Analysis in the Critique of Pure Reason

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It is widely supposed that the principal task of Kant's Critique of Pure Reason is to carry out some kind of analysis of experience. Commentators as profoundly at odds on fundamental points of interpretation as P. F. Strawson and Patricia Kitcher share this supposition. In a letter to J. S. Beck, Kant seems to endorse this view himself, referring to some unspecified stretch of the Critique as an 'analysis of experience in general'. The idea that the Critique is engaged in an analysis of experience accords well with an attractive conception of critical philosophy as making something explicit that is generally only implicit in our cognitive lives. After all, the categorical imperative is no innovation of Kant's practical philosophy, but rather is meant to be revealed as the animating principle of 'ordinary moral rational cognition'.2 Likewise, the principles revealed in Kant's theoretical philosophy should be nothing other than the principles that necessarily animate ordinary empirical cognition; and Kant says that experience is, or is a mode of, empirical cognition.³ For this reason, it is undeniably compelling to think of the *Critique* as offering some kind of analysis of experience.

However, the idea that the *Critique* engages in some kind of analysis of experience is misleading as a guide to the text. In the *Critique* itself, Kant never announces that the work will involve an analysis of experience. Moreover, in one of the few passages where Kant comments explicitly on the method of the *Critique* in published print, he claims instead that the *Critique* 'takes nothing as given except reason itself'. If this is so, then the work of the *Critique* might be conceived instead as involving an analysis of the faculty of reason. My principal task in this paper is to show how we are to understand this. Before turning to that task, I argue that the popular view that the *Critique* carries out an analysis of experience stands at odds with Kant's own conception of the *Critique*'s method.

To be sure, Kant's explicit remarks on the method of the *Critique* are few, somewhat isolated, and undeniably cryptic. Yet if we pull these remarks together and consider them in the context of Kant's general remarks on methodology, a crisper picture emerges of the *Critique*'s method – and this, in turn, functions as a guide for correctly appreciating the nature and role of analysis in the *Critique*. For whatever analytic arguments there may be in the *Critique*, they are arguments that belong to a larger argumentative framework. It is crucial that we understand that larger framework in order to understand the analytic arguments themselves.

This, I take it, is Kant's point when he remarks on the role of analysis in the *Critique*. In the Introduction, he announces that the Critique must present a 'complete enumeration of the fundamental concepts which comprise the pure cognition under consideration'. However, the Critique 'properly refrains' from offering a 'complete analysis of these concepts' (A13/B27). Such an analysis, Kant claims, 'would not be purposeful [zweckmäßig]'. Kant then mentions a synthesis so important that it is 'that for the sake of which the entire Critique actually exists' (A14/B28). Although Kant is not here explicit about what this synthesis is, or where in the text it is to be found, we can at least infer that if there is a purposeful analytic argument to be found in the Critique, its purposeful character would be intelligible with respect to this allimportant synthesis. The analytic argument in question, if there is one, would be a necessary preparation for that synthetic argument.5

No doubt, this remark about the role of analysis in the *Critique* is as cryptic as any of Kant's explicit remarks about the proceedings of the *Critique*. For this reason, it is understandable that it has been widely ignored by commentators. However, it is possible to make sense of this remark, and doing so will advance our understanding of the broader methodological framework of the *Critique*. There are, then, two neglected features of Kant's conception of the method of the *Critique* that I shall try to illuminate and explain: first, that the *Critique* carries out an analysis of the faculty of reason, and secondly, that the purpose of this analysis is to make some all-important synthetic argument possible.

Yet since my account of analysis in the *Critique* runs counter to the dominant line of interpretation – according to which the *Critique* is principally engaged in an analysis of experience – I

shall, in the context of considering Kant's remarks about the methodological framework, argue for the inadequacy of two versions of the dominant interpretation. According to one version of the dominant interpretation, the starting point of the Critique is indicated by the famous opening line of its introduction: 'There can be no doubt that all of our cognition begins with experience' (B1). According to this line of thought, the *Critique* – which is supposed to yield knowledge of our cognitive capacity - begins with experience as all cognition does. It begins with experience in the sense that it takes as given an empirically identified subject matter: namely, specific modes of cognition as they might be described non-controversially in thoroughly empirical terms.⁶ According to another version of the dominant interpretation, the starting point of the *Critique* is some conception of experience in general. The starting point of the Critique is some highly general conception of the experience of an objective world.⁷ The primary task of part 1 will be to present an account of the methodological framework of the Critique against which the adequacy of the dominant interpretation may be assessed.8

In part 2, I present an account of the *Critique*'s purposeful analysis. I begin by trying to clarify the idea that some conception of reason is the only given admitted at the outset of the *Critique*. I argue that the task of the *Critique*'s front matter, that is, the prefaces and introduction, is to present this conception of reason. I then argue that the purposeful analytic argument is found in the transcendental deduction chapter. The starting point of the transcendental deduction is not experience; rather, as I argue, the deduction begins with a problem that stems directly from the initial account of theoretical reason as it is laid out in the *Critique*'s front matter. A conception of experience emerges in the course of the transcendental deduction; it is not the starting point.⁹

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It is striking that a philosopher who thought so long and hard about proper philosophical method would say so little about the method of his most important work.¹⁰ Kant is most explicit about the method of the *Critique* in the *Prolegomena*, where he comments on the difference in method between the two works. The

method of the Critique is synthetic, which Kant primarily glosses with the previously quoted remark that it 'takes nothing as given except reason itself'. The starting point of the Critique is the faculty or capacity of reason; Kant claims that it is a whole new science, one that is 'robbed of all help from other [sciences]' (P §5, 4: 279). This stands in contrast to the *Prolegomena*, which follows an analytic method that takes as given certain actual expressions of reason - principally, pure mathematics and pure natural science and argues regressively to the 'principle of the possibility' of each (p. 275). Much more could be said about Kant's distinction between analytic and synthetic method, at least with respect to his work of the critical period.¹¹ What concerns us here is principally the difference in the starting point between the synthetic Critique and the analytic *Prolegomena*: the faculty of reason (a potentiality or capacity) is the purported starting point of the synthetic Critique, and not some particular expression or actualization of reason.12

It is worth pausing to consider what could possibly be meant by the idea that the *Critique* takes nothing as given except reason itself. Surely this echoes Kant's presentation of the *Critique* as a project of self-knowledge, one in which reason assesses its own capacity (Axi; Bxxxv; A849/B877). But this conception of the project hovers too high above the text to provide any obvious insight into its twists and turns. Moreover, reason does not seem to be given at the outset of the *Critique* – at least not with the same clarity of purpose with which pure mathematics, say, is given at the outset of the first part of the *Prolegomena*. The mere idea that the starting point of the *Critique* is nothing other than reason itself does not immediately illuminate the structure and method of the work as a whole.

We can, however, make some progress with this idea by turning to consider another point that is perhaps aligned with the distinction between the synthetic *Critique* and the analytic *Prolegomena*. The *Critique*, Kant repeatedly insists, is a science. It is the 'science [...] of *an a priori judging* reason'. And in at least one of the several passages where this point is made, the context is once again that of distinguishing between the *Critique* and the *Prolegomena*: the latter contains mere 'preliminary exercises' to prepare readers for the critical science of reason, which alone can promise to deal with 'the pure faculty of reason in its whole extent and bounds'. 14

This point about the claimed scientific status of the *Critique* is evidently related to its deliberately systematic articulation, which may be considered in contrast with the *Prolegomena*. The *Prolegomena* identifies the a priori representations that are conditions of the possibility of pure mathematics, and then identifies a distinct set of a priori representations that are conditions of the possibility of pure natural science, and yet never explicitly addresses the precise relation between the two. The *Prolegomena* leaves us without a systematic account of these separately identified sets of fundamental representations, which is to say that it does not provide a science of human reason in Kant's terms.

For Kant, scientific knowledge must be systematic. A science is 'a whole of cognition ordered according to principles'. A system is 'the unity of the manifold cognitions under one idea' (A832/B860). Now, these two remarks taken together suggest that while a science may contain a plethora of principles, these principles would be unified by some 'one idea'. Scientific knowledge, Kant remarks, 'presupposes an idea, namely that of the form of a whole of cognition' (A645/B673). Now, what could Kant possibly mean when he says that scientific knowledge begins with an idea of the form of the whole of the cognition in question? The most sensible interpretation is that we begin with a preliminary grasp of the very subject matter regarding which the science will go on to give the determinate account.

This interpretation gathers support from the fact that Kant understands the systematic character of scientific cognition in teleological terms. A science is a systematic whole of cognition that is 'articulated [gegliedert] (articulatio) and not heaped up (coacervatio); it can, indeed, grow internally ... but not externally ... like an animal body whose growth does not add limbs, but rather makes each limb stronger and fitter for its ends without altering the proportion' (A833/B861). The organs of an animal body are determined functionally, that is, with respect to their contribution to the life of the animal. A conception of what it is to live a life of a certain kind is the idea that governs our recognition of the functional parts of the organism, and in turn allows us to appreciate their unity as elements of the organism. So, a science is like an organized being. To draw out the analogy in the case of critical philosophy, we would say that some conception of the end of reason would govern our recognition of the elements of a science of

reason. ¹⁶ Kant obviously supposes that there are elements of the critical science: the great bulk of the *Critique*, after all, is called the Doctrine of Elements. It divides into a Transcendental Aesthetic and a Transcendental Logic, suggesting that the elements in question are sensibility and intellect (broadly construed). But what are they elements of? Kant's overarching conception of the *Critique* as reason's self-knowledge suggests that they are conceived as elements of reason.

We have already considered Kant's claim that scientific cognition 'presupposes an idea ... of the form of a whole of cognition'. Kant goes on to claim that this idea of the whole 'precedes the determinate cognition of the parts, and contains the conditions for determining a priori the place of each part and its relation to the others' (A645/B673). Determinate cognition of the parts, then, would presumably differ from indeterminate cognition of the parts by providing an account of the relation of each part to one another in its contribution to the end of the whole. Such grasp of the relation of the parts is required for the cognition to be systematic, which Kant glosses as 'its interconnection from a principle' (A645/B673). Thus, the determinate knowledge of the parts would seem to rest on the discovery of a unifying principle - that is, a principle on the basis of which the relation of the parts could be determined. How would we discover such a principle? As Kant tells us that the idea of the whole 'contains the conditions for determining a priori the place of each part and its relation to the others' (my emphasis), he implies that the crucial unifying principle is implicit in the idea of the whole, and hence would be discoverable through analysis.¹⁷

If this general model of scientific cognition applies to the particular case of the *Critique* – as it should if the *Critique* is the project that Kant advertises it to be – then the *Critique* would begin with some preliminary conception of reason. This conception of reason would contain the crucial unifying principle without which the *Critique* could not be a science in Kant's terms. In part 2, I will argue that the role of the purposeful analysis that Kant refers to in the introduction is to establish the crucial unifying principle of the *Critique*. This purposeful analysis sets out to address a problem that has its roots in the preliminary conception of reason that is laid out in the *Critique*'s front matter. In short, I will be applying this general model of scientific cognition to the particular case of

the *Critique*. That this is the correct interpretive strategy still needs further motivation. I will try to provide it by considering more deliberately why critical philosophy cannot proceed as an analysis of experience.

A prominent advocate of the view that the Critique principally contains regressive or analytic arguments that take experience as given is Patricia Kitcher, who claims that the Critique contains transcendental proofs that begin with experience, or with the possibility of experience. This conception of the starting point quickly gets a determinate interpretation: the starting point is cognitive experience, which is a general term for the 'repertoire of cognitive tasks that we can perform'. 18 We are to begin with noncontroversial, and hence empirical, accounts of certain cognitive tasks.¹⁹ The principal work of the Critique is called task analysis: these cognitive tasks are 'analyzed in order to show that they require certain elements that cannot be supplied by the senses'.²⁰ Thus, certain non-empirical elements of Kant's philosophy are legitimated by an analytic demonstration of their status as conditions of the possibility of 'cognitive experience'. Task analysis allows Kant to introduce and defend the supposition that we possess certain cognitive faculties that in turn explain how we are entitled to suppose that we can have knowledge of laws of nature on the basis of experience.²¹ So, we move from particular episodes of cognitive experience to the faculties that make these experiences possible.

It is not made entirely clear how it is determined which particular tasks make up the repertoire of cognitive experience in the first place. But Kitcher's claim that the starting point of the *Critique* is experience suggests that the repertoire is discovered on the basis of some kind of minimal introspection: the analysanda are given in experience. What we are supposed to end up with is an account of the fundamental faculties of the mind, each making some necessary a priori contribution to cognition.

The problem with Kitcher's interpretation of the Kantian project is that it bears a closer resemblance to the project of Hume than it does to that of Kant. To be sure, the two projects share a similar overarching self-conception: namely, to develop an account of our cognitive power in order to dispel the illusions of speculative

metaphysics. Hume called for the development of a 'true metaphysics ... in order to destroy the false and adulterate'; true metaphysics Hume conceived as a project of mental geography – a 'delineation of the distinct parts and powers of the mind' – in order to determine the extent of the cognitive power.²² This mental geography would in turn serve as a basis by which to adjudicate particular claims of reason – with the claims of speculative metaphysics lodged outside the horizon of human reason, as Kant put it in his account of the Humean project (A760/B788). In both projects, the negative account – or the denial of certain pretensions of human reason – relies upon the positive account of the cognitive power.

Despite the similarities, there are of course profound differences between the two projects; and I do not mean to suggest that Kitcher is thoroughly blind to them. Yet perhaps there has been, at least historically, a tendency for commentators in the Anglo-American tradition at least to underestimate some of these differences. Kitcher's account of task analysis does this in at least two respects. She suggests that the principal result of task analysis is the identification of some element of cognitive experience that could not come from the senses. While that may be too much to press on Hume, it also seems too little to attribute to Kant: for in this way, Kitcher implies that Kant relies on task analysis to bring into view the very idea of the intellect. That suggestion clashes with Kant's conception of the project as taking reason – a dimension or aspect or capacity of the intellect – as given in some sense. Perhaps the more jarring clash results from Kitcher's emphasis on empirical introspection as affording a starting point for analysis in the Critique of Pure Reason. For it is precisely by focusing our attention on the implications of taking empirical introspection as a starting point that Kant aims to distinguish his geography of human reason from Hume's in a passage from the Doctrine of Method, to which I now turn.

The point of the passage is to register a general methodological complaint about the Humean project: in order to shut down a line of inquiry (e.g. speculative metaphysics) Hume would need to demonstrate that we are necessarily ignorant about the relevant subject matter. A determination of necessary ignorance, rather than actual ignorance, can only rest on a complete, positive, a priori account of the bounds of our cognitive capacity. Hume offers a

mere censorship of human reason, in which particular claims of reason are subject 'to examination, and if necessary to blame' (A760/B788). The fraudulent claims are cast out piecemeal; Hume cannot even determine, Kant insists, that the cast-out propositions are ones about which we remain necessarily in ignorance.²³ Hume's attempt to censor certain claims of human reason is meant to rest on his project of mental geography, which itself relies centrally on empirical introspection. Kant's report of Hume's aim to draw inferences about the bounds of our cognitive capacity on the basis of perception (i.e. introspection) is hardly unfair (A758/B786).

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Kant resorts to metaphor to express the methodological difference between the two projects. Our knowledge of the magnitude of the earth is to be compared to our knowledge of the magnitude – the 'extent and bounds' (A762/B790) – of human reason.

If I represent the surface of the earth as a plate (in accordance with sensible appearance), then I cannot know how far it extends. But experience teaches me this: that wherever I go, I always see a space around me in which I could proceed further. Thus I know the limits of my actual knowledge of the earth [Erdkunde] at any time, but not the bounds of all possible description of the earth. But if I have come so far as to know that the earth is a sphere and its surface the surface of a sphere, then from a small part of it – e.g., the magnitude of one degree – I can know the diameter and, by means of this, the entire boundary of the earth . . . determinately and according to principles a priori. And though I am ignorant of the objects which this surface may contain, I am nevertheless not ignorant in regard to the magnitude and limits of the extension [Umfang] that contains them. (A759/B787)

The metaphor is drawn out a couple of pages later: 'Our reason is not like an indeterminably extended plane ... but must rather be compared more with a sphere, the radius of which can be found out from the curvature of an arc on its surface' (A762/B790). If the faculty of reason is represented by the sphere, then introspective experience might be represented by the view from the surface. At stake is how we are to acquire knowledge of the entire extent and bounds of this sphere (reason) given that we cannot escape having a perspective from a particular point on the surface.

The passage points to the possibility of having some grasp of the form of the whole (i.e. the knowledge that one stands on the surface of a sphere) and using this as a starting point from which to assess the extent of the sphere. There is no suggestion here that

experience (an array of introspective episodes, say) figures as a starting point of an analysis. Instead, the passage points to the crucial importance of the geographer's knowledge – the source of which is left unspecified – of the form of the whole.

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The geographical metaphor focuses our attention on the principal task of the *Critique*, which is to determine the extent and bounds of human reason. This is also the principal task of much of what is taken to be first philosophy in the modern era. Both the Kantian and the Humean projects (contrary, say, to a Cartesian one) maintain that experience must be a frame of reference as we seek knowledge of human reason itself. Hume attempts to infer the general characteristics of the capacity as a whole by introspection on particular episodes; this is what it means to take experience as the starting point. Kant replies: in order for these episodes to yield any insight into the extent of the whole, we must already have a conception of the form of the whole. It sets out with the idea that any particular experience (whether introspective or not) is, as it were, informed by this 'whole'.²⁴

This metaphorical passage addressing the method of critical philosophy corroborates our earlier account of Kant's conception of the method of scientific systematic inquiry (§2). Yet while the passage may tell against Kitcher's interpretation of Kant's methodology in the *Critique*, it does not by itself rule out the Strawsonian possibility that the relevant whole might be conceived as experience in general rather than as human reason. I shall try to address this issue in the course of the next two sections.

According to P. F. Strawson, the aim of the analytic work of the *Critique* is to make explicit the 'limiting or necessary features of experience'. ²⁵ Kant is an analyst of the conception of experience in general, who discovers the limiting features of experience when he recognizes that some candidate limiting feature cannot be severed from our conception of experience without obliterating that conception altogether. ²⁶ So, for example, we cannot abstract from the idea that 'particular items capable of being encountered in experience' are 'temporally and spatially ordered items. We are confronted with the thought of this link being so vital that it cannot be broken without nullifying the whole conception of experience . . . ²⁷ We are responsible, in such an analysis, to the 'limits of

what we can conceive of, or make intelligible to ourselves, as a possible general structure of experience'. 28

Strawson advances his interpretation of the analytic argument of the Critique in the context of expressly eschewing the idea that this analysis is supposed to lead to the discovery of the sources of our cognition – that is, our cognitive faculties. Strawson supposes that he is doing away with a mere idiom, and claims that Kant's concern with the sources of knowledge is 'incoherent in itself' and 'masks, rather than explains, the real character of his inquiry'. The true insights of the work are all found in an 'analytical argument which is in fact independent of [the doctrine of the faculties]'.²⁹ With this, however, Strawson dismisses the broader methodological framework of the *Critique*. For if Kant's conception of a cognitive faculty is not a mere idiom, and if Kant's conception of the Critique as reason's project of self-knowledge or 'critique of its own faculty' (Bxxxv) is not a rhetorical flourish, then Strawson's attempt to isolate an analytic argument from its putatively unattractive context may not be a harmless one at all.

In the end, what is missing from Strawson's account may not be all that different from what is missing from Kitcher's. This is so despite the fact that they stand at odds over the status of psychology in the *Critique*. Like most commentators, they disregard Kant's own conception of the *Critique* as a science and, in turn, what this entails about its method. Kant says that a science begins with an idea of the whole: thus, any candidate feature of experience in general (Strawson) or any cognitive faculty (Kitcher) is determined with respect to its function or place in that whole. The problem with the dominant interpretation, whether it is offered in the spirit of Strawson or the spirit of Kitcher, is its tendency to overlook Kant's idea that analysis in the *Critique* is but part of a broader argumentative framework.

Still, someone might claim in Strawson's defence that his invocation of experience in general as the starting point of analysis in the *Critique* is meant to be a conception of the relevant whole. After all, we cannot dismiss the fact that Kant himself wrote to Beck that the *Critique* contains some analysis of experience in general, *Erfahrung überhaupt*. But experience in general is certainly not equivalent to any particular experience, nor even to some collection of experiences. But, then, what is it to speak of experience in general? We have not yet identified any obvious criteria by which

we might distinguish between reason and experience in general to determine whether one, over the other, is really meant to be the starting point of the principal analytic work of the *Critique of Pure Reason*.

The obvious place for commentators to turn to find support for the idea that the *Critique* is conceived as an analysis of experience is the opening passage of its Introduction. Kant begins there with a sincere nod to the empiricist thesis that 'all of our cognition begins with experience' (B1). He continues by hinting that critical philosophy will be concerned to identify some contribution to experience that 'our own cognitive capacity ... brings forth from itself'. The passage does indeed contain some important clues about the Critique's project, and it is perfectly correct to infer that critical philosophy will be concerned to identify this contribution to experience that has its source in our own cognitive capacity. Once again, though, this clue is easily misinterpreted if we overlook the broader context in which it appears. If we appreciate that the Critique's introduction continues a line of thought that is begun in the preface, we will not only be able to make sense of Kant's claim that the *Critique* takes nothing as given except reason itself, but we will also be able to distinguish the Strawsonian idea that the Critique carries out an analysis of experience in general from the genuinely Kantian one. My task in the next section is to examine the front matter of the Critique so that this distinction may be made.

2.

The remainder of this paper will be devoted to two principal tasks. The first is to come to terms with Kant's claim that the *Critique of Pure Reason* takes nothing as given except reason itself. To understand this remark, we must examine the *Critique*'s front matter – that is, the prefaces and introduction. The second edition preface contains an illustration of reason in its theoretical capacity: reason is presented as a cognitive capacity that achieves its paradigmatic expression in scientific knowledge of material nature. In the introduction, Kant moves from this initial illustration to sketch the framework of a project in which pure theoretical reason, so conceived, is to 'critique its own capacity' (Bxxxv). Thus the

introduction contains an initial analysis of reason as it is presented in the preface. It is taken as given that the physical sciences of nature are successful, and that they are the cognitive projects that they take themselves to be. The fact that we can, with evident cognitive success, formulate laws of nature entails that we posses a capacity to make claims that hold of necessity and yet pertain to matters of fact. This is the *Critique*'s preliminary conception of pure theoretical reason.

Kant's initial examination of the preliminary conception of reason in the Introduction leads him to what may be the most distinctive and fundamental thesis of the *Critique*: the thesis about the heterogeneity of sensibility and understanding. This thesis is presented as a claim about the elements of pure theoretical reason; thus, it completes Kant's presentation of the preliminary conception of reason. On my interpretation, the front matter of the *Critique* is therefore devoted to illustrating and articulating, in a preliminary way, a conception of the very subject matter regarding which the main text of the *Critique* should give the scientific account.

The second task of the remainder of this paper is to account for Kant's remark about the purposeful analysis in the introduction. Our account of Kant's general conception of scientific method, applied to the particular case of the *Critique*, suggests that the purposeful analysis will proceed from the preliminary conception of reason that is laid out in the front matter. I will argue that the purposeful analysis can be found in the initial stages of the Transcendental Deduction chapter; this claim shall be based on an examination of the starting point of the Transcendental Deduction, showing how this starting point develops out of the *Critique*'s preliminary conception of reason.

To come to terms with Kant's idea that the starting point of the *Critique* is nothing other than reason itself, let us begin by considering the very first topic of the book. The opening line of the second edition preface unambiguously announces that its topic is scientific knowledge (Bvii); this topic remains clearly in view throughout the discussion that follows. Scientific knowledge, moreover, is conceived as a mode of knowledge that belongs to the concern of reason. More specifically, the topic is theoretical science, with mathematics and physics serving as successful examples. Lamented is the failure of metaphysics to attain the secure

path of a science.³⁰ Very early on, Kant remarks that these sciences must contain a priori cognition insofar as reason is involved in them (Bix). Although Kant is not explicit here about his reasoning on this point, it is his recognition that these sciences deal in universal and necessary truths that leads him to suppose that they must contain some a priori cognition. Thus Kant effectively claims – without any particular argument, or initial definition of reason – that reason is a faculty for a priori cognition.

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Thus the topic of the preface is scientific knowledge, which is conceived as an expression of human reason. Indeed, the general context of the discussion implies that scientific cognition is the paradigmatic expression of human reason. If this is so, then the end of human reason considered in its theoretical (as opposed to practical) employment would be scientific knowledge of material nature.³¹ Of particular interest to Kant in the preface are the investigative practices that allow some inquiry to attain the status of a science: on this, Kant dwells particularly on the examples of Euclidean geometry and the experimental method of modern natural science. (Mathematics is, at least ultimately for Kant, a science of nature; its domain is not some realm of abstract mathematical objects, but rather nature itself.³²)

It may seem that the introduction opens with an unexplained fresh start, changing the subject entirely. Kant begins there with a sincere nod to the empiricist thesis that 'all of our cognition begins with experience' (B1). Experience is conceived as what may well be a hylomorphic composite that is the result of our cognitive faculty being aroused into activity by objects affecting our senses. The 'raw material of sensible impressions' may be 'worked up' into that 'knowledge of objects ... that is called experience'. The formal element of experience is something that 'our own cognitive capacity ... brings forth from itself'. Critical philosophy, Kant hints, will be concerned to acknowledge this contribution of our cognitive capacity; but this addition (*Zusatz*) or contribution cannot be distinguished from the fundamental material (*Grundstoffe*) 'until long practice has made us attentive to it and skilled in the separation of it' (B2).

The preface is evidently devoted to the topic of human reason, its successes and failures; the Introduction begins by invoking experience. Though it appears to be a shift in topic, in fact the front matter is singlemindedly devoted to articulating a general conception of

reason or an idea of the whole. In the preface we consider particular examples of the exercise of pure theoretical reason; yet the aim of critical philosophy is not to legitimate the cognitive claims of any particular science of nature. Rather, it is concerned to legitimate the cognitive claims of pure theoretical reason as such. Universally true of the sciences of nature is that their claims pertain to the world as we experience it; experience is the inescapable reference point, and ultimate testing ground, of their claims. This is why Kant opens the introduction by reflecting briefly on what experience is. He begins with a conception of experience that should not put off the most stalwart of empiricists; but he continues by suggesting the possible need for a revision in our conception of experience. It is within a certain context that Kant suggests that a reconsideration of our conception of experience may be in order: that context is the general claim, put forward in the preface, that the paradigmatic expression of human reason in its theoretical capacity is scientific knowledge of material nature. In this way, a guiding question of the project comes to light: what must be true about experience if it is to be an expression of reason in its theoretical employment? What must be true about experience if it is to contribute to, and allow for, scientific knowledge of material nature?

Thus, the project sets out with an illustration of the paradigmatic employment of reason in its theoretical capacity. This provides a starting point for the articulation of a framework within which a new understanding of the very idea of experience promises to come to light. If there is some sense in which this project can be conceived as an analysis of experience in general, it is no different from the sense in which it is conceived as an analysis of theoretical reason. So while there is sense to be made of the idea that the *Critique* is an analysis of experience in general, it encompasses considerably more than – if it is not entirely distinct from – the Strawsonian idea of critical philosophy as beginning with a general conception of experience of an objective world.³³

Readers wanting to take seriously Kant's claims about the role of reason in the *Critique* may still wish to say that the work should be conceived as an analysis of experience by reason. I take it that an idea of this sort stands behind Graham Bird's conception of Kant's project of descriptive metaphysics: 'the project of accepting our experience *as given without philosophical preconceptions* in order

to identify the fundamental principles that govern it'.34 Such a project brings about 'a transition from the survey of our contingent experience to items that are not themselves contingent but are constitutive of that experience'.35 Since the analysis is to be carried out by reason, presumably the relevant items would be identified through rational self-recognition (i.e. reason recognizing its own contribution to contingent experience). There is nothing especially wrong with this as an overarching conception of the Kantian project. But I still believe that more needs to be said about the framework of that project as reason's recognition or assessment of its own contribution to contingent experience. This framework, as I wish to suggest in this paper, emerges out of a recognition that scientific cognition is the paradigmatic expression of human reason. It is the end of reason in the sense that it makes reason what it is. Thus reason's recognition of its necessary contribution to contingent experience would rely on this presupposition about its own nature from the outset.

To return, then, to the Critique's front matter: the preface illustrates theoretical reason as a capacity that achieves its paradigmatic expression in scientific knowledge of material nature, and the opening paragraph of the introduction clarifies that a central concern of the Critique is to determine what must be true about experience if it is to contribute to scientific knowledge of material nature. The introduction continues by addressing more deliberately how we could have scientific knowledge as it was illustrated in the preface. The theoretical sciences are sciences of nature: they may be either metaphysical or physical. To ask generically after the possibility of theoretical science is to ask how we can make claims that hold of necessity and yet pertain to matters of fact (i.e. formulate natural laws). This would be to have knowledge that is independent of experience about objects that can only be given in experience. Such knowledge would arise from what Kant refers to as 'synthetic a priori judgements' (B19). The question as to how it is possible to judge in this way is dubbed the general problem of pure reason (in the heading to \(VI \), indicating a further development in the articulation of a preliminary conception of reason.

From the formulation of this problem, we are led to a thesis that Kant claims is the only introduction or preliminary required as we embark upon the work proper. It is Kant's characteristic thesis

about the heterogeneity of sensibility and understanding. I will refer to it as the heterogeneity *thesis*:

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[T]here are but two stems of human cognition, which perhaps arise from a common, but to us unknown, root – namely, sensibility and understanding. Through the first objects are *given* to us, while through the second they are *thought*. To the extent that sensibility may contain a priori representations, which constitute the condition under which objects may be given to us, it would belong to transcendental philosophy. (A15/B29–30)

With this presentation of the heterogeneity thesis at the end of the Introduction, the preliminary account of reason draws to a close, with sensibility and understanding introduced as elements of theoretical reason. The *Critique*'s front matter provides us with exactly what we are led to expect from our general account of the methodological framework of the *Critique*: a preliminary conception of reason that contains the end and the form of the whole. The whole is theoretical reason, its 'end' is scientific knowledge of material nature, and the form of the whole is some yet undetermined relation of its elements, sensibility and understanding. Sensibility and understanding figure as two irreducible elements of pure theoretical reason; this irreducibility is understood in terms of the idea that each element 'may contain a priori representations'. Thus the analysis of reason begins in the *Critique*'s introduction, and it leads us to the heterogeneity thesis.

But what about the purposeful analysis? If our general account of the *Critique*'s methodology is correct, we should expect to discover some unifying principle allowing us to account for the relation of the elements to one another and their contribution to the end of the whole. We are also expecting that this unifying principle will be revealed through an analytic argument of some kind, since the idea of the whole is supposed to contain the conditions for arriving at a determinate account of the elements. Where is this analytic argument found? And how, exactly, is it tethered to the preliminary conception of reason that is laid out in the front matter? My aim in the next section is to address these issues.

The heterogeneity thesis – the preliminary that concludes the front matter – not only shapes everything that follows, it also introduces

the central problem of the *Critique*, as we shall see. The heterogeneity thesis informs the division of the great bulk of the *Critique* – the Doctrine of Elements – into two parts: the Transcendental Aesthetic and the Transcendental Logic. Each part presupposes the possibility of considering each element in isolation from the other. The Aesthetic will 'isolate sensibility' both from 'what the understanding thinks through its concepts', as well as from 'everything that belongs to sensation' (A22/B36).³⁷ The first division of the Transcendental Logic, the Transcendental Analytic, begins by announcing that the 'pure understanding separates itself not only from everything empirical, but also completely [separates itself] from all sensibility' (A65/B89; see also A62/B87). The point of this strategy – I shall call it the strategy of isolation – is to give an account of the a priori representations that are constitutive of each element.³⁸

Now, let us return briefly to our earlier account of Kant's general conception of scientific knowledge. Scientific knowledge presupposes some idea of the whole: applied to our case, this would mean that we set out with some preliminary conception of pure theoretical reason. By the conclusion of the Critique's front matter, this preliminary conception is in place: reason is conceived as a capacity for scientific knowledge of material nature, with sensibility and understanding (each constituted by distinct a priori representations) as its elements. If the general account of scientific cognition is any guide, then we could infer that this idea of the whole 'contains the conditions for determining the place of each part and its relation to the others' (§2, above). Thus, it is by some reflection on this idea of the whole that we uncover the means or conditions by which we can arrive at determinate knowledge of the parts. Ultimately, then, we will need to address the relation of the elements to one another; however, at this point we have not yet identified the principle that would allow us to do so.

Our account of the elements of reason remains indeterminate as long as it is carried out under the strategy of isolation. The reason for this does not become entirely clear until the introductory passage of the Transcendental Logic, where Kant reminds us of the heterogeneity thesis and then introduces another thesis that evidently complements it. Sensibility and understanding are two fundamental sources of human cognition, each of which is characterized by a distinct mode of representation – sensibility by

intuitions, understanding by concepts (A50/B74). Knowledge requires the involved cooperation of both capacities, as Kant stresses in a well known remark: 'Thoughts without content are empty, intuitions without concepts are blind' (A51/B75). This expresses what I shall call the cooperation thesis. The heterogeneity and cooperation theses are bound up together in a summary remark: 'These two faculties or capacities can never exchange their functions. The understanding can intuit nothing, and the senses can think nothing. Only through their unification can cognition arise' (A51/B75–6).

The cooperation thesis tells us that as long as we consider the one element in isolation from the other, we cannot have an account of its status as a cognitive capacity. In Kant's terms, we cannot have an account of the objective validity of the representations constitutive of each capacity.³⁹ So, the strategy of isolation must be overcome. By that I mean that the Critique will never deliver on its promise of providing a scientific account of the cognitive capacity without identifying a basis by which the putatively independent and separate accounts of sensibility and understanding may be joined into a single, unified account of reason in its theoretical capacity. Thus the heterogeneity thesis - and the strategy of isolation which it underwrites - introduces the central problem of the *Critique.* From a methodological perspective, this problem may be recognized as the task of discovering the crucial unifying principle through which a determinate account of the elements becomes possible. Under the strategy of isolation, the account of the elements remains indeterminate because their status as cognitive capacities remains unaddressed.

As we have seen, Kant's views about scientific cognition indicate that we would need to discover a principle that would function as the condition by which 'the place of each part and its relation to the others' can be determined a priori (A645/B673). Applying this to the particular case of the *Critique*, we can see that to discover this principle is to move beyond the strategy of isolation. In turn, to overcome the strategy of isolation in this way would be to provide a synthetic account of the unity of the elements according to a principle. Now, Kant indicates that a purposeful analysis is required for an all-important synthesis. The pivotal importance of the synthesis that I have just described should be evident: for without this synthesis we would not have a scientific account of the

theoretical capacity of human reason. Thus it seems that the purposeful analysis would be the argument that reveals this unifying principle, which would be conceived as the first or highest principle of human cognition.

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Where is this purposeful analysis found in the text? We have already seen how the strategy of isolation is related to the problem of demonstrating the status of sensibility and understanding as cognitive capacities; and this problem is evidently closely linked –indeed, if it is not identical – to the problem of accounting for the objective validity of their constitutive representations.⁴⁰ Thus, it seems likely that the purposeful analysis would be found in the Transcendental Deduction.

My task in the remainder of this paper is to provide further grounds for supposing that the initial task of the Transcendental Deduction is to carry out the promised purposeful analysis. In order to make this case, I wish to focus attention solely on the starting point of the Deduction; it lies well beyond the scope of this paper to go into the argument of the Deduction in any detail. If the task of the purposeful analysis is to reveal the principle by which the previously identified elements are to be related to one another as elements of the whole, then on the basis of Kant's conception of scientific procedure we should expect that this principle will be revealed through reflection upon some general idea of the whole.⁴¹ Now, if it is the case that this purposeful analysis is to be found in the initial stages of the Deduction chapter of the *Critique*, then we should expect to be reminded of that general idea of the whole.

The Deduction begins by reminding us where we left off at the end of the front matter, before the strategy of isolation began. Indeed, the initial section of the Deduction (§15) offers a reminder of the heterogeneity thesis, only now the distinction between sensibility and understanding is recast as a distinction between receptive and spontaneous capacities of the mind.⁴² The actual argument of the Deduction begins in §16, with a question about what it is for a spontaneous intellect to have sensible representations. From this perspective, then, the problem of the Deduction is to account for the unity of the heterogeneous elements of pure theoretical reason, or a discursive intellect.

The argument presupposes an intellect that investigates its own capacity first-personally. Let us briefly examine the starting point of the argument. It begins with a well-known remark: 'The *I think*

must be *able* to accompany all of my representations' (B131–2). For shorthand, I will refer to this as the cogito statement. It is uttered in the first person, by a spontaneous intellect. Now, the cogito statement is supposed to apply to all of this subject's representations. This means that the cogito statement can be applied to sensible representation in particular, which is precisely what happens next: '[E]verything manifold in intuition has a necessary relation to the *I think* in the same subject in which this manifold is encountered' (B132). The upshot is that the conditions of a single subject's thinking any sensible representation are the conditions of that sensible representation's belonging to that subject at all.

The initial question of the Transcendental Deduction, then, is a question about what it is for an intellect to have or enjoy sensible representations.⁴³ The crucial unifying principle – which Kant calls the principle of the synthetic unity apperception - emerges in response to this question.⁴⁴ That the principle of the synthetic unity of apperception is the basis for unifying separate accounts of sensibility and understanding is indicated at the outset of §17, where Kant says that the formal conditions of intuition as identified in the Transcendental Aesthetic themselves stand under the principle of the synthetic unity of apperception.⁴⁵ The details are worked out later on, through Kant's account of figurative synthesis in §24 and §26 of the Deduction; the strategy of isolation is overcome there, through an account of how the principle of the synthetic unity of apperception, which Kant has shown entails a necessary synthesis in accordance with the categories, bears on the account of sensibility offered in the Transcendental Aesthetic. This account then underwrites the specific articulation of the principles of the pure understanding in the Analytic of Principles. Thus, the discovery of the principle of the synthetic unity of apperception provides the basis for a continued synthetic argument that occupies Kant throughout the remainder of the Transcendental Analytic.

Hence the starting point of the Deduction is a question rooted in Kant's initial reflections on theoretical reason. Although two elements of reason were there identified, only one – broadly conceived as the intellectual element – takes on the task of investigating the cognitive capacity of theoretical reason as such. Since it is presupposed that cognition requires the involved cooperation of both elements, the intellectual element seeks the proper understanding of what it is for it (as an intellect) to have or enjoy sensible

representations. The principle that emerges as the response to this question is therefore contained in the general idea of human reason laid out in the front matter of the *Critique*; and the argument that leads to that principle (the details of which I have passed over here) must be an analytic argument that is a necessary preparation for the synthetic account of the unity of pure theoretical reason. That account of the unity of pure theoretical reason according to a principle is 'that for the sake of which the entire *Critique* actually exists' (A14/B28).

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Where, finally, does experience figure in all of this? To be sure, this synthetic account of the unity of pure theoretical reason is an account of the nature of experience. This synthetic account is not happily conceived as proceeding from an analysis of experience. It proceeds first from an analysis of human reason, which itself articulates a framework within which it is then asked 'what must experience be like if it is to be an expression – an actualization – of this capacity?' The Kantian account of experience emerges through a reconstruction of the whole. Whether Kant needed to draw on a method of this sort is another matter, a question pressed on the Kantian project by its reception in Germany in the years that followed. Nevertheless, an adequate understanding of Kant's text requires at least an acknowledgement of its methodological framework as Kant himself understood it.⁴⁶

Notes

- 20 January 1792 (11: 313; 315). References to Kant's works, with the exception of the *Critique of Pure Reason*, refer to the volume and page of the German Academy of Sciences edition, *Gesammelte Schriften*, ed. Königlich Preußischen Akademie der Wissenschaften, later the Deutschen Akademie der Wissenschaften zu Berlin. 29 volumes (Berlin: Walter de Gruyter [and predecessors], 1902-). References to the *Critique of Pure Reason* follow the pagination of the first (A) and second (B) editions. Translations are my own, but I consulted the commonly used English translations. The following abbreviations are used: *G=Groundwork for the Metaphysics of Morals; KpV=Critique of Practical Reason; KrV= Critique of Pure Reason; KU= Critique of the Power of Judgement; P= Prolegomena to Any Future Metaphysics.*
- ² See *KpV* (5: 8 n.) and *G* (4: 393).

- ³ B146 and B165–6 both say that empirical cognition is experience; Kant's wording at B1 and B128 suggests that empirical cognition is the genus of which experience is a species.
- ⁴ P §4 (4: 274).
- Admittedly, Kant refers only to an analysis and a synthesis in this passage, and not analytic and synthetic arguments. Though perhaps not every analysis is happily conceived as an analytic argument, it seems fair to suppose that an analysis that drives towards a definite *end* (i.e. a purposeful analysis) should count as an analytic argument if anything does.
- ⁶ A prominent advocate of this interpretation is Patricia Kitcher. See especially Patricia Kitcher, *Kant's Transcendental Psychology* (Oxford and New York: Oxford University Press, 1990).
- ⁷ A prominent advocate of this interpretation is P. F. Strawson, in *The Bounds of Sense: An Essay on Kant's 'Critique of Pure Reason'* (London: Methuen, 1966).
- ⁸ I wish to emphasize that it is not my aim to advance a sustained or detailed critique of either Kitcher's or Strawson's work. I shall be considering their respective positions largely in the abstract, and only in the context of considering more deliberately than I think either has done Kant's own conception of the method of the *Critique*.
- Thus I think that we can best understand the starting point of the Deduction if we appreciate how it is related to the starting point of the entire book. There is widespread disagreement among commentators about the Deduction's starting point. According to P. F. Strawson, the problem with the idea that the starting point of the Deduction is experience concerns the ambiguity of the term: for if experience is taken in the considered Kantian sense (where experience is a mode of empirical cognition, and hence is already categorially structured), this threatens to trivialize the argument that ensues. Thus, Strawson and other commentators claim that the Deduction begins with some bare conception of self-consciousness. Karl Ameriks argues that the starting point of the Transcendental Deduction is empirical knowledge, and that this does not doom the argument of the Deduction to triviality ('Kant's Transcendental Deduction as a regressive argument', Kant Studien, 19 [1978], 273-87). My account of the starting point of the Deduction is informed by Kant's conception of the Critique's method, and for this reason, perhaps, does not fall neatly into either camp, nor does it straightforwardly respond to the existing debate.
- The issue of the proper method of metaphysics is the topic of Kant's 1764 'Prize Essay' (*Untersuchung über die Deutlichkeit der Grundsätze der natürlichen Theologie und der Moral*, 2: 273–302). Decades later, Kant is still working on the same topic: for Kant claims

- that the *Critique* is a 'treatise on the method' of a future metaphysics (Bxxii).
- I discuss the synthetic method at greater length in 'Science and the Synthetic Method of the *Critique of Pure Reason*', *Review of Metaphysics*, 59 (2006): 517–39).
- This point about the starting point of the Critique may be connected to its multivalent aspirations. Graham Bird, in his account of the Critique as a work of descriptive metaphysics, remarks: 'Kant's descriptive metaphysics is a descriptive metaphysics of experience that includes science; it is a descriptive metaphysics of science, including psychology, and of ordinary experience', 'Kant and Strawson's descriptive metaphysics', in Hans-Johann Glock (ed.), Kant and Strawson (Oxford: Clarendon Press, 2003), p. 77. Although this suggests a different relation of priority between experience and scientific cognition in the Critique from the one that I shall argue for in this paper, nevertheless it accurately canvasses much of the extent of the Critique's aspirations. So it may be that the Critique would have the resources to address all of this because it takes as given only the capacity of reason. By contrast, the analytic Prolegomena would provide us with an account only of certain kinds of scientific cognition; it could not promise any descriptive metaphysics of experience as such, as perhaps the Critique does.
- Kant's letter to Christian Garve of 7 August 1783 (10: 340). Kant twice refers to the *Critique* as a 'whole new science' in the *Prolegomena* (4: 279 and 261–2); and, in the closing passage of the *Critique*, Kant refers to the whole work as pure theoretical reason's 'scientific and fully illuminating self-knowledge' (A849/B877).
- ¹⁴ *P* (4: 261).
- Metaphysical Foundations of Natural Science, preface (4: 467). See also A832/B860 and Jäsche Logic (9: 139).
- How we would draw out the analogy in the case of material sciences (e.g. mathematics and physics) is complicated somewhat by the priority of critical philosophy as a formal science assessing the capacity of reason as such. For Kant's distinction between material and formal rational cognition, see *G* (4: 387).
- Some of the characteristics of Kant's general conception of scientific method particularly its way of understanding systematicity in teleological terms figure in the two short passages that serve as general introductions to the *Critique*'s Transcendental Analytic and Analytic of Concepts (A64–6/B89–91). See also Bxxxvii–xxxviii.
- ¹⁸ Kant's Transcendental Psychology, p. 16.
- Examples of these tasks include the following: attributing self-identity and empirical apperception (20, 145), making judgements about

objects (142), and perceiving spatial and temporal arrays (142, 156 ff.).

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- ²⁰ Kant's Transcendental Psychology, p. 18.
- ²¹ Ibid., p. 21.
- David Hume, Enquiries Concerning Human Understanding and Concerning the Principles of Morals (Oxford: Clarendon Press, 1975), pp. 12-14.
- The idea is that Hume would need to claim that it is not possible to have knowledge of some proposition, while his methodological resources only entitle him to claim that we do not actually have knowledge of it. To make a claim about our necessary ignorance thus requires a complete account of our cognitive capacity; which is to say that the Transcendental Dialectic's account of the incapacity or *Unvermögen* of reason must follow upon the Transcendental Analytic's account of its capacity or *Vermögen*.
- Despite possible appearances to the contrary, Kant's idea that critical philosophy must begin with a conception of the form of the whole does not presuppose what is to be demonstrated. For to know the shape of the earth is not yet to know its magnitude; and to have some preliminary conception of human reason is not yet to have determined the bounds of its capacity.
- The Bounds of Sense, p. $1\overline{5}$.
- ²⁶ Ibid., p. 52.
- ²⁷ Ibid., p. 50.
- ²⁸ Ibid., p. 15.
- ²⁹ Ibid., p. 16.
- The first-edition preface focuses on the possible status of metaphysics as a science, while the second edition preface takes a broader view, and considers a range of examples of successful scientific cognition as a platform on which to diagnose the failure of metaphysics. I will focus entirely on the second edition, giving deliberate consideration to what we are supposed to learn about reason from Kant's presentation of these examples of successful scientific cognition. In the second edition preface, Kant also points to pure general logic as a successful science; but it has a different status from mathematics and physics since it is a formal science that abstracts from all content of knowledge, and so does not itself provide knowledge of objects of some domain, or even indicate how such knowledge is possible.
- Recognition of the end of human reason would allow us to recognize the elements, or functional parts, of human reason.
- See B147; cf. A4/B8. Kant suggests that mathematics only yields knowledge in so far as it is applicable to what can be given in empirical intuition. Thus, the proper object of mathematical cognition is nature, and mathematics is a science of nature.

It encompasses considerably more because of the emphasis that is placed on scientific knowledge in Kant's articulation of the methodological framework of the *Critique*. Strawson overlooks this, perhaps even deliberately, as he downplays considerably the centrality of Kant's question about the possibility of synthetic a priori judging (see *The Bounds of Sense*, p. 43).

Incidentally, our general conception of experience shifts in Strawson's account. Initially, it is just supposed to be some general conception of experience of an objective world. But Strawson worries that the Transcendental Deduction would be question-begging if it took so rich a conception of experience as given. Thus, the Deduction begins with a more minimal conception of 'inner experience' (*The Bounds of Sense*, p. 92).

- Graham Bird, 'Kant's and Strawson's descriptive metaphysics', p. 68.
- ³⁵ Ibid., p. 76.
- It is true that, in this passage, Kant only says that sensibility may contain a priori representations; he says nothing about the possibility of the understanding's containing a priori representations. The emphasis is placed on sensibility here, because it would go without saying (for Kant's eighteenth-century German reader, versed in Wolff and Baumgarten) that an account of fundamental a priori concepts would be part of a transcendental philosophy. The idea that sensibility could be constituted by certain a priori representations is a distinctively Kantian innovation, and for this reason he often points exclusively to his account of sensibility as the distinguishing feature of his transcendental idealism.
 - This is to leave us with the a priori representations that we (i.e. whoever assents to the account in the front matter) suppose that sensibility must contain i.e. 'pure intuition and the mere form of appearances' (A22/B36).
- To clarify: the strategy of isolation is the strategy of considering sensibility first in isolation from understanding, and then understanding in isolation from sensibility. The strategy of isolation is not the same as abstracting or isolating the formal element of representation from the material element (which Kant alludes to at B2). The distinction between sensible and intellectual representation thus belongs to the governing presuppositions of the *Critique*. Perhaps Kant's appeal to it as a methodological principle lends it a status similar to that of the 'Copernican' hypothesis (Bxvi–xvii): the irreducible distinction between sensible and intellectual representation figures as a hypothesis, the test of which is to see if it allows us to succeed in metaphysics where others (who confuse the nature of sensible and intellectual representation, A271/B327) fail.

I do not wish, at least in the present context, to challenge the viability of Kant's strategy of isolation. Indeed, whether it is even possible to consider, in any meaningful way, each element in isolation from the other is a serious question. It is the crux of Hegel's complaints about Kant's theoretical philosophy.

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It is uncontroversial that the aim of the Transcendental Deduction is to account for the objective validity of the categories. However, the issue of whether any parallel treatment is given for space and time as the pure forms of intuition is rather controversial. Daniel Warren argues that the Metaphysical Exposition of Space (KrV§2), is concerned with the a priori origin of the representation of space; Kant is not, as Henry Allison and others have suggested, trying to establish its objective validity there ('Kant and the apriority of space', *Philosophical Review*, 107 (1998), 179–224). This leaves open the possibility that the Transcendental Expositions of space and time (*KrV* §3 and §5, respectively) effectively offer their transcendental deduction. Warren himself is non-committal on the issue, but seems to suggest that the demonstration of their objective validity may be postponed until the Transcendental Deduction chapter (see the final sentence of his paper, and 220 n. 53).

Kant is simply confusing on this issue. Just prior to the Transcendental Deduction, Kant claims that a transcendental deduction of space and time has already been provided; their 'a priori objective validity' has already been established (§13, A87/B119–120, see also A85/B118). But soon thereafter, Kant remarks that we see the need to demonstrate the objective validity of space (nothing is said about time) only once we consider the pure concepts of the understanding, and recognize that a deduction is required for them (A88/B120). While this is not conclusive, it does suggest that there may be some problem with the idea that a transcendental deduction of space and time has already been given in the Transcendental Aesthetic.

Furthermore, the idea that a transcendental deduction of space and time has already been given in the Transcendental Aesthetic is unsatisfactory for the following methodological reasons. It should be non-controversial that at least the initial segments of the Transcendental Aesthetic are carried out under the auspices of the strategy of isolation – i.e. the Metaphysical Expositions of space and time (KrV §2 and §4). Now, if the Aesthetic is carried out entirely under the auspices of the strategy of isolation, then it never brings the understanding into view; and if this is the case, then (on the basis of the cooperation thesis) we can conclude that we could not yet have any account of sensibility as a cognitive capacity, and hence of its constitutive representations as objectively valid. But if the Aesthetic is

not carried out entirely under the auspices of the strategy of isolation, then it is presumably in the Transcendental Expositions of space and time that the restrictions of that strategy are lifted (though perhaps just momentarily). Indeed, in the Transcendental Expositions, Kant endeavors to show that space and time are sources of synthetic a priori cognition (geometry and the general doctrine of motion). However, there is a problem with this, stemming from the general methodological restrictions that Kant imposes on the *Critique* when he distinguishes its method from the 'analytic procedure' of the *Prolegomena*: the *Critique* is a 'whole new science, robbed of all help from other sciences' (4: 279). It appears that the Transcendental Expositions rely on contraband resources; and even if they contain the transcendental deduction of space and time, their arguments must be regarded as *parerga* by the lights of the avowed method of the *Critique*.

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- 40 See the previous note.
- This is because the preliminary idea of the whole is supposed to contain the conditions for determining the relation of the parts.
- Thus, the Deduction begins: 'The manifold of representations can be given in an intuition which is merely sensible, i.e. is nothing but receptivity, and the form of this intuition can lie a priori in our faculty of representation without being anything other than the mode in which the subject is affected' (B129). What cannot be given through the senses is the 'combination of a manifold', for this is an 'act of spontaneity', and an 'action of the understanding' (B130). (Combination is deemed an 'Actus der Spontaneität', then a 'Verstandeshandlung', and finally an 'Actus' of the 'Selbsttätigkeit' of the representing subject.) Receptivity is associated with sensibility, and spontaneity is associated with the understanding.

Kant reminds the reader of the heterogeneity thesis at crucial junctures of the text: at the end of the front matter (thus introducing the Doctrine of Elements), at the outset of the Transcendental Logic, and within the Logic, at the outset of the Transcendental Deduction. Receptivity and spontaneity do not figure in the first invocation of the heterogeneity thesis at all; they are introduced in the second, where they figure in definitions of sensibility and understanding respectively (see A51/B75). And while sensibility and understanding do make an appearance in §15, particular emphasis is placed on the on the receptivity/spontaneity pair.

We are inside the framework of the Transcendental Logic, the account of the spontaneity of the mind; this is why the question concerns what it is for an intellect to have given representations, rather than what it is for a fundamentally receptive capacity to think. Having things the other way around would entail having the Transcendental Logic come

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before the Transcendental Aesthetic; this possibility was raised by J. S. Beck, which Kant mentions in his letter to J. H. Tieftrunk (13: 463).

- The cogito statement, on my reading, should not be identified with the principle of the synthetic unity of apperception, which alone introduces the crucial idea that all of a single subject's representations are subject to a necessary synthesis. This synthesis, as Kant argues only later in the Deduction, must be in accordance with the categories.
- ⁴⁵ 'The highest principle of the possibility of all intuition in relation to sensibility was according to the transcendental aesthetic that the all the manifold of sensibility stands under the formal conditions of space and time. The highest principle of it [sc. intuition] in relation to the understanding is: that all the manifold of intuition stands under the conditions of the original-synthetic unity of apperception' (§17, B136).
- 46 I would like to thank Markos Valaris, and two anonymous referees for this journal, for extremely helpful comments on earlier versions of this paper.