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KANT AND THE DISCIPLINE OF REASON

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Abstract: Kant's notion of 'discipline' has received considerable attention from scholars of his philosophy of education, but its role in his theoretical philosophy has been largely ignored. This omission is surprising since his discussion of discipline in the first *Critique* is not only more extensive and expansive in scope than his other discussions but also predates them. The goal of this essay is to provide a comprehensive reading of the Discipline that emphasizes its systematic importance in the first *Critique*. I argue that its goal is to establish a set of rules for the use of pure reason that, if followed, will mitigate and perhaps even eliminate our tendency to make judgments about supersensible objects. Since Kant's justification for these rules relies crucially on claims he has defended in the Doctrine of Elements, I argue further that, far from being a dispensable part of the *Critique* as commentators have tended to claim, the Discipline is in fact the culmination of Kant's critique of metaphysics.

Kant's notion of discipline has been frequently discussed in connection with his views on education, but it has seldom been noted that this notion also plays an important role in his theoretical philosophy.¹ This omission is surprising, not only because Kant's discussion of discipline in the *Critique of Pure Reason* is extensive but also because it predates his discussions of discipline the *Lectures on Pedagogy* as well as his more scattered remarks about discipline in the Collins and Vigilantius lectures on moral philosophy, *Critique of the Power of Judgment*, *Metaphysics of Morals*, and *Anthropology from a Pragmatic Point of View*. Indeed, if we are to give priority to any of Kant's discussions of discipline, it should be to his discussion in the first *Critique*, which covers nearly one hundred pages of the Academy Edition and ranges over topics as diverse as philosophical and mathematical cognition, freedom of speech, education, skepticism, the legitimate use of hypotheses, and the method of proof underlying Kant's celebrated arguments in the Doctrine of Elements. This discussion comprises the first chapter of the Doctrine of Method, 'The Discipline of Pure Reason'.²

The goal of this essay is to provide a comprehensive reading of the Discipline that emphasizes its systematic importance in the first *Critique*. In doing so, I shall be cutting against the grain of Kant interpretation which from Kemp Smith onwards has tended to regard the Doctrine of Method and, hence, the Discipline as a dispensable part of the *Critique*.³ In brief, the reading I will defend is that the goal of the Discipline is to establish a set of rules for the use of pure reason that, if followed, will mitigate and perhaps even eliminate our tendency to make judgments about supersensible objects. Like Descartes' *Regulae*, then, the Discipline introduces us to a number of habits of mind that Kant believes are advantageous to inquiry. But while Descartes believes that his rules constitute a method for discovering truth, Kant believes that his are merely a means for avoiding a certain kind of error, namely the error or 'deception' associated with transcendental illusion. Further, since Kant's justification for these rules relies crucially on claims he has defended in the Doctrine of Elements, I argue that, far from being a dispensable part of the *Critique*, the Discipline is the culmination of Kant's critique of metaphysics.

After introducing Kant's notion of transcendental illusion and, following Michelle Grier, elaborating on the distinction between this illusion and the deception associated with it, I proceed to examine some of the textual evidence for my primary interpretative claim: that the goal of the Discipline is to provide us with a set of rules to mitigate or eliminate this deception (section one).⁴ Having provided a general defense of this claim, I then formulate the specific rules Kant endorses in the Discipline, sketch his arguments for them, and indicate the ways in which these arguments rely on the results of the Doctrine of Elements (sections two and three). Finally, I briefly summarize the results of my analysis and elaborate on the reasons it should lead us to regard the Discipline as the culmination of Kant's critique of metaphysics (section four).

1. ILLUSION AND DECEPTION

Kant introduces transcendental illusion by means of a comparison between it and two more mundane forms of illusion: empirical (or optical) illusion and logical illusion. The former are things like straight oars that look bent in the water, square towers that look round in the distance, and the change in the apparent size of the moon when it moves from the horizon upward in the night sky. The latter, which Kant also characterizes as a ‘mere imitation of the form of inference’, are simply mistakes in logical reasoning (A296/B353). The source of empirical illusion is external, certain facts about our environment and visual system, while the source of logical illusion is internal, our failure to follow logical rules. Further, while logical illusion can be eliminated by exercising care in judgment, empirical illusion is, in a certain sense, ineliminable. Try though we might, we cannot make the stick look straight, although we may succeed in not judging it to be so.

Transcendental illusion combines elements of these other two forms of illusion. Like logical illusion, its origin is within our own minds, and in particular in the confusion of the subjective principle that reason must seek the ‘unconditioned for conditioned cognitions of the understanding’ with the objective principle that the unconditioned is given (A307/B365).⁵ The former is a claim about the nature of reason and, indeed, one that describes what Kant regards as its principal activity, while the latter is a claim about the existence of objects that allow reason to complete or fully realize this activity. But like empirical illusion, transcendental illusion is ineliminable. Just as one can learn the cause of the moon illusion without thereby eliminating the illusion itself, transcendental illusion ‘does not cease even though it is uncovered and its nullity is clearly seen into by transcendental critique’ (A297/B353). Further, transcendental illusion is both the origin of *special metaphysics* (the part of Wolffian metaphysics that deals with the

objects: God, the soul, and the world), insofar as it constitutes the subjective source of our ideas of these objects as well as our tendency to make knowledge claims about them, and of the regulative principles of reason, such as the principle of parsimony, that allow us to systematize our empirical knowledge of the world.⁶

Thus, it is fortunate that Kant consistently draws a distinction between transcendental illusion and the deception associated with it. The former, with many details omitted, is the confusion of subjective and objective principles described in the previous paragraph, while the latter is any attempt to make knowledge claims about the objects of special metaphysics, the ideas of which are a result of this confusion. Kant describes the goal of the Dialectic as an attempt to uncover ‘the illusion in transcendental judgments, while at the same time protecting us from being deceived by it’ (A297/B354). And when he begins his discussion of the regulative use of the ideas of reason, he emphasizes that the ‘illusion’ arising from this use is one that ‘can be prevented from deceiving’ (A644/B672). Transcendental illusion can thus be ineliminable and a source of positive regulative principles without undermining the success of Kant’s critique of metaphysics, for eliminating the deception, not the illusion itself, is what is essential to this critique.

How, then, is this deception supposed to be eliminated? There can be no doubt that part of the work is done by the analysis of the dialectical inferences of reason in Book Two of the Dialectic, for it is here that Kant identifies the mistakes that give the arguments of German special metaphysics the appearance of legitimacy. But this task cannot be *completed* in the Dialectic since Kant makes clear that merely identifying the cause of transcendental illusion is not enough to prevent us from being deceived by it. The ‘natural and unavoidable dialectic of pure reason,’ he emphasizes, is such that ‘even after we have exposed the mirage it will not cease

to lead our reason on with false hopes, continually propelling it into momentary aberrations that always need to be removed' (A297/B354).⁷ Thus, even if we accept the Dialectic's analysis of the cause of transcendental illusion, we will still find ourselves tempted to make precisely the kinds of claims about supersensible objects that constitute the most celebrated part of the metaphysical view Kant means to overturn.

It is the Discipline that, I suggest, completes the work of eliminating transcendental deception begun in the Dialectic. Kant begins the Discipline with a general description of what he calls 'negative judgments'. These are judgments about the limitations of our cognitive abilities, and Kant emphasizes that their sole purpose is to prevent error (A709/B737). In contexts where error is unlikely, negative judgments are moot, 'like the proposition of the scholastic orator that Alexander could not have conquered any lands without an army' (A709/B737). But in contexts where error is likely, these judgments are not only important but *more* important than judgments that increase our knowledge. And the need for negative judgments is particularly acute in the field of metaphysics:

[...] where the limits of our possible cognition are very narrow, where the temptation to judge is great, where the illusion that presents itself is very deceptive, and where the disadvantage of error is very serious, there the **negative** in instruction, which serves merely to defend us from errors, is more important than many a positive teaching by means of which our cognition could be augmented. (A709/B737)

Since sole purpose of negative judgments is to prevent error, the task of the Discipline can only be to eliminate the deception associated with transcendental illusion.

Kant's subsequent characterization of discipline only bolsters this conclusion. Discipline is the '**compulsion** through which the constant propensity to stray from certain rules is limited and finally eradicated' (A709/B737). This is a general characterization and can certainly be applied to things other than reason.⁸ But if we take it as a characterization of the discipline of reason, as Kant encourages us to do, the 'certain rules' referred to can only be the prohibition

against the use of the categories to cognize the supersensible that Kant attempts to establish in the Doctrine of Elements, and the ‘constant propensity’ to stray from these rules can only be the temptation to use the categories in this prohibited way brought about by transcendental illusion.⁹ To limit or eliminate this propensity, then, is equivalent to limiting or eliminating transcendental deception.

But as I have already suggested, the fact that eliminating transcendental deception is the primary goal of the Discipline does not imply that the other parts of the *Critique* make no contribution to this goal. Indeed, Kant emphasizes that the Doctrine of Elements has already disciplined pure reason with regard to its ‘content’ and that the task of the Discipline is to discipline pure reason with regard to its ‘method’ (A712/B740). Disciplining the content of pure reason, I suggest, amounts to establishing that pure reason is not a source of speculative cognition at all or, as Kant puts it in the opening of the Canon, that it ‘accomplishes nothing in its pure use’ (A795/B823). Understood in this way, Kant’s comment suggests that one way the Doctrine of Elements contributes to the elimination of transcendental deception is that each of its parts (the Aesthetic, Analytic, and Dialectic) helps to establish this claim.

In the next section of this essay, I will argue that another way the Doctrine of Elements contributes to the elimination of transcendental deception is that Kant appeals to its results in order to justify the rules restricting the use of pure reason he introduces in the Discipline. For the moment, however, I want to establish that this strategy of appealing to the prior results of the *Critique* to justify rules for the use of reason is consistent with the goal of the Method. This goal, as Kant describes it, is to ‘accomplish, in a transcendental respect, that which, under the name of **practical logic** [...] the schools sought but accomplished only badly’ (A708/B735). Just as the Doctrine of Elements is intended to provide the transcendental counterpart to general logic, then,

Kant intends the Doctrine of Method to provide the transcendental counterpart to practical logic.¹⁰ According to the tradition of logic with which Kant was familiar, practical logic is the aspect of logic that addresses ‘the particular ways in which the rules of learned cognition and learned presentation are applied’ (17:72-3).¹¹ The goal of the Method is thus to apply the main results of the Doctrine of Elements, and combating transcendental deception, what I have argued is the goal of the Discipline, is one natural way to apply these results.¹²

2. RULES FOR THE DISCIPLINE OF PURE REASON

Armed with an understanding of the goal of the Discipline, we can now ask how Kant goes about accomplishing it. In the remainder of this section, I hope to show that Kant’s strategy is to provide a defense of four rules for the use of pure reason that, if followed, will mitigate and potentially eliminate the misuse of reason brought about by transcendental illusion. They are:

1. Pure reason should not use the mathematical method because philosophy does not contain the elements required for this method: definitions, axioms, and demonstrations.
2. Pure reason has no legitimate skeptical use. That is, it should not be used to eliminate metaphysical conflicts simply by opposing arguments to each other or by showing that particular attempts at rational cognition fail.
3. Hypotheses about supersensible objects should not be used as explanatory devices in science or common sense judgments about the world, and their only permissible use is as a means to undermine dogmatic claims about supersensible objects.
4. Any attempt to establish rational cognition of supersensible objects must adhere to the rules of transcendental proof. And when these rules are understood, we learn that there can be no such cognition.

Kant never formulates these rules as explicitly as I have done, but each expresses the main conclusion of one of the four sections of the Discipline. And as we proceed, I will quote the places in the text where Kant’s formulations come closest to the ones I have provided. Since Kant’s defense of the second rule is more difficult to piece together than the other three, I will

postpone discussion of it until the next section. In the remainder of this section, I will examine his defenses of rules 1, 3 and 4, indicating the ways in which they rely on the results of the Doctrine of Elements.

Rule 1: Kant begins the first section of the Discipline, ‘The discipline of pure reason in dogmatic use’, by returning to the main issue of the Dialectic, the possibility of rational cognition of supersensible objects, and introducing a new explanation of our belief that such cognition is possible. Instead of emphasizing transcendental illusion’s role in the formation of this belief as he did in the Dialectic, Kant now suggests that the success of mathematics gives us another reason to think that, contrary to the results of the Doctrine of Elements, cognition of supersensible objects may be possible. Specifically, Kant suggests that our ability to determine mathematical truths with certainty leads us to hope that reason can apply the method of mathematics with equal success to the questions of special metaphysics:

Mathematics gives the most resplendent example of pure reason happily expanding itself without assistance from experience. Examples are contagious, especially for the same faculty, which naturally flatters itself that it will have the same good fortune in other cases that it has had in one. Hence pure reason hopes to be able to expand itself in as happy and well grounded a way in its transcendental use as it succeeded in doing in its mathematical use, by applying the same method in the former case that was of such evident certainty in the latter. It is therefore very important for us to know whether the method for obtaining apodictic certainty that one calls **mathematical** in the latter science is identical with that by means of which one seeks the same certainty in philosophy, and that would there have to be called **dogmatic**. (A713/B741)

The belief that the mathematical method could be successfully applied in philosophy was, of course, a central tenet of German rationalism.¹³ So Kant’s argument that it cannot addresses a natural response to his criticisms of traditional metaphysics in the *Critique*.¹⁴

After formulating the problem he will address, Kant next elaborates on the differences between philosophical and mathematical cognition. The former is ‘**rational** cognition from concepts’, while the latter is rational cognition ‘from the **construction** of concepts’

(A713/B741). Further, to construct a concept according to Kant is ‘to exhibit *a priori* the intuition corresponding to it’ or, in slightly less Kantian terms, to construct a figure in intuition that expresses the content of the concept (ibid).¹⁵ Both philosophical and mathematical cognition are rational in the sense that each is guided by reason, both in its capacity as the faculty of mediate inference as in its regulative use.¹⁶ However, despite the fact that the phrase ‘**rational cognition from concepts**’ might lead one to believe that Kant is describing philosophical cognition *sensu* his rationalist opponents, Kant is clear that this distinction is to be understood as one within his own theory of cognition. In a subsequent passage, he emphasizes that both mathematical and philosophical cognition have an essential relation to intuition.¹⁷ It is thus the suitability of the mathematical method to Kant’s own account of philosophical cognition that is at issue in the first section of the Discipline.

The distinction between philosophical and mathematical cognition, for which I have provided only the barest of sketches, sets the stage for the main argument in section one, namely that the mathematical method is not suited for philosophical investigation and, in particular, for the investigations into supersensible objects that claim to proceed by means of pure reason alone. That is, although Kant frames his argument in terms of philosophical cognition in general, his primary aim is to show that the mathematical method is not suited to the kinds of arguments examined in the Dialectic. Thus, he comments that his argument is necessary because pure reason hopes that ‘it can stave off having to give up entirely the effort to get beyond the bounds of experience into the charming regions of the intellectual’ despite Kant’s previous efforts to determine its bounds (A726/B754). Further, at the close of the argument I am about to consider, Kant emphasizes that it shows the mathematical method is not suited to philosophy and that this is especially true ‘in the field of pure reason’ (A735/B763). Given that the goal of the Discipline

is, as I have argued, to provide us with restrictions on the use of pure reason that have the potential to eliminate transcendental deception, this emphasis on the consequences of Kant's argument for pure reason is exactly what we should expect.

Kant's argument proceeds in four steps. Since the mathematical method asks us to prove propositions by using definitions, axioms, and demonstrations, Kant will show that 'none of these elements, in the sense in which the mathematician takes them, can be achieved or imitated by philosophy' (steps 1-3) and that philosophy therefore cannot use the mathematical method (step 4) (A727/B755). Although Kant has previously discussed definitions in the *Analytic*, his characterization of definition in the *Discipline* bears little resemblance to his earlier treatment and is largely independent of his claims about the differences between mathematical and philosophical cognition.¹⁸ But his characterizations of mathematical axioms and demonstrations rely heavily on these differences as well as the distinction between mathematical and dynamical principles of pure understanding introduced in the second chapter of the *Analytic of Principles*. As a result, the conclusions of the second and third steps of Kant's argument follow without much argument from the initial characterizations Kant gives. Given that the task of the *Doctrine of Method* is to apply the results of the *Doctrine of Elements*, this too is exactly what we should expect.

To define according to Kant is 'to exhibit originally the exhaustive concept of a thing within its boundaries' (A727/B755). 'Exhaustive' (*ausführlich*) is a term from Wolffian logic. A concept is exhaustive when it contains enough marks or predicates for us to always recognize the objects that fall under it and never confuse them with others. Meier illustrates this distinction in the following way. The concept of the color red is an exhaustive concept since someone possessing it will always be able to identify instances of red and not confuse them with instances

of other colors, say blue. But if we can only taste that a wine is red but not that it is a cabernet, merlot or some other kind of red wine, then our concepts of these kinds of wines are not exhaustive.¹⁹ Kant's own use of 'exhaustive' varies slightly from Meier's. But he means to characterize definitions as exhaustive in Meier's sense when he writes that '**[e]xhaustiveness** signifies the clarity and sufficiency of marks' and that '**boundaries** [signify] the precision [of marks], that is, that there are no more of these than are required for the exhaustive concept' (ibid). What makes a definition 'original', however, is that the determination of the marks that make it exhaustive 'is not derived from anywhere else and thus [not] in need of proof' (ibid). A definition is thus a particular kind of exhaustive concept, namely one in which it is in some sense self-evident that the marks it contains are sufficient for identifying the objects that are supposed to fall under it.

Kant's (and my) gloss on the originality of a concept is, admittedly, somewhat thin. But his argument that philosophy has no definitions in the mathematical sense does not rely on their originality but on their exhaustiveness.²⁰ Suppose that I know the definition of something and you want to know it as well. Suppose also that I am not willing to simply tell you the definition but only to tell you whether a particular mark is part of it or not. While you would surely be able to identify a number of the marks in the definition and could, in principle, identify all of them, you would have no guarantee that you had identified them all without knowing how many marks were in the definition to begin with. At best, you could say that it was highly probable but not certain that you had identified them all.

Kant believes we are in a similar situation with regard to all concepts that are 'given *a priori*' (A728/B756).²¹ Although these concepts are given to us *a priori*, they are given 'confusedly'. That is, we are aware of them and able to apply them but do not have a distinct

conception of all their constituent marks. And while we can make these concepts more distinct by identifying objects that fall under them and asking ourselves in virtue of what properties they do, we can never be certain that we have identified all of the marks of the concept, much less that we have identified all and only those marks that would allow us to always identify the objects falling under it. As a result, the most we can say is that it is highly probable but not certain that we have identified the marks that would make our concept exhaustive and thus, apart from the question of its originality, capable of being a definition. Kant puts this argument in the following way:

For I can never be certain that the distinct representation of a (still confusedly) given concept has been exhaustively developed unless I know that it is adequate to the object. But since the concept of the latter, as it [i.e. the concept] is given, can contain many obscure representations, which we pass by in our analysis though we always use them in application, the exhaustiveness of the analysis of my concept is always doubtful, and by many appropriate examples can only be made **probable** but never **apodictically** certain. (A728/B756)

In order to emphasize the possibility that our analysis of an *a priori* concept may always be incomplete, Kant prefers to call this analysis the *exposition* of concepts rather than the definition.

I now turn to Kant's characterizations of axioms and demonstrations, the second and third steps of his argument. The first are 'immediately certain' synthetic *a priori* principles, and the second are 'intuitive' apodictic proofs (A732-4/B760-2). The idea of a principle that is both synthetic *a priori* and immediate or of a proof that is intuitive might be thought to point to an obvious explanation of why axioms and demonstrations so understood are not part of philosophy. In particular, it might seem that axioms and demonstrations as Kant here characterizes them are inconsistent with the dependency of our cognition on concepts and intuitions. Since Kant is operating within the confines of his account of cognition, however, this explanation cannot be the right one. Rather, Kant is tacitly invoking the distinction between mathematical and dynamical principles introduced in the second chapter of the *Analytic*. Here he distinguishes

between mathematical principles that pertain ‘merely to intuition’ and dynamical principles that pertain ‘to the **existence** of an appearance in general’ (A160/B199). While both kinds of principles are necessary, Kant claims that mathematical principles are ‘unconditionally necessary’ and thus ‘apodictic’ but that dynamical principles are necessary ‘only under the condition of empirical thinking in experience’ and thus ‘only mediately and indirectly’ (ibid). Moreover, mathematical principles are capable of ‘intuitive certainty’, while dynamical principles are ‘capable only of a discursive certainty’ (A162/B201). Axioms and demonstrations cannot be part of philosophy, then, because philosophical cognition does not have the immediacy and intuitive certainty that characterizes mathematical cognition.

Having argued that definitions, axioms, and demonstrations cannot be found in philosophy, Kant concludes his justification for Rule 1 as follows:

Now from all of this it follows that it is not suited to the nature of philosophy, *especially in the field of pure reason*, to strut about with a dogmatic gait and to decorate itself with the titles and ribbons of mathematics, to whose ranks philosophy does not belong, although it has every cause to hope for a sisterly union with it. (A735/B763, my emphasis)

As I have suggested, Kant’s emphasis on the implications of his argument for pure reason is consistent with the Discipline’s aim of providing us with a set of rules to limit or eliminate transcendental deception.

Rule 3: Kant begins section three of the Discipline, ‘The discipline of pure reason with regard to hypotheses’, with a rhetorical question. If we accept the main results of the *Critique* and agree that pure reason is capable of no cognition whatsoever in its speculative use, does it not follow that we can at least hypothesize the existence of supersensible objects as a means to explain certain facts about the world or lend support to our theories of nature (A769/B797)? As one might expect, Kant’s answer to this question is ‘no’. The details of this answer constitute his

defense of the third of the four rules outlined at the beginning of this section. And like his defense of Rule 1, his defense of Rule 3 draws on important arguments from the Doctrine of Elements, in this case, the distinction between real and logical possibility introduced in the second and third chapter of the *Analytic of Principles*.²²

Kant begins by outlining two criteria for a hypothesis, which he understands as the supposition of the existence of some entity whose actual existence is not known. The first is that the object, the entity whose existence is hypothesized, is possible. The second is that the object 'be connected as a ground of explanation with that which is already given' (A770/B798). The first of these criteria is necessary to distinguish ideas created 'under the strict oversight of reason' from mere creations of the imagination and the second to emphasize that the value of a hypothesis is its ability to provide an explanation for something that is unknown or not sufficiently understood. But the conception of possibility Kant has in mind is not logical possibility or the mere absence of contradiction in the concept of the object whose existence one would hypothesize but real possibility or the agreement of the concept 'with the formal conditions of experience in general' (A220/B268). In order for an object to be a real possibility, then, it must be an object of possible experience; that is, it must be an object in space and time with an extensive and intensive magnitude that is subject to the Analogies of Experience. As Kant puts it: 'In a word: it is only possible for our reason to use the conditions of possible experience as conditions of the possibility of things' (A771/B799).

On the basis of this initial characterization of a hypothesis, Kant then argues that there can be no legitimate 'transcendental hypotheses' or suppositions about the existence of supersensible objects. Since we have no knowledge whatsoever of supersensible objects, no supposition of the existence of such an object will be able to provide a 'ground of explanation'

for something 'already given' in experience. And without being able to fill this explanatory role even in principle, such a supposition would fail to be a genuine hypothesis. As Kant puts it:

A **transcendental hypothesis**, in which a mere idea of reason would be used for the explanation of things in nature, would thus be no explanation at all, since that which one does not adequately understand on the basis of known empirical principles would be explained by means of something about which one understands nothing at all. (A772/B800)

But in addition to not being genuine hypotheses that help us understand nature, Kant argues that transcendental hypotheses are also harmful to the development of our knowledge. In particular, he argues that they discourage inquiry by giving those who resort to them the mistaken impression that they have actually understood the phenomenon they are investigating. And it is for both of these reasons that Kant concludes: 'Transcendental hypotheses of the speculative use of reason and a freedom to make good the lack of physical grounds of explanation by using all sorts of hyperphysical ones can never be permitted at all' (A773/B801).

Despite the fact that they cannot be used to establish any claim, transcendental hypotheses do have what Kant calls a 'polemical' or 'defensive' use (A776/B804). That is, they can be used to argue *against* dogmatic claims about supersensible objects by showing that anyone making these claims is unable to exclude various possibilities that are incompatible with their claims. Thus, if someone asserts dogmatically that the soul cannot be immaterial because 'experience seems to prove that the elevation and derangement of our mental powers are merely different modifications of our organs', Kant suggests that we could weaken this argument by hypothesizing 'that our body is nothing but the fundamental appearance to which the entire faculty of sensibility and therewith all thinking are related, as their condition, in our present state (of life)' and that '[s]eparation from our body would be the end of this sensible use [...] and the beginning of the intellectual' (A778/B806). Of course, this hypothesis is not something that

could be proven or even something that Kant, when he is being more precise, would want to call a genuine hypothesis. But it undermines the dogmatic assertion that the soul is material because it presents a logical possibility that, because no one is really in a position to know anything about the soul, the person making this dogmatic claim cannot exclude.

This polemical use of transcendental hypotheses could just as easily be used to undermine dogmatic assertions of the claims of special metaphysics as to undermine their denials. But it is the use of reason to combat the latter that is Kant's focus. Thus, in his elaboration on the polemical use of reason, he emphasizes that this use of reason will frustrate 'the opponent's illusory insights, which would demolish our own asserted propositions' (A776/B804). What are these propositions that Kant suggests both he and his reader assert? They cannot be the denials of the claims of special metaphysics, but neither can they be the assertions of these claims since our ability to assert both has been undermined by the arguments of the Doctrine of Elements. Rather, Kant suggests that they are the assertions of these claims *on practical grounds*. After commenting that speculative reason favors neither the assertion nor the denial of these claims, he gestures toward the arguments of the Canon:

It will be shown in what follows, however, that in regard to its **practical use** reason still has the right to assume something which it would in no way be warranted in presupposing in the field of mere speculation without sufficient grounds of proof; for all such presuppositions injure the perfection of speculation, about which, however, the practical interest does not trouble itself at all. (A776/B804)

And it is in defense of these claims that Kant believes the polemical use of transcendental hypotheses has its greatest use. The passage continues as follows:

There it thus has a possession the legitimacy of which need not be proved, and the proof of which it could not in fact give. The opponent should therefore prove. But since he no more knows something about the object that is doubted that would establish its non-being than does the former, who asserts its actuality, here an advantage on the side of he who asserts something as a practically necessary proposition (*melior est conditio possidentis*) is revealed. He is, namely, free to use, as it were in an emergency, the very same means

for his good cause as his opponent would use against it, i.e. to use the hypotheses that do not serve to strengthen the proof of it but serve only to show that the opponent understands far too little about the object of the dispute to be able to flatter himself with an advantage in speculative insight over us. (A776-7/B804-5)

The polemical use of reason can therefore play an important role in defending the practical claims of reason by reminding us that any speculative denial of those claims is on shaky ground. For this reason, Kant ends his discussion of the practical claims of reason with the clearest formulation of Rule 3 found in this section: ‘Hypotheses are therefore allowed in the field of pure reason only as weapons of war, not for grounding a right but only for defending it’ (A777/B805).

Rule 4: The fourth section of the Discipline, ‘The discipline of pure reason in regard to its proofs’, explicitly formulates the rules for the proofs of synthetic *a priori* philosophical propositions that Kant has used implicitly throughout the *Critique* and evaluates pure reason’s ability to use these ‘transcendental proofs’ to gain knowledge of supersensible objects.²³ More specifically, Kant argues that any attempt to cognize objects through pure reason *should* follow these rules but that actually attempting to do so reveals quite quickly that this kind of cognition is impossible. The final section of the Discipline is thus the counterpart to Kant’s discussion of the mathematical method in section one. Just as he there argued that the mathematical method could not be used to acquire knowledge of the objects of special metaphysics because the differences between mathematical and philosophical cognition make the use of this method in philosophy impossible, Kant here argues that the method he believes actually underlies philosophical cognition and has tacitly supposed throughout the *Critique* cannot be used to acquire this kind of knowledge either. As a result, pure reason is left without any method for its speculative use. And this is perhaps the best argument of all that its legitimate uses can only be regulative and practical.

According to Kant, the method of transcendental proof has three rules. The first is that one should not attempt to prove a synthetic *a priori* proposition ‘without having first considered whence one can justifiably derive the principles on which one intends to build and with what right one can expect success in inferences from them’ (A786/B814). The second is that there can be only one proof for each synthetic *a priori* proposition (A787/B815). And the third is that these proofs must be direct or ‘ostensive’ and not indirect or ‘apagogic’ (A789/B817). The result of a sincere attempt to use these rules to guide our attempts to acquire cognition through pure reason is, Kant believes, the realization that this cognition is impossible.

Consider the first of these rules. Determining ‘whence one can justifiably derive the principles’ one wants and the right to expect successful inferences when using them amounts to determining the source of the principles one wants to use in the proof and their proper domain of application. But Kant has already shown in the *Analytic* that the principles of the understanding—the Axioms, Anticipations, Analogies, and Postulates—are valid only for objects of possible experience and thus that these principles cannot ground any synthetic *a priori* cognition through pure reason. And he has shown in the *Dialectic* that the ideas of reason have no objective validity at all, so they are equally unsuited to ground any cognition through pure reason (A786/B814). Hence, there is no source in either reason or the understanding for principles that would support claims about supersensible objects and thus no basis for a transcendental proof from pure reason.

The situation is similar with the second and third rules of transcendental proof. Regarding the second rule, Kant does not attempt to show that there cannot be just one proof for any putative synthetic *a priori* proposition from pure reason. Instead, he merely comments that those

who claim that there are in fact proofs of such principles typically offer many proofs for each principle:

Where reason would conduct its business through pure concepts, only a single proof is possible if any proof is possible at all. Thus if one sees the dogmatist step forth with ten proofs, one can be sure that he has none at all. For if he had one that proved apodictically (as must be the case in matters of pure reason), for what would he need the rest? His intention is only that of every parliamentary advocate: one argument for this one, another for that, in order to take advantage of the weakness of his judges who [...] just grasp the first argument that occurs to them and decide accordingly. (A789/B817)

Kant need not argue that the second of the three rules of transcendental proof cannot be used for proofs of pure reason, then, because his opponents have consistently failed to adhere to it.²⁴ And regarding the third rule, he argues that any attempt to prove a pure rational principle directly will fail because, as we saw in the previous paragraph, the only principles that are objectively valid at all and thus suitable for inclusion in a proof are the principles of the understanding, and they are valid only for objects of possible experience. Consequently, any attempt to give a direct proof of any claim of special metaphysics will serve only to reveal ‘dogmatic illusion, and compel pure reason to surrender its exaggerated pretensions in its speculative use, and to draw back within the boundaries of its proper territory, namely practical principles’ (A794/B822).

3. THE ‘SKEPTICAL USE’ OF PURE REASON

As I suggested at the beginning of the previous section, Kant’s defense of the claim that pure reason has no skeptical use is more difficult to piece together than his defenses of the other rules established in the Discipline. This difficulty arises in part because Kant is not clear about what the ‘skeptical use’ of pure reason is and in part because he presents his argument that there is no such use in the context of an explicit critique of David Hume. What begins as an attempt to accomplish the fairly circumscribed task of establishing Rule 2 quickly turns into an extended comparison of Hume’s approach to the critique of metaphysics with Kant’s own.²⁵

As Kant initially describes it, the skeptical use of reason is identical to an approach to the critique of metaphysics that combats our tendency to make claims about supersensible objects by identifying equally compelling arguments for contradictory claims about these objects, which Kant elsewhere calls the ‘skeptical method’ (A424/B451). As I have argued elsewhere, Kant associates this method with Hume and even endorsed its use during a period in the 1770’s before deciding that it could play only a preparatory role in his mature critique of metaphysics.²⁶ When Kant illustrates Hume’s reliance on the skeptical use of reason, however, it is Hume’s account of causation not the skeptical method that is his focus. Thus, what Kant conceives of as the skeptical use of reason appears to be a general approach to the elimination of our tendency to make claims about supersensible objects that includes the skeptical method as a component but is also exemplified by at least some aspects of Hume’s account of causation.

The skeptical use of pure reason is not the only subject Kant addresses in the second section of the Discipline, however. As its title suggests, Kant begins this section by discussing the ‘polemical’ use of pure reason. This use, which Kant describes as ‘the defense of its [i.e. reason’s] propositions against dogmatic denials of them’ is essentially the same as the polemical or defensive use of hypotheses discussed in the previous section. In contrast to his treatment of the polemical use of hypotheses in section three of the Discipline, however, Kant here suggests that *all* dogmatic claims and not just those that would pose a threat to the claims of the Canon should be treated polemically. Kant encourages freedom in the polemical use of reason because he believes that questioning all dogmatic claims is an essential part of the development of reason (A744/B772).²⁷ But in a separately titled part of section two, ‘On the impossibility of a skeptical satisfaction of pure reason that it is divided against itself’, Kant also distinguishes the polemical use of reason from its skeptical use. And it is here that he attempts to justify his claim,

announced at the close of the first part of this section, that there is ‘no permissible skeptical use of pure reason’ (A756/B784).

Kant’s initial description of the skeptical use of reason makes clear that the skeptical method is an example of this use. In his initial discussion of it, Kant describes this method as ‘the method of watching or even occasioning disputes, not in order to decide it to the advantage of one party or another, but to investigate whether the object of the dispute is not perhaps a mere mirage at which each would snatch in vain’ (A422/B451). Similarly, the skeptical use of reason asks us to ‘set the boasting of one side against another, which stands on the same rights’ (A757/B785). And like the skeptical method, Kant believes that the skeptical use of reason can play a preparatory role in the critical philosophy by, as it were, softening our dogmatic inclinations and making us more receptive to critique.

But in the same passage in which he acknowledges that the skeptical use of reason can ‘shock reason [...] into raising some doubt about its pretensions and giving a hearing to the critique’, he also insists:

But for reason to leave just these doubts standing, and to set out to recommend the conviction and confession of its ignorance, not merely as a cure for dogmatic self-conceit but also as the way in which to end the conflict of reason with itself, is an entirely vain attempt, by no means suitable for arranging a peaceful retirement for reason; rather it is at best only a means for awaking it from its sweet dogmatic dreams in order to undertake a more careful examination of its condition. (A757/B785)

When he claims that there is ‘no permissible skeptical use of pure reason’, then, at least one thing Kant means is that letting reason use the skeptical method to examine conflicting claims about supersensible objects is an ineffective way to end these conflicts. Merely reflecting on the fact that there *are* equally compelling arguments for conflicting claims in the field of speculative philosophy or on the individual arguments themselves is not enough to show us that supersensible objects cannot be objects of cognition and therefore not enough to persuade us to

limit our reflections to the narrow bounds that Kant outlines in the Doctrine of Elements. In the above passage, then, Kant is explicitly contrasting his approach to the elimination of these conflicts, the discipline of reason, with the skeptical method. But since there are many philosophers—most notably Hume—who believe that ‘this skeptical manner of withdrawing from a tedious quarrel of reason’ is a shortcut ‘for arriving at an enduring philosophical tranquility’, Kant introduces his discussion of the impossibility of a ‘skeptical satisfaction of pure reason’ by commenting that the popularity of the skeptical approach makes it ‘necessary to exhibit this manner of thought in its true light’ (A757/B785).

But as I have said, the focus of Kant’s explicit discussion of Hume’s views is his account of causation. And it is this account that he connects with Hume’s attempt to eliminate the deception brought about by transcendental illusion:

The famous David Hume was one of these geographers of human reason, who took himself to have satisfactorily disposed of these questions [of pure reason] by having expelled them outside the horizon of human reason, which however he could not determine. He dwelt primarily on the principle of causality, and quite rightly remarked about that that one could not base its truth (indeed not even the objective validity of the concept of an efficient cause in general) on any insight at all, i.e. *a priori* cognition, and thus that the authority of this law is not constituted in the least by its necessity, but only by its merely general usefulness in the course of experience and a subjective necessity arising therefrom, which he called custom. Now from the incapacity of reason in general to make use of this principle that goes beyond all experience, he inferred the nullity of all pretensions of reason in general to go beyond the empirical. (A760/B789)

In this passage, Kant directly links Hume’s argument that reason is not the source of our causal inferences with the elimination of the claims about supersensible objects that reason forces on us and thus with the elimination of transcendental deception. In particular, he suggests that this argument allows Hume to conclude that reason can give us no knowledge of anything beyond the bounds of experience and thus no knowledge of any supersensible object. In his subsequent discussion, Kant then elaborates on why, despite these conclusions, Hume’s argument fails to

eliminate this deception. And it is here that he presents one of two arguments against the skeptical use of reason.

Kant describes Hume's attempt to eliminate transcendental deception as the '**ensorship of reason**' or the process of 'subjecting the *facta* of reason to examination and where necessary to blame' (A760/B780). The choice of the term '*facta*' is somewhat puzzling, but the most plausible way to interpret Kant's reference to the '*facta* of reason' is as reference to the activities of reason or, more precisely, to individual attempts to cognize objects through reason. This interpretation is not only compatible with the literal meaning of *facta* but also with Kant's discussion of the censorship of reason in the introduction to the Discipline, the only other place the topic is addressed in the *Critique*.²⁸ There he writes that the 'individual errors [of reason] can be eliminated through **ensure**' but that their causes can only be eliminated 'through critique' (A711/B739). Kant's characterization of Hume's approach as the censorship of reason in the passage from A760/B780 thus implicitly contrasts this approach with the approach of the *Critique*.

This implicit contrast is quickly made explicit. For while Kant says that it is 'beyond doubt' that the censorship of reason 'inevitably leads to **doubt** about all transcendent use of principles', he insists that only a critique of pure reason can conclusively establish the illegitimacy of *all* transcendent use of principles. Such a critique does not subject the *facta* of reason to examination but 'reason itself, as concerns its entire capacity and suitability for pure *a priori* cognitions', and only it is capable of establishing our ignorance 'in regard to all possible questions of a certain sort' as opposed to merely establishing the inadequacy of particular answers to particular questions concerning the existence or nature of some supersensible object (A761/B789). In the most detailed discussion of Hume found in either edition of the *Critique*,

then, Kant suggests that his entire critique of the faculty of reason, including the arguments of the Discipline, is an attempt to end the conflicts of metaphysics that Hume could not.

But what exactly is the nature of Kant's criticism? Why is examining the *facta* of reason not enough to eliminate transcendental deception? Kant's answer is remarkably Humean in spirit. For what he claims is that examining *individual attempts* to cognize supersensible objects through reason cannot warrant the conclusion that reason can *never* be the source of such cognition. As Kant puts it:

All failed dogmatic attempts of reason are *facta*, which it is always useful to subject to censure. But this cannot decide anything about reason's expectations of hoping for better success in its future efforts and making claims to that; mere censure can therefore never bring to an end the controversy about what is lawful in human reason. (A764/B792)

What Kant has done, then, is turn the nub of Hume's problem of induction against him. Just as Hume insists that our knowledge of causal relations cannot be founded on reason because we can provide no non-circular argument for the principle that the future will resemble the past, Kant insists that our knowledge—however extensive—of reason's past inability to cognize supersensible objects does not warrant the conclusion that reason's future attempts will be equally unsuccessful. And without this assurance that reason's future actions will resemble its past ones, '[Hume] is doubted, for his objections rest only on *facta*, which are contingent, but not on principles that could effect a necessary renunciation of the right to dogmatic assertions' (A767-8/B795-6).

This is all Kant says about Hume's examination of the *facta* of reason. And one wishes he had said more. To be sure, Hume does argue in a manner like that suggested by Kant in the first part of Section IV of the *Enquiry Concerning Human Understanding* when he attempts to show that experience not reason is the source of our knowledge of causal relationships. For Hume's strategy there is to ask us to imagine various cases (e.g. the biblical Adam's first

encounter with water or fire) in which experience not reason is the source of our knowledge of the causal properties of particular objects. But it is more difficult to understand why Hume's examination of the problem of induction should be thought of as an examination of the *facta* of reason since it attempts to show that reason is not the source of our conclusions from experience not by examining individual actions of reason but by establishing the *general* claim that there is no non-circular argument for the claim that the future will resemble the past. And since the conclusion of the problem of induction makes room for the development of Hume's alternative account of the concept of cause in Section VII and this account is key to his resolution of the metaphysical conflicts he considers in Sections VIII, X, and XI, we should have reservations about the force of Kant's criticism as an indictment of Hume's reliance on the skeptical use of reason.²⁹

Fortunately, Kant also has a more general line of criticism. In particular, he argues that no merely empirical account of cognition can eliminate transcendental deception because no such account can establish that we *necessarily* cannot cognize any supersensible objects. This criticism is at the outset of Kant's discussion of the skeptical use of reason. And although Kant does not explicitly mention Hume here, he does develop a contrast between determining the *limits* of knowledge and determining their *boundary* that he later uses to illustrate the differences between his critique of reason and Hume's censorship of it.³⁰ So it is safe to assume that Kant also has Hume in mind in these earlier passages.

Kant begins his evaluation of the skeptical use of reason with the following claim: 'The consciousness of my ignorance (if this is not at the same time known to be necessary) should not end my enquiries, but is rather the proper cause to arouse them' (A758/B786). Here Kant states what he believes is a necessary condition for any successful attempt to eliminate transcendental

deception. It is not enough to show that some or all of our past or current attempts to cognize supersensible objects have failed. Rather, we must show that these objects are *necessarily* beyond our cognitive grasp. And one cannot establish this stronger claim empirically but only by providing a critique of reason:

But that my ignorance is absolutely necessary and hence absolves me from all further investigation can never be made out empirically, from **observation**, but only critically by **getting to the bottom of** the primary sources of our cognition. Thus the determination of the boundaries of our reason can only take place in accordance with *a priori* grounds; its limitation, however which is a merely indeterminate cognition of an ignorance that is never completely to be lifted, can also be cognized *a posteriori*, through what which always remains to be known even with all knowledge. The former cognition of ignorance, which is possible only by means of the critique of reason itself, is thus **science**, the latter is nothing but **perception**, about which one cannot see how far the inference from it might reach. (A758/B786)

In this passage, Kant introduces the distinction between the empirical determination of limits and the critical determination of boundaries and claims that only the latter can justify an end to our attempts to cognize supersensible objects because only the latter can show that our ignorance of objects is necessary.

Kant then proceeds to illustrate the determination of limits by asking us to imagine the surface of the earth as a flat surface. If we conceive the earth in this way, we have no way to determine its size. Rather, all we can say is that wherever we go, we see a space in which we *could* move farther (A759/B786). For all we know, the earth might be unlimited in size, or it might end on the other side of an unexplored hill that is presently beyond our perception. All we can determine about the size of a flat earth, then, is the extent of our *actual* knowledge of it, and this is an example of what Kant calls the determination of limits. The determination of our actual knowledge of the earth is empirical and does not support any conclusion about how much more of the earth is or is not out there waiting to be discovered. Consequently, it cannot be used to justify an end to our investigation.

But if we instead imagine the surface of the earth as a sphere, we will be able to calculate the size of the entire earth from the length of even the smallest arc of this sphere. And Kant thinks of this calculation as a determination of the earth's boundary. Because it involves the use of geometry, this determination proceeds according to *a priori* principles. More importantly, because it assigns the earth a determinate size, determining the earth's boundary also allows us to determine the extent of our *possible* knowledge of the earth and in turn to show in a principled way that and where our investigations of the earth must necessarily end. As he puts it:

But if I have gotten as far as knowing that the earth is a sphere and its surface the surface of a sphere, then from a small part of the latter, e.g. from the magnitude of one degree, I can cognize its diameter and, by means of this, the complete boundary, i.e. the surface of the sphere, determinately and in accordance with *a priori* principles; although I am ignorant in regard to the objects that this surface might contain, I am not ignorant in regard to the magnitude and limits of the domain that contains them. (A759/B787)

Determining the earth's boundary is thus similar to the critique of pure reason in two important respects. Just as the former uses the *a priori* principles of geometry to determine the extent of our possible knowledge of the earth, the latter uses the *a priori* principles of the Aesthetic and Analytic to determine the extent of our possible knowledge in general. And just as the former is able to determine the proper objects of geographical inquiry, the latter is able to determine the proper objects of inquiry in general.

But Hume's empirical account of cognition determines limits not boundaries. As Kant puts it, Hume 'merely **limits** our understanding without **drawing boundaries** for it' (A767/B795). In contrast to the geographer of the flat world Kant has just imagined, however, these limits are negative not positive. They are represented by claims about what we do not know and not what we do. But because they are based on empirical principles, they bring about only 'a general distrust' and 'no determinate knowledge of the ignorance that is unavoidable for us' (ibid). And as a result, Hume is unable to 'effect a necessary renunciation of the right to

dogmatic assertions' and the skeptical use of reason his argument embodies must be rejected (A768/B796).

4. CONCLUDING REMARKS

Such, at least in outline, are the arguments by which Kant seeks to establish the four rules for the use of pure reason set out in section two of this essay. Each is an example of the 'negative in instruction' that characterizes discipline for Kant, insofar as each identifies an illegitimate use of reason and enjoins us to refrain from that use (A709/B737). Reason may not apply the mathematical method to philosophical questions in the manner of Wolff and his followers, posit supersensible entities as ultimate explanatory grounds except in a 'polemical' attempt to combat dogmatic claims about supersensible objects (especially when these consist of the denials of the claims for which Kant will provide practical arguments in the Canon), use the method of transcendental proof to cognize supersensible objects, or deploy either the skeptical method or the tactic of merely identifying the failure of particular attempts to cognize supersensible objects through pure reason as a means to combat transcendental deception. Further, since providing us with the tools to limit or eliminate this deception is what motivates Kant to introduce the rules of the Discipline, we should regard this section of the *Critique* as the culmination of Kant's critique of metaphysics. It is the Discipline that provides us with the tools not merely to understand the limits of knowledge outlined in the *Critique* but to integrate them into our thinking about ourselves and the world, and this integration is necessary if we are to complete the revolution in philosophy that Kant has started. Without them, we are left only with the account of the limits of knowledge itself and the Dialectic's analysis of the sources of transcendental illusion, and Kant is clear that these are not sufficient to prevent us from periodically falling back into dogmatism and retarding the progress of metaphysics.

Far from being dispensable, then, the Discipline is an essential part of Kant's attempt to achieve one of the central goals of the *Critique*. Of course, the Discipline cannot achieve its goal without relying on much of what has come before in the *Critique*. Kant directly appeals to the distinction between mathematical and dynamical principles of the pure understanding, the distinction between logical and real possibility, and the general conclusions of the Analytic and Dialectic in the course of his arguments. In fact, if the Discipline is, as I have argued, Kant's attempt to provide us with the tools to combat transcendental deception, its task *presupposes* the analyses of the Aesthetic, Analytic, and Dialectic. But this, I suggest, should be welcome news since it reveals systematic connections between the two most fundamental divisions of the *Critique*, connections that many of Kant's readers have had difficulty seeing.

Finally, my analysis has revealed what for some is an unexpected connection between Kant's concerns in the Discipline and his response to Hume. The locus of this response is traditionally thought to be the Second Analogy and Kant's account of causation.³¹ But the contrast Kant draws in the Discipline between his 'critique' of reason and Hume's 'censor' of it suggests that the traditional view should be modified in two ways. First, it suggests that Kant's primary interest in Hume's account of causation was not in its consequences for our judgments about empirical objects but rather in its ability to undermine the kinds of metaphysical views that Kant himself targeted.³² Second, it suggests that Kant regarded the entire *Critique*, or at least those parts of it that are relevant to his critique of metaphysics, as part of his response to Hume since it is here that Kant attempts to make good on the project that, in Kant's view, he and Hume share while avoiding the pitfalls of Hume's own attempt. These claims require more defense than I can give them here, but they serve to underscore the importance of Kant's comments in the Discipline to an understanding of his ambitions in the *Critique*.³³

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NOTES

¹ Citations from the *Critique of Pure Reason* use the standard A/B format to refer to the pages of the first (A) and second (B) editions. Citations from Kant's other works use the volume number and pagination of Kant 1900—. Quotations from the *Critique* are taken from Kant 1997. All other translations are my own. Scholars who discuss the notion of discipline as it applies to Kant's views on education include Weisskopf 1970, Funke 1974, Munzel 1991, Louden 2000, Munzel 2003, and Wilson 2006.

² In what follows, 'Discipline' will refer to this portion of the *Critique* and 'discipline' to the notion discussed therein.

³ Kemp Smith (1918: 563) writes that the 'entire teaching' of the Method 'has already been more or less exhaustively expounded in the earlier divisions of the *Critique*', and his discussion of the Discipline omits section three entirely and devotes only one sentence to section two. Similarly, Bird (2006: 739) writes that the Method merely 'summarizes' the work of the Doctrine of Elements and limits his discussion of the Discipline to section one. And apart from the Canon, Moore (2010: 311) regards Kant's discussion of transcendental proof as the 'really significant' contribution of the Method, which at least suggests that its other contributions are incidental.

Gehrhart 1998 is a notable exception to the tendency to downplay the significance of the Method.

⁴ See Grier 2001, Introduction, esp. 8-11 and Chapter 4, esp. 111-6 and 128-30. Note, however, that my terminology differs from Grier's. She uses the phrase 'judgmental error' to refer to the deception associated with transcendental illusion, which I will generally refer to as 'transcendental deception' or simply 'deception'. It seems to me that this terminological choice represents less of a departure from Kant's own language, since he frequently distinguishes illusion (*Schein, Illusion*) from deception (*Betrug*), but it does not reflect a departure from the substance of Grier's view on this issue.

⁵ Cf. A297/B353. For more discussion of reason and its search for the unconditioned, see Grier 2001: 101-142, Allison 2004: 307-332, and Rohlf 2010. I concur with Rohlf's criticisms of Allison's reconstruction of Kant's argument for transcendental illusion.

⁶ The dual role of transcendental illusion is emphasized by Grier (2001: 101-39, 263-301). See A652-4/B680-2 for Kant's discussion of parsimony.

⁷ Additional 'negative' evidence for this claim can be found at A308-9/B365-6 and A703/B731, passages that discuss the aims of the Dialectic and make no reference to transcendental deception.

⁸ Indeed, Kant gives similar characterizations of discipline in the *Lectures on Pedagogy* at 9:442 and 9:452.

⁹ On this reading, Kant's suggestion that our propensity to stray from these rules can be 'eliminated' appears to be in tension with his comment at A297/B354, quoted previously, that transcendental illusion 'continually' propels us into 'momentary aberrations that always need to be removed'. Perhaps the latter comment is true only of the individual whose reason has not been

disciplined according to the rules of the Discipline, or perhaps this tension reflects an uncertainty on Kant's part about whether transcendental deception can be eliminated or merely limited. In any event, it is clear that Kant believes transcendental illusion can at least be limited, and this is sufficient for the reading of the Discipline I am proposing.

¹⁰ For the parallel comment in the Doctrine of Elements, see A55/B80.

¹¹ See Meier 1752. Meier's book was a standard textbook in Wolffian logic and the book Kant used in his logic lectures for over forty years. It is reprinted along with Kant's notes in volume seventeen of the Academy Edition, from which I quote.

¹² This is not to say that combating transcendental deception is the only way to apply the results of the Doctrine of Elements, however. The Canon, Architectonic, and History can each be understood as applying these results in certain ways. See Rauscher 2010 for discussion of the Canon and Höffe 1998 for discussion of the Architectonic and the History.

¹³ See, for example, Christian Wolff 1963: §139.

¹⁴ Kant develops a second argument for this claim at A736-8/B764-6 that I will not consider. Following the suggestion of the previous quotation, this argument identifies the mathematical method with the dogmatic method and argues that pure reason contains no dogma and that reason's use of the dogmatic method is therefore *per se* inappropriate.

¹⁵ For a more detailed discussion of the constructability of mathematical concepts, see Lisa Shabel 2006.

¹⁶ Kant introduces the former capacity at A303/B360 and the latter at A644/B672.

¹⁷ See A720/B748.

¹⁸ For this discussion, see A240-6/B300-3. There Kant's argument is that none of the categories can be defined 'without immediately descending to the conditions of sensibility' (A241/B300).

In contrast, his view in the Discipline is that, even if we descend to the ‘conditions of sensibility’, no *a priori* concepts (including but not limited to the categories) can be defined.

¹⁹ See Meier 1752: §132. Cf. Wolff 2003: 129.

²⁰ I will here ignore Kant’s argument that empirical and arbitrary concepts cannot be defined in the same sense that mathematical concepts can. These arguments are interesting, but they are only of secondary importance to the conclusion this section draws about the use of pure reason.

²¹ The adverb ‘given’ is meant to contrast these *a priori* concepts with the *a priori* constructed concepts of mathematics.

²² Kant first discusses real possibility, although not under this name, in the Postulates of Empirical Thinking in General, but his explicit contrast between logical and real possibility occurs in the chapter on phenomena and noumena. In the A edition of this chapter, Kant uses the terminology of ‘logical’ and ‘transcendental’ possibility as opposed to ‘logical’ and ‘real’, but the distinction itself is the same in both editions. See A220-4/B267-72 and A244/B302. Kant also briefly mentions the distinction in the footnote at Bxxvi.

²³ Kant’s views in this section of the Discipline have been explored by interpreters interested in providing a characterization of transcendental arguments. See Gram 1984, Moore 2010, and the literature cited therein.

²⁴ Admittedly, this is a weak argument since the fact that rationalist philosophers have not yet reached a consensus on the best argument for each of the cardinal doctrines of special metaphysics does not mean that they will not do so in the future. Indeed, we will see in the next section that one of Kant’s criticisms of Hume turns on a similar argument. But since Kant’s position is that each of these rules is necessary for a successful transcendental proof, his argument that proofs from pure reason cannot adhere to the first is already sufficient to show that

the transcendental method of the *Critique* cannot be used to establish rational knowledge of the objects of special metaphysics.

²⁵ Kant makes clear that he regards Hume's project as first and foremost a critique of (broadly rationalist) metaphysics in a number places, among them A764/B792, 5:12-3, and the footnote at 4:259. For discussion of these and other passages, see Chance 2011.

²⁶ See Chance 2012.

²⁷ It is at here that Kant launches into the discussion of freedom of speech and education that I referred to in the introduction of this essay.

²⁸ *Factum* means act or deed, and *facta* is its accusative plural. Watkins (2005: 377-8) provides a similar reading of these passages.

²⁹ Two questions should be distinguished here. The first is whether Kant's discussion of the *facta* of reason is meant to be an argument against the skeptical use of reason as a means to eliminate transcendental deception. The second is whether Hume's arguments in the *Enquiry* and, in particular, in Section IV can be accurately characterized as 'subjecting the *facta* of reason to examination' (A760/B780). I am expressing doubts about the latter not the former.

³⁰ This contrast is picked up again in the *Prolegomena*, where Kant's final discussion of Hume occurs in a section titled 'On Determining the Boundary of Pure Reason' (4:350-65).

³¹ Watkins (2005: 363-388) has recently questioned this view. I discuss Watkins' views in Chance 2013

³² I defend this claim in Chance 2012.

³³ I am grateful to Richard Aquila, Scott Edgar, and Andrew Roche for comments on earlier versions of this paper.

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¹ Citations from the *Critique of Pure Reason* use the standard A/B format to refer to the pages of the first (A) and second (B) editions. Citations from Kant's other works use the volume number and pagination of Kant 1900—. Quotations from the *Critique* are taken from Kant 1997. All other translations are my own. Scholars who discuss the notion of discipline as it applies to Kant's views on education include Weisskopf 1970, Funke 1974, Munzel 1991, Louden 2000, Munzel 2003, and Wilson 2006.

² In what follows, 'Discipline' will refer to this portion of the *Critique* and 'discipline' to the notion discussed therein.

³ Kemp Smith (1918: 563) writes that the 'entire teaching' of the Method 'has already been more or less exhaustively expounded in the earlier divisions of the *Critique*', and his discussion of the Discipline omits section three entirely and devotes only one sentence to section two. Similarly, Bird (2006: 739) writes that the Method merely 'summarizes' the work of the Doctrine of Elements and limits his discussion of the Discipline to section one. And apart from the Canon, Moore (2010: 311) regards Kant's discussion of transcendental proof as the 'really significant' contribution of the Method, which at least suggests that its other contributions are incidental. Gehrhart 1998 is a notable exception to the tendency to downplay the significance of the Method.

⁴ See Grier 2001, Introduction, esp. 8-11 and Chapter 4, esp. 111-6 and 128-30. Note, however, that my terminology differs from Grier's. She uses the phrase 'judgmental error' to refer to the deception associated with transcendental illusion, which I will generally refer to as 'transcendental deception' or simply 'deception'. It seems to me that this terminological choice represents less of a departure from Kant's own language, since he frequently distinguishes illusion (*Schein*, *Illusion*) from deception (*Betrug*), but it does not reflect a departure from the substance of Grier's view on this issue.

⁵ Cf. A297/B353. For more discussion of reason and its search for the unconditioned, see Grier 2001: 101-142, Allison 2004: 307-332, and Rohlf 2010. I concur with Rohlf's criticisms of Allison's reconstruction of Kant's argument for transcendental illusion.

⁶ The dual role of transcendental illusion is emphasized by Grier (2001: 101-39, 263-301). See A652-4/B680-2 for Kant's discussion of parsimony.

⁷ Additional 'negative' evidence for this claim can be found at A308-9/B365-6 and A703/B731, passages that discuss the aims of the Dialectic and make no reference to transcendental deception.

⁸ Indeed, Kant gives similar characterizations of discipline in the *Lectures on Pedagogy* at 9:442 and 9:452.

⁹ On this reading, Kant's suggestion that our propensity to stray from these rules can be 'eliminated' appears to be in tension with his comment at A297/B354, quoted previously, that transcendental illusion 'continually' propels us into 'momentary aberrations that always need to be removed'. Perhaps the latter comment is true only of the individual whose reason has not been disciplined according to the rules of the Discipline, or perhaps this tension reflects an uncertainty on Kant's part about whether transcendental deception can be eliminated or merely limited. In any event, it is clear that Kant believes transcendental illusion can at least be limited, and this is sufficient for the reading of the Discipline I am proposing.

¹⁰ For the parallel comment in the Doctrine of Elements, see A55/B80.

¹¹ See Meier 1752. Meier's book was a standard textbook in Wolffian logic and the book Kant used in his logic lectures for over forty years. It is reprinted along with Kant's notes in volume seventeen of the Academy Edition, from which I quote.

¹² This is not to say that combating transcendental deception is the only way to apply the results of the Doctrine of Elements, however. The Canon, Architectonic, and History can each be understood as applying these results in certain ways. See Rauscher 2010 for discussion of the Canon and Höffe 1998 for discussion of the Architectonic and the History.

¹³ See, for example, Christian Wolff 1963: §139.

¹⁴ Kant develops a second argument for this claim at A736-8/B764-6 that I will not consider. Following the suggestion of the previous quotation, this argument identifies the mathematical method with the dogmatic method and argues that pure reason contains no dogma and that reason's use of the dogmatic method is therefore *per se* inappropriate.

¹⁵ For a more detailed discussion of the constructability of mathematical concepts, see Lisa Shabel 2006.

¹⁶ Kant introduces the former capacity at A303/B360 and the latter at A644/B672.

¹⁷ See A720/B748.

¹⁸ For this discussion, see A240-6/B300-3. There Kant's argument is that none of the categories can be defined 'without immediately descending to the conditions of sensibility' (A241/B300). In contrast, his view in the Discipline is that, even if we descend to the 'conditions of sensibility', no *a priori* concepts (including but not limited to the categories) can be defined.

¹⁹ See Meier 1752: §132. Cf. Wolff 2003: 129.

²⁰ I will here ignore Kant's argument that empirical and arbitrary concepts cannot be defined in the same sense that mathematical concepts can. These arguments are interesting, but they are only of secondary importance to the conclusion this section draws about the use of pure reason.

²¹ The adverb 'given' is meant to contrast these *a priori* concepts with the *a priori* constructed concepts of mathematics.

²² Kant first discusses real possibility, although not under this name, in the Postulates of Empirical Thinking in General, but his explicit contrast between logical and real possibility occurs in the chapter on phenomena and noumena. In the A edition of this chapter, Kant uses the terminology of 'logical' and 'transcendental' possibility as opposed to 'logical' and 'real', but the distinction itself is the same in both editions. See A220-4/B267-72 and A244/B302. Kant also briefly mentions the distinction in the footnote at Bxxvi.

²³ Kant's views in this section of the Discipline have been explored by interpreters interested in providing a characterization of transcendental arguments. See Gram 1984, Moore 2010, and the literature cited therein.

²⁴ Admittedly, this is a weak argument since the fact that rationalist philosophers have not yet reached a consensus on the best argument for each of the cardinal doctrines of special metaphysics does not mean that they will not do so in the future. Indeed, we will see in the next section that one of Kant's criticisms of Hume turns on a similar argument. But since Kant's position is that each of these rules is necessary for a successful transcendental proof, his argument that proofs from pure reason cannot adhere to the first is already sufficient to show that the transcendental method of the *Critique* cannot be used to establish rational knowledge of the objects of special metaphysics.

²⁵ Kant makes clear that he regards Hume's project as first and foremost a critique of (broadly rationalist) metaphysics in a number places, among them A764/B792, 5:12-3, and the footnote at 4:259. For discussion of these and other passages, see Chance 2011.

²⁶ See Chance 2012.

²⁷ It is at here that Kant launches into the discussion of freedom of speech and education that I referred to in the introduction of this essay.

²⁸ *Factum* means act or deed, and *facta* is its accusative plural. Watkins (2005: 377-8) provides a similar reading of these passages.

²⁹ Two questions should be distinguished here. The first is whether Kant's discussion of the *facta* of reason is meant to be an argument against the skeptical use of reason as a means to eliminate transcendental deception. The second is whether Hume's arguments in the *Enquiry* and, in particular, in Section IV can be accurately characterized as 'subjecting the *facta* of reason to examination' (A760/B780). I am expressing doubts about the latter not the former.

³⁰ This contrast is picked up again in the *Prolegomena*, where Kant's final discussion of Hume occurs in a section titled 'On Determining the Boundary of Pure Reason' (4:350-65).

³¹ Watkins (2005: 363-388) has recently questioned this view. I discuss Watkins' views in Chance 2013

³² I defend this claim in Chance 2012.

³³ I am grateful to Richard Aquila, Scott Edgar, and Andrew Roche for comments on earlier versions of this paper.