conception of nature and puts it in the place of real essence.⁷²

But why did Kant not just adopt Locke's account of real essence? Remember that for Locke 1) real essence belongs to substances, 2) it consists of primary qualities, 3) it is the ground of powers (indirectly also the ground of the accidents of things, or of mental "ideas"), 4) we presently do not know how powers are grounded in real essences (i.e., in primary qualities). Both hold that real essence does not have a constitutive role (as the Scholastics and also Leibniz and Wolff have it), but only a causal one. However, there are two crucial points of disagreement with Kant. First, Locke thinks that powers are grounded in primary qualities. For Locke, powers are what one would nowadays call "dispositions", which are grounded in a (presently unknown) "categorical basis", viz., primary qualities. But this would converse the direction of dependency in Kant.⁷³ His view is that substances are the ground of accidents by virtue of powers. For this reason, the very accidents that are the effect of causation cannot be its ultimate ground. Nor would it help to identify some accidents as the real essence of a substance and argue that they, in contrast to other accidents, are not dependent on the powers of the substance, but rather ground the powers. Kant says nothing that could support this interpretation; quite the contrary, the nature of material bodies (and thereby their real essence) consists of the powers of repulsion and attraction and not of determinations that ground these powers.

The disagreement between Locke and Kant about what a real essence consists of might also in part explain another crucial disagreement: Locke holds that real essence is contingent and alterable, whereas Kant considers real essence necessary, unchangeable (unless by God), and the first ground of all other properties. Albeit more elaboration on this would be needed, this shows that Kant is closer to the Scholastics than Locke with regard to the modal role of essence: Locke holds that real essences could be changed by physical causes. Wolff, on the contrary, believes that essences could not at all differ from what they actually are because the essence obtains by virtue of logical relations.

⁷² I do not say that this is how Kant's view has historically evolved, which we cannot know for sure, although the notion of real ground already takes center stage in 1763, namely in the *Beweisgrund* and the *Negative Magnitudes*.

⁷³ Here I agree with Massimi, who points out that Kant is not a "categoricalist" – i.e., he holds that "fundamental natural properties" are "dispositional" rather than "categorical" (Massimi 2017: 161 n. 17).

Kant's view is that the essence of a particular thing could be different, and God might even change it; yet it could not be changed by natural, but only by supernatural causes.⁷⁴

In summary, Kant's conception of real essence combines elements from Wolff and Locke. He agrees with Wolff that nature (= real essence) consists of necessary and immutable causal grounds, and with Locke that a real essence does not make a thing what it is. As a result, Kant retains the causal role, but rejects the constitutive role of essence.

3. Possible Objections

I have argued that real essence and nature are identical in Kant. On an alternative interpretation, however, nature is only the paradigmatic case of real essence, but by no means the only one. Nick Stang, for instance, holds that, with regard to concrete objects, the real essence of a thing is identical to its nature, but abstract (e.g. mathematical) objects have no nature, but only a real essence.⁷⁵ I can imagine four ways to argue for such a view. First, when Kant distinguishes between essence as the ground of possibility and nature as the ground of actuality, he seems to make a distinction between real essence and nature. Second, one may think that not all real grounds are causal, and then the door would be open for thinking that real essence is different from nature because the former could dispense with causal grounds. Third, space and time, along with mathematical objects, could be taken to have a real essence, and, since they have no powers, they do not have a nature, which would reveal that real essence and nature are different. Fourth and lastly, Kant sometimes says that a real definition defines the real essence of a thing, and this may be taken to show that some entities have a real essence, but no nature. I will argue that, while there is a grain of truth in all of these objections, none of them defeats my analysis. By way of doing so, however, it will turn out that some of Kant's views have changed in one way or another.

3.1. Essence as the Ground of Possibility, Nature as the Ground of Actuality

The first challenge of my interpretation comes from the way in which Kant contraposes "essence" to "nature":

⁷⁴ See n. 68.

⁷⁵ See Stang 2016: 239f. Others, as presumably Massimi (2017), might hold that real essence and nature are altogether different.

The first inner ground of that which belongs to the possibility of a thing is essence, the first ground of that which belongs to actuality is nature. (R5705 18:331, 1776-89⁷⁶)

According to this and other passages, essence is the ground of the possibility of a thing, whereas nature is the ground of actuality.⁷⁷ Since “essence”, “ground” and “possibility” are unspecified here, there are two possible readings of the quote. First, one could think that real essence is the real ground of real possibility, as opposed to nature as the cause of actuality. On this interpretation, some objects have a real essence as the ground of real possibility; but other objects also have a nature as the ground of actuality. As a result, there would be a threefold distinction: logical essence as the ground of logical possibility, real essence as the ground of real possibility, and nature as the ground of actuality.⁷⁸

However, some transcripts make it clear that the distinction is in fact only twofold:

One also calls real essence nature. Thus, when I distinguish essence and nature, I distinguish logical from real essence. (L-Wiener 24:840)⁷⁹

While there is no guarantee that this applies to all cases in which essence and nature are contraposed, it encourages an alternative reading of the above passage: logical essence is the logical ground of logical possibility, whereas nature (= real essence) is the real ground (= cause) of actuality. So we have just a twofold distinction, where real essence is both the ground of real possibility and of actuality.⁸⁰ Admittedly, Kant refers to nature only as the ground of actuality, which surely is at odds with my reading. However, all this shows is that he has an inconsistent view concerning a minor point of his account, but not that he did not in fact equate real essence with nature.⁸¹

⁷⁶ See also R4609 17:608, R4839 17:742, M-L₁ 28:211, 28:215, M-Mrongovius 29:933; furthermore, compare MFNS 4:467 to 4:467n. On the basis of this definition, a transcript tells us that it is wrong to define nature as “essential power”, as Reimarus did, for it only follows from the fact that nature is the ground of actuality that it consists of essential powers (M-Mrongovius 29:934).

⁷⁷ I take it that this distinction has been influenced by Wolff’s distinction between grounds of being (which belong to possible things) and grounds of becoming.

⁷⁸ One reason to accept this interpretation could be the fact that Kant speaks of essence as the “first inner ground of that which belongs to the possibility of a thing”, which may seem to tie “inner ground” and possibility to things rather than concepts. However, Kant sometimes connects inner grounds to logical essence (see R5405f. 18:174, R5408 18:175, M-Volckmann 28:411) and may use “possibility of a thing” as shorthand for the logical possibility of the concept that corresponds to the thing (see fn. 103 for the analogous point on logical essence).

⁷⁹ See also L-Hechsel 342, L-Warschauer 563. My reading is confirmed by a number of passages in which “essence” is specified to “logical essence”. See R4095 17:413, R5405 18:174, R5406 18:174, R5408 18:175, R5706 18:331, M-L₁ 28:211, M-Volckmann 28:411, M-Mrongovius 29:820f.

⁸⁰ That real possibility has grounds is argued for by Stang (2016: 198f.). My claim that the grounds of real possibility belong to nature and are therefore exclusively causal is controversial, but I shall defend it in another paper.

⁸¹ Stang thinks that nature is not the ground of actuality, but of what he calls “existence*”, that is, concreteness, as opposed to the abstractness of, say, mathematical objects (see Stang 2016: 238f.). He

The bottom line is that, although Kant distinguishes between essence as the ground of possibility and nature as the ground of actuality, this gives us no reason to assume that real essence be different from nature. For Kant never explicitly distinguishes *real* essence from nature and even declares that, whenever he contrasts essence to nature, he is contraposing logical to real essence.

3.2. Are All Real Grounds Causal?

My answer to 4) was that all grounds of a real essence are either actual causes (by powers) or potential causes (by faculties). However, one may challenge this view by arguing that there are other sorts of real grounds, too⁸²; and if this should turn out true, it would be difficult to resist the temptation of contending that real essences also have non-causal real grounds. From this it would follow that real essence can be different from formal nature because the latter, qua being causal, cannot have non-causal grounds, whereas real essence can have them; and then one might contend that some objects have a real essence, but no nature – consequently, real essence and nature would be different. Although Kant often equates real grounds and causes, one might think that causes are just the paradigmatic case of real grounds, so this allegedly does not rule out that there are other kinds of real grounds as well.⁸³ However, I do not find this approach very promising; for the fact that Kant so often equates causes and real grounds suggests that he really thought that there are no non-causal real grounds.⁸⁴ But one could respond that there are clear counter-examples, so I need to rule such cases out.⁸⁵

therefore thinks that, while real essence is also the ground of abstract objects, nature is only the ground of concrete objects. I agree that Kant, following Wolff, sometimes employs a sense of “existence” that does not mean actuality. (However, I disagree with Stang on what this meaning is. As I read Wolff, “existence” is not concreteness, but the complement to essence. Properties that belong to the existence of a thing are contingent properties not entailed by the essence. But be that as it may.) The problem about this reading is not only that essence as the ground of possibility and nature as the ground of concreteness would not make for a good contrast (which Kant surely intends), but also that Kant often refers to nature as the ground of “actuality” and not of “existence” (see R5705 18:331, R4839 17:742, M-L₁ 28:211, 28:215, M-Mrongovius 29:934). So we have to assume that, whenever Kant connects “nature” to “existence”, he means actuality rather than “existence*”.

⁸² For example, Stang argues that the grounding relation is a “non-logical non-causal asymmetric real grounding relation between mutually necessarily entailing propositions” (Stang 2016: 236). See also Chignell 2012: 650, Massimi 2017: 156ff., Stratmann 2018: 3-7.

⁸³ See Stratmann 2018: 6f.

⁸⁴ In fact, Stang (2016: 146) admits that the pre-Critical Kant has no other model of real grounds than causes.

⁸⁵ There are more potential counter-examples than I discuss below, such as noumenal affection, God’s grounding of possibility, and inherence. I shall give only a brief response to these points here. As for the former two, they have been taken for non-causal grounding relations by a number of Kant scholars, but I think that they are in fact causal (although some sophisticated discussion would be needed to argue for this). Inherence might be considered as a grounding relation because Kant says that substances are grounds of accidents (see Tel 8:180n, OD 8:224n). However, in these passages he distinguishes between inherence and causation as relations between substances and accident, and it seems clear that only the latter involves real grounds, according to Kant. As regards other candidates for non-causal grounding – like, say, composition – I hold that they are at least not real grounds by virtue of essences. For example, even if Kant should think that parts are

One way to argue for non-causal real grounds would be by appealing to Wolff's distinction between grounds (or principles) of being (*rationes essendi*) and of becoming (*rationes fiendi*). As we have seen, this distinction is tied to Wolff's other distinction between essence and nature: grounds of being are grounds qua essence, grounds of becoming are grounds qua nature. Furthermore, Baumgarten argues that grounds of being are grounds of the possibility of a thing.⁸⁶ If it could be shown that Kant endorses the distinction between grounds of being and grounds of becoming, one would have a reasonable case that he must distinguish between real essence and nature as well.⁸⁷ However, aside from Herder's notes of pre-Critical lectures⁸⁸, we only have four passages in Critical transcripts that distinguish between grounds of being and grounds of becoming⁸⁹; and Kant's characterization of grounds of being follows Baumgarten so closely that one must doubt that he in fact accepts this notion and not merely reports it. For the transcripts read that grounds of being are grounds of possibility, without specifying whether "ground" and "possibility" are to be understood in the logical or the real sense.⁹⁰ The same problem occurs when Kant adopts a Wolffian example for grounds of being, according to which the three sides of a possible triangle "are the ground of the three angles" (M-Mrongovius 29:809).⁹¹ So while it is conceivable that Kant embraces the notion of grounds of being in his lectures, it is also possible that he merely reports this notion as a traditional one.

real grounds of the whole (which would have some initial plausibility, but could also be disputed), they are not grounds qua their essences. So I could still claim that all the grounds a substance has by virtue of its real essence are causal.

⁸⁶ See Baumgarten, M 311. In addition, Crusius's distinction of existential grounds and efficient causes apparently is a transformation of the distinction between grounds of being and grounds of becoming. See Crusius, ENV 69, 79, 83b.

⁸⁷ Stang (2016: 208f.) and Massimi (2017: 158) read grounds of being as non-causal grounds qua the essence of a thing.

⁸⁸ See M-Herder 28:37.

⁸⁹ Those are M-L₂ 28:571, M-Dohna 28:648, M-Mrongovius 29:809, 29:844. A peculiar case is the *Critique of Practical Reason*, where Kant refers to freedom as the ground of being of morality (as opposed to morality as the ground of the cognition of freedom, see CPrR 5:4n). It is conceivable that Kant is just adopting the contrast between grounds of being and grounds of cognizing as a familiar one, without making ontological commitments concerning the notion of grounds of being. This is rendered at least somewhat plausible by the fact that his meta-ethical views concerning the ontological status of morality remain quite unclear (as far as I can see). For this reason, this passage should be kept apart from those in the transcripts.

⁹⁰ A further expression that remains unspecified in this way is when *Metaphysics Mrongovius* (29:844) claims that grounds of being are "the ground of possibility and concern the essence of things", which is not at all different from what Baumgarten says. Although it is in principle conceivable that "essence of things" is meant to indicate a real essence, one would need an argument to show that Kant is not merely repeating Baumgarten.

⁹¹ See also M-L₂ 28:571 and Wolff GM-C 16. Crusius (ENV 39) uses it as an example for existential grounds. Stang (2016: 208f.) reads this as an example for non-causal real grounds.

But if the Critical Kant should have ever believed in grounds of being, he retracts his endorsement in his letter to Reinhold by the latest, dating from May 12, 1789.⁹² There he uses the example of the triangle again to illustrate a distinction between “formal” and “material” real grounds⁹³:

In passing, I remark [...] that real ground is in turn twofold, [namely] either the *formal* ground (of the *intuition* of objects), such as, e.g., the sides of a triangle contain the ground of the angles, or the *material* ground (of the *existence* of things); the latter is the reason why one calls that which contains it *cause*. (C 11:36)

Since the example of the three sides of the triangle is the same that formerly has been used in his lectures to illustrate grounds of being (whether as his own conception or not), we can assume that the distinction of “formal” and “material” real grounds is meant to replace the one between grounds of being and grounds of becoming.⁹⁴ Kant has now incorporated grounds of being into his classification of grounds, but holds that mathematical grounds are neither logical nor causal; so he subdivides real grounds into formal and material ones.⁹⁵ However, this is the only passage where Kant distinguishes between two kinds of real grounds, and it is also the only one where he explicitly refers to mathematical objects as “real grounds” and not just as “grounds”. So it should be doubted that this is his considered view. And Kant clearly again changes his mind in preliminary work to *On a Discovery* shortly afterwards:

The ground is either the logical ground (or the ground of cognition) or the real ground of the existence of a thing. The logical ground is either that which rests on the identity with concepts or that which rests on the construction of their concepts [i.e., the construction of the objects of the concepts]. If the ground lies in the construction of a concept, e.g., the ground of the angles in the sides of a triangle [...], then one must not consider it as a ground that lies in the things and differs from the consequence.

⁹² To discuss the temporal relation of the transcripts containing grounds of being to the letter to Reinhold, it is necessary to assess the temporal origin of the transcripts. The Cambridge edition dates *Metaphysics Mrongovius* to 1782/83 (Ameriks and Naragon 1997: xxxv f.) and tentatively dates *Metaphysics L₂* to 1790/91 (see Ameriks and Naragon 1997: xxxii). But Pinder (1998: xiv ff.) convincingly argues that the dates on the transcripts usually do not correspond to the dates of the lectures, and that the possessors of the transcripts are not to be conflated with their authors. So it is a vivid possibility that the respective lectures on which the quotes are based are of earlier origin than Ameriks and Naragon suggest and that even *Metaphysics L₂* predates the letter to Reinhold. *Metaphysics Dohna*, on the contrary, is a peculiar case, as it contains concrete dates of each day Kant lectured. For this reason, it can be dated by certainty to 1792/93 (see Ameriks and Naragon 1997: xxviii). This is later than the letter to Reinhold, but it is striking that the transcript reports the distinction of principles only as a customary one (“One divides principles [...]”, M-Dohna 28:648), indicating that Kant might not, or no longer, endorse it. Even if Kant may have accepted the distinction in the lectures before the Reinhold letter, it seems likely that he did not present it as his own view in the lectures of the 1790s.

⁹³ Stratmann (2018: 5) treats this as Kant’s considered view.

⁹⁴ This is also suggested by the fact that both grounds of becoming and material real grounds are causal.

⁹⁵ Two transcripts present another sort of ground of being, namely the material of physical bodies (e.g., wood and clay as building materials for cities, see M-Herder 28:37, M-Dohna 28:648). This may be tied to Baumgarten (M 311), who refers to grounds of being as the ground of composition. There is no evidence that Kant ever adopts this view.

The logical ground is either that through concepts (discursively) or through the construction of the concepts (intuitively); in both cases, ground and consequence are thought as parts of one and the same representation of an object. (Prel-OD 20:360⁹⁶)

Whereas the sides of the triangle have been an example for formal real grounds in the letter to Reinhold, they now serve to illustrate a specific kind of logical ground, namely one that does not rest on the analysis, but on the construction of a concept. Kant thinks that the sides and the angles of a triangle can only be thought as “parts” of one and the same representation, so they cannot be representations of real grounds. The crucial shift with respect to the Reinhold letter is that, while mathematical grounds still form a third class of grounds, they are no longer real grounds but a species of logical grounds.⁹⁷ As a result, the only real grounds remaining are causes. Whether or not this actually prompted Kant to change his account, he is now in a position to uphold the view he expressed to Reinhold, namely that real essence and nature are identical.⁹⁸ Note that I do not claim that Kant made this account of mathematical grounds his considered view, as he does not repeat this account later. But it shows that Kant abandoned the distinction between formal and material real grounds, which had the apparently unwelcome result that some real grounds are not causal.

In conclusion, although it is not impossible that Kant accepts Wolffian “grounds of being” in his Critical thinking until 1789, the textual evidence for it is scant or dubious. In 1789, Kant transforms grounds of being into “formal real grounds”, which are a non-causal species of real grounds. But soon after that, he changes his mind again and transforms formal real grounds into logical grounds that rest on the construction of a concept, to the effect that all real grounds are causal.

3.3. Do Space and Time Have a Real Essence?

Next, one might worry that space and time have a real essence, but no nature, which would reveal that real essence and nature be different. My answer to question 1) was that nature belongs to substances because they alone can be causally efficacious. Clearly, space and time are not substances.⁹⁹ For this reason, if space and time had a real essence, they could not also have a nature. Kant consistently holds that space and time have an essence, but no nature.¹⁰⁰ However, according to

⁹⁶ See also Prel-OD 20:371, where Kant writes that we cannot distinguish between two types of real grounds because “real grounds of intuition according to their form” are in fact “logical grounds”, although they do not belong to “cognition through concepts”.

⁹⁷ Importantly, this does not mean that mathematical cognition is analytic, for it rests on intuition, which makes it synthetic. Kant apparently thinks that mathematical grounds are logical because they depend on concepts, albeit not on their analysis, but on their construction.

⁹⁸ See C 11:36.

⁹⁹ See, e.g., A39/B56, where Kant warns against taking space and time for Newtonian thing-like “non-entities”.

¹⁰⁰ See MFNS 4:467n, M-Herder 28:49, M-Schön 28:492, M-Mrongovius 29:820, 29:934. In 29:820, the transcript first says that triangles do have a nature, and some lines later that they do not, but the former is an

what I have argued in section 3.1, this should be read as the logical essence of the concepts of space and time.¹⁰¹ But in the same letter to Reinhold in which he distinguishes formal and material real grounds, Kant also speaks of the “real essence of space and time”:

[E]ven *the real essence of space and time* and the first ground of why the former has three, the latter only one dimension, is inscrutable to us; namely for the reason that logical essence is to be cognized analytically, but real essence synthetically and a priori [...]. (C 11:37, emphasis mine)

Therefore, Stang holds that “mathematical objects have essences, but not natures” (Stang 2016: 239).¹⁰² If it were Kant’s considered view that space and time have real essences, my interpretation would indeed be untenable. But this is the same letter in which he accepts formal real grounds, and it is again the only place where the view that space and time have a real essence can be encountered. This time, Kant does not explicitly abandon his view later, but as soon as he stops considering mathematical grounds as formal real ones, he has reason to stop attributing real essences to space and time as well. For, although the relation between space and time and mathematical concepts is not entirely clear, it appears that, as long as Kant holds that mathematical grounds are formal real ones, a putative real essence of space and time would need to include these formal real grounds. But when he gave up this view, he was no longer committed – at least not by considerations on mathematical grounding – to holding that space and time have real essences. Since Kant equates real essence with nature in the letter to Reinhold, he has a clear motivation not to think that space and time have real essences; and so it is no wonder that he never repeats this view later.

3.4. Real Essence and Real Definition

There has been a long tradition of distinguishing between *nominal* and *real definitions* before Kant. Leibniz gives it a canonical form, according to which “the real definition exhibits the possibility of the definiendum and the nominal does not” (Leibniz, VI vi 294f.). Wolff endorses it (LL 191) and concludes that a real definition depicts the essence (GL 48).¹⁰³ Stang argues that Kant connects this distinction to his own between logical and real essence such that “a nominal definition reveals a

obvious typo. In Prol 4:320, Kant ascribes nature to circles, but it seems likely that he was just confused. (For a different interpretation of this passage, see Messina 2017b.)

¹⁰¹ One could object to this that, if my reading were correct, Kant would have to speak of the *concept* of space and of time. For a logical essence belongs to concepts and not to things. But it is quite common in Kant to speak of “logical essences” of things although they, strictly speaking, belong to concepts. See L-Jäsche 9:61, L-Dohna 24:728, M-L₂ 28:553, M-Dohna 28:621, M-Mrongovius 29:820.

¹⁰² See also Messina 2017a: 144.

¹⁰³ See also Meier, Ver 280.

logical essence and a real definition reveals a real essence” (Stang 2016: 234).¹⁰⁴ This is indeed true for *some* passages in Kant, such as in the *Jäsche-Logic*:

Logical nominal definitions of given concepts of understanding are taken from an attribute; real definitions, on the contrary, are taken from the essence of things, the first ground of possibility. The latter thus contain that which always pertains to a thing – the real essence of it. (L-Jäsche 9:144, see R2916 16:575, R2918 16:576, L-Pölitz 24:573, L-Wiener 24:919, L-Hechsel 409ff., L-Warschauer 617f.)

According to this quote, a real essence contains the ground of real possibility, so a real definition can exhibit the possibility of a thing by referring to its essence. But Kant also speaks of real definitions for mathematical, ethical (e.g., virtue), and other abstract objects¹⁰⁵ – if they all had a real essence, they clearly could not at the same time have a nature, which would count against the identity of real essence and nature.

Yet note that Kant only connects real definitions with real essences in texts that, with the exception of *Jäsche-Logic* (which is in this case modeled on earlier *Reflexionen*), are either older *Reflexionen* or transcripts that draw on material from lectures that probably have been given in the 1770s.¹⁰⁶ In the Critical period, on the contrary, we only find versions of a definition of “real definition” that can be found in the *Jäsche-Logic*, too:

Real definitions, on the contrary, are sufficient for the cognition of an object according to its inner determinations in that they exhibit the possibility of the object from inner marks. (L-Jäsche 9:143, see A241n)

This definition of “real definition” dispenses with the notion of “real essence” and therefore allows for real definitions of objects which do not have a real essence.¹⁰⁷ While I cannot give a full account

¹⁰⁴ See also Hanna 2006: 166, Nunez 2014: 648, Messina 2017: 144.

¹⁰⁵ See, e.g., L-Jäsche 9:144. The ontological status of those objects in Kant is anything but clear. Suffice it that they are not mere fictions, but have their place in reality.

¹⁰⁶ Adickes dates R2916 to 1764-9 and R2918 to 1769-71, and the passage from the *Jäsche-Logic* is modeled according to R2918. The respective passages in *L-Wiener* and *L-Hechsel*, as well as those of *L-Pölitz* and *L-Warschauer*, agree with another and have the same provenance (see Pinder 1998: lxiii). Pinder (1998: l ff.) argues that *L-Hechsel* can have been written no later than 1782 and probably no sooner than the late 1770s, but does not rule out that some material in it is of earlier origin. He apparently thinks that the same holds for *L-Wiener* (see Pinder 1998: lii f.). Pinder (1998: lvii) also dates *L-Pölitz* and *L-Warschauer* at roughly the same time, namely ca. 1780, where a probable *terminus ad quem* is again 1782 (see Pinder 1998: lx). Therefore, the *terminus a quo* for the period in which Kant had the view that real definitions exhibit the real essence is 1764, the *terminus ad quem* is 1782. However, since all these lectures possibly draw on even earlier material, it is conceivable that Kant gave up the view soon after he wrote the *Reflexionen*. In any case, the view does not occur in his Critical writings or in reading notes/transcripts (viz., *L-Dohna* and the marginal notes in *L-Bauch*) that are by certainty of Critical provenance.

¹⁰⁷ Similar definitions of real definition are present in all logic lectures, even in those that claim that the object of a real definition is the real essence of a thing. See L-Pölitz 24:573f., L-Busolt 24:658, L-Dohna 24:760, L-Wiener 24:919, L-Bauch 167f., L-Bauch/RT 126 260, L-Hechsel 409f., L-Warschauer 617. Kant also refers to a

of Kant's view on definitions here, I take it that "inner determinations", or "inner marks", are what the constitutive role of essence is usually needed for – the "inner marks" constitute what the object is. For example, the inner marks of a triangle are what it is to be a triangle. Since real definitions "exhibit the possibility of the object from inner marks", they reveal what the object is. So my claim is not that Kant wants to get rid of the constitutive role of essence altogether – he just denies that this role belongs to real essence. To be sure, a real essence can be part of what it is to be an object – the real essence of gold, which consists of its powers, is the ground of its golden color, its malleability, that it does not rust, etc. In this case, one might say that the real essence of gold constitutes the "natural kind" of gold. But what it is to be an "abstract" object, like truth or justice, cannot be constituted by a real essence in the Kantian sense.¹⁰⁸ At least, the fact that the notion of "real essence" is absent from Kant's characterization of real definitions in the Critical period suggests that he was aware of this.

4. Conclusion

I have argued in this paper that Kant perpetuates the tradition of essence as the first ground of properties, by which it has a causal role. This tradition has not only been vivid in the Scholastics, but also in 18th century German philosophy. Kant, however, combines it with Locke's distinction between nominal and real essence and denies real essences a constitutive role. He also holds that real essence consists of the powers of a substance and is thus identical to its nature. The real essence is thus not what a thing is, but rather the causal ground of what the thing is or can ever be. Whether or not Kit Fine is right that this role of essence "is denied to any right-minded modern" (Fine 1994b: 19), it has not been denied to Kant.

One final worry must be addressed: could I not have attributed an overly coherent view to Kant? Can it really be ruled out that he attributes a constitutive role to real essence, even if this conflicts with a number of other commitments he has? To be sure, such skepticism may be warranted in some cases, but probably not here. First of all, it is really difficult to see what the positive case could be that real essence be different from nature. I suspect the main motivation for such a reading stems from a wish to align Kant with contemporary views on essence. But this would come at very serious textual costs. While I have acknowledged some minor inconsistencies and developments of Kant's account, I hope

nominal definition in a somewhat different way as that which makes a word clear (see A241n, L-Blomberg 24:268ff., L-Philippi 24:459f.). But I abstract from this difficulty here.

¹⁰⁸ This should help to prevent a possible misunderstanding. For I do not claim that cognition of objects that lack real essences must be derived from logical essences, but only that synthetic cognition does not always concern real essences. In mathematics, for example, we cognize that the angle sum of a triangle necessarily is 180°, but this is neither cognition of the triangle's putative real essence nor derived from the logical essence of the concept <triangle>.

to have given a well-motivated reading of it that ascribes to him a subtle and nuanced view. Claiming that what Kant says on essence is a mess would make him look like a bad philosopher for no good reason.¹⁰⁹

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¹⁰⁹ [acknowledgments]

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