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Transcendental Paralogisms as Formal Fallacies – Kant’s Refutation of Pure Rational Psychology

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Abstract: According to Kant, the arguments of rational psychology are formal fallacies that he calls transcendental paralogisms. It remains heavily debated whether there actually is any formal error in the inferences Kant presents: according to Grier and Allison, they are deductively invalid syllogisms, whereas Bennett, Ameriks, and Van Cleve deny that they are formal fallacies. I advance an interpretation that reconciles these extremes: transcendental paralogisms are sound in general logic but constitute formal fallacies in transcendental logic. By formalising the paralogistic inference, I will pinpoint the error as an illegitimate existential presupposition. Since – unlike transcendental logic – general logic abstracts from all objects, this error can only be detected in transcendental logic.

Keywords: paralogism, transcendental logic, rational psychology, soul, *sophisma figurae dictionis*

According to Kant, the arguments of rational psychology, designed to establish metaphysical tenets about the thinking self or the soul, are in fact formal fallacies that he calls transcendental paralogisms. A plethora of difficult interpretative problems haunt the Paralogisms chapter, which exposes and analyses these fallacies. Two principal lines of interpretation stand particularly far apart, as they disagree even on whether the paralogisms really commit any formal error to begin with. According to Michelle Grier and Henry Allison, the transcendental paralogisms are deductively invalid syllogisms, whereas Jonathan Bennett, Karl Ameriks, and James Van Cleve deny that they are formal fallacies at all.¹

¹ Bennett, Jonathan: *Kant’s Dialectic* [*Kant’s Dialectic*]. Cambridge 1972, 72; Ameriks, Karl: *Kant’s Theory of Mind. An Analysis of the Paralogisms of Pure Reason*. Oxford 2000 [1982], 48; Van Cleve, James: *Problems from Kant*. New York 2003 [1999], 174; Grier, Michelle: *Kant’s Transcendental Doctrine of Illusion* [*Transcendental Illusion*]. Cambridge 2001, 155 f, 157, 163; Allison,

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I believe this fundamental divide stems from a misunderstanding of what transcendental paralogisms are and that a clear definition can reconcile the two extremes. I focus on Kant's neglected distinction between *logical* and *transcendental* paralogisms: whereas the former consist "in the falsity of a syllogism as to form", the latter have a specifically "transcendental ground for inferring falsely as to form"^{2,3}. Although this distinction is introduced in the very beginning of the Paralogisms, only Grier and Allison acknowledge it, and they too continue to treat transcendental paralogisms as (a species of) *logical* paralogisms.

I propose an intermediate view according to which transcendental paralogisms are (deductively) valid and sound syllogisms in *general logic* yet formal fallacies in *transcendental logic*. Unlike general logic, which analyses concepts in abstraction from their objects, Kant's transcendental logic specifically investigates the logical form of objects, abstracting only from their empirical content. The specific fallacy of equivocation (*sophisma figurae dictionis*) of transcendental paralogisms is, I submit, unique to transcendental logic: while normal equivocation conflates *different concepts*, transcendental paralogisms conflate a *concept* with its possible *object*. Since general logic abstracts from objects, such an error cannot be detected in it. Still, the transcendental paralogism *does* constitute a formal fallacy, one that can be exposed only with the resources of transcendental logic. This also explains why Kant's predecessors were oblivious to the fallacy, as they had no conception of transcendental logic.

I start by presenting Kant's theory of syllogisms and his distinction between formal and material fallacies. In section 2, I will show that transcendental logic –

Henry E.: *Kant's Transcendental Idealism – an Interpretation and Defense* [*Transcendental Idealism*]. Revised and enlarged edition. New Haven/London 2004, 335. The paralogisms are also construed as formally invalid, e. g., by Patricia Kitcher (*Kant's Transcendental Psychology*. Oxford 1990, 183), Béatrice Longuenesse ("Kant on the Identity of Persons." In: *Proceedings of the Aristotelian Society* 107 (2), 2007, 149–167, 151n2), Ian Proops ("Kant's First Paralogism" ["First Paralogism"]. In: *Philosophical Review* 119, 2010, 449–495, 470), and Corey W. Dyck (*Kant and Rational Psychology* [*Rational Psychology*]. Oxford 2014, 100 f).

2 „Der logische Paralogismus besteht in der Falschheit eines Vernunftschlusses der Form nach [...]. Ein transscendentaler Paralogismus aber hat einen transscendentalen Grund, der Form nach falsch zu schließen.“ (KrV, A 341/B 399, translation amended.) Guyer's and Wood's translation of *Form nach* as "due to its form" contains specificity not found in the original: it suggests that a transcendental paralogism infers falsely *because* of the form of the *syllogism*. First, however, this "because" is superfluous, as Kant attributes it to the "transcendental ground," and second, Kant only speaks of inferring falsely as to form, not necessarily as to the form *of the syllogism* – crucially leaving open the form in question. (See section 2.)

3 Citations from Kant's works that have been translated into English are taken (with some alterations) from the Cambridge Edition of the Works of Immanuel Kant (Cambridge, 1995 ff). Other translations are mine.

although contrasted with formal (general) logic – also involves formal fallacies of its own. In section 3, I will show that transcendental paralogisms are neither deductively invalid fallacies of general logic nor formally flawless inferences. I advance a novel interpretation of the “transcendental ground for inferring falsely” as an illegitimate existential presupposition that neglects the laws of transcendental logic. While the inferences of rational psychology are sound in general logic, they succeed in determining merely the *concept* of the soul (how we must *think* of ourselves). But the rationalist covets *metaphysical* knowledge of the *object*, the soul itself (how we thinkers must *exist*). Used in this way, however, the inferences are transcendental fallacies. In section 4, I will formalise the transcendental paralogism in order to make its fallacy explicit. I will conclude with a discussion of how this interpretation transforms the way we ought to read Kant’s critique of rational psychology. Note that I seek only to expose the invalidity in the paralogistic inferences: I present neither an interpretation of *why* the rationalist would commit the fallacy (i.e., transcendental illusion) nor an analysis of Kant’s refutation of the so-called broadly rationalistic psychology that relies on tools beyond mere rationalistic inferences.

1 Formal and Material Fallacy

A syllogism or an inference of reason consists of three judgments: the major and minor premises and a conclusion. The major premise expresses a rule, and the minor premise subsumes something under (the condition of) this rule. The conclusion is a judgment that is thereby derived with necessity from the premises.⁴

The alleged paralogisms of rational psychology are specifically categorical syllogisms;⁵ i.e. their major premise is a judgment of the form “*A* is *B*”, where *A* is the subject and *B* the predicate term. The minor premise has the form “*C* is *A*”. From these two premises the conclusion “*C* is *B*” is derived.⁶ *B* is called the *major* and *C* the *minor term*. The term *A* that is common to both premises is called the *middle term* or *concept* (*medius terminus*, *Mittelbegriff*), since it mediates the two

⁴ Log, AA 09: 120 f; KrV, A 303 f/B 360 f, A 330/B 386 f.

⁵ KrV, A 323/B 379.

⁶ *A*, *B*, and *C* may stand for individuals or general concepts, nouns or adjectives. Kant himself does not commonly use symbols but enumerates all possible forms resulting from modifying categorical judgments as to, e.g., quantity (“all”, “some”) or quality (“is”, “is not”). Here I will omit these forms as an unnecessary complication. (Log, AA 09: 120 f, 122 f.)

premises, or “because through it a cognition [C] is subsumed under the condition [A] of the rule [A is B]”⁷.

Since syllogisms have two premises that both contain two terms, of which the middle term is common to both, a categorical syllogism must contain exactly three terms – otherwise it is a fallacy.⁸ For example, the major premise “All humans are mortal” connects two terms, the middle term “human” and the major term “mortal”. The minor premise “Socrates is human” subsumes the minor term “Socrates” under the middle term. In the conclusion, the minor term is connected with the major term so that “Socrates is mortal” is inferred.

1.1 Form and Matter of Syllogisms

According to existing interpretations, Kant’s claim that transcendental paralogisms are formal fallacies means that they are *deductively invalid* in formal logic.⁹ Kant does not operate with the contemporary distinction between formal and material fallacies, however – indeed, in contemporary classification a fallacy of equivocation is *material*. Although Kant himself says little about this distinction, we find express definitions e.g. in G. F. Meier’s *Auszug aus der Vernunftlehre* – the textbook on which Kant based his lectures on logic. According to Meier, a fallacy (*Betrugschluß*) is an “inference of reason, which is false in the form”¹⁰. For him, “[t]he matter of the inference of reason (*ratiocinii materia*) consists in its premises, its form however (*ratiocinii forma*) in the derivation of the conclusion from the premises”¹¹.¹² Meier then proceeds to “define a true inference of reason through an inference of reason that is correct both in the matter and in the form”¹³. Since the premises constitute its matter, a syllogism can be a (merely) formal fallacy only if its premises are true.

7 „weil durch denselben ein Erkenntniß unter die Bedingung der Regel subsumirt wird“ (Log, AA 09: 123).

8 Log, AA 09: 124.

9 Only Grier explicitly characterises the fallacy as “deductively invalid” “from the standpoint of general logic” (*Transcendental Illusion*, 157). Others speak only of a “formal fallacy”, implicitly taken as a deductive fallacy of general logic (a formal fallacy in the standard contemporary sense).

10 Meier, G. F.: *Auszug aus der Vernunftlehre* [Auszug]. Halle 1752, § 402. In: AA 16.

11 *Auszug*, § 359.

12 Meier (like Kant sometimes) speaks of “antecedent” (*Vorder-*) and “concluding” judgments (*Schlussurtheil*). Since Meier equates these with the Latin “*praemissae*” and “*conclusio*”, I translate them accordingly (*Auszug*, § 356).

13 Meier, G. F.: *Vernunftlehre*. Halle 1752, § 396. See also *Auszug*, § 360.

In his lectures, Kant follows Meier almost *verbatim*: a formal fallacy is an “inference of reason that is false as to form”¹⁴. Kant’s distinction between the form and the matter of an inference is also similar to Meier’s:

Sophism is a dialectical mode of inference that has merely the illusion of truth. The illusion can lie

- a.) In the matter, i. e. in the premises or in the propositions themselves, or
- b.) In the form, i. e. when the illusion lies in the conclusion (in the mode of inference).^{15,16,17}

For Kant too, then, a formal fallacy is an inference in which the form of the syllogism is false (i. e. invalid), whereas the “truth or falsity of a syllogism in the matter concerns the truth or falsity in the premises”¹⁸. In a formal fallacy, the inference is false or invalid in that the conclusion may be false even when the premises are true.¹⁹

¹⁴ „Ein Vernunftschluß, welcher der Form nach falsch ist [...], heißt ein Trugschluß“ (Log, AA 09: 134, translation modified).

¹⁵ „Sophisma ist eine dialectische Schlußart, die blos den Schein der Wahrheit hat. Der Schein kann liegen

a.) In der Materie d. i. in praemissis oder in den Sätzen selbst, oder

b.) In der Form d. i. wenn der Schein in der Conclusion (in der Art zu schließen) liegt.“ (V-Lo/Busolt, AA 24: 680; see also Log, AA 09: 121.)

¹⁶ In the *Logik Dohna-Wundlacken*, Kant gives the following definition: „Ein Vernunftschluß, der in der <Materie> falsch ist, heißt Trugschluß, und wenn er in <forma> falsch ist — Paralogism. Sophisma ist ein in forma falscher Schluß.“ (V-Lo/Dohna, AA 24: 777.) The expression “in forma” is also found in Kant’s marginal note of his copy of the A-edition *Critique*, next to the definition of transcendental paralogism: „Ein Paralogism ist ein Vernunftschluß, der in forma falsch ist.“ (HN, CLV E 47, AA 23: 38.)

¹⁷ Since the conclusion is a judgment, one might think that it belongs to the matter of inferences. But Kant identifies the conclusion with the mode or form of inference „sofern sie die Consequenz enthält“ (Log, AA 09: 121). This *consequentia* is the “if ... then ...” structure of a hypothetical judgment (KrV, A 303/B 360; Log, AA 09: 105f). That is, the form of a syllogism lies in the conclusion *insofar* as it includes the way in which one has inferred to it, i. e. not merely as a judgment *per se* but specifically as a judgment *derived from the premises*.

¹⁸ „Die Wahrheit oder Falschheit eines Vernunftschlusses in der Materie betrifft die Wahrheit oder Falschheit in den Praemissen.“ (V-Lo/Philippi, AA 24: 472.) See also: “The propositions in an inference can be true, but the inference can nonetheless be false as to form, i. e., a fallacy.” (“Hechsel Logic” [*Logik Hechsel*]). In: J. Michael Young (ed.): *Lectures on Logic*. Cambridge 1992, 409 [orig. manuscript p. 110]; see also V-Lo/Dohna, AA 24: 772.)

¹⁹ While today syllogisms are called invalid rather than false, Kant speaks of both the “falsity” and the “invalidity” of a syllogism equivalently. The term “soundness” does not enter Kant’s vocabulary – it was developed in the 19th century. He speaks rather of true and valid inferences and of the validity (i. e. truth) of the conclusion. The idea of soundness he would spell out in

What is more, Meier identifies two ways of rejecting an interlocutor's proof: showing that "the opponent has committed an error either in the matter or in the form of his proof"²⁰. The latter demands that the opponent "change his inference", the former that he "prove the premises"²¹. Not only does Meier thus attribute material fallacies to false premises, he also states that a rejection of proof can be directed either at the premises (matter) or at the inferential form. It is significant, then, that Kant commences his critique of the rational psychologists by making it explicit that he targets the form, not the matter (premises), of their proofs.

Kant's claim that transcendental paralogisms are formal rather than material fallacies thus mirrors his frequent claim that their *premises are true*.²² Beyond this, it is not yet decided what kind of formal fallacy they commit. Hence, *pace* all interpretations known to me,²³ when Kant claims that transcendental paralogisms are "false as to form", this does not on its own imply that he takes them – whether correctly (Allison, Grier) or incorrectly (Ameriks, Bennett, Van Cleve) – to be formal fallacies in the contemporary sense, i. e. deductively invalid inferences (in general logic). One should place emphasis not on transcendental paralogisms' being formal rather than material fallacies – for this does not distinguish them from the logical paralogisms with which they are contrasted – but on their being *transcendental* rather than *logical* fallacies.²⁴

terms of the matter and form of syllogisms: a formally correct inference is valid; a formally *and* materially correct inference is sound.

²⁰ *Auszug*, § 516.

²¹ *Ibid.*

²² E. g. KrV, A 402; see also Proops, "First Paralogism", 470.

²³ Proops does recognise that for Kant a paralogism is a formal fallacy in that it "is invalid, even though its premises are true" ("First Paralogism", 468). Proops nonetheless takes the invalidity to be the deductive invalidity of general logic.

²⁴ As Kant is commonly thought to have coined the term *formal logic*, one might still suspect that he must have deviated from his predecessors on this point. It is, however, not true that Kant coined the term in the first place (Wolff, Michael: *Die Vollständigkeit der kantischen Urteilstafel* [Urteilstafel]. Frankfurt a. M. 1995, 202f). Furthermore, neither Kant's marginal notes (R 3203–13, Refl, AA 16: 710–714, esp. R 3208) to his copy of Meier's *Auszug aus der Vernunftlehre* nor any other passages known to me indicate any disagreement with Meier's exposition of formal and material fallacies.

1.2 The *sophisma figurae dictionis*

According to Kant, the conclusion of the syllogism that exhibits the procedure of rational psychology “is drawn *per sophisma figurae dictionis* [sophism of a figure of speech], hence through a fallacy”²⁵. This sophism, also known as *the fallacy of equivocation*, is a formal fallacy in which “the *medius terminus* is taken in different meanings”²⁶. In general logic, this equivocation occurs when the same word that is used in both instances of the middle term expresses two different *concepts*, whereby the middle term cannot mediate the premises.²⁷ For example:

Major premise: Whatever is light cannot be dark

Minor premise: A feather is light

Conclusion: A feather cannot be dark

Here the word “light” is used in two different senses, expressing two different concepts. If we make the equivocation explicit by changing the word-expression, e. g. by distinguishing between the concepts *light in colour* and *light in weight*, we get an obviously invalid syllogism of four terms:

Major: Whatever is light in colour cannot be dark

Minor: A feather is light in weight

Conclusion: A feather cannot be dark

²⁵ „wird *per sophisma figurae dictionis*, mithin durch einen Trugschluß [...] gefolgt“ (KrV, B 411, translation modified; see also KrV, A 402).

²⁶ „der *medius terminus* in verschiedener Bedeutung genommen wird“ (Log, AA 09: 135).

²⁷ In *Logik Hechsel* Kant specifically says that in a *sophisma figurae dictionis* the “[v]ox medii termini [the word for the middle term] [...] is taken in different meanings” (*Logik Hechsel*, 410 [110 f]). (Kant distinguishes between concepts and words e. g. in Log, AA 09: 11–13, 116; AA 20: 260; V-Lo/Wiener, AA 24: 792; V-Lo/Dohna, AA 24: 754.) Notably, Meier equates *terminus* with expression (*Ausdruck*), which he defines as a word that signifies (*bedeutet*) a concept. In fallacies of ambiguity, the same word signifies different concepts. (*Auszug*, §§ 440, 449, 457, 463.) Two words, e. g. the German “Mensch” and the Finnish “ihminen”, can express the same concept: *human*. That the equivocation occurs when words are mapped onto concepts is clear from the fact that the fallacy of equivocation often disappears upon changing the language – e. g. when the English word “light” in the following example is replaced with the German words “hell” and “leicht”. In the *Port-Royal Logic*, too, the fallacy of equivocation involves a “confusion introduced by ambiguous words” (Arnauld, A. & Nicole, P.: *The Port-Royal Logic* [*Port-Royal Logic*]. Translated by James Dickoff and Patricia James. Indianapolis 1964, 263).

As Grier and Allison point out, since an inference that commits this kind of fallacy of equivocation has four rather than three terms,²⁸ it is a species of the formal fallacy of four terms (*quaternio terminorum*). This is indeed how the fallacy of equivocation has traditionally been analysed, e.g. in the *Port-Royal Logic* from 1662:

This sophism [the fallacy of abusing the ambiguity of words] is committed in several ways. All syllogisms invalid because of containing four terms are arguments that commit this fallacy. [This is the case e.g.] if the middle term is taken in one sense in the major premiss and in another sense in the minor premiss [...].²⁹

Grier's and Allison's claim that the transcendental paralogism is a deductively invalid four-term syllogism is motivated by this traditional analysis – and if it were invalid in general logic, their claim would hold. As I will show, however, the fallacy of four terms fails to capture the kind of equivocation that grounds the paralogistic inferences of rational psychology. Indeed, since Kant specifically contrasts the transcendental paralogism with a logical one in the opening paragraph of the Paralogisms, it seems reasonable to investigate whether the former involves a different kind of equivocation:

A logical paralogism consists in the falsity of a syllogism as to form, be its content otherwise what it may.³⁰ A transcendental paralogism, however, has a transcendental ground for inferring falsely as to form.³¹

Since logical and transcendental paralogisms are both fallacies of equivocation, I distinguish between *logical* and *transcendental* equivocation. These denote an equivocation of the middle term in *general* and in *transcendental logic*, respectively. Only the former equates two concepts strictly speaking, while the latter

28 *Transcendental Illusion*, 163n; *Transcendental Idealism*, 335. See also Wunderlich, Falk: “Kant’s Second Paralogism in Context. The *Critique of Pure Reason* on Whether Matter Can Think.” In: W. Lefevre (ed.): *Between Leibniz, Newton, and Kant*. Dordrecht 2001, 175–188, 176. Note that Kant never explicitly claims that a fallacy of equivocation involves four terms. Grier states otherwise (*Transcendental Illusion*, 163n) but does not provide a reference.

29 *Port-Royal Logic*, 262f.

30 The same expression „*der Inhalt mag sein, welcher er wolle*“ also appears in Kant’s definition of general logic (KrV, A 53/B 77), suggesting that a logical paralogism is one specifically in general logic.

31 „Der logische Paralogismus besteht in der Falschheit eines Vernunftschlusses der Form nach, sein Inhalt mag übrigens sein, welcher er wolle. Ein transscendentaler Paralogismus aber hat einen transscendentalen Grund, der Form nach falsch zu schließen.“ (KrV, A 341/B 399, translation amended.)

equivocates a concept with its purported object. In what follows, I will show that the transcendental ground underlying the transcendental paralogism involves such a transcendental equivocation.

2 Transcendental Logic and Formal Fallacy

According to Kant, logic is “the science of the rules of the understanding in general”³². In its most general sense, logic “contains the absolutely necessary rules of thinking, without which no use of the understanding takes place”, and it therefore does not consider “the difference of the objects to which it may be directed”³³. Rather, it “abstract[s] [...] from all objects of cognition”³⁴ or “from any relation of [cognition] to the object”³⁵. On this account, Kant’s logic is commonly called *formal*.³⁶ Although Kant does speak of *formal logic*, it is striking that – to my knowledge – this exact expression appears *only once* in his entire corpus.³⁷ To call Kant’s logic “formal” without further elaboration can thus be very misleading.^{38,39} The expression must be understood against the backdrop of Kant’s highly context-dependent distinction between matter and form.

32 „der Wissenschaft der Verstandesregeln überhaupt“ (KrV, A 52/B 76).

33 „enthält die schlechthin nothwendigen Regeln des Denkens, ohne welche gar kein Gebrauch des Verstandes stattfindet, und geht also auf diesen unangesehen der Verschiedenheit der Gegenstände, auf welche er gerichtet sein mag“ (KrV, A 52/B 76).

34 „abstrahier[t] [...] von allen Objecten der Erkenntniß“ (KrV, B ix).

35 „von aller Beziehung derselben [Erkenntnis] auf das Object“ (KrV, A 55/B 79).

36 E. g. Stuhlmann-Laeisz, Rainer: *Kants Logik*. Berlin 1975; Schulthess, Peter: *Relation und Funktion*. Berlin 1981; Wolff, Michael: *Urteilstafel*; MacFarlane, John: “Frege, Kant, and the Logic in Logicism.” In: *The Philosophical Review* 111, 2002, 25–65; Prien, Bernd: *Kants Logik der Begriffe*. Berlin 2006; Rosenkoetter, Timothy: “Truth Criteria and the Very Project of a Transcendental Logic.” In: *Archiv für Geschichte der Philosophie* 91, 2009, 193–236; Tolley, Clinton: “The Generality of Transcendental Logic.” In: *The Journal for the History of Philosophy*, 2012, 417–446.

37 KrV, A 131/B 170. Peter Schulthess makes the same observation (Schulthess, Peter: *Relation und Funktion*. Berlin 1981, 12).

38 For such an elaboration, see *Urteilstafel*, 204 ff, esp. 229: „Formal nennt Kant die formale Logik nämlich nicht etwa deshalb, weil die Regeln, die sie darstellt, formale Regeln sind. Alle logischen Regeln sind nämlich in irgendeiner Hinsicht und relativ zu irgendwelchen Inhalten formal.“

39 This is also hazardous because there are several different ways in which the formality of “formal logic” can and has been understood even outside Kant scholarship – Catarina Dutilh Novaes recognises eight such meanings, one of which is Kant’s (Dutilh Novaes, Catarina: “The Different Ways in which Logic is (said to be) Formal.” In: *History and Philosophy of Logic* 32, 2011, 303–332).

2.1 Matter and Form

The matter/form distinction permeates Kant's philosophy: matter and form are "two concepts that ground all other reflection" and are "bound up with every use of the understanding"⁴⁰. Matter "signifies the determinable in general" and form "its determination"⁴¹. Béatrice Longuenesse connects the concept pair to thinking in general: "All thinking is an activity of *determining* (giving *form* to) a *determinable* (*matter*)."⁴² Every representation involves *that which is represented* (matter) and the *way in which* that something is represented (form). This is why matter and form appear throughout Kant's philosophy in various contexts, relative to different species of representation and faculty.⁴³ Thus it must at the very least be asked: With regard to *which* form is general logic formal?

General logic is formal because, as an exposition of the rules of the understanding or of *thinking in general*, it "has to do with nothing but the mere form of thinking"⁴⁴. It thus abstracts from the *matter* or *content* of thinking.⁴⁵ "The matter of concepts is the *object*"⁴⁶, and according to Kant general logic "abstracts

40 „zwei Begriffe, welche aller andern Reflexion zum Grunde gelegt werden, so sehr sind sie mit jedem Gebrauch des Verstandes unzertrennlich verbunden“ (KrV, A 266/B 322).

41 „bedeutet das Bestimmbare überhaupt“ – „dessen Bestimmung“ (KrV, A 266/B 322).

42 Longuenesse, Béatrice: *Kant and the Capacity to Judge. Sensibility and Discursivity in the Transcendental Analytic of the Critique of Pure Reason [Capacity to Judge]*. Translated by Charles T. Wolfe. Princeton 1998, 148.

43 As we saw, the matter of a syllogism is its premises, and its form is the inference or *consequentia* that determines the conclusion through them. For a thorough discussion of matter and form, see *Capacity to Judge*, 147–62.

44 „hat mit nichts als der bloßen Form des Denkens zu thun“ (KrV, A 54/B 78). Similarly, e.g., pure spatiotemporal intuitions are "formal" because they have to do with nothing but the mere form of sensibility.

45 Although Kant sometimes distinguishes between *matter* (*Materie*) or *material* (*Stoff*) and *content* (*Inhalt*), here he appears to use them equivalently to refer to the objects of cognition or thinking (e.g. KrV, A 59/B 83; see also Rosenkoetter, Timothy: "Truth Criteria and the Very Project of a Transcendental Logic." In: *Archiv für Geschichte der Philosophie* 91, 2009, 205–12). This distinction is especially prominent in *Jäsche Logik*, where Kant contrasts the matter of concepts (§ 2) with their content (§ 7) (Log, AA 09: 91, 95; compare also KrV, A 70/B 95 with A 74/B 99 f; cf. *Urteilstafel*, 120 ff.; Brandt, Reinhard: *Die Urteilstafel. Kritik der reinen Vernunft A 67–76; B 92–101*. Hamburg 1991, 62). In the Paralogisms, the word "matter" (*Materie*) refers exclusively to physical matter; "content" is used once (KrV, A 397 f), and "material" (*Stoff*) twice (KrV, A 382, B 423 n) for objective reference.

46 „Die Materie der Begriffe ist der Gegenstand“ (Log, AA 09: 91).

from all real or objective difference of cognition” and cannot therefore “occupy itself [...] with the content of concepts”⁴⁷.

Apart from general logic, there are also particular or special (*besondere*) logics that, unlike general logic, contain “the rules for correctly thinking about a certain kind of objects”⁴⁸. These special logics include transcendental logic, which does not “abstract from all content of cognition” but “would exclude all those cognitions that were of empirical content”⁴⁹.⁵⁰ It is, in a sense, the most general of the special logics, concerning objects in the most abstract way: in it “the object itself is represented as an object of the mere understanding”⁵¹. While general logic abstracts from all objects, transcendental logic distinguishes between *pure* and *empirical* objects and abstracts only from the latter, i. e. from the given content of objects. Whereas general logic expounds the necessary rules of *thinking in general*, irrespective of *what* is thought, transcendental logic expounds the necessary rules of specifically *objective thinking*: “the principles without which no object can be thought at all”⁵². It is, in a word, a *logic of objectivity*. As Michael Wolff notes, it is thereby also *the special logic of metaphysics*.⁵³

2.2 The Concept of an Object

Kant’s notoriously ambiguous use of the term “object” complicates matters and needs to be addressed, for despite abstracting from objects, general logic accord-

47 „abstrahiert [...] von allem realen oder objectiven Unterschiede des Erkenntnisses“ – „sich mit [...] dem Inhalte der Begriffe beschäftigen“ (Log, AA 09: 101).

48 „die Regeln, über eine gewisse Art von Gegenständen richtig zu denken“ (KrV, A 52/B 76).

49 „von allem Inhalt der Erkenntniß abstrahirte“ – „würde alle diejenigen Erkenntnisse ausschließen, welche von empirischem Inhalte wären“ (KrV, A 55 f/B 79 f).

50 According to Wolff, special logics are the “besonderen Regeln, die in einer bestimmten Wissenschaft gebraucht werden, wenn Beweise durchgeführt werden” (*Urteilstafel*, 209), e.g. in mathematics, physics, and jurisprudence (*Urteilstafel*, 210). See also V-Met-K3E/Arnoldt, AA 29: 983; *Urteilstafel*, 204, 241; Prien, Bernd: *Kants Logik der Begriffe*. Berlin 2006, 41.

51 „der Gegenstand selbst [wird] als ein Gegenstand des bloßen Verstandes vorgestellt“ (Log, AA 09: 15).

52 „die Principien, ohne welche überall kein Gegenstand gedacht werden kann“ (KrV, A 62/B 87).

53 *Urteilstafel*, 210, 241. Transcendental logic continues to be interpreted in various incompatible ways – see especially Timothy Rosenkoetter (“Truth Criteria and the Very Project of a Transcendental Logic.” In: *Archiv für Geschichte der Philosophie* 91, 2009) and Clinton Tolley (“The Generality of Transcendental Logic.” In: *The Journal for the History of Philosophy* 50, 2012). A full defence of my reading is a task for another article. What is important is that my interpretation yields substantial benefits for interpreting Kant’s Paralogisms.

ing to Kant nonetheless “deals with all objects in general”⁵⁴. To avoid contradiction, general logic must not be taken as something that *does not apply to* objects but as something that, by abstracting from everything that belongs to these objects, abstains from *saying anything about* them specifically as objects – just as mathematics applies to concrete objects like mugs and people yet abstracts from their concreteness so as to focus on their pure quantity. The rules of general logic, in virtue of applying to all thinking whatsoever, must also apply to the corresponding *objects* of every thought – if there are any.

For Kant, in its most abstract sense, the term “object” denotes *what is thought*, i. e. *any* object of thought. As explained in *Metaphysik Mrongovius*, this sense is so wide that it includes even *impossible* objects: an “object can also be thought with impossible predicates”⁵⁵. Since an object in general can be possible or impossible, “[t]he object [... is] the highest concept in ontology.”⁵⁶ For something to be an *object of thinking* or a merely *logical* something, it is only necessary that it *not contradict itself* and that it therefore be *logically possible*.⁵⁷ It is in this sense of *logical object* that general logic deals with all objects in general, whether possible or impossible, actual or imagined, etc. An object is a logical object in general if and only if its *concept* is not self-contradictory, i. e. is thinkable.

Fig. 1: Species of Objects

⁵⁴ „auf alle Gegenstände überhaupt geht“ (Log, AA 09: 15; see also KrV, A 57/B 82).

⁵⁵ „doch kann man Gegenstand auch mit unmöglichen praedicaten denken“ (V-Met/Mron, AA 29: 811).

⁵⁶ „Der Gegenstand [...] der höchste Begriff der Ontologie.“ (V-Met/Mron, AA 29: 811.)

⁵⁷ V-Met-L2/Pölit, AA 28: 544.

Typically, however, when Kant speaks of objects he means them “in the metaphysical” or “in the real sense”⁵⁸. These are *possibly existing objects*, i. e. objects whose concepts not only are non-self-contradictory but also have *objective reality*.⁵⁹ Transcendental logic is a logic of objectivity or a logic of objective thinking in the real sense of an object as a possibly existing thing – not in the logical sense in which every non-self-contradictory thought has an object simply in virtue of being *about something*. Kant repeatedly warns us “not to infer immediately from the possibility of the concept (logical possibility) to the possibility of the thing (real possibility)”⁶⁰.

2.3 The Formality of Transcendental Logic

Kant contrasts transcendental logic with general logic because, *as a science of thinking* (i. e., as a logic), it does not concern the form of thinking alone and is therefore not a formal *logic*. Yet transcendental logic is nonetheless a formal *science* of another kind, namely of “the merely formal principles of pure understanding”⁶¹, viz. of the categories and the transcendental principles of the understanding that apply them. As Wolff notes, “all logical rules are formal in some respect and relative to some content”⁶². Although transcendental logic does not abstract from all content of *thinking* or *cognition*, it still abstracts specifically from any content given by sensibility: it “separates itself completely not only from everything empirical, but even from all sensibility”⁶³. It thus concerns only the *conceptual form* of the objects of cognition, i. e. the way in which we must *think* every possibly existing object (whereas the transcendental aesthetic concerns their *sensible form*: how we must *intuit* them).

58 „im metaphysischen Verstande (in sensu reali)“ (V-Met-L2/Pölitiz, AA 28: 555; see also V-Met/Mron, AA 29: 811).

59 V-Met-L2/Pölitiz, AA 28: 544. I will not here enter the debate on how precisely to understand “objective reality.” In the relevant sense, however, a concept has objective reality if its object is at least *really possible*, i. e. can exist – regardless of whether it actually does (KrV, A 95, A 109 f, B 148–51, A 217/B 264, A 338 f/B 396 f, A 594/B 624 n). By contrast, a logical object is something that can at least be *thought*, regardless of whether it can also exist.

60 „von der Möglichkeit der Begriffe (logische) nicht sofort auf die Möglichkeit der Dinge (reale) zu schließen“ (KrV, A 596/B 624 n; see also KrV, A 244/B 302).

61 „den bloßen formalen Principien des reinen Verstandes“ (KrV, A 63/B 88).

62 *Urteilstafel*, 229.

63 „sondert sich nicht allein von allem Empirischen, sondern sogar von aller Sinnlichkeit völlig aus“ (KrV, A 65/B 89).

But transcendental logic alone does not suffice for determining objects. It only determines the *form* of thinking that must pertain to all possibly existing objects, i. e. the necessary conditions of the possibility of *thinking* a real object. These conditions are not *sufficient* for the existence of such objects; the *matter* of cognition must still be *given* elsewhere. For humans, it is given in sensible intuition. Hence transcendental logic, too – albeit a logic of objectivity – abstracts from all *actual* objects, for it concerns only *pure* objects of thinking as to their mere conceptual form, whereas actual objects must have a matter as well. Demonstrating that it is impossible for humans to cognise objects without sensibly given content is one of the main aims of the *Critique of Pure Reason*.⁶⁴

According to Kant, the pure concepts of the understanding – expounded in transcendental logic – constitute the *conceptual form of experience*.⁶⁵ This is how he defines the categories: “A concept that expresses this *formal* and *objective* condition of experience universally and sufficiently would be called a pure concept of the understanding.”⁶⁶ The categories apply to objects because they constitute “the form of thinking of an object in general”⁶⁷. Their objective validity “rests on the fact that through them alone is experience possible (as to the form of thinking)”⁶⁸.

64 Since Kant includes the schematism and the transcendental principles under the title Transcendental Logic, one might object that transcendental logic abstracts only from *empirical* sensible content, not from all sensible content. But there is, first, direct textual evidence against such a reading (note 63). Second, we must distinguish between transcendental logic itself and its application conditions: „In einer transscendentalen Logik isoliren wir den Verstand (so wie oben in der transscendentalen Ästhetik die Sinnlichkeit) und heben bloß den Theil des Denkens aus unserm Erkenntnisse heraus, der lediglich seinen Ursprung in dem Verstande hat. Der Gebrauch dieser reinen Erkenntniß aber beruht darauf als ihrer Bedingung: daß uns Gegenstände in der Anschauung gegeben sind, worauf jene angewandt werden könne.“ (KrV, A 62f/B 87.)

In one sense, then, in isolation, transcendental logic treats only the conceptual form that understanding contributes to the *thought* of the objects of cognition. In another sense (under the title Transcendental Logic in the *Critique*), it can also be considered in tandem with transcendental aesthetic. Hence it treats the *a priori* conditions of applying the conceptual form (the categories) *both* to the *a priori* form (space and time) *and* to the empirical content of sensibility (KrV, A 88–90/B 120–2, B 169.) This view accommodates the objection and has the advantage that in the Transcendental Dialectic one can again abstract from the specifically sensible application conditions of the categories and investigate whether *reason*, via its inferences, can bypass these conditions and apply the categories to the *transcendent* objects of the ideas of pure reason.

65 E. g. KrV, B xvii–xviii, B 1, A 96, A 110, A 119, A 125, B 146, A 220/B 267, A 246 f/B 303, A 250.

66 „Ein Begriff, der diese *formale* und *objective* Bedingung der Erfahrung allgemein und zureichend ausdrückt, würde ein reiner Verstandesbegriff heißen.“ (KrV, A 96, my emphasis.)

67 „die Form des Denkens eines Gegenstandes überhaupt“ (KrV, A 50/B 74 f).

68 „[beruht] darauf, daß durch sie allein Erfahrung (der Form des Denkens nach) möglich sei“ (KrV, A 93/B 126, translation modified).

In short: “Pure concepts of the understanding [...] first make [experience] possible as to form”⁶⁹.

The following picture emerges: transcendental logic does not constitute formal *logic*, as it does not investigate the forms of thinking in general, yet it is a formal *science* nonetheless, namely of the conceptual forms of experience and objective thinking.⁷⁰ Kant’s definition of transcendental paralogisms as false inferences “as to form” need not therefore be understood in the general-logical sense of form, for it can refer to the categories as conceptual forms of objective thinking – making them fallacies of equivocation in transcendental rather than general logic.

In deciding whether a concept refers to a mere logical object or to a real, possibly existing object, it does not suffice to analyse the formal conditions of all thinking (general logic); one must analyse the special formal conditions of objective thinking (transcendental logic). The failure to attend to these transcendental-logical rules (the transcendental principles for applying the categories) is “the transcendental ground for inferring falsely as to form” that renders the paralogistic inferences illegitimate and inconclusive.

3 The Transcendental Paralogism

According to Grier and Allison, transcendental paralogisms are special invalid syllogisms of general logic that are grounded in the nature of reason, specifically in transcendental illusion.⁷¹ Kant’s apparent equation of “transcendental ground” with a “ground in the nature of human reason” lends credence to their view:

69 „Reine Verstandesbegriffe [...] machen] Erfahrung [...] der Form nach [...] allererst möglich“ (KrV, A 130, translation modified). Here Kant uses the exact same expression “as to form” as in his definition of transcendental paralogism, yet he clearly does not treat the categories as a subject matter of general logic.

70 In the same sense, the transcendental aesthetic is a formal science – „die Wissenschaft von der Sinnlichkeit“ (V-Met/Mron, AA 29: 802) – for it expounds time and space as the forms of sensibility and intuition (KrV, B 148). See also KrV, A 52/B 76; Stuhlmann-Laeisz, Rainer: *Kants Logik*. Berlin 1975, 5.

71 See also “First Paralogism”, 465.

A transcendental paralogism, however, has a transcendental ground for inferring falsely due to its form. Thus a fallacy of this kind will have its ground in the nature of human reason, and will bring with it an unavoidable, although not insoluble, illusion.⁷²

An alternative interpretation is possible, however, for the two instances of “ground” could denote different grounds. Namely, two conditions must be met for me to commit a fallacy: (1) the inference must be invalid, and (2) I must erroneously take it to be valid: “An inference of reason that is [1] false as to form, although [2] it has for itself the illusion of a correct inference, is called a *fallacy*”^{73, 74} It is plausible that the “transcendental ground” is what makes the paralogism invalid (it violates the rules of transcendental logic). Rather than specifying *this* ground, that the paralogism has “its ground in the nature of reason” would then refer to the second ground: the reason for taking the invalid inference for a valid one (transcendental illusion).⁷⁵ That Kant does not explicitly say so might be because he simply refrains⁷⁶ from reiterating here the parallel point about logical paralogisms that he had already made earlier in the Dialectic when contrasting logical and transcendental illusion:

Logical illusion, which consists in the mere imitation of the form of reason (the illusion of fallacious inferences), arises solely from a failure of attentiveness to the logical rule. Hence as soon as this attentiveness is focused on the case before us, logical illusion entirely disappears. Transcendental illusion, on the other hand, does not cease even though it is uncovered and its nullity is clearly seen into by transcendental criticism [...].⁷⁷

72 „Ein transscendentaler Paralogismus aber hat einen transscendentalen Grund, der Form nach falsch zu schließen. Auf solche Weise wird ein dergleichen Fehlschluß in der Natur der Menschenvernunft seinen Grund haben und eine unvermeidliche, obzwar nicht unauflösliche Illusion bei sich führen.“ (KrV, A 341/B 399.)

73 „Ein Vernunftschluß, welcher der Form nach falsch ist, ob er gleich den Schein eines richtigen Schlusses für sich hat, heißt ein Trugschluß“ (Log, AA 09: 134, translation modified).

74 Kant speaks of both the ground of error (illusion) and the ground of truth or falsity. An example of the latter is: „[Die innere Criteria] sind *Objective*, welche den Grund enthalten, warum eigentlich etwas wahr, oder falsch sey“ (V-Lo/Blomberg, AA 24: 87f). An example of the former is: „Eine Erkenntniß aber ist [...] *formaliter* [...] wahr, wenn die gründe, sie zu beweisen, und herzuleiten richtig sind“ (op. cit., 97). Technically, the difference is between a ground of truth and a ground of holding-to-be-true (*Fürwahrhalten*). See Log, AA 09: 65ff.

75 It is beyond the scope of this paper to discuss the central notion of transcendental illusion.

76 Kant’s explicit definition of logical paralogism here presents only one aspect of fallacies and error in general: their *invalidity* or *falsity*. The other official requirement – that we take them to be valid or true – is implicit in the contrast to transcendental paralogisms. (See Log, AA 09: 56, 134; V-Lo/Wiener, AA 24: 824, 828, 832; V-Lo/Dohna, AA 24: 719f.)

77 „Der logische Schein, der in der bloßen Nachahmung der Vernunftform besteht, (der Schein der Trugschlüsse) entspringt lediglich aus einem Mangel der Achtsamkeit auf die logische Regel.

That an inference does not follow the general-logical rule is the ground for its invalidity, and the ground for nonetheless taking it to be valid is our inattentiveness to this rule. While this “artificial illusion”⁷⁸ can be avoided, transcendental paralogisms involve a “*natural* and unavoidable *illusion*”⁷⁹ due to a special, transcendental ground. It is thus feasible to read the claim that transcendental paralogisms have their “ground in the nature of human reason” not as their *definition* but as a *further*, illusion-related contrast between them and logical paralogisms. My alternative reading, then, is that the “transcendental ground for inferring falsely” is a transcendentially logical conflation of a concept (of an object) with its possibly existing object – or, equivalently, the same concept with and without (demonstrable) objective reference.

3.1 The Syllogism of Rational Psychology

In the A-edition⁸⁰ Paralogisms, Kant somewhat hesitantly calls the transcendental paralogism a fallacy of equivocation and is quick to specify in which sense:

If one wants to give a logical title to the paralogism in the dialectical syllogisms of the rational doctrine of the soul, insofar as they nonetheless have correct premises [i.e. are not material fallacies], then it can count as a *sophisma figurae dictionis*, in which the major premise makes a merely transcendental use of the category, in regard to its condition, but in which the minor premise and the conclusion, in respect of the soul that is subsumed under this condition, make an empirical use of the same category.⁸¹

So bald daher diese auf den vorliegenden Fall geschärft wird, so verschwindet er gänzlich. Der transscendentale Schein dagegen hört gleichwohl nicht auf, ob man ihn schon aufgedeckt und seine Nichtigkeit durch die transscendentale Kritik deutlich eingesehen hat [...].“ (KrV, A 296 f/ B 353f.)

78 „gekünstelte[r] Schein[]“ (KrV, A 298/B 354).

79 „[n]atürliche[] und unvermeidliche[] *Illusion*“ (KrV, A 298/B 354).

80 Due to the many differences in Kant’s presentation of the A- and B-Paralogisms, there is considerable variety of focus in the literature. Ameriks, Bennett, and Van Cleve concentrate on the A-edition, whereas Grier and Allison discuss both. I will mostly draw on the B-Paralogisms, and although I believe the superficial differences in Kant’s account of the error in both editions can be reconciled, I will not defend this view here. (See Kannisto, Toni: “Why There Can Be No Future Achilles – The Inherent Fallacy in the Paralogisms.” In: *Immanuel Kant: Die Einheit des Bewusstseins*. Hrsg. von G. Motta and U. Thiel. Berlin 2017, 148–163, see 151–154.)

81 „Wenn man den Paralogism in den dialektischen Vernunftschlüssen der rationalen Seelenlehre, so fern sie gleichwohl richtige Prämissen haben, logisch betiteln will: so kann er für ein *sophisma figurae dictionis* gelten, in welchem der Obersatz von der Kategorie in Ansehung ihrer Bedingungen einen bloß transscendentalen Gebrauch, der Untersatz aber und der Schlußsatz in

Kant's caution is prudent, for as we have seen, a regular *sophisma figurae dictionis* (of general logic) equivocates between two different concepts denoted by the same word, whereas here the equivocation concerns two *uses* of the *same* concept – “the same category”. Kant's subsequent explanation underscores this point:

Thus e. g., the concept of substance in the paralogism of simplicity is a pure intellectual concept, which in the absence of conditions of sensible intuition is merely of transcendental use, i. e., of no use at all. But in the minor premise the very same concept is applied to the object of all inner experience, yet without previously establishing it *in concreto* and grounding the condition of its application, namely its persistence; and hence an empirical, though here illegitimate, use is being made of it.⁸²

Since the category is “the very same concept” in both premises, the paralogism has three terms and does not – *pace* Grier and Allison – appear to be a fallacy of four terms. As Kant's explanation shows, by the “use” of a concept he means its application to objects.⁸³ Only if the concept is the same can its different applica-

Ansehung der Seele, die unter diese Bedingung subsumirt worden, von eben der Kategorie einen empirischen Gebrauch macht.“ (KrV, A 402f, translation modified.)

82 „So ist z.B. der Begriff der Substanz in dem Paralogismus der Simplicität ein reiner intellectueller Begriff, der ohne Bedingungen der sinnlichen Anschauung bloß von transscendentalem, d. i. von gar keinem Gebrauch ist. Im Untersatze aber ist eben derselbe Begriff auf den Gegenstand aller inneren Erfahrung angewandt, ohne doch die Bedingung seiner Anwendung *in concreto*, nämlich die Beharrlichkeit desselben, voraus festzusetzen und zum Grunde zu legen, und daher ein empirischer, obzwar hier unzulässiger Gebrauch davon gemacht worden.“ (KrV, A 403, translation amended.)

83 Although Kant has no systematic definition of the term “use” (*Gebrauch*), by the transcendental and empirical use of concepts he means objective reference exclusively: to use a concept is to (attempt to) *subsume* things under it, i. e. to determine something as its referent object. In transcendental use, the domain of discourse consists of things in general; in empirical use it consists of appearances or objects of experience. Apart from the Paralogisms, this view is explicit in the Schematism and Phenomena/Noumena chapters. E. g. „Der transscendentale Gebrauch eines Begriffs [...] ist dieser: daß er auf Dinge *überhaupt* und *an sich selbst*, der empirische aber, wenn er bloß auf Erscheinungen, d. i. Gegenstände einer möglichen *Erfahrung*, bezogen wird.“ (KrV, A 238 f/B 298.) „Nun gehört zum Gebrauche eines Begriffs noch eine Function der Urtheilskraft, worauf ein Gegenstand unter ihm subsumirt wird [...]“ (KrV, A 247/B 304.) Notably, this use is only *purported*, i. e. the object is *intentional*: it involves „der Subsumtion irgend eines *angeblichen* Gegenstandes unter diese Begriffe“ (KrV, A 248/B 305, my emphasis). To underscore this, Kant sometimes says that the ‘transcendental use’ is „von gar keinem Gebrauch“ (KrV, A 403; see also A 247 f/B 304 f). For such a use would only be of „logische Bedeutung“ and „stellt keinen Gegenstand vor“ (KrV, A 147/B 186 f). That is, it fails to constitute an *objective* use in the relevant (metaphysical) sense. (On objective use, see KrV, A 161/B 200, A 286/B 342, A 327/B 383.) Transcendental use of the categories is of no (objective) use at all because, in the absence of some-

tions to objects be conflated. Were the transcendental paralogism an ordinary *sophisma figurae dictionis*, the same *word* would denote different *concepts*, but here the *same concept* is used in different ways or has two different relations to possibly existing objects.

In the B-edition Kant says that in “the procedure of rational psychology there is a paralogism that is exhibited through the following syllogism”⁸⁴. I will call this the General Syllogism:

- [Major premise:]** What cannot be thought otherwise than as subject does not exist otherwise than as subject, and is hence substance.
- [Minor premise:]** Now a thinking being, considered merely as such, cannot be thought otherwise than as subject.
- [Conclusion:]** Therefore it also exists only as such a being, i. e., as substance.⁸⁵

Kant reiterates that this conclusion is drawn “*per sophisma figurae dictionis*, hence through a fallacy”⁸⁶. Unfortunately, what exactly is being equivocated here is unclear, as Kant himself offers a wide range of *prima facie* incompatible explanations. Since I have shown elsewhere that his various formulations can nonetheless be reconciled, I shall side-step these interpretative issues here for the sake of simplicity and present my reading directly.⁸⁷

According to the B-edition, the inference conflates “a being” or “thing” with “thinking”: while according to Kant the major premise’s “what” refers to “things”,⁸⁸ the minor premise’s “thinking being” – confusingly enough – talks

thing given in intuition, „wird nichts gegeben, was unter den Begriff subsumirt werden könne“, which is to say that it has „keinen bestimmten oder auch nur der Form nach bestimmaren Gegenstand“ (KrV, A 247 f/B 304). This “determinable object” is the *matter* of the concept (see 2.1). As we saw, transcendental logic alone without given (sensible) content can only anticipate the conceptual form of objects and does not determine any real objects. See also KrV, A 139/B 178, A 146/B 185, and note 94.

84 „In dem Verfahren der rationalen Psychologie herrscht ein Paralogism, der durch folgenden Vernunftschluß dargestellt wird.“ (KrV, B 410, translation modified.)

85 „Was nicht anders als Subject gedacht werden kann, existirt auch nicht anders als Subject und ist also Substanz.

Nun kann ein denkendes Wesen, bloß als ein solches betrachtet, nicht anders als Subject gedacht werden.

Also existirt es auch nur als ein solches, d. i. als Substanz.“ (KrV, B 410 f, translation amended.)

86 „*per sophisma figurae dictionis*, mithin durch einen Trugschluß“ (KrV, B 411, translation modified.)

87 See note 80 and “First Paralogism”, 471f.

88 „ein[] Wesen“ (KrV, B 411) – „Ding“ (KrV, B 411 n) – „Das Denken“ (*ibid.*) – „Dingen“ (*ibid.*), respectively. Note that while it is not altogether clear whether for Kant “being” and “thing” are

“not about *things*, but about *thinking*”^{89,90} That the inference conflates a *thought* with a *thing* means that it conflates a *concept* (or, as it may be, an idea) with its *object*. Kant expresses this basic conflation in various, not obviously equivalent, ways.

First, the conflation consists in an equivocation between two uses of a concept, either in relation to “a being that can be thought of in every respect” (major premise) or “relative only to thinking [...] but not at the same time in relation to the intuition through which it is given as an object of thinking”⁹¹ (minor premise). Second, in the major premise the concept therefore “applies to an object in general”, whereas in the minor premise “no object is thought”⁹², as the concept is applied only in “thinking (in that one abstracts from every object)”⁹³. (See note 101.) Third, since the relevant concepts here are the categories, in A-edition terms the major premise uses the category *transcendentally*, applying it to a mere object in general, whereas the minor premise uses it *empirically*, applying it to real objects.⁹⁴ That the minor premise in the A-edition is applied empirically to objects would seem to contradict Kant’s B-edition claim that it relates to thinking alone, were it not for his qualification that this application is in fact *illegitimate*⁹⁵ – which is to say that the minor premise is precisely *justified* relative “only to thinking”, not to its possible (real) object.⁹⁶

equivalent terms, in the Paralogisms he appears to use them more or less synonymously. I follow his practice.

89 „nicht von Dingen, sondern vom Denken“ (KrV, B 411 f n).

90 The A-edition rendition is entirely different: the inference allegedly conflates or makes two different uses of a category.

91 „einem Wesen [...], das überhaupt, in jeder Absicht [...] gedacht werden kann“ – „nur relativ auf das Denken [...], nicht aber zugleich in Beziehung auf die Anschauung, wodurch es als Object zum Denken gegeben wird“ (KrV, B 411).

92 „[geht] auf ein Object überhaupt“ – „[wird] an gar kein Object gedacht“ (KrV, B 411 n).

93 „Denken (indem man von allem Objecte abstrahirt)“ (KrV, B 411 f n).

94 KrV, A 403. In terms of Kant’s A-edition exposition, in the major premise the category could even refer to things in themselves; the minor premise, however, is restricted to things as appearances. (KrV, A 139/B 178, A 146 f/B 185–187, A 242/B 299, A 246–248/B 303–305.)

95 See note 82.

96 Whereas in the B-edition Kant expounds the condition under which the minor premise is true, in the A-edition he explains what the rational psychologist (erroneously) takes it to accomplish, namely that it applies to objects. The diagnosis of the error remains the same between the two editions, however.

3.2 Hypostatisation as a Formal Fallacy in Transcendental Logic

Kant calls the conflation of a concept, representation, or idea with a really existing object *hypostatisation*.⁹⁷ This term – as Grier has shown in detail – lies at the centre of Kant’s critique of speculative metaphysics.⁹⁸ As it concerns the relationship of a concept to a real object, something from which general logic abstracts, hypostatisation is a fallacy in transcendental logic. The major premise of the General Syllogism is true in *general logic*, of a logical object. Since this logical object can fail to be an existing thing and even a *possibly* existing metaphysical or real object, the major premise is true even if there are no (or even cannot be) things that “cannot be thought otherwise than as subject”.⁹⁹ Hence it alone has no bearing on metaphysics, and to assume otherwise is to hypostatise the concept. Kant typically expresses this point by stating that the middle term in the paralogisms lacks demonstrable *objective reality*:

[T]he concept of a thing that can exist for itself as subject but not as a mere predicate carries with it no objective reality at all, i. e., [...] one cannot know whether it applies to any object, since one has no insight into the possibility of such a way of existing [...]. [T]hus if we stay merely with thinking, we also lack the necessary condition for applying [e. g.] the concept of substance [...] to itself as a thinking being[.]¹⁰⁰

⁹⁷ KrV, A 384–386, A 392, A 580/B 608.

⁹⁸ *Transcendental Illusion*, 130 f, 169 f, and *passim*; KrV, A 384–386, A 392–395, A 402.

⁹⁹ Kant’s multi-faceted and equivocal use of the terms “object” and “subject” is confusing. “Object” here retains the meaning assigned to it in section 2.2. “Subject” may denote the grammatical subject term “A” in “A is B”, contrasted with the predicate term “B” (see section 1). But it can also denote the psychological subject, i. e. the self, the I, or the thinking being. Kant frequently speaks of this I or thinking being both as the subject term in judgments of rational psychology, e. g. in “I am substance”, and as the *object* of rational psychology – a purported possibly existing *thing*. What is at stake in the Paralogisms is whether the thinking being (psychological subject) is also an existing thing (a real object), and indeed specifically one that can only be referred to by the grammatical subject of a categorical judgment, never by its predicate. If so, the psychological subject as a real object is, according to Kant, a *substance* – defined as „etwas, das als [grammatisches] Subject, niemals aber als bloßes Prädicat existiren könne“ (KrV, B 149). In the context of the General Syllogism, the “subject” in “thought / exists as subject” is always grammatical: it is either the existing or the merely thought referent of the subject term. Crucially, then, the *subject* here is contrasted not with an *object* but with a *predicate* (see e. g. note 113).

¹⁰⁰ „der Begriff eines Dinges, was für sich selbst als Subject, nicht aber als bloßes Prädicat existiren kann, [führe bei sich] noch gar keine objective Realität [...], d. i. [...] man [könne] nicht wissen [...], ob ihm überall ein Gegenstand zukommen könne, indem man die Möglichkeit einer solchen Art zu existiren nicht einsieht [...]. [A]lso fehlt es uns auch, wenn wir bloß beim Denken

That the major premise is noncommittal with regard to the existence of the object would not be a problem if the minor premise could establish that there actually is such a real object that can only be thought as subject. The conclusion could then follow the stronger and metaphysically pregnant sense of “object”.¹⁰¹ The B-edition minor premise fails to establish this, however, for if it is true at all, this is because, as we saw, it “talks about this [thinking] being only insofar as it is considered as subject [...] but not at the same time in relation to the intuition through which it is given as an object for thinking”. And when in the A-edition analysis it is supposed to apply the category empirically to objects, it does so “without previously [...] grounding the conditions of its application”, viz. the conditions of its objective reality, and hence through an “illegitimate” use or hypostatisation of it. Although the rational psychologist *would need* the minor premise to be true of a real object, it can only be shown to be true of the subject and of thought. It therefore cannot determine the *logical* object of the major premise as a real *metaphysical* object.

The inference is not wholly invalid, however. Although “in the conclusion it cannot follow that I cannot *exist* otherwise than as [a referent of the] subject [term]”, it does follow that “in *thinking my existence* I can use myself only as the subject [term] of judgment”. But this “is an identical proposition that discloses absolutely nothing about the manner of my *existence*”¹⁰².¹⁰³ The inference can thus be read in two ways: either it is valid – and sound – in general logic yet (therefore) remains noncommittal to the possible existence of its object, or it reaches a

stehen bleiben, an der nothwendigen Bedingung, [z.B.] den Begriff der Substanz [...] auf sich selbst als denkend Wesen anzuwenden“ (KrV, B 412f).

101 This explains why Kant adds the somewhat perplexing remark that the major premise talks about a being „auch so, wie es in der Anschauung gegeben werden mag“ (KrV, B 411; again in B 411 n), in spite of its applying merely to an „Object überhaupt“ (KrV, B 411 n) or its making a merely „transscendentalen Gebrauch“ (KrV, A 403) of the category. This confirms that an object in general might – or might not – *also* be intuited and so be an existing thing. While the major premise remains noncommittal, the minor premise purports yet fails to determine the object specifically as intuited.

102 „daher im Schlußsatze nicht folgen kann: ich kann nicht anders als Subject *existiren*, sondern nur: ich kann *im Denken meiner Existenz* mich nur zum Subject des Urtheils brauchen, welches ein identischer Satz ist, der schlechterdings nichts über die Art meines *Daseins* eröffne“ (KrV, B 412 n, my emphasis).

103 *Pace* Van Cleve, according to whom, although the paralogism is logically valid and can have true premises, “there is no understanding of the middle term that makes both premises simultaneously acceptable” (Van Cleve, James: *Problems from Kant*. New York 1999, 175). Van Cleve’s otherwise refined interpretation is unsupported by textual evidence and even contradicts Kant’s explicit acknowledgment (cited above) of a reading of the middle term that makes the premises and conclusion simultaneously true.

fallacious metaphysical conclusion through the illegitimate assumption in transcendental logic that the object – the I as the object of the idea of soul – does exist. This is why Kant repeatedly states that each proposition of rational psychology is *apodictic* and *must be valid* as an *identical* or *analytic* proposition.¹⁰⁴ As far as *general logic* is concerned, then, the General Syllogism is sound with a necessarily true conclusion (and is indeed not a paralogism). Yet, since general logic abstracts from objects, it does not decide whether the inference is sound for objects – a sound *metaphysical* inference. As Kant summarises:

Thus through the analysis of the consciousness of myself in thinking in general not the least is won in regard to the cognition of myself as object. The logical exposition of thinking in general is falsely held to be a metaphysical determination of the object.¹⁰⁵

4 The Transcendental Fallacy in the General Syllogism

Formalising the General Syllogism in contemporary logic is helpful for exposing the fallacy in the transcendental paralogism with formal rigour. As contemporary logic differs from Kant's Aristotelian logic and contains tools not available to him, the presentation and analysis of the syllogism must deviate from the letter of Kant's own diagnosis of its error, though it remains true to its spirit. Note that the formalisation brings out both the *valid* general-logical inference and the *invalid* transcendental-logical one, while Kant's General Syllogism is (purposely) ambiguous between the two.

4.1 Formalisation of the General Syllogism

According to Kant, “what cannot be thought” is a contradiction or a logical impossibility, and so the General Syllogism constitutes an indirect proof grounded in the logical impossibility of the negation.¹⁰⁶ By adding the implicit *all*-operator

104 KrV, B 407–409.

105 „Also ist durch die Analysis des Bewußtseins meiner selbst im Denken überhaupt in Ansehung der Erkenntniß meiner selbst als Objects nicht das mindeste gewonnen. Die logische Erörterung des Denkens überhaupt wird fälschlich für eine metaphysische Bestimmung des Objects gehalten.“ (KrV, B 409.)

106 Thus the major premise concerns a logical object (see section 2 and V-Met-L2/Pölitiz, AA 28: 544).

and by reading the “does not exist otherwise” modally stronger as “cannot exist otherwise,” as required by the “only” in the conclusion, the major premise is:¹⁰⁷

Major premise: For all x , if it is not possible that x is not thought as subject, then it is not possible that x exists and is not thought as subject.

$$\forall x(\neg\Diamond(\neg Sx) \rightarrow \neg\Diamond(\exists y(y = x) \ \& \ \neg Sx)).$$

Also, by definition, if x exists and can only be thought as subject, then x is a substance.¹⁰⁸ By applying the negations and De Morgan’s law, we get:

Major premise: For all x , if x is necessarily thought as subject, then it is necessary that either x does not exist or x is thought as subject.

$$\forall x(\Box(Sx) \rightarrow \Box(\neg\exists y(y = x) \vee Sx)).$$

107 It is unfortunate that Kant’s presentation of the General Syllogism is formally so incomplete. Assuming that he meant it to be formally valid at least in its explicit form, it can be remedied, however. First, it is reasonable to assume an *all*-operator: (i) the “what” seems to be of general significance, akin to “whatever”; (ii) Kant specifically refers to “things” and “object in general” (KrV, B 411 n); and most conclusively, (iii) according to Kant, „In allen kategorischen Vernunftschlüssen muß der *Major* ein allgemeiner [...] Satz [...] sein“ (Log, AA 09: 124; see also AA 23: 38). Second, the “does not exist otherwise” must be understood apodictically as “cannot exist otherwise”: (i) otherwise, the conclusion would lack the apodicticity that Kant attributes to it throughout (see esp. KrV, B 407–409, B 412 n); (ii) a substance is for Kant not merely something that does not exist otherwise than as subject, but something that *cannot* exist otherwise than as subject (e. g. KrV, B 149, B 407, A 348 f, see also note 99); and (iii) choosing either modality in any case makes little difference – the same problem affects both versions. Third, I use S to denote the predicate *subjecthood* so that Kant’s “thought as subject” equals “is predicated subjecthood” – this is in line with his view of thinking as judging, which predicates concepts of subjects. Since “thought as subject” does not equal “exists as subject,” I have rendered “does not exist otherwise than as subject” via the impossibility of the conjunction that x exists yet is not predicated S . See also “First Paralogism”, 471.

108 To my mind, the reference to substance in the inference is otiose. The “hence” / “also” (see section 3.2) only points out that the consequent spells out the definition of a (real) substance: something that exists and is necessarily thought as subject (see note 99). Furthermore, Kant nonetheless allows for „eine Substanz [nur] in der Idee“ (KrV, A 351), i. e. for a logical substance. His distinction between the valid yet metaphysically barren use of the term and its illegitimate metaphysical use would disappear if one identified “substance” with *real* substance. The numerous interpretative difficulties involved in the distinction between “real” and “logical” substance – often expressed in terms of the category of substance with or without schemata – cannot be addressed here.

Since the antecedent logically implies the consequent,¹⁰⁹ the major premise is in fact a tautology¹¹⁰ and hence also indisputable – which is why Kant can take the rationalists to agree to it even though they never explicitly presented this particular inference. That the major premise is formulated in the negative is crucial, as it makes the consequent a disjunction that leaves it undecided whether x exists. As the major premise is true irrespective of whether x exists, it corroborates Kant's claim that it applies categories transcendently to an object in general – which, as we saw, could even be an impossible object.

The minor premise merely affirms that the soul or a “thinking being” (s) cannot be thought otherwise than as subject. That is:

Minor premise: It is not possible that a thinking being, considered merely as such,¹¹¹ is not thought as subject.
 $\neg\Diamond\neg Ss$.

This is equivalent to:

Minor premise: A thinking being, considered merely as such, is necessarily thought as subject.
 $\Box Ss$.¹¹²

Kant takes this premise to be true: we can indeed only think of ourselves as subjects.¹¹³ Thus, since both premises are true and the minor fulfils the condition of the major, the inference is not only valid but also *sound* and affords the following conclusion:

Conclusion: Necessarily, either the thinking being does not exist or the thinking being is thought as subject.
 $\Box(\neg\exists y(y = s) \vee Ss)$.

¹⁰⁹ Sx implies $Sx \vee p$ for any proposition p .

¹¹⁰ Kant calls it a tautology explicitly in: HN, E CLV, AA 23: 48.

¹¹¹ The “considered merely as such” does not contribute to the formalisation except by ruling out the otherwise legitimate interpretation: $\neg\Diamond\neg Ss$ & $\exists x(x = s)$. (See sections 3.2–3.)

¹¹² In Fregean logic, true predication implies the existence of the object. This is not so for Kant, however: one can predicate something of an individual without that individual's existing. E. g. “God is omnipotent” is a necessarily true *analytic* judgment that does not imply God's existence (KrV, A 595/B 623). See Vanzo, Alberto: “Kant on Existential Import.” In: *Kantian Review* 19, 2014; Kannisto, Toni: “Kant and Frege on Existence.” In: *Synthese* (Forthcoming – published electronically in 2017: <https://link.springer.com/article/10.1007/s11229-017-1372-5>).

¹¹³ KrV, B 407. See also note 99.

Since the inference is deductively valid and sound, whatever fallacy it commits, it is not one of general logic. Yet despite its soundness, the inference nonetheless fails to establish what the rational psychologist covets, for the conclusion is a *disjunction* that does not determine whether the thinking being exists at all. And surely the rational psychologist, a metaphysician rather than a logician, takes the soul or the thinking being to *exist* as substance and not merely to be *thought* as substance. In technical terms, the inference only excludes the possibility that the thinking being exists *yet* is not thought as subject: $\Box \neg (\exists y (y = s) \ \& \ \neg Ss)$. As it does not decide whether the thinking being exists, it leaves open two alternatives: the metaphysically pregnant $Ss \ \& \ \exists y (y = s)$ and the merely logical $Ss \ \& \ \neg \exists y (y = s)$. Thus, although the inference appears to conclude something metaphysical about the soul with its ostensibly existence-related and affirmative conclusion, it is in fact mere logical jugglery that accomplishes nothing of metaphysical significance.

The disjunctive conclusion shows that the rational psychologist now faces a dilemma: either he makes the inference sound by refraining from assuming existence, thereby forfeiting any metaphysically relevant conclusion, or he assumes the existence of the soul (as the object of the idea) and draws a metaphysically relevant yet fallacious conclusion.

4.2 The Transcendental Equivocation

The General Syllogism is not a fallacy of four terms. The middle term is the same concept throughout (“what cannot be thought otherwise than as subject”) – making the syllogism deductively valid. Insofar as one uses both premises without presupposing existence, the major premise applies to existing and non-existing objects alike, whereas the minor premise just states that the thinking being satisfies the antecedent of the major premise. The conclusion is sound yet unable to establish any connection to real objects. Understood metaphysically, the inference does present a fallacy of equivocation, but a transcendental one in which the (same) middle term is covertly taken to denote two different relations to a possibly existing object. Since general logic does not concern real objects (or the lack thereof), the illegitimate existential presupposition must be an error in transcendental logic.¹¹⁴

114 Grier is the sole interpreter to notice the relevance of transcendental logic here. According to her, Kant has “two rather different (albeit related) [...] sense[s] of ‘formality’” (*Transcendental Illusion*, 155), and in some cases “Kant’s criticism [...] is more properly understood in terms of transcendental logic” (*op. cit.*, 156). Nonetheless, in her view Kant’s “claim that the error is a for-

One might object that replacing some instances of “thinking being” in the General Syllogism with “existing thinking being” renders the inference a four-term fallacy. But this would merely make it a four-term syllogism of *transcendental* logic, for the two expressions denote the same concept (“thinking being”), although the one denotes it as having objective reference while the other does not. For, famously, existence is not a real predicate that can change a concept.¹¹⁵ The difference between, e.g., actual and possible dollars does not lie in the *concept*: “the latter signifies the concept and the former its object”^{116, 117} It is thus essential to Kant’s theory of existence that the equivocation here is not between two concepts but between the same concept considered with and without reference to an existing object.

Similarly, when Kant states that “the concept of substance in the paralogism of simplicity is a pure intellectual concept”¹¹⁸ rather than an empirical one, he is saying not that the premises have different concepts but that the “very same concept”¹¹⁹ is taken in two relations to its possibly existing object. Kant specifically states that whether concepts are “*empirical or arbitrary or intellectual*” has to do with the “origin of concepts in regard to their *matter*” and is therefore a concern not in general logic but “in metaphysics”¹²⁰. Indeed, transcendental logic concerns precisely this “origin of our cognitions of objects”¹²¹.

mal one simply refers to the supposed fact that the syllogism in question is deductively invalid” (*op. cit.*, 156; again on 157). But since deductive invalidity belongs to general, not transcendental, logic, she does not give the latter a decisive role: in her view, that the fallacy is transcendental is merely a reference to the “transcendental misapplication” (*op. cit.*, 157) of the categories that grounds the error. Crucially, Kant specifically claims that the Dialectic is not at all concerned with the „*transscendentalen Gebrauch oder Mißbrauch der Kategorien*“ (KrV, A 296/B 352).

115 E.g. KrV, A 219/B 266, A 233 f/B 286, A 597–599/B 625–627.

116 „Denn da diese den Begriff, jene aber den Gegenstand [...] bedeuten“ (KrV, A 599/B 627).

117 Two concepts are different only if their intensions or contents are different, and modal predicates (including existence) do not concern this content at all: „Die Kategorien der Modalität haben das Besondere an sich: daß sie den Begriff, dem sie als Prädicat beigefügt werden, als Bestimmung des Objects nicht im mindesten vermehren. Wenn der Begriff eines Dinges schon ganz vollständig ist, so kann ich doch noch von diesem Gegenstande fragen, ob er bloß möglich oder auch wirklich [...] sei?“ (KrV, A 219/B 266). See also Kannisto, Toni: “Positio contra complementum possibilitatis – Kant and Baumgarten on Existence.” In: *Kant-Studien* 107, 2016, 291–313, see 301–306.

118 „der Begriff der Substanz in dem Paralogismus der Simplicität [ist] ein reiner intellectueller Begriff“ (KrV, A 403).

119 „eben derselbe Begriff“ (KrV, A 403).

120 „Der Ursprung der Begriffe in Ansehung ihrer *Materie*, nach welcher ein Begriff entweder *empirisch* oder *willkürlich* oder *intellectuell* ist, wird in der Metaphysik erwogen.“ (Log, AA 09: 94.)

121 „Ursprung unserer Erkenntnisse von Gegenständen“ (KrV, A 55 f/B 80).

As Bennett points out, the paralogistic inference can only conclude “an empty or ‘formal’ truth”¹²². A formally true judgment is true of *concepts* and their interrelations without necessarily being true of their (real) objects, i.e. materially true.¹²³ “Unicorns are one-horned” is a merely formal (analytic) truth that does not (on its own) materially determine whether there are unicorns. When the rational psychologist takes the inference to afford a metaphysically relevant material truth, he “misunderstand[s] and inflate[s] its conclusion”¹²⁴. This is to say that the rational psychologist surreptitiously, without justification from the inference itself, chooses the conclusion that favours metaphysics: $\exists y(y = s) \ \& \ Ss$ rather than $\neg \exists y(y = s) \ \& \ Ss$.

While Bennett does not provide a good explanation of *why* the rationalist inflates the conclusion, we now see that the rational psychologist is prone to do so because he does not acknowledge the possible (transcendentally logical) conflation or hypostatisation of a concept with its object, as he had no conception of transcendental logic to begin with. Although unlikely to commit such an error in the case of unicorns,¹²⁵ e.g., the rationalist overlooks the distinction when considering such abstract and in some sense necessary metaphysical concepts as *soul*. As Allison points out, it is part and parcel of the rationalist method (*contra* Kant) to treat necessary truths of reason as material rather than merely formal truths.¹²⁶

5 Epilogue: Pure and Impure Rational Psychology

There is an obvious limit to our results thus far. The rationalist could amend the proof simply by providing independent grounds for the soul’s existence. Since it is even the most certain truth for Descartes that the thinking self exists, it is

¹²² Kant’s *Dialectic*, 72f.

¹²³ E.g. KrV, A 58–64/B 82–88; Log, AA 09: 50–53.

¹²⁴ Kant’s *Dialectic*, 72.

¹²⁵ See KrV, A 600f/B 628f.

¹²⁶ *Transcendental Idealism*, 340; see KrV, A 593–6/B 621–624. The inferences appear logically sound because they *are* logically sound, and so any metaphysician who takes – as Kant accuses his predecessors of doing (KrV, A 593/B 621, A 596/B 624 n) – the *logical necessity* of a judgment (the conclusion of a sound inference) for a *real necessity* of the object of that judgment would have to believe that the inferences of rational psychology establish *metaphysical* truths about the thinking self. This existential presupposition is illegitimate, as it violates the additional conditions that transcendental logic sets for objectivity.

easy to imagine the rationalists' indifference to the insufficiency of the General Syllogism.

Corey W. Dyck has recently shown that there are two kinds of rational psychology: "narrowly" and "broadly rationalistic psychology" – or pure and impure rational psychology. While the former (like transcendental logic) abstracts from all sensible and empirical content of our self-cognition, the latter is partially grounded in the empirical self of inner perception or experience and is therefore not purely logical.¹²⁷ Dyck also argues convincingly that Kant's immediate predecessors and interlocutors were in fact broadly rationalistic psychologists and hence in a prime position to avoid the above-mentioned dilemma. This would corroborate Ameriks's claim that thus far Kant has only rebutted the *a priori inferences* of rational psychology, not the very possibility of metaphysical knowledge of the soul – for the broadly rationalistic psychologist could (and does) employ other proofs.¹²⁸

I have argued elsewhere¹²⁹ that Kant was well aware of these ramifications in the Paralogisms and therefore mounted a two-pronged attack against rational psychology by explicitly distinguishing between its two argumentative methods, the "synthetic" and the "analytic procedure"¹³⁰. The former is the proper method of "rational psychology as a system"¹³¹ and is utilised by narrowly rationalistic psychology. His dissolution of the General Syllogism is designed to thwart only this synthetic procedure.¹³² Broadly rationalistic psychology, on the contrary, starts off with the soul as a special object of inner *experience*, i.e. from the perceived fact of the thinker's existence. In doing so, it follows the analytic procedure that begins "not from the concept of a thinking being in general [like the synthetic procedure] but from an actuality"¹³³, namely from the "empirical proposition" that "I exist thinking"¹³⁴.¹³⁵ Hence it circumvents the problem of existence

127 *Rational Psychology*, 1–10.

128 Ameriks, Karl: *Kant's Theory of Mind*. Oxford 2000 [1982], 75 f.

129 Kannisto, Toni: "Why There Can Be No Future Achilles." Berlin 2017, 154–160.

130 „synthetische[s]“ (KrV, B 416) and „analytisches Verfahren“ (KrV, B 418).

131 „in der rationalen Psychologie als System“ (KrV, B 416).

132 When introducing the General Syllogism, Kant specifically speaks of the procedure or "Verfahren der rationalen Psychologie" (KrV, B 410).

133 „nicht vom Begriffe eines denkenden Wesens überhaupt, sondern von einer Wirklichkeit“ (KrV, B 418).

134 „empirischer Satz“ (KrV, B 422 n) – „Ich existire denkend“ (KrV, B 428, my emphasis).

135 In the Paralogisms, Kant distinguishes between the „Ich denke“ „nur problematisch genommen“ – i.e. containing merely the concept "I" – and „so fern er eine Wahrnehmung von einem Dasein enthalten mag“ (KrV, A 347/B 405; see also KrV, B 422 n). Only the former can ground pure rational psychology. It is only in the context of his critique of broadly rationalistic

that undermines the synthetic procedure, though it does have fatal flaws of its own.

To neuter the analytic procedure, Kant needs to show that the soul *in itself* (as required by rational psychology) cannot in fact be such an object of inner perception, and hence cannot be assumed to exist based on inner experience. Since transcendental idealism, already established in the *Analytic*, has disclosed all objects of experience as mere appearances, his rebuttal of the analytic procedure in the *Paralogisms*¹³⁶ simply lays bare the consequences that adopting transcendental idealism has for broadly rationalistic psychology. The synthetic procedure of pure rational psychology, on the contrary, does not rely on the soul's being an object of experience but seeks non-experiential, inferential knowledge of it. This is why I believe that pure rational psychology is Kant's main target in the *Paralogisms*, for it has hitherto remained untouched by the *Analytic*. Far from diminishing its importance, that Kant's invalidation of the General Syllogism only touches the narrowly rationalistic psychology rather sharpens it.

Kant specifically states that in the *Dialectic* he is not interested in “the *transcendental* use or misuse of the categories” that ensues when one “does not attend enough to the boundaries of the territory in which alone the pure understanding is allowed its play”¹³⁷. Explaining how exactly impure rational psychology fails to adhere to these boundaries is, to be sure, one task of the *Paralogisms*, but it is the possibility of *transcendent* “principles that actually incite to tear down all those boundary posts”¹³⁸ that steps forth as the main, as of yet unchallenged, threat in the *Dialectic*. And, crucially, its refutation cannot rely on transcendental idealism, for Kant rightly worries on the contrary that pure rational psychology would refute transcendental idealism¹³⁹:

psychology that Kant speaks of the „*Ich denke*, als ein Satz, der schon ein Dasein in sich schließt“ (KrV, B 418) – parsed as “I exist thinking”. Indeed, since in the “empirical proposition” “I think” „nicht bestimmt wird, ob ich nur als Subject und nicht auch als Prädicat eines andern existiren und gedacht werden könne“ (KrV, B 419), it does not even show that the “I” (as an object) is something “that *cannot* be thought otherwise than as subject,” which, however, is what the antecedent of the major premise of the General Syllogism requires (see 4.1). This distinction tracks that between the synthetic and analytic procedure, where the former starts with “I think” and the latter with “I exist thinking”.

136 KrV, B 413 ff.

137 „den *transscendentalen* Gebrauch oder Mißbrauch der Kategorien, welcher ein bloßer Fehler [...] ist, die auf die Grenze des Bodens, worauf allein dem reinen Verstande sein Spiel erlaubt ist, nicht genug Acht hat“ (KrV, A 296/B 352).

138 „Grundsätze, die uns zumuthen, alle jene Grenzpfähle niederzureißen“ (KrV, A 296/B 352).

139 Kant has two interrelated senses of transcendental idealism. Narrowly speaking, it is the thesis that space and time are mere forms of sensibility. Broadly speaking, it is the thesis that we cognise only appearances, never things in themselves (KrV, A 369). Here, I use “transcendental

It would be a great, or indeed the only stumbling block to our entire critique, if it were possible to prove *a priori* that all thinking beings are in themselves simple substances [etc.]. For in this way we would have taken a step beyond the sensible world, entering into the field of *noumena* [...]. Thus synthetic propositions *a priori* would not, as we have asserted, be feasible and accessible merely in relation to objects of possible experience [i. e., appearances], but rather they could reach as far as things in general and in themselves[.]¹⁴⁰

If Kant's removal of this "stumbling block" (transcendental realism) to his view that we only cognise appearances (transcendental idealism) were ultimately grounded in a mere reiteration of the latter, it would constitute an enormous circular argument. Although Grier presents a sophisticated explanation of how Kant refutes the broadly rationalistic psychologist – as well as a refined analysis of the nature and ground of the transcendental illusion underlying the paralogisms – she does ultimately commit Kant to such question begging because she overlooks precisely the fact that he has two targets that require two *different* refutations. By collapsing Kant's critique of narrowly and broadly rationalistic psychology, she ends up claiming that the error of the paralogistic inferences can be avoided *only* by adopting transcendental idealism.¹⁴¹ But pure rational psychology must, on

idealism" in the broad sense – used especially by Grier (e. g. *Transcendental Illusion*, 151) and Allison (e. g. *Transcendental Idealism*, 3). Since all cognition (even through reason) depends on intuition, and all intuition must conform to ideal space and time, transcendental idealism pertains to all cognition (KrV, A 490f/B 518f). It is this broad sense of transcendental idealism that must not ground the refutation of pure rational psychology.

140 „Ein großer, ja sogar der einzige Stein des Anstoßes wider unsere ganze Kritik würde es sein, wenn es eine Möglichkeit gäbe, *a priori* zu beweisen, daß alle denkende Wesen an sich einfache Substanzen sind [etc.]. Denn auf diese Art hätten wir doch einen Schritt über die Sinnenwelt hinaus gethan, wir wären in das Feld der *Noumenen* getreten [...]. Also sind synthetische Sätze *a priori* nicht bloß, wie wir behauptet haben, in Beziehung auf Gegenstände möglicher Erfahrung und zwar als Principien der Möglichkeit dieser Erfahrung selbst thunlich und zulässig, sondern sie können auch auf Dinge überhaupt und an sich selbst gehen [...].“ (KrV, B 409f).

141 *Transcendental Illusion*, 99, 151, 158f. Similarly for Allison (*Transcendental Idealism*, 340) and Dyck. Although Dyck acknowledges the worry that on his reading the Paralogisms would have force only against the broadly rationalistic psychologist and provides a sketch of how to dispel it (*Rational Psychology*, 226 ff.), I have argued elsewhere that his attempt is contrived because he too fails to see that Kant targets *two* distinct methods of rational psychology (Kannisto, Toni: "Toni Kannisto on Corey W. Dyck's 'Kant and Rational Psychology'." In: Dennis Schulting (ed.): *Critique*, 2015. Published online:

<https://virtualcritique.wordpress.com/2015/06/23/toni-kannisto-on-corey-dycks-kant-and-rational-psychology/>). Bennett, too, inadvertently renders Kant's argument toothless against pure rational psychology when he concludes that its inferences neither "arise[] [n]or lead[] to any empirical knowledge of myself" (*Kant's Dialectic*, 72f). The rationalist would surely shrug this off as inconsequential, for he seeks not mere empirical knowledge but *rational a priori* knowledge.

the contrary, fail of its own accord, without reference to transcendental idealism. One virtue of my reading is that it establishes exactly this by revealing that the very argumentative method of pure rational psychology is *inherently* fallacious.

Finally, however right Ameriks may be that Kant has thus far only refuted certain inferences of rational psychology, Ameriks also overlooks the two-part nature of Kant's refutation of rational psychology. There is, first, the negative refutation – discussed in this article – of the pure rationalist's *a priori* inference (as Kant construes it), which does indeed leave room for other proofs. Second, however, Kant can rely on the wealth of argumentation that supports his own positive theory of the self, which in turn undermines broadly rationalistic psychology – even if it has to rely heavily on the Transcendental Analytic and transcendental idealism. As these two jointly refute all rational psychology, it is not true that Kant leaves the fate of the metaphysics of the soul undecided.

Exposing transcendental paralogsms as fallacies in transcendental logic shows that the mere recognition that something might be necessarily true of a thought without there being any corresponding existing thing suffices to expose the gap in the paralogistic inference. This requires neither transcendental idealism nor even the very distinction between things in themselves and appearances. Kant can grant his opponent the truth of his premises, the validity of his inference, and therefore even the soundness of his argument, yet maintain that without an additional proof of the existence of the soul, the argument remains empty and merely logical with no metaphysical import.

Conclusion

Transcendental paralogsms are formal fallacies of transcendental logic, grounded in an equivocation between a concept as referring to an object in general (in thinking) and as referring specifically to an existing metaphysical object. Although my interpretation concerns only one part of Kant's critique of rationalistic metaphysics, namely the method of pure *a priori* reasoning, it boasts significant virtues. First, it allows us to separate this part of Kant's critique from his transcendental idealism, making it applicable independently of this intricate philosophical theory. Second, unlike e.g. Grier and Allison's reading, my interpretation avoids the circularity of grounding Kant's refutation of transcendently realistic metaphysics of mind in transcendental idealism. Third, the formalisation of the General Syllogism facilitates its assessment with contemporary logical tools. Fourth, by allowing us to demarcate sharply between Kant's critique of narrowly and broadly rationalistic psychology, it paves the way for a more precise

explication of the latter. Finally, to my mind the formalisation of the paralogisms shows that Kant is right to reject *a priori* rational inferences as the sole means of grounding a metaphysics of mind. That a concept is related to a possibly existing object can never be proven in formal logic alone but requires developing and then applying criteria for *real* possibility – not of the concept and its non-contradictory nature but of the thing and its existence. This meta-metaphysical challenge to all metaphysics remains as potent today as it ever was.

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