Kant's Account of Real Possibility and the German Philosophical Tradition

<u>Abstract</u>: Kant's postulate of possibility states that possible is whatever agrees with the formal conditions of experience. As has often been noted, this is a definition of real possibility. However, little attention has been paid to the relation of Kantian real possibility to the German philosophical tradition before him. I discuss three kinds of possibility present in this tradition – internal, external, and (Crusian) real possibility – and argue that Kant endorses internal and external possibility. Furthermore, I show, specifically with respect to the concept of state (*Zustand*), that the three traditional conceptions are reminiscent of three conceptions of real possibility that Kant implicitly distinguishes. Lastly, I argue that, according to Kant, we need experience to prove real possibility (at least as regards the three conceptions of the real possibility of states) because otherwise we could not know whether the formal conditions of experience obtain.

On the face of it, Kant's conception of "real possibility" looks like a radical departure from the philosophical tradition. For his discussion of real possibility occurs within his philosophical project to provide principles and conditions that are constitutive of being an object of experience, rather than metaphysical principles that apply to things directly. For instance, all objects of experience must be in space and time, and every event necessarily has a cause. Kant's discussion of these principles also includes a section on the "Postulates of empirical thinking in general," which establishes principles ("postulates") for possibility, actuality, and necessity. The so-called "postulate of possibility" reads:

Whatever agrees with the formal conditions of experience (in accordance with intuition and concepts) is possible. (A218/B265)¹

-

¹ I quote Kant from the *Critique of Pure Reason* by reference to page numbers of the A and B edition, all other works from the *Akademie* edition by reference to title, volume, and page number. Many translations, especially of transcripts and *Reflexionen*, are my own, although I consulted standard translations. The following abbreviations for titles are used: C = Correspondence, CPJ = Critique of the Power of Judgment, CPrR = Critique of Practical Reason, FICPJ = First Introduction to the Critique of the Power of Judgment, M-x = Metaphysics x (lecture), MFNS = Metaphysical Foundations of Natural Science, NM = Negative Magnitudes, OPGP = The Only Possible Ground of Proof, PM = On the Progress of Metaphysics, Prol = Prolegomena to Any Future Metaphysics, Rx = Reflexion x, Rel = Religion Within the Boundaries of Reason Alone, RT-x = Rational Theology x (lecture). Leibniz, Wolff, Baumgarten, and Crusius are quoted according to paragraphs. The datings of the *Reflexionen* follow Adickes's suggestions in the *Akademie* edition.

As many Kant scholars point out, this is a definition of "real possibility" in its restriction to experience² – whatever satisfies the principles that are constitutive of experience (the formal conditions) is a possible object of experience.

However, while Kant's conception of real possibility is indeed novel, there is more continuity between the philosophical tradition and Kant in this respect than has been assumed. We can see this when we look closely at what it means to fulfill these conditions. There are two crucial points. First, the formal conditions do not affect all ontological kinds equally. For instance, the Second Analogy, which demands that all events are caused, has no significance for substances, which are permanent (qua the First Analogy). As a result, there are different conditions of the real possibility of substances, of events, and so on. For reasons of space, I focus on the concept of 'state' (*Zustand*) in this paper. States are the sum total of accidents at a given point in time and the effect of causal actions. Although my restriction to this entity is somewhat arbitrary, the concept of states occurs frequently in Kant's discussion of causality and involves many aspects of possibility.

Second, I will argue that, when Kant talks about real possibility, he sometimes abstracts from some formal conditions of experience. It is here where the German philosophical tradition before Kant becomes relevant. For I will argue that Kant implicitly distinguishes between three conceptions of real possibility that resemble three important conceptions of possibility before him. Specifically, Leibniz, Wolff, and Baumgarten distinguish between *internal* possibility – the possibility of something "in its own nature" – and *external* possibility, which is the possibility of

² See Schneeberger 1952: 15f., Motta 2012: 49, Kannisto 2012: 107f., Leech 2014: 342, Abaci 2016: 129f., 2019: 183, Blecher 2018: 932. – Some scholars hold that real possibility in its restriction to experience is or may be only a sub-class of real possibility in a broader sense, according to which even things in themselves might be really possible (see Chignell 2014: 574, Stang 2016: 287). Although I am sympathetic to this view, I take no stance on it here, as I am only interested in the narrower sense in this paper.

³ Up to this point, there is barely literature of the connection between Kantian real possibility and the philosophy before him. Even Stang (2016), who considers the German modal metaphysics before Kant in some detail, ignores this aspect. And although Abaci (2019) discusses the impact of Leibniz and Wolff on Kant's pre-Critical conception of possibility, he is silent on their influence when it comes to Kant's Critical views.

something in accordance with actual, contingent causal conditions. Crusius employs the term "real possibility," which stands for a broadly Aristotelian conception of possibility, according to which possibility is grounded in the powers (or capacities) of substances. External possibility resembles what I call a-possibility, which is the real possibility of a state insofar as there can be an action that causes the state. Crusian real possibility is close to c-possibility, which abstracts from the real possibility of an action and only considers whether there are really possible capacities to produce a state. Finally, internal possibility is reminiscent of m-possibility, which abstracts from causality in general (and hence close to internal possibility) and only considers whether an empirical state is really possible with respect to the form and matter of appearances. What makes Kant's account of interest to contemporary readers is that all of these three conceptions of real possibility are meaningful ways of talking about possibility.

I will proceed as follows. Section 1 outlines the implications of Kant's definition of real possibility in terms of formal conditions of experience. Section 2 considers the conceptions of internal, external, and real possibility before Kant. Section 3 discusses Kant's treatment of internal and external possibility in his published and unpublished work. Sections 4-6 consider the different conceptions of real possibility in detail with respect to the exemplaric case of the real possibility of states. Section 7 considers an initially puzzling aspect of Kant's account: he argues that we need experience to prove real possibility – otherwise we could not tell whether such exotic things like ghostly matter, soothsaying, or telepathy are really possible. I will show for each of the conceptions discussed in the previous sections that we need experience to show that the formal conditions of experience are really possible. Section 8 concludes.

1. The Postulate of Possibility as a Definition of Real Possibility

Kant outlines the notion of real possibility by way of distinguishing it from "logical possibility":

The concept is always possible if it does not contradict itself. That is the logical mark of possibility, and thereby the object of the concept is distinguished from the *nihil negativum*. Yet it can nonetheless be an empty concept, if the objective reality of the synthesis through which the concept is generated has not been established in particular; but as was shown above, this always

rests on principles of possible experience and not on the principles of analysis (on the principle of contradiction). This is a warning not to infer immediately from the possibility of the concept (logical possibility) to the possibility of the thing (real possibility). (A596/B624n)⁴

The quote contains ontological as well as epistemological claims about logical and real possibility. Logical possibility is the "possibility of the concept" and a semantic notion; a concept is logically possible iff there is no contradiction in it. Real possibility, on the contrary, is the "possibility of the thing" and akin to 'metaphysical possibility' (in contemporary parlance). Since categories are pure, non-empirical concepts of objects⁵, the category of possibility is the concept of real possibility. 6 Kant argues that real impossibility follows from logical impossibility, whereas logical possibility is a necessary, but not a sufficient condition on real possibility. For, in addition, an object must also agree with "principles of possible experience." By "as was shown above," Kant is apparently referring back to the postulate of possibility. Consider it again:

Whatever agrees with the formal conditions of experience (in accordance with intuition and concepts) is possible. (A218/B265)

Kant emphasizes that "the principles of modality" – that is, the postulates – "are also nothing further than definitions [Erklärungen]⁸ of the concepts of possibility, actuality, and necessity in their empirical use" (A219/B266). This means that the postulates are definitions of the modal categories. 9 As Nunez convincingly argues, the postulates are even real definitions. 10 Real

⁴ See also Bxxvif.n, A243f./B301f., B302f.n, PM 20:302, 20:325, M-Mrongovius 29:811f.

⁵ See A79f./B105, B128, Prol 4:324.

⁶ The modal concepts form the fourth class in the table categories, of which possibility – or, more precisely, possibility and impossibility – is the first (see A80/B106).

⁷ Since these principles belong to transcendental philosophy, Kant sometimes refers to real possibility as "transcendental possibility" (see A244/B302, A610/B638).

⁸ "Erklärung" does not always mean "definition" (see A730/B758), but Kant suggests elsewhere that the postulates are definitions. Compare A244/B302 with A240f./B300, see also Nunez 2014: 644-8, Stang 2016: 265f.

⁹ The qualification "in their empirical use" suggests that real possibility as defined by the postulate of possibility is only a sub-class of real possibility in general; the latter might also apply to things in themselves. But this is not uncontroversial and my paper will be restricted solely to real possibility within the bounds of experience. Nor will I engage with the accounts of real possibility in general that have recently been provided by Chignell and Stang.

definitions "provide a clear *mark*, by which the *object* (definitum) can always be securely cognized" (A241n).¹¹ Therefore, the postulate of possibility must provide necessary and sufficient conditions for real possibility. We can thus define real possibility as follows:

Real Possibility: Something is really possible iff it agrees with the formal conditions of experience.

The formal conditions are the forms of space and time¹² and the principles of pure understanding.¹³ The Transcendental Aesthetics contends that objects of experience are necessarily spatiotemporal.¹⁴ The Analytic of Principles establishes the "principles of pure understanding" (A148/B187), which contain "the ground of the possibility of experience" (A237/B296), as metaphysical principles for objects of experience. These principles include the "axioms of intuition," "anticipations of perception," and "analogies of experience" (A161/B200)¹⁵ – for example, the Second Analogy states that everything that happens in experience has a cause¹⁶. The fact that these principles are constitutive of experience is the reason that they are formal principles of experience. Therefore, an object that does not meet these principles cannot be an object of experience, and it is both necessary and sufficient for real possibility to meet them.

¹⁰ See Nunez 2014: 644-8.

¹¹ Nominal definitions, by contrast, would merely explain the meaning of the categories (see A241n).

¹² See A48f./B66.

¹³ My description of the formal conditions of experience largely agrees with Stang 2011: 447f., 2016: 201-3, Chignell 2014: 587, Chignell and Stang 2015: 1824, Abaci 2016: 135, 2019: 183.

¹⁴ See A26/B42, A34/B51. An exception may be made for the soul insofar as it is an object of experience, which would be only temporal.

¹⁵ The Postulates chapter deals with principles of pure understanding too, but, on pain of circularity, the "postulates of empirical thinking in general" (A161/B200) cannot belong to the formal conditions of experience that are required for the postulate of possibility. Furthermore, it should be noted that the principles proved in the *Metaphysical Foundations of Natural Science* are not conditions for all empirical objects, but only for material bodies. Hence, they are not conditions of real possibility.

¹⁶ See A189, B232.

This also means, on the other hand, that the conditions on real possibility cannot contain conditions that are not necessary for being an object of experience, but only for being possible under certain contingent conditions. Chignell and Stang reflect this point by distinguishing between "formal" and "empirical" possibility. Whereas formal possibility is supposed to be the possibility of something insofar as it agrees with the formal conditions of experience (which is just the definition of real possibility)¹⁷, empirical possibility is meant to be the agreement with causal laws and circumstances¹⁸. By illustration, consider a cloth of magnetic matter that attracts iron filings. While the possibility of this event depends on contingent conditions – for instance, it would be impossible if there were a massive barrier between the cloth and the filings – the Second Analogy determines that this event also depends on the formal condition that it has a cause in experience. Although I generally agree with this distinction, Chignell and Stang do not discuss what it means for causality to meet the formal conditions of experience. Much of my discussion of real possibility will be concerned with distinguishing merely contingent from formal (necessary) causal conditions.¹⁹

There is an issue that significantly complicates my discussion, though. For different ontological kinds of entities have different conditions of their possibility. A "state" (*Zustand*) is the sum total of accidents that a substance has at a particular instant²⁰; and as I shall argue, states cannot be

_

¹⁷ See Stang 2011: 448, 2016: 203, Chignell 2014: 587, Chignell and Stang 2015: 1823.

¹⁸ See Stang 2011: 453, Chignell 2014: 589, Chignell and Stang 2015: 1823f. Stang (2016: 213) also calls this kind of possibility "empirical-causal possibility." But note that Chignell and Stang do not use the concept "empirical possibility" in quite the same way. For Stang, empirical(-causal) possibility is the agreement with causal laws and circumstances, whereas in Chignell the term just means the agreement with causal laws. Stang calls the latter "nomic possibility" (2016: 255) and also adds the notion of "noumenal(-causal) possibility," which is the possibility that concrete appearances are grounded by things in themselves (see Stang 2011: 457, 2016: 225). I will employ similar taxonomy, but connect it to the general distinction between real and external possibility.

¹⁹ A note on terminology: 'causal conditions' are all the conditions that are required for causal actions. They include causal laws and causal 'circumstances.' The latter encompass preceding events that occasion succeeding events, like the rolling of a ball that hits another ball.

²⁰ See M-Schön 28:512, M-L₂ 28:564.

actual unless they are caused by an action. But this leaves the real possibility of (material) substances themselves unaffected, as their existence is permanent and does not depend on causal conditions. In this paper, I provide explicit definitions solely for the real possibility of states. Determining the conditions of the real possibility of other entities would require further discussion of Kant's metaphysics. For instance, we would need to say more about Kant's causal model in order to fully understand the conditions of the real possibility of actions. But, in principle, the conditions of the real possibility of actions, or of other entities, should not be very different from the conditions of the real possibility of states. For example, I assume that, just like states, the real possibility of actions depends on the real possibility of preceding actions; and everything I say about states should be applicable to accidents.

Yet, even with regard to the real possibility of states, Kant does not embrace just one conception of it. Rather, he uses the notion of real possibility in ways that abstract to varying degrees from the formal conditions of experience. As we shall see, Kant sometimes considers all formal conditions of experience (including those that belong to the formal conditions of causal series), sometimes abstracts from the formal conditions of causal series (but does not abstract from causal powers), and sometimes abstracts from causality in general. Thus, when we combine different kinds of entities with different degrees of abstraction, we obtain a number of different conceptions of real possibility, including three conceptions of the real possibility of states.²² While Kant does not distinguish the resulting conceptions of real possibility explicitly, these conceptions of real possibility align to traditional kinds of possibility; and his thinking

-

²¹ This explains why I neglect the First and the Third Analogy, although they belong to the formal conditions of experience. The First Analogy holds that the substance is permanent, but the accidents are changeable. The Third Analogy holds that all substances in space necessarily interact. But these Analogies contribute little to understanding the possibility of states.

When I speak of 'conceptions of real possibility,' I mean that they are different implementations of the postulate of possibility. While they all stand under the general postulate of possibility, these conceptions do not add further conditions of possibility to the formal conditions of experience, but rather determine which formal conditions are applied to which entities. This differs from Chignell or Stang, who refer to 'empirical possibility' etc. as 'kinds' of real possibility and add conditions that go well beyond the formal conditions of experience.

about real possibility was influenced by the traditional theories of possibility. Thus, it will be most beneficial to consider the accounts from Leibniz, Wolff, Baumgarten, and Crusius in some detail.

2. Internal, External, and Real Possibility before Kant

Despite the wide attention that Leibniz's metaphysics of modality has received, there has been surprisingly little interest in its relation to Kant. ²³ The key modal problem for Leibniz was to avoid necessitarianism (the view that everything that is possible is actual and therefore necessary). For he famously holds that God necessarily creates the best possible world – how can Leibniz evade the claim that the only possible world is the actual? His solution consists in a distinction of two kinds of possibility: On the one hand, *per se* possibility is the possibility of something "in its own nature." ²⁴ This is the possibility something has in itself, irrespective of any conditions on which the possibility depends. ²⁵ According to Leibniz, something is possible *per se* iff it can be thought without contradiction. But there is also possibility *per accidens*, which is the possibility of something all things considered. ²⁶ This presupposes *per se* possibility, but is also dependent on additional conditions. Now Leibniz thinks that the world, and everything that happens in it, owes its existence to an act of God's creation and the pre-establishment of the course of the world's events. Since God can only create the best possible world (qua his omnibenevolence), all other worlds are incompatible with his will. Thus, the actual world is the best possible world, and all other worlds are impossible *per accidens*. Nonetheless, these worlds

²³ For important recent exceptions, see Stang 2016: ch. 1 and Abaci 2019: ch. 2. However, both authors focus on *per se* modality and Kant's pre-Critical philosophy.

²⁴ See, e.g., Leibniz, Con 57, also Chignell 2009: 167n20, Stang 2016: 15n11, and the references mentioned there. My discussion of Leibniz's modal metaphysics follows Adams 1994: ch. 2, Newlands 2010, Lin 2012, and Abaci 2019: 35-54.

²⁵ That *per se* possibility is not dependent on conditions does not mean that it is not grounded. According to Leibniz, all essences are grounded in God's mind; and Wolff, Baumgarten, Crusius, and also Kant have endorsed variants of Leibniz's view. While this is a hotly debated topic, I am able to steer clear of it here.

²⁶ Although Newlands (2010: 86-90) casts doubt on it, Lin (2012: 431f.) provides compelling evidence that Leibniz explicitly considers them as two kinds of possibility, and not just as two modal aspects of one kind of possibility.

are possible *per se* because they can be thought without contradiction – with regard to their essences, these worlds are possible.

For Leibniz, the possibility of something *per accidens* depends on the possibility of causal conditions that bring this state about – by virtue of causal conditions, something is made hypothetically necessary.²⁷ It would go too far to consider Leibniz's model of causality here, which is informed by the infamous doctrine of "pre-established harmony," which Kant rejects. But unlike Leibniz²⁸, Wolff accepts inter-substantial causation and connects this with Leibniz's distinction between possibility *per se* and possibility *per accidens*, which Wolff calls "internal" and "external" possibility²⁹:

Internally possible is whatever is possible regarded in itself, that is, which, considered in itself, does not include any contradiction [...]. Externally possible is whatever has a determinate cause in the visible world, that is, which is able to exist in it [...]. (Wolff, Cosm 111)³⁰

Wolff argues that internally possible is whatever can be thought without contradiction, whereas externally possible is that for which there is a cause. Since causes are grounds of actuality, one may wonder why Wolff defines external possibility in terms of actual causes. But Wolff is a

1994: 16-20.

²⁷ As Leibniz carefully points out, hypothetical necessity does not mean that something would be necessary if some condition obtained, but that something is actually necessary because of a condition that in fact obtains. See Adams

²⁸ See Watkins 2005: 24-50, 118-29 for discussion of Leibniz's and Wolff's views on causality in relation to Kant.

²⁹ For helpful discussion of Wolff's views on possibility, see Dunlop 2018: 1134f. and Abaci 2019: 59-74. There may be differences in the way Leibniz and Wolff spell out the distinction, but the general idea is clearly the same. – Dunlop argues that Wolff's expression "possibility *in potentia remota*" signifies a broader notion than external possibility because this conception "does not involve a connection to what actually exists" (Dunlop 2018: 1135). Her reading of this notion is close to Crusian real possibility (see below). However, this strikes me as misguided. For possibility *in potentia remota* is indirectly connected to, and dependent on, grounds in existing substances by a causal chain that ultimately produces the object in question (see Wolff, Ont 176). For this reason, Wolff claims that a being *in potentia remota* must have its sufficient ground of existence in the causal series (Ont 178) and not merely a potential ground of existence, as Dunlop appears to hold.

³⁰ See also GM 574, TN 142, and Dunlop 2018: 1135, Abaci 2019: 71f.

determinist: given actual causal conditions, all events are hypothetically necessary.³¹ Thus, all grounds of external possibility are also grounds of actuality; there are no unactualized external possibilities.³² Nevertheless, there is a conceptual difference between grounds of existence and grounds of external possibility. For Wolff defines a "potential being" as that which "can have its sufficient ground of existence" in an existing being (Ont 175). He also distinguishes "powers," which he calls the "source of changes" (GM 115), from "capacities," which are "the possibility of doing something" (GM 117).³³ While substances are actual causes by virtue of their powers³⁴, they are potential causes by virtue of their capacities. Consequently, grounds of external possibility are potential causes, whereas grounds of existence are actual causes.

Most of the passages in Kant that deal with internal and external possibility are either notes in his copy of Baumgarten's *Metaphysica* – the textbook on which Kant based his lectures on metaphysics – or in transcripts of his lectures on metaphysics in sections which relate directly to passages from Baumgarten. Baumgarten writes that "whatever is possible regarded in itself is possible in itself" (Baumgarten, M 15 (17:29))³⁵, whereas whatever is possible in connection with something else is "hypothetically possible" (Baumgarten, M 16 (17:30)).³⁶ Clearly, he is following his teacher Wolff, and these expressions are equivalents for internal and external possibility.³⁷

_

³¹ See Wolff, Cosm 112, 114, also Abaci 2019: 73.

³² See also Abaci 2019: 73.

³³ This is a technical distinction. In a broader sense, even capacities are powers. I sometimes use these notions interchangeably. See Heßbrüggen-Walter 2004: 57-75 for discussion of Wolff's account of capacities.

³⁴ See Wolff, Ont 881.

³⁵ Baumgarten also says that whatever involves no contradiction is possible (see M 8 (17:24)). This is clearly what he later refers to as "possible in itself." See also Abaci 2019: 66.

³⁶ Baumgarten mentions "[possibile] intrinsecus, absolute, per se, simpliciter" as alternative expressions for "possibile in se" (Baumgarten, M 15 (17:29)), and "[possibile] respective, relative, extrinsecus, per aliud, et secundum quid" for "possibile hypothetice" (Baumgarten, M 16 (17:30)).

³⁷ There are two important differences to Wolff, though. First, Baumgarten's notion of hypothetical possibility applies to properties that are grounded by other properties in whatever way, including the principle of

Lastly, Crusius is also important as Kant adopts the term "real possibility" from him. Crusius's conception of real possibility is reminiscent of a recent trend in contemporary modal metaphysics, according to which possibility is grounded in causal powers. ³⁸ This means, roughly, that something is possible because there are powers that could make it actual – for example, it is possible that sugar dissolves in water because of the powers of these objects. In essence, this is a revival of an Aristotelian tradition. Aristotle saw possibility – or potentiality – to be grounded in actuality³⁹, and so did the Scholastic philosophers influenced by him⁴⁰. Crusius is an heir to this tradition:

If one considers a possible thing only insofar as one can think it, that is, insofar as that which one posits in a concept can be connected in a concept without a contradiction arising either with itself or any other true sentence [...]: then it is called *ideal possibility*, or the mere *possibility in thoughts*. Some call this *metaphysical possibility*. But if one directs one's attention to the fact that one can take as given that also sufficient causes for the thing are really present [wirklich vorhanden] that only need to come into the state of action [in dem Stand der Action kommen dürfen]: then it is called *real possibility*, or the *possibility outside of thoughts*. (Crusius, E 56)

Whereas ideal possibility is the "possibility in thoughts," real possibility is the "possibility outside of thoughts." Although Crusius does not explicitly distinguish between concepts and things as two distinct domains of possibility, his distinction anticipates Kant's between logical and real possibility. But since the principle of contradiction is the criterion for ideal possibility, the latter is ultimately an adaptation of internal possibility. All Real possibility, by contrast, has

contradiction (M 19 (17:30)), whereas Wolff applies the notion of external possibility only to properties that are causally grounded. Second, Baumgarten rejects inter-substantial causation in favor of pre-established harmony (see M 463, also Theis 1994: 105f., Kanterian 2018: 143). For more discussion of Baumgarten's account of possibility, see Kanterian 2018: 153-6.

³⁸ See Borghini and Williams 2008, Jacobs 2010, and Vetter 2015.

³⁹ Aristotle discusses this in *Metaphysics Z*, e.g., 1048a.

⁴⁰ See Knuuttila 2017.

⁴¹ When Crusius says that some refer to ideal possibility as "metaphysical possibility," he must have his teacher Adolph Friedrich Hoffmann in mind. Hoffmann distinguishes, among others, between "metaphysical possibility" (the possibility of something according to the principle of contradiction, Ver 1077) and "physical possibility" (when a substance has the power to act, Ver 1078) and says that one can also refer to the former as "ideal" and the latter

"sufficient causes," which must be distinguished from "determining causes." The former are potential causes, whereas the latter are actual causes that in fact act. ⁴² I will sometimes refer to possibility insofar as there are potential causes as *Crusian real possibility*.

Crusian grounds of real possibility are similar to Wolffian grounds of external possibility because both are potential causes. ⁴³ The difference to Wolff is that Crusius abstracts from particular causal circumstances that lead to an actual causal series. By illustration, it is really possible that a ball rolls because this possibility is grounded in the powers of the ball. But the external possibility of rolling depends on causal circumstances (like another ball hitting the ball). Crusius makes this distinction in his own way by saying that something can be impossible either "absolutely" or "under the position of certain circumstances" (E 58). The latter is just external possibility (or something close). ⁴⁴ Absolutely possible, on the contrary, is that "which contradicts [neither] itself [nor] the properties of the necessary universal cause of all things" (E 58). This is not just ideal possibility, as it requires that a thing be compatible with God's properties in addition to being free of contradiction. Since Crusius distinguishes between only two ways a thing can be impossible, absolute possibility must be real possibility. The fact that absolute possibility abstracts from all relations to other things does not prevent this: although real possibility is defined in terms of powers, real possibility is intrinsic and free of contingent conditions because powers belong to the nature of a substance ⁴⁵.

To sum up, Leibniz, Wolff, and Baumgarten distinguish between internal and external possibility; and Crusius adds the notion of "real possibility" – which, like external possibility, is

as "real" possibility. Notably, physical possibility does not require the existence of a substance (see Hoffmann, Ver 1078). Although Crusius does not just repeat Hoffmann, he follows him closely.

⁴² See Crusius, E 56, 64, 66, 69, 83(a), 83(b), 405. For the distinction between sufficient and determining grounds, see Crusius, De Usu 3, also E 39.

⁴³ In Crusius's scholastic terminology, potential causes are "present *actu primo*," whereas actual causes are also "present *actu secundo*" (Crusius, E 64).

⁴⁴ See also E 84, where Crusius speaks of the "possibility of an action."

⁴⁵ See Crusius, E 39. If Crusius follows Hoffmann in this respect (which he does not make explicit though), then not even the contingent fact is required that these substances exist (see n. 41).

grounded in causal powers, but, like internal possibility, abstracts from contingent circumstances. We will see that all three kinds of possibility have a legacy in Kant's use of the term "real possibility."

3. Kant on Internal and External Possibility

Considering the historical background, it cannot come as a surprise that Kant distinguishes between internal and external possibility, too. ⁴⁶ To begin with, in his pre-Critical so-called 'possibility proof' he emphasizes that the proof must be based on internal and not external possibility. ⁴⁷ Kant continues to use these notions in his Critical writings. ⁴⁸ For example, he distinguishes internal from "absolute" possibility (A324f./B381). While internal possibility is the possibility under abstraction from all conditions, absolute possibility is the possibility whatever the conditions. Internal possibility is the minimal condition of possibility and met by every object whose concept does not contradict itself ⁴⁹, whereas absolute possibility is the maximal condition and cannot be met within experience (more on absolute possibility below). ⁵⁰

In his *Reflexionen* and lectures⁵¹, Kant also distinguishes between internal and external possibility:

⁴⁶ While some attention has been paid to the distinction of internal and absolute possibility (see Poser 1989, Kannisto 2012: 48-50), the distinction of internal and external possibility has almost been overlooked in the literature. Even so, this distinction is briefly noted by Theis (1994: 199f.), Chignell (2009: 181), Stang (2016: 15), and Abaci (2019: 106); but they may deviate from my reading and also ignore Kant's endorsement of the distinction in the Critical period.

⁴⁷ See OPGP 2:157.

⁴⁸ See e.g. A96, A324f./B381, A370, A597/B625, A626/B654, MFNS 4:511, CPJ 5:400, and Rel 6:155 for internal possibility (or possibility "in itself"), and CPJ 5:221, 5:447f. for external possibility. See also "relative possibility" (FICPJ 20:250).

⁴⁹ See M-Schön 28:508, M-L₂ 28:562, M-Mrongovius 29:813.

⁵⁰ See A324f./B381, M-Volckmann 28:406f., M-Schön 28:488, M-Dohna 28:627.

⁵¹ The relevant passages for discussion of internal and external possibility are A324f./B381, R4297 17:499, R4403 17:533f., R5181 18:110f., R5185-7 18:111, R5254 18:132f., R5590 18:242, R5691-5 18:327-9, R5698 18:329, R6372-

Possibility is either internal or external possibility. (R5691 18:327, 1776-89)

One can say: something is not merely in itself (internally), but also hypothetically⁵² possible. (R6376 18:696, 1790-5)

Something is possible internally or in and for itself, and relatively in relation and connection with other things. ([...] Much is possible internally that in connection is not possible externally, i.e., conditionally possible as well; the condition is here as much as a ground, e.g., it is [not only] possible in itself that a human being becomes rich, but also conditionally; for his parents are rich, i.e., there is moreover a ground for it. [...]) [I]t is [internally] possible that a human being should arrive at vast riches, but, due to laziness, unsuitability [Unschicklichkeit], and a lack of wealthy relatives it is [externally] impossible. (M-Mrongovius 29:813)

Notwithstanding this, hypothetical possibility can also be regarded in such a way that possibility is extended by it, e.g., it is not only internally possible that a human being attains riches, but all the more because he has rich relatives and is well-reputed with rich people. By this I extend my thought of possibility. — Yet it would be better if one adhered to the division in internal and external possibility. (M-Schön 28:488)

Something can be considered to be internally or also externally possible [...]. [...] What is impossible in itself is also not possible under any condition, for what is nothing in itself cannot be something in any conjunction; and what is in turn possible in itself is yet not possible under any conditions. (M-Volckmann 28:406f.)

According to these passages⁵³, it is internally possible for everybody to become rich; and if one has rich parents, there is even a ground of the external possibility of becoming rich. For this person could inherit the parents' riches when they die (or previously by a donation so as to

^{4 18:695}f., R6376 18:696, M-Volckmann 28:406f., 28:426, M-Schön 28:488, 28:508, M-L₂ 28:550, 28:562, M-Dohna 28:627, 28:637, M-Mrongovius 29:813. I will not always explicitly refer to them in the sequel.

⁵² As in Baumgarten, "hypothetically," "relatively" and "conditionally possible" are apparently equivalent expressions to "externally possible" and used interchangeably (though Kant prefers "external possibility," according to the fourth quote). See n. 36 for Baumgarten's use of these terms.

Some remarks could be added. First, other than the name suggests, the ground of "external possibility" is not necessarily external to a thing, but can be in the same thing (e.g., when the mind has the capacity to prove mathematical theorems). Second, even internal possibility is grounded by God (at least in the pre-Critical *Beweisgrund*). Third, like Wolff (Ont 177) and Baumgarten (M 165-8 (17:61f.)), and related to Crusius's account of real possibility (see Crusius, E 56), Kant thinks that external possibility comes in degrees (depending on the strength of their grounds). Space limitations prevent me from discussion of these points.

avoid taxes).⁵⁴ However, if the person has no rich relatives, is lazy, and lacks a talent for a profession in which she could attain riches, then there is no ground of the possibility of becoming rich. Consequently, becoming rich is not externally possible for this particular person.

I quote these texts extensively because they are too numerous to be an inadequate report of Kant's views by the compilers of the transcripts. It is also beyond reasonable doubt that he endorses the distinction between internal and external possibility, instead of merely reporting Baumgarten's view. For Kant criticizes Baumgarten for using the concepts 'internal' and 'absolute' possibility interchangeably in quite the same way as in the *Critique*. ⁵⁵ A further aspect where Kant criticizes Baumgarten is that Kant states that the term 'external possibility' is preferable to 'hypothetical possibility.' ⁵⁶ Since Kant also uses the terms 'internal' and 'external' possibility himself, we can assume that he endorses these conceptions and should understand them in the light of his terminological clarification as is reported in the transcripts of his lectures.

Although the quoted texts are not explicit about it, it makes sense to think of the grounds of external possibility as causal grounds. Having "rich relatives" and being "well-reputed with rich people" are potential causes of events by which the person could become rich; "laziness, unsuitability, and a lack of wealthy relatives" mean the absence of potential causes of events through which this person could become rich. What is left open is whether external possibility is more like Crusian real possibility and concerns merely the causal capacities by which events can occur, or whether it is more like Wolffian external possibility and concerns particular events, localized at particular times. Strictly speaking, external possibility is the possibility all things considered in Wolff and Leibniz. However, we will also discuss conceptions of external

-

⁵⁴ It is striking that Kant sometimes uses examples of social relations to illustrate real grounds. Although he apparently has no explicit social ontology, I assume that he takes them to be analogous to other kinds of real grounds, in particular physical grounds; so they are suitable examples.

⁵⁵ See also M-Volckmann 28:406f., M-Schön 28:488. For Baumgarten's use of these terms, see M 15 (17:29).

⁵⁶ See M-Volckmann 28:406f., M-Schön 28:488, M-L₂ 28:550, M-Dohna 28:627, M-Mrongovius 29:813.

possibility in the following section that abstract from some, but not all contingent conditions.

Kant's examples of external possibility would fit to the latter as well.

However, it is a bit tricky to show that Kant indeed embraces the conception of causal grounds of possibility. We can begin with the distinction between "capacity" [*Vermögen*] and "power" [*Kraft*], which he adopts from Wolff.⁵⁷ A transcript of a lecture reports:

Power contains the ground of the actuality of an action, capacity the ground of the possibility of an action. (M-Mrongovius 29:823f.)⁵⁸

This clearly corresponds to Wolff's and Crusius's distinction between potential and actual causes. Kant also employs the Crusian term "determining ground" when he points out that capacities become powers under appropriate causal circumstances:

The inner principle of the possibility of an action is now called capacity. But this inner principle of the possibility of an action also requires a determining ground so that the action becomes actual; and this is *power*. (M-Schön 28:515)

As in Crusius, determining grounds are grounds that determine a substance to act so that it becomes a ground of actuality.⁵⁹ But it must well be noted that Kant speaks of the possibility of an *action*, rather than of possibility simpliciter.⁶⁰ On the one hand, this is fine because different

⁵⁷ For a helpful discussion of powers and capacities in Kant see Heßbrüggen-Walter 2004: 136-42. I provide a more detailed account of Kant's views on causality elsewhere, where I argue that the distinction between capacities and powers is central for his understanding of the possibility of an action.

⁵⁸ See also R3582-6 17:72-5, R3588-90 17:75-6, M-Volckmann 28:434, M-Schön 28:515, M-L₂ 28:564, M-Dohna 28:640.

⁵⁹ See section 2 for Crusius's distinction between sufficient and determining grounds. It should be noted though that determining grounds are involved in a twofold manner here: First, a merely sufficient ground is changed into an active determining ground; second, another determining ground causes this substance to be active and to have a determining ground.

⁶⁰ This also holds for the passages referenced in n. 58. Note that Kant's use of the term diverges from mine and Crusius's. Kant refers to faculties as grounds of the possibility of an action because they are necessary conditions of actions. Still, actions are subject to the additional condition that they have a determining ground; and Crusius and I only speak of 'possibility of an action' if this condition is met, too.

ontological kinds of entities have different conditions of their possibility. But how do we know that capacities are also the ground of the possibility of what is caused by an action, that is, states? I will now argue that a state is possible iff an action is possible that causes it.⁶¹

One direction of this biconditional can be proved easily: if an action that brings state *s* into existence is possible, so is *s*. For actions are defined as "the relation of the subject of causality to the effect" (A205/B250).⁶² Thus, an action without an effect would be a contradiction. From this it follows that, since capacities are the ground of the possibility of actions, they are *ipso facto* also the ground of the possibility of the state that would be caused by the action.

As for the other direction, the Second Analogy states that all events have a cause. Since events are changes of states⁶³ and there are no uncaused states, Kant also paraphrases the Second Analogy as: every state in appearance is conditioned by a preceding state.⁶⁴ By illustration, I can only become rich if something happens that makes me rich: my wealthy uncle dies, or I sign a million dollar contract. If such actions were not possible, it would not be possible to be rich. But the powers by which these actions are enabled are called capacities insofar as the powers are not active – in this case, capacities are the ground of the possibility to be rich, precisely because they are the ground of the possibility of an action that makes me rich. Since the effects of actions are states, capacities are necessary conditions of their possibility. This shows that Kant is committed to the broadly Aristotelian view that possibility is grounded in potentialities.⁶⁵

•

⁶¹ I am speaking of "possibility" in the abstract here, but will specify later to which conceptions of possibility this biconditional applies.

⁶² See also A544/B572, M-Schön 28:512, M-L₂ 28:564f., M-Mrongovius 29:823f.

⁶³ See M-L₂ 28:573.

⁶⁴ See e.g. A195/B240, A198/B243f.

⁶⁵ While I claim that there are causal real grounds of possibility, I take no stance in this paper on whether all real grounds are causal, or whether there are non-causal (real) grounds of possibility.

Unfortunately, Kant never says how internal and external possibility relate to real possibility. ⁶⁶ This is not a simple question because, as I said above, Kant uses the term "real possibility" not always as involving all formal conditions of experience. Furthermore, one can distinguish between various conceptions of external possibility. But the general idea is clear: real possibility adds to internal possibility the formal conditions of experience, and then external possibility adds to real possibility the contingent conditions of particular circumstances. For the purposes of this paper, internal possibility is mainly relevant in its contrast to external possibility; hence, I will disregard internal possibility in the sequel. But it will prove very fruitful to explore the relations between the various conceptions of external and real possibility. Let us now consider the real possibility of states (my main concern in this paper) in detail.

4. A-possibility

Our discussion of various conceptions of the real possibility of states begins with a conception that encompasses all formal conditions of experience, including all causal ones. But this must be contrasted with a conception of external possibility that considers all conditions, period, and hence even includes all contingent conditions. This conception of external possibility can best be understood by Kant's discussion of the postulate of necessity, which reads:

That whose connection with the actual is determined in accordance with general conditions of experience is (exists) necessarily. (A218/B266)

The postulate does not concern "the existence of things (substances) but of their state of which alone we can cognize the necessity" (A227/B279).⁶⁷ Furthermore, Kant holds that "we cognize only the necessity of effects" (A227/B280); and "Everything that happens is hypothetically

•

⁶⁶ There is a *Reflexion* that could suggest that Kant equates external possibility with real possibility: "Possible *in thesi* (^s according to the concept: logically), but not *in hypothesi*. (^s no real possibility.)" (R5695 18:329, 1776-89) Since Kant is reported to equate "possibility *in thesi*" and "possibility *in hypothesi*" with internal and external possibility (see M-Volckmann 28:407, M-L₂ 28:550), it may seem that the latter is real possibility. But it is not clear whether the later addition "no real possibility" is meant as an elucidation of or a contrast to "not *in hypothesi*." Anyways, I am aware of no other passage that could suggest an identity of real and external possibility.

⁶⁷ My discussion of the postulate of necessity agrees with Abaci 2019: 186f. See also Stang 2016: 214-6.

necessary" (A228/B280). This makes sufficiently clear not only that the postulate of necessity concerns what Leibniz and Wolff call "hypothetical necessity," but also that Kant embraces their determinism with regard to experience – in the empirical world, there is place neither for chance nor for freedom. But as we have seen, it follows from determinism that external possibility and hypothetical necessity have the same scope: whatever is hypothetically necessary is externally possible, and vice versa. Since the possibility of a state depends on the possibility of an action (as shown in the last section), we can define the resulting conception of possibility as follows:

A(e)-Possibility⁶⁹: Some state s at time t is a(e)-possible iff under actual causal conditions an action is externally possible that causes s at t.⁷⁰

This reveals that a(e)-possibility is a conception of external possibility, as a(e)-possibility is dependent on contingent causal conditions.

Some interpreters have concluded from the postulate of necessity that real possibility and (hypothetical) necessity are co-extensional.⁷¹ Yet we must be careful here. It is true that a(e)-possibility must be co-extensional with hypothetical necessity because a(e)-possibility does not abstract from contingent conditions. But for this very reason, a(e)-possibility is not a form of real possibility. So it should not come as a surprise that Kant expresses agnosticism about the relationship of necessity to possibility in a later paragraph of the Postulates:

Whether the field of possibility is greater than the field that contains everything actual, and whether the latter is in turn greater than the set of that which is necessary, are proper questions which must be solved synthetically [und zwar von synthetischer Auflösung]⁷², though they also fall under the jurisdiction of reason alone; for they mean, roughly, to ask whether all things, as

⁶⁸ See A228/B280 and A534/B562. Kant's determinism is, of course, enforced by the Second Analogy.

^{69 &}quot;a" is for "action". "e" for "external".

⁷⁰ One may find it objectionable that, here and elsewhere, I am using the word "possible" in the *definiens*. But this is not a problem as long as *definiens* and *definiendum* contain different kinds (or conceptions) of possibility.

⁷¹ See the references mentioned in Abaci 2016: 150n4.

⁷² Guyer and Wood translate this portion as "and can, to be sure, be solved synthetically." However, "von synthetischer Auflösung" does not mean that these questions can in fact be solved, so I amended their translation.

appearances, belong together in the sum total and the context of a single experience, of which each given perception is a part which therefore could not be combined with any other appearances, or whether my perceptions could belong to more than one possible experience (in their general connection). (A230/B282f.)

The question whether there is "more than one possible experience" means whether "another series of appearances in thoroughgoing connection with that which is given to me in perception, thus more than a single all-encompassing experience, is possible" (A231f./B284). That is, there might be a different causal series that leads to different states instead of the actual series. Therefore, Kant cannot be talking about a(e)-possibility because the possibility in question includes counterfactual possibilities – that is, states that are possible under other conditions than the actual ones. Since the co-extensiveness of hypothetical necessity and a(e)-possibility rules out counterfactual a(e)-possibilities, and since Kant makes no indication that he is no longer talking about real possibility, he must mean real possibility in the above quote.

But what conception of real possibility does Kant have in mind? I argue that the conception resembles a(e)-possibility (which is just a form of external possibility), but abstracts from contingent causal conditions. For we want to know whether a causal series, and the states and events of which it is composed, is possible under formal conditions of experience even if the causal series is not possible given present causal laws and circumstances. As we have seen, a state is only possible if there is a possible action that causes it. This is required by the Second

.

⁷³ Kant's presentation is a bit unfortunate here. In A230/B282f., he only asks whether *actual* appearances could belong to a different sum total of appearances. But even if this should not be possible, this clearly would not rule out the possibility of "more than a single all-encompassing experience." Since Kant is concerned with the coextensionality of possibility and actuality here, we should regard the former question as an inadequate depiction of the problem.

⁷⁴ In this regard, I fully agree with Abaci (2016: 141, 2019: 191-4). Chignell and Stang think that Kant does change the kind of possibility, but arguably because they hold that formal possibility is not applicable in this context. Despite our disagreements, I concur with Stang (2011: 457, 2016: 223f.) that the possibility at issue here involves noumenal grounds; and I largely follow his insightful analysis of this paragraph (see Stang 2011: 454-7, 2016: 219-22).

⁷⁵ Note again that my use of the term 'possibility of an action' diverges from Kant's own use. See n. 60.

Analogy and hence part of the formal conditions of experience. If we apply this to states, we can define the relevant conception as follows:

A-possibility: Some state s is a-possible iff an action is really possible that causes s.

This definition has the real possibility of actions in the *definiens*. But what are the conditions of the real possibility of actions? I cannot discuss Kant's model of causality in detail here, but I assume that it is a formal condition of actions that there be a preceding action by which a substance is determined to act.⁷⁶ Thus, actions are only possible under the condition of preceding actions. According to Kant, this means that we cannot know whether counterfactual states or actions are really possible, as he argues in a passage shortly after the above quote:

That which is possible only under conditions that are themselves merely possible is not possible *in all respects*. But this is the way the question is taken when one wants to know whether the possibility of things extends further than experience can reach.

[...] In fact, absolute possibility (which is valid in every respect) is no mere concept of the understanding, and can in no way be of empirical use; rather it belongs solely to reason, which goes beyond all possible empirical use of the understanding. (A232/B284f.)

Here Kant distinguishes between possibility that obtains only under "conditions that are themselves merely possible" and "absolute possibility," which is valid "in all respects." If a condition is merely possible, the condition is contingent. But possibility that obtains under contingent conditions is external possibility. "Absolute possibility," or possibility "in all respects," on the contrary, is unconditioned possibility, or possibility whatever the circumstances. For example, an action that is possible independently of other actions would be absolutely possible. Rant's determinism rules out absolute possibility within experience,

⁷⁶ See A543/B571, Prol 4:343f.

⁷⁷ These conditions cannot be the formal conditions of experience. Kant admits that there might be "other forms of intuition (than space and time) or other forms of understanding (than the discursive form of thinking, or that of cognition through concepts)," but holds that they "would still not belong to experience" (A230/B283). Thus, the formal conditions of experience are not "merely possible". Here I agree with Stang 2016: 221f., Abaci 2019: 189f.

⁷⁸ See also A324/B381, M-Volckmann 28:406, M-Schön 28:488, M-L₂ 28:550. – Absolute possibility is sometimes understood as the possibility of things in themselves in contrast to 'relative possibility,' which is supposed to be the

where every action is conditioned by a preceding action. This is why the concept of absolute possibility "belongs solely to reason" – it transcends the limits of experience, just like freedom or absolute necessity, as it seeks for the unconditioned ground of conditioned possibility in experience. If there is absolute possibility, then it must be in the realm of things in themselves.

Nevertheless, since there is room for absolute possibility only outside experience, we have to wonder why Kant connects this notion with the question whether there could be counterfactual possibilities within experience. The answer can be given by a look at the Third Antinomy. This antinomy famously consists in the clash of the "thesis" that there must be a first cause with the "antithesis," according to which there is an infinite causal series in which there is no first cause. Famous and the cause of the Entire Antinomy consists in assuming the possibility of an unconditioned cause of the empirical world outside experience. Such a cause would not only be the unconditioned ground of a causal series, but for this reason also of a-possible states. By illustration, a malicious lie is hypothetically necessary given actual causal conditions and hence a(e)-possible. But assuming that I am free as a noumenal being, there would be an absolutely possible ground of the a-possibility that I speak the truth instead of lying. Such a cause would not only possible ground of the a-possibility that I speak the truth instead of lying.

However, freedom is just an example of the more general point that things in themselves ground appearances and that a different empirical world may be grounded in different grounds of things in themselves (for instance, if God chooses to create a different world).⁸² But precisely

possibility relative to the formal conditions of experience (see Wood 1978: 44-6, Abaci 2014: 4, 2016: 131, 2019: 106, Kilinc 2015: 1595). But it is hard to see how this reading is supported by the texts, and it has no obvious advantage over the reading that I propose. My interpretation also differs from Poser 1989: 125, 128, and Kannisto 2012: 49.

⁷⁹ See A444/B472-A451/B479.

⁸⁰ See A537/B565.

In the first *Critique*, Kant emphasizes that we cannot know whether we are in fact free (see A557f./B585f.). In the second *Critique*, however, he holds that we can know freedom through the moral law (see CPrR 5:3f., 5:29f.), albeit merely in a practical regard (see CPrR 5:56f.). I cannot discuss here whether this means that we can infer knowledge of absolute possibility then.

⁸² See Stang 2011: 458-60, 2016: 223-5.

because the unconditioned ground of all possibility cannot be found in experience we cannot know whether a counterfactual causal series is really possible. For we have no means to know whether there is such an unconditioned ground in the noumenal realm. This explains Kant's agnosticism about counterfactual possibilities.

As regards the grounds of the a-possibility of *actual* states, though, we cannot in the same manner infer that they are grounded in an absolutely possible noumenal ground. For Kant makes clear that the contingency of the empirical world does not justify the inference to an unconditioned ground as a condition of its real possibility. Rather, he holds that the empirical world is never given as a whole; it is merely an illusion that there is an unconditioned cause, and, by extension, an unconditioned ground of a-possibility, within experience.⁸³ But if we want to explain the real possibility of counterfactual states, it is a formal condition of real possibility that there be an absolutely possible ground outside experience that grounds them.⁸⁴

5. C-Possibility

A-possibility considers whether an action is really possible that causes a certain state. But Kant is sometimes interested only in the states that are really possible through the capacity of substances while abstracting from whether these capacities can be made active. This is roughly the sense in which Crusius uses the term "real possibility." However, there are several levels of abstraction to be distinguished.

.

⁸³ See A561f./B589f., also A609f./B637f.

⁸⁴Here we must distinguish between what, paradoxically, may be called 'contingent' and 'necessary' absolute possibility. For, while Kant occasionally seems to reserve the concept of absolute possibility to God (see R4688 17:676, R4690 17:676, R5254 18:132f.), he applies it to freedom on other occasions (see R5179 18:110, R5181 18:110). Free actions are possible whatever the circumstances, but it is clearly contingent whether free beings (other than God) exist at all. This renders the possibility of states that are possible by virtue of human freedom akin to external possibility. By contrast, God would be the absolutely necessary being that is not in need of being grounded. Therefore, states in experience that are possible through divine actions are a-possible and not dependent on contingent conditions.

First, one can consider the capacities of particular substances and what is possible through them. This meaning is at place, I take it, when Kant says that it is externally possible for someone to be rich because this person has the capacity of industriousness. Generalizing, every substance has particular powers – be it humans, other living beings, or material objects. And since no substance can be merely passive, but must contribute its own powers to change its state⁸⁵, the possibility of a state is co-dependent on the capacities of that substance. The possibility of becoming rich if one has the capacities of industriousness, etc., can be understood in terms of dependency on particular causal capacities. This makes it a conception of external possibility.

Second, one can abstract from particular substances and say that something is possible if there are *any* actual substances that can cause some state. According to a recent interpretive trend – which I endorse – natural laws are built up from capacities (or powers) of actual substances. ⁸⁶ On this view, some state is "nomically possible" (as Stang (2016: 255) puts it) if there is a substance (or a multiplicity of concurring substances) with capacities that can produce a certain effect. For instance, it is nomically possible that salt dissolves in water if there are actual substances with capacities that can cause this event. Or, to quote an example Kant gives, "expanding force" is a "physical ground" that makes impenetrability "possible in the first place" (MFNS 4:502). ⁸⁷ But Kant clearly does not think that laws of nature are entailed by the formal conditions of experience, so other laws and capacities (or powers) than the actual ones might be really possible. ⁸⁸ For this reason, nomic possibility is not real possibility. On the other hand, nomic possibility does not depend on particular, changeable circumstances; therefore, nomic

⁸⁵ See M-Schön 28:513, M-Dohna 28:640, M-Mrongovius 29:823.

⁸⁶ See Kreines 2009, Stang 2016: 238-44, Massimi 2017, Messina 2017.

⁸⁷ As Abaci (2016: 152n22) points out, one transcript of Kant's lectures defines "physical possibility" as "that which does not conflict with the laws of experience" (M-Mrongovius 29:812), where the laws clearly are empirical laws (Kant uses the example of building a large palace within four weeks, see M-Mrongovius 29:812). Apparently, physical possibility is nomic possibility. But since one single transcript is no sufficient evidence, I do not take this passage as decisive evidence.

⁸⁸ See A127, B165, CPJ 5:180, 5:184, and the discussion of these passages in Stang 2016: 230f.

possibility can be called a conception of external possibility only insofar as nomic possibility depends on what kinds of substances actually exist.

Third, one may abstract from the actual world at all and say that some state is *really* possible if there are really possible substances with really possible capacities to produce this state.⁸⁹
Telepathy or mental community would be really possible in this sense if substances with such capacities were really possible (which is, however, beyond the scope of our available knowledge).⁹⁰ This is a conception of real possibility because it fully abstracts from contingent conditions. Since this conception of real possibility depends on causal powers, it resembles Crusian real possibility.

The three kinds of possibility may be defined like this:

C(e)-Possibility⁹¹: Some state s of substance S is c(e)-possible iff S has capacities to cause s

under appropriate causal circumstances. 92

C(n)-Possibility⁹³: Some state s is c(n)-possible iff there are actual substances with

capacities that would cause s under appropriate causal circumstances.

C-Possibility: Some state s is c-possible iff there are really possible substances with

really possible capacities that would cause s under appropriate causal

circumstances.

Kant is committed to c-possibility by his view that other laws of nature might be really possible. This is different from saying that other causal series are really possible (a-possibility) because the latter also requires the real possibility of causal circumstances that ground a causal series, from which laws of nature abstract. This ensures the distinctness of a- and c-possibility. Now let us turn to a third conception of real possibility.

⁹¹ "c" for "capacity", but also with a nod to Crusius. "e" again stands for "external".

⁸⁹ I cannot discuss the real possibility of capacities and substances here. The minimal condition, however, is that they satisfy the constitutive principles of experience (see the next section).

⁹⁰ See section 7 for discussion of this point.

⁹² The appropriate causal conditions may include causal interaction and therefore powers of other substances.

⁹³ "n" for nomic.

6. M-Possibility

C-possibility differs from a-possibility in that it abstracts from actions that could cause a state. But one can make one further step and abstract even from temporal connections (and their causal relations) in general. Kant's distinction between "constitutive" and "regulative" principles of understanding is key here. Constitutive principles – the axioms of intuition and anticipations of perception – do not invoke temporal relations; they only demand that appearances have spatio-temporal form (and extensive magnitude) and reality as its matter (which has intensive magnitude). By contrast, regulative principles – the analogies of experience and the postulates of empirical thinking in general – do include temporal relations. ⁹⁴ For this reason, Kant says that the constitutive principles pertain to "appearances with regard to their mere possibility" (A178/B221). Clearly, possibility here consists only in the matter and form of appearances, as required by the constitutive principles, and abstracts from temporal and causal relations. ⁹⁵ Restricting the scope to states again, we can thus define a third conception of real possibility:

*M-possibility*⁹⁶: Some state is *m-possible* iff the state has spatiotemporal form and sensible matter (reality).

M-possibility is the possibility of the state of appearances isolated from their connections to other appearances, or else from succeeding states of the same appearance. Thus, m-possibility abstracts from causality in general, by which it resembles internal possibility.

Kant appears to think along these lines in his discussion of the "principle of thoroughgoing determination" in the second section of the Transcendental Ideal. He begins by noting:

⁻

⁹⁴ See A178-80/B221f.

Another way to put the difference between constitutive and regulative principles is that the former are constitutive of *appearances*, whereas the latter, despite being regulative for appearances, are constitutive of *experience*. For experience is the systematically connected sum total of all appearances, which requires the analogies of experience (compare A110 with A180f./B222-4). Thus, even "regulative" principles are constitutive of experience, which is why the formal conditions of experience include them. See Stang 2016: 220 for a similar view. ⁹⁶ "M-possibility" because the constitutive principles are also called "*mathematical* principles" (see A162/B201, A236f./B296).

Every *thing*, in regard of its possibility, stands under the principle of *thoroughgoing* determination; according to which, among *all possible* predicates of *things*, insofar as they are compared with their opposites, one must apply to it. (A571f./B599f.)

As the ensuing discussion makes clear, the "possible predicates" either "express a being" (A574/B602) – that is, a "reality (thinghood)" (A574/B602) – or express a non-being (the absence of reality)⁹⁷. Predicates that express a being are "transcendental affirmations," whereas predicates that express a non-being are "transcendental negations." Therefore, there are pairs of possible predicates where a transcendental affirmation expresses the being of a reality, while a transcendental negation expresses the absence of this reality – for example, light and darkness, wealth and poverty. ⁹⁹ Thus, the "principle of thoroughgoing determination" requires determining of each such pair whether the thing has a reality or lacks it.

But what is the kind of possibility according to which these predicates are *possible* predicates? The following passage from the Transcendental Ideal helps to answer this question:

The possibility of objects of sense is a relation of these objects to our thought, in which something (namely, the empirical form) can be thought a priori, but what constitutes the material, the reality in appearance (corresponding to sensation) has to be given; without that nothing at all could be thought and hence no possibility could be represented. (A581/B609)

Abstracting from epistemic aspects for a moment, Kant argues that possibility has two conditions: the possibility of the sensible form and the possibility of its matter. But these are just the conditions of m-possibility, and it is pretty clear that causal relations are irrelevant in this context. Assume a state (as the sum total of predicates) were m-possible, but not c- or a-possible. There would be no reason why one should exclude the predicates that belong to this state from the realm of the possible predicates that serve for the thoroughgoing determination of an object. Even if there were no possible capacities or actions that could make a predicate instantiated, we could make a negative judgment that this predicate does not pertain to the

⁹⁷ See A574f./B602f.

⁹⁸ See A574/B602.

⁹⁹ See A574f./B602f.

object. Thus, the kind of possibility that is required for the principle of thoroughgoing determination is m-possibility.¹⁰⁰

7. Why Do We Need Experience to Prove Real Possibility?

Given that Kant determines the formal conditions of experience a priori, we might think that we can also prove a priori whether something is really possible. Nevertheless, while Kant affirms this for categories and mathematical concepts¹⁰¹, he denies it for other concepts. For example, he holds that we cannot know without experience whether ghostly matter and the like are really possible. In this section, I discuss recent interpretations of this claim and, contrary to them, plea for a straightforward reading: we cannot know real possibility without experience – specifically, not a-, c-, and m-possibility – because we cannot know without experience whether the formal conditions of experience are met.

In the Postulates, Kant holds that the possibility of some objects could only be proved a posteriori:

But if one wanted to make entirely new concepts of substances, of powers, and of interactions from the material that perception offers us, without borrowing the example of their connection from experience itself, then one would end up with nothing but figments of the brain, for the possibility of which there would be no indications at all, since in their case one did not accept experience as instructress nor borrow these concepts from it. Invented concepts of this sort cannot acquire the character of their possibility *a priori*, like the categories, as conditions on which all experience depends, but only *a posteriori*, as ones given through experience itself, and their possibility must either be cognized *a posteriori* and empirically or not cognized at all. (A222/B269f.)

⁻

Here I disagree with Stang (2016: 292), who holds that the kind of possibility in this case must be noumenal (causal) possibility, which is close to what I call a-possibility and involves noumenal, absolutely possible grounds (see section 4). I suspect that he is putting the cart before the horses. For the realm of m-possible predicates is already known as possible, and reason only then seeks for an unconditioned condition of these predicates.

Kant holds that the real possibility of the objects of categories is proved by supplying the categories with sensible schemata (see A145f./B185, A247/B304), whereas the real possibility of mathematical objects is shown by constructing them in pure intuition (see A220f./B268, A223f./B271f., A240/B299).

Following this passage, Kant mentions examples that illustrate such cases for the categories of relation (substance-accident, cause-effect, community): a "substance that was persistently present in space yet without filling it," "a special fundamental power of our mind to intuit the future," and "a faculty of our mind to stand in a community of thoughts with other humans" (A222/B270). These are concepts that we "make from the material that perception offers us" (we arbitrarily combine concepts that are given to us in experience), but we do not know if the objects represented by these concepts are really possible (A222/B269). Kant also says about "reality" (the first category of quality) that "it is evidently intrinsically forbidden to think it in concreto without getting help from experience" (A223/B270). In brief, he thinks one cannot know the real possibility of all these objects without experience. It is also important to note that Kant's point is merely epistemic — he does not say that these objects are impossible (though he surely assigns little credence to their existence), but only that we cannot know if they are (really) possible.

There are two reactions to this problem in the literature. Chignell and Stang hold that these epistemic restrictions only apply to what they call 'empirical possibility' – that is, when Kant says that we cannot know possibility without experience, he means that we cannot know whether

[.]

¹⁰² See also A770f./B798f.

¹⁰³ See Abaci 2016: 139, 2019: 195f.

¹⁰⁴ See also A581/B609.

One might think that experience is only an enabling and not an evidential condition of knowing real possibility. I admit that Kant is not very clear on the difference between these two functions of experience. But while experience has the enabling function of making us acquainted with sensible realities, I hope to show that experience is not merely enabling, but also evidential with regard to a-, c-, and at least some cases of m-possibility. See n. 121 for a brief discussion of cases of m-possibility in which experience may be only enabling.

106 See also Abaci 2019: 196f. Stang (2016: 204n22) puts forth interesting arguments that may show that these objects cannot be really possible, on Kantian assumptions. However, the question is what Kant intends these cases to illustrate, and the text suggests that he does not consider them objects that are really impossible, but objects of which we cannot know whether they are really possible.

there are contingent causal conditions that allow something to happen. ¹⁰⁷ Yet, apart from the problem that Kant does not use the term 'empirical possibility,' he never says that we can always know a priori whether something meets the formal conditions of experience. ¹⁰⁸ Instead, I agree with Abaci that, according to Kant, we need experience to prove real possibility (and not 'empirical possibility'). ¹⁰⁹

Nonetheless, Abaci's rationale is unconvincing. For he agrees with Chignell that we would need experience to rule out "real repugnance." Kant uses this notion both in pre-Critical and Critical work 111, and Chignell holds that real repugnance can render something impossible, according to Kant. Crucially, Chignell distinguishes between what he calls "predicate-canceling" and "subject-canceling" real repugnance. The prominent examples of mutually opposing forces, or other opposing magnitudes, are cases of predicate-canceling real repugnance, in which particular (non-essential) effects are rendered impossible, according to Chignell. Clearly, predicate-cancelling real repugnance is only a case of a(e)-impossibility – it depends on contingent circumstances whether, say, two forces cancel each other; and Chignell may even agree on that point. But he holds that there is also subject-canceling real repugnance in Kant, which is meant to include contemporary non-logical impossibilities like the alleged fact that water cannot be XYZ. According to Chignell and Abaci's reading, only subject-canceling real repugnance can render something really impossible because this cancels the whole subject. 113

.

¹⁰⁷ See Stang 2011: 452, 460f., Chignell 2014: 588-93, Chignell and Stang 2015: 1824. See n. 21 for their use of 'empirical possibility' and related expressions.

¹⁰⁸ See also Abaci 2016: 137, 2019: 189f.

¹⁰⁹ See Abaci 2019: 197.

¹¹⁰ See Abaci 2016: 140, 2019: 197, Chignell 2009: 171-7.

¹¹¹ See e.g. NM 2:175, A273/B329.

¹¹² See Chignell 2009: 172-4.

¹¹³ See Chignell 2009: 174. Abaci is critical of Chignell's account (see Abaci 2019: 110-4), but ultimately concedes that Kant is committed to subject-canceling real repugnance (see Abaci 2019: 114f., 197).

One problem with this view is that Kant does not refer to real repugnance as an impediment to real possibility in the *Critique*.¹¹⁴ Another is that it is highly doubtful that he in fact accepts subject-canceling real repugnance.¹¹⁵ Chignell points to a transcript in which Kant is reported to have said that we cannot know whether God is really possible because we cannot rule out real repugnance between his realities, which Chignell reads as a case of subject-canceling real repugnance.¹¹⁶ Yet note that Kant does not say that there might be real repugnance between realities themselves, but only "with respect to all their effects" (RT-Pölitz 28:1025).¹¹⁷ This suggests that he is speaking about predicate-canceling real repugnance even in the case of God. And at least in *Beweisgrund*, Kant emphasizes that two opposed forces whose effects cancel each other out are nonetheless "simultaneously possible within a body" (OPGP 2:86).¹¹⁸ While it is true that Kant holds that predicate-canceling real repugnance would render God really impossible¹¹⁹, the reason apparently is not that he could not simultaneously instantiate all perfections, but that real repugnance would itself be an imperfection and hence contradict the concept of God as the most perfect being.¹²⁰ Absent clear cases of subject-canceling real repugnance, real repugnance should not be considered an impediment to real possibility.

[.]

¹¹⁴ See e.g. the passages quoted in Chignell 2009: 189n50, which only show that Kant thinks we cannot prove the real possibility of God, but not that the reason for it is that we cannot rule out real repugnance.

¹¹⁵ See also Yong 2014: 47n12. One passage from *Beweisgrund* that is often taken to be an example of subject-canceling real repugnance is Kant's claim that "the impenetrability of bodies, extension and the like, cannot be attributes of that which has understanding and will" (OPGP 2:85, see Chignell 2009: 173f., Stang 2016: 80f., Abaci 2019: 114f.). But this reading is not forced on us; and Kant later writes that the fact that bodies lack the power of thinking follows from the principle of contradiction, which exposes the alleged real repugnance as a contradiction (OPGP 2:87, see also M-L₁ 28:273, M-L₂ 28:591, M-Dohna 28:682, M-K₂ 28:755).

¹¹⁶ See RT-Pölitz 28:1015f., 1024-6, and Chignell 2009: 188-90.

¹¹⁷ See also RT-Pölitz 28:1015f.

¹¹⁸ See also NM 2:171 and Abaci 2019: 111f.

on contingent circumstances whether there is real repugnance between God's realities.

¹²⁰ See OPGP 2:85.

Nonetheless, if we look back to our discussion in the preceding sections, we can grasp why experience is needed for real possibility. Let us begin with m-possibility. We have seen that Kant holds that it is "intrinsically forbidden" to think a reality "in concreto without getting help from experience" (A223/B270). This means that we need experience to prove the real possibility of realities. Since realities are the matter of m-possibility, it follows that we need experience to prove m-possibility. For example, we cannot know whether states of ghostly matter are m-possible because we cannot prove the real possibility of this kind of reality. ¹²¹

As for a- and c-possibility, we can trivially infer them from actuality, but what about counterfactual states? Both conceptions require knowing whether there are really possible powers by which certain counterfactual states could be caused. However, how could we know what kinds of powers are really possible without experience? We have no a priori knowledge of capacities¹²² (except in the case of repulsive and attractive forces¹²³); and from experience we are merely acquainted with the effects of powers, which only allows for inductive inferences to the grounds. Thus, we cannot know whether capacities to foresee the future or to interact directly with other minds are a- or c-possible. And in addition, knowledge of a-possibility would

٠

As regards m-possibility, one may wonder whether experience only has an enabling and not an evidential role in some cases. For we need experience to form concepts of realities, but it is not clear that we need experience as evidence that a given reality is really possible, as long as we can think it as a sensible reality. For example, it might be sufficient to form the concept <unicorn> (which is composed of concepts that are given in experience) to prove that unicorns satisfy the constitutive principles of experience and are hence m-possible. — Without reaching a final verdict, and irrespective of that problem, it is worth pointing out that Kant may have chosen the examples of soothsaying, etc., because they lack concepts of realities and are hence cases where experience is clearly evidential. For example, the concept of "ghostly matter" may be understood as <matter that is extended in space without filling it>. This is a description of a kind of matter whose concept does not contain what kind of reality that matter is (unsurprisingly, as we have no experience of that stuff). So we do not know whether ghostly matter has a really possible reality, and we would need experience to prove the real possibility of ghostly matter.

¹²² See A558/B586.

¹²³ See MFNS 4:499, 4:508.

¹²⁴ See C 11:36f., M-Volckmann 28:411f., M-L₂ 28:553, M-Mrongovius 29:820. Also compare A9/B13 with Prol 4:257.

require that we know whether a causal chain grounded in noumenal absolute possibility is possible, which is far beyond the limits of our knowledge. 125

8. Conclusion

In this paper, I have considered Kantian real possibility in its historical context. While the general definition of real possibility is provided by the postulate of possibility, my analysis has shown that we can find three conceptions of real possibility in Kant's work as regards the implementation of the postulate with respect to states. These three conceptions resemble three kinds of possibility that his predecessors embraced. What I have called "m-possibility" corresponds to possibility per se, or internal possibility; "c-possibility" corresponds to Crusian real possibility; and "a-possibility" corresponds to hypothetical, or external, possibility. Apossibility considers all formal conditions that make a state really possible and Kant uses this conception at the end of the Postulates in his discussion of co-extensionality. C-possibility abstracts from causal actions and is employed to point out that other laws of nature might be really possible. Lastly, m-possibility abstracts from causality in general and is used in the Transcendental Ideal with respect to the principle of thoroughgoing determination. Furthermore, Kant endorses internal possibility and various conceptions of external possibility. I have also shown that we cannot prove any of these three conceptions of real possibility without experience (at least in most cases) because we need experience two show that some state meets the formal conditions of experience. 126

.

Since we cannot determine the scope of the three conceptions of real possibility considered in this paper, we also cannot determine whether they are co-extensive or differ in scope. Although a-possibility logically entails c-possibility (if an action that would cause a state is really possible, then there must be really possible powers to cause this state) and c-possibility in turn entails m-possibility (if there are really possible powers to cause a state, then the state must be really possible with respect to the form and matter of appearance), the respective converse does not hold. Therefore, it might be that the scope of m-possibility is larger than that of c-possibility, which in turn might be larger than the scope of a-possibility.

¹²⁶ [acknowledgments]

References

Abaci, Uygar (2014): "Kant's Only Possible Argument and Chignell's Real Harmony." *Kantian Review* 19/1, 1-25.

Abaci, Uygar (2016): "The Coextensiveness Thesis and Kant's Modal Agnosticism in the 'Postulates." European Journal of Philosophy 24/1, 129-158.

Abaci, Uygar (2019): Kant's Revolutionary Theory of Modality. Oxford.

Adams, Robert M. (1994): Leibniz: Determinist, Theist, Idealist. Oxford.

Baumgarten, Alexander G. (M): Metaphysica. Reprinted in vol. 17 of the Akademie-Ausgabe.

Blecher, Ian (2018): "Kant's Principles of Modality." European Journal of Philosophy 26, 932-944.

Borghini, Andrea and Williams, Neil E. (2008): "A Dispositional Theory of Possibility." Dialectica 62, 21-41.

Chignell, Andrew (2009): "Kant, Modality, and the Most Real Being." *Archiv für Geschichte der Philosophie* 91, 157-192.

Chignell, Andrew (2014): "Modal Motivations for Noumenal Ignorance: Knowledge, Cognition, and Coherence." *Kant-Studien* 105/4, 573-597.

Chignell, Andrew, and Stang, Nicholas F. (2015): "Postulate des empirischen Denkens." In M. Willaschek et al. (eds.), *Kant-Lexikon*. Berlin, 1822-1827.

Crusius, Christian August (De Usu): *De usu et limitibus principii rationis determinantis vulgo sufficientis*. Leipzig 1743.

Crusius, Christian August (E): Entwurf der nothwendigen Vernunft-Wahrheiten, wiefern sie den zufälligen entgegen gesetzet werden. Reprint of the edition Leipzig 1745. Hildesheim 1964.

Dunlop, Katherine (2018): "The origins and "possibility" of concepts in Wolff and Kant: Comments on Nicholas Stang, Kant's Modal Metaphysics." *European Journal of Philosophy* 26, 1134-1140.

Heßbrüggen-Walter, Stefan (2004): *Die Seele und ihre Vermögen: Kants Metaphysik des Mentalen in der >Kritik der reinen Vernunft<*. Paderborn.

Hoffmann, Adolph Friedrich (Ver): Vernunft-Lehre, darinnen die Kennzeichen des Wahren und Falschen aus den Grundsätzen des menschlichen Verstandes hergeleitet werden. Leipzig 1737.

Jacobs, Jonathan (2010): "A Powers Theory of Modality: or, How I Learned to Stop Worrying and Reject Possible Worlds." *Philosophical Studies* 151, 227-248.

Kannisto, Toni (2012): From Thinking to Being: Kant's Modal Critique of Metaphysics. Unpubl. Diss., Oslo.

Kilinc, Berna (2015): "Möglichkeit." In M. Willaschek et al. (eds.), Kant-Lexikon. Berlin, 1591-1595.

Knuuttila, Simo (2017): "Medieval Theories of Modality." In *The Stanford Encyclopedia of Philosophy* (Summer 2017 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/sum2017/entries/modalits-medieval/.

Kreines, James (2009): "Kant on the Laws of Nature and the Limitations of our Knowledge." *European Journal of Philosophy* 17/4, 527-558.

Leech, Jessica (2014): "Making Modal Distinctions: Kant on the Possible, the Actual, and the Intuitive Understanding." *Kantian Review* 19/3, 339-365.

Leibniz, G.W. (Con): *Confessio Philosophi*: *Papers Concerning the Problem of Evil 1671-1678*. Transl. and ed. R. Sleigh. New Haven, 2005.

Lin, Martin (2012): "Rationalism and Necessitarianism." NOÛS 46/3, 418-448.

Massimi, Michela (2017): "Grounds, Modality, and Nomic Necessity in the Critical Kant." In M. Massimi/A. Breitenbach (eds.), *Kant and the Laws of Nature*. Cambridge: Cambridge University Press, pp. 150-170.

Messina, James (2017): "Kant's Necessitation Account of Laws and the Nature of Natures." In M. Massimi/A. Breitenbach (eds.), *Kant and the Laws of Nature*. Cambridge: Cambridge University Press, pp. 131-149.

Motta, Giuseppe (2012): Die Postulate des empirischen Denkens überhaupt. Berlin.

Newlands, Samuel (2010): "The Harmony of Spinoza and Leibniz." *Philosophy and Phenomenological Research* 81/1, 64-104.

Nunez, Tyke (2014): "Definitions of Kant's categories." Canadian Journal of Philosophy 44/5-6, 631-657.

Poser, Hans (1989): "Kants absolute Modalitäten." In G. Corsi/C. Magnione/M. Mugnai (eds.), Atti del Convegno Internazionale di Storia della Logica – Le Teorie delle Modalita. Bologna: CLUEB.

Schneeberger, Guido (1952): Kants Konzeption der Modalbegriffe. Basel.

Stang, Nicholas (2011): "Did Kant Conflate the Necessary and the 'a Priori'?" Noûs 45/3, 443-471.

Stang, Nicholas (2016): Kant's Modal Metaphysics. Oxford.

Theis, Robert (1994): Gott: Untersuchung der Entwicklung des theologischen Diskurses in Kants Schriften zur theoretischen Philosophie bis hin zum Erscheinen der Kritik der reinen Vernunft. Stuttgart.

Vetter, Barbara (2015): Potentiality: From Dispositions to Modality. Oxford.

Watkins, Eric (2005): Kant and the Metaphysics of Causality. New York.

Wolff, Christian (GM): *Vernünfftige Gedancken von Gott, der Welt und der Seele des Menschen, auch allen Dingen überhaupt* ("German Metaphysics"). Reprint of the 11th edition, 1751. Ed. by C.A. Corr. Hildesheim 1983.

Wolff, Christian (Cosm): *Cosmologia Generalis*. Reprint of the 2nd edition, 1737. Ed. by J. École. Hildesheim 1964.

Wolff, Christian (Ont): *Philosophia Prima sive Ontologia*. Reprint of the 2nd edition, 1736. Ed. by J. École. Hildesheim 1962.

Wolff, Christian (TN): *Theologia Naturalis* ("Natural Theology"), Part 1.1. Reprint of the edition of 1739. Ed. by J. École. Hildesheim 1978.

Wood, Allen W. (1978): Kant's Rational Theology. Ithaca.

Yong, Peter (2014): "God, Totality and Possibility in Kant's *Only Possible Argument." Kantian Review* 19/1, 27-51.