Chapter I.
Constructing the Space of Metaphysics: Kant and His Idealist Successors on the Role of Intuition in A Priori Demonstration

According to Kant, what distinguished geometry as an a priori science from metaphysics was its capacity to intuitively, that is, self-evidently demonstrate its definitions. By contrast, metaphysics as he found it had only ever resorted to discursive arguments, arguments that in principle cannot possess the self-evidence of the deductions of geometry. The metaphysical habit of making unrestricted claims about reality as such was therefore wrongheaded or, rather, "dogmatic." The first *Critique* tells us that the claims of metaphysics must rather be restricted to the realm of possible experience. Some of Kant's idealist successors disputed the premises of that conclusion. They believed, against Kant, that metaphysics does have a way of intuitively demonstrating its arguments, only the intuitions on which metaphysics should rely were purely "intellectual," thus of an entirely different sort from the spatial intuitions of geometry. This dispute shaped the history of what came to be known as German Idealism. I argue that Hegel's philosophical project, at least from the *Phenomenology* onwards, developed as a dialectical rejection of the role attributed to intuition in a priori justification, both by Kant and his idealist successors. In this chapter, I will discuss the issues at stake in the dispute about the availability of intellectual intuition for the philosopher. In the next chapter, I will present the argument driving Hegel's critique.

Why did Kant ascribe self-evidence to the deductions of geometry? What did he understand by self-evidence to begin with? Why was such self-evidence placed outside the reach of metaphysics? All these questions derive from Kant's conception of the demonstrative role of intuition in the a priori mathematical sciences, which find their paradigm in geometry. In particular, these questions derive from Kant's understanding of the geometrical deductive method of demonstration, commonly known as geometrical "construction."

In discussing Kant's exposition of construction, I will isolate three elements: (1) his analysis of geometrical construction, (2) his argument for the source of the demonstrative force of construction (namely, its reliance on an a priori intuition of space), and (3) his argument regarding the self-evidence of the results thereby secured, on which he relied in barring the method from the metaphysician. These three elements will respectively constitute the content of the first three parts of this chapter. These considerations basically encapsulate Kant's conception of the role of intuition in a priori demonstration. Addressing them will allow us to understand the positions of Kant's idealist successors on metaphysics and intuitive demonstration. I will give a brief survey of those in Part IV.

Part I. The Procedure of Geometrical Construction

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In this part, I will focus on Kant's exposition of "construction." I will follow Kant in concentrating mainly on construction as it figures in geometry, though the basic import of his exposition was meant to apply to the proof procedures of pure mathematics in general. Note that "geometry" for Kant was simply Euclidean geometry; there existed no viable competing model in the late 1700's. Furthermore, since my chief focus here is on Kant's exposition of demonstration in Euclidean geometry, I will not be concerned with how well his exposition holds up to the deductions found in the *Elements*.

Kant's claim that "[**p**]**hilosophical** cognition is **rational cognition** from **concepts**," while "mathematical cognition [is rational cognition] from the **construction** of concepts" (A713/B741)[1] is well-known. Here I am concerned with his explanation of "construction" as "exhibit[ing] *a priori* the intuition corresponding to [a concept]" (ibid.), in which procedure one "considers the concept *in concreto*, although not empirically" (A715/B743). Kant's views on the relevance of the geometrical method of demonstration appear in the Transcendental Doctrine of Method, the second "half" of the *Critique of Pure Reason*. In the first section of the latter's opening chapter — "The Discipline of Pure Reason in Dogmatic Use" — Kant sets out to explicate "the *method* of cognition from pure reason" (A712/B740), having completed the articulation of "the content … of cognition from pure reason" (ibid.) in the Doctrine of Elements, that is, the first "half" of the *Critique*. As "cognition from pure reason" refers to metaphysics itself,[2] the methodological importance of "The Discipline of Pure Reason" for Kant's entire transcendental project cannot be overstated.

The first task is to explain how a concept can be geometrically constructed. Kant describes the way in which a geometer would approach the task of demonstrating a proposition (e.g., Prop. I.32, stating that the sum of the angles of any triangle is equal to two right angles) as follows:

> He begins at once to construct a triangle. Since he knows [i.e., from previous constructions] that two right angles together are exactly equal to all of the adjacent angles that can be drawn at one point on a straight line, he extends one side of his triangle, and obtains two adjacent angles that are together equal to two right ones. Now he divides the external one of these angles by

[1] Throughout this chapter, I will rely on the "A/B" convention by itself to indicate that the citation is from Kant's first *Critique*.
[2] Cf., e.g.: "Pure rational cognition from mere *concepts* is called pure philosophy or metaphysics" (Kant 2004: 469).

> drawing a line parallel to the opposite side of the triangle, and sees that here there arises an external adjacent angle which is equal to an internal one, etc. In such a way, through a chain of inferences that is always guided by intuition, he arrives at a fully illuminating and at the same time universal solution of the question. (A716-7/B744-5)[3]

"A chain of inferences that is always guided by intuition" is an apt description for the procedure of construction. More specifically, the inferences are based on instructions for producing the relations described by a proposition of geometry in pure or empirical intuition. The proposition Kant is referring to is Proposition 32 of Book I of Euclid's *Elements*. It states:

> In any triangle, if one of the sides be produced, the exterior angle is equal to the two interior and opposite angles, and the three interior angles of the triangle are equal to two right angles. (Heath 1956: 317)

For the moment, I will concentrate on construction in empirical intuition. Construction in empirical intuition is easier to understand because it corresponds to our laying out of geometrical relations empirically, e.g., by using a straight edge and compass (or, today, by a digital drawing software). This in turn will facilitate understanding how construction relies on a priori intuition.[4]

The Euclidean Postulates that play a foundational role in geometrical construction are the first through the third. They state, respectively: "to draw a straight line from any point to any point"; "to produce a finite straight line continuously in a straight line"; "to describe a circle with any center and radius." These Postulates summon the reader to produce the figures in question for themselves. They stand for the simple operations out of which all the possible figures on the Euclidean plane may be produced (Friedman 2012, 6). It is plain to see that the Postulates look like ordinary propositions. What makes the Postulates special is the contention that the figures indicated therein are to be produced immediately in the imagination or on paper – they are figures the extension or

[3] For greater consistency in the terminology of this and the following chapters, I will substitute "universal" for "general" whenever the original is a variant of *allgemein*/*Allgemein*; that is, if it does not detract from the author's intention.

[4] Besides the relation between construction and the pure form of outer intuition (which I will table for the moment for clarity's sake and return to at the end of this part), there is a perhaps even more important connection between construction and the production of schemata through the pure productive imagination. Michael Friedman remarks: "This 'rule of synthesis,' [viz., the one guiding the construction] therefore, appears to be nothing more nor less than the Euclidean construction of an arbitrary triangle considered in the Axioms of Intuition as a 'mere [universal] function of the productive imagination'" (Friedman 2012: 5). He continues: "More generally, then, we can take the Euclidean constructions corresponding to the fundamental geometrical concepts (line, circle, triangle, and so on) as what Kant means by the *schemata* of such concepts" (ibid.). Important as this connection may be, I believe that taking it into account would expand this chapter to an unwieldy degree. For more on the relationship between construction and the schemata, see Domski 2010.

description of which we are intuitively capable. They are not derived from more basic propositions. Rather, they themselves are expressive of the most basic propositions. This is what distinguishes the Postulates from the Propositions of the *Elements*. The mere understanding of what the Postulates instruct us to produce is supposed to directly present the figures themselves in imagination without requiring further assistance. In other words, we have an intuitive understanding of the Postulates. The Postulates, in turn, are the building blocks of the more complex figures that are possible in Euclidean space. Their intuitiveness trickles down to the more complex constructions.

3

It is instructive to conceive of demonstration as sometimes involving a preparatory "analytic" step, after which ("synthetic") construction, and thus the demonstration proper, may proceed.[5] I will adopt this distinction purely for the purpose of clarification and do not wish to thereby enter into a technical debate.

Analysis may be considered as the preparatory step for construction. It is a simple step that involves breaking-down the contents of a given concept into its simplest constituent representations. These simplest representations correspond to the figures described by one or more of the Postulates. The simplest constituent representation in a triangle, for example, is the straight line. The role of the analytic step is especially clear in the earlier propositions of Book I, since later propositions presuppose what has already been proven and help themselves to the results. To facilitate the exposition, I will thus focus on Proposition I.1, which sets out to construct an equilateral triangle. However, we can still see the same procedure at play even in Proposition I.32 which Kant takes up in "The Discipline of Pure Reason."

I will assume the analytic step is completed and jump straight into the construction of the equilateral triangle. That is, I will assume that we have broken down the concept of an equilateral triangle into its constituent representations, ending up with the representation of a straight line (Postulate 1). The first step in the construction is to produce the straight line. From there, we are supposed to construct an equilateral triangle without invoking anything which we might otherwise know about such triangles. The synthesis of the representations that constitute the triangle must, in other words, be carried out a priori. Knowing the definition of an equilateral triangle (say, from Definition 20 in the *Elements*) does not count as "cheating," because the description includes nothing about how a triangle might be produced a priori, which is what demonstration hinges on. Counterintuitively, the Definitions are not what we start with.

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[5] This procedure is explicitly used in some parts of the *Elements*. In a note to Propositions 1-5 of Book XIII, we find the following remark:
"What is analysis and what is synthesis? Analysis is the assumption of what is sought as if it were admitted and the arrival by means of its consequences [i.e., regressively] at something admitted to be true.
"Synthesis is an assumption of that which is admitted and the arrival by means of its consequences [i.e., progressively] at the end or of what is sought." (Quoted in Artmann 1999: 102)

Rather, they tell us about what needs to be demonstrated. By themselves, they neither vouch for nor deny the possibility of constructing their figures (unless, of course, they contained a contradiction): "I can always define my concept…; but I cannot say that I have thereby defined a true object" (A729/B757). We may think of the definition as determining the end-point of the demonstration, but not telling us how to reach it. It should be clear that there is nothing in a straight line that necessarily relates it to an equilateral triangle, any more than it relates it to any other geometrical figure. The information at our disposal for carrying out the construction of an equilateral triangle, the subject of the first Proposition of the first Book of the *Elements*, is thus quite minimal: all we know is basically how to extend a line and rotate it to produce a circle (Postulates 1-3). And we know this intuitively, not by referencing further demonstrations.[6]

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Proposition I.1 presents us with a task: "On a given finite straight line to construct an equilateral triangle." Note that despite its wording, it is really the "to construct an equilateral triangle" part which makes up the core of the proposition, for the nature of an equilateral triangle is already anticipated in Definition 20: "Of trilateral figures, an equilateral triangle is that which has its three sides equal." The task here, therefore, is to demonstrate the existence of that which has already been given as the definition of a concept: to show, in other words, that "a true object" corresponds to "the concept" of an equilateral triangle (A729/B757).[7]

What gives the construction of concepts demonstrative status, however, hinges on the specific manner in which the steps of the procedure are organized. In the construction of an equilateral triangle, the steps may be laid out as follows. It is probably true – or so one hopes – that schoolchildren can reproduce the steps of this simple proof, but we are inquiring after the origin of its demonstrative power. I will thus go through the proof in some detail. The proof is simple enough not to require a visual aid; the reader can easily imagine the produced figures:

Step	Derivation
1. Let AB be the given finite straight line.	We can construct AB by Postulate 1: "To draw a straight line from any point to any point."

[6] The significance of these two basic procedures, which comprise Postulates 1-3, is addressed in Part III, below.

[7] "Existence," here and throughout my discussion of geometry, must not be taken to mean the empirical reality of the geometrical figures, but only the objectivity of the demonstrated formal properties. As Daniel Breazeale puts it: "it is precisely because mathematical construction deals only with the *form* of sensation, and not with the *content* of the same (which, according to Kant, is the ground of all claims concerning reality), that mathematical demonstrations can never establish the *existence* of their corresponding empirical objects" (Breazeale 2015: 5 n.7). What is proven in the constructions of geometry, in a word, is that so many formal properties inhere necessarily and universally in space, not that objects corresponding to them empirically exist. I will discuss how geometry deals with "the form of sensation" in Part III.

2. With the center A and distance AB let the circle BCD be described.	Post. 3: "To describe a circle with any center and radius."
3. With the center B and the distance AB let the circle ACE be described.	Post. 3, again.
4. From the point C, at which the circles intersect, to the points A and B, let the straight lines CA and CB be produced, respectively.	Post. 1, again.
5. Since the point A is the center of the circle CDB, AC is equal to AB.	Definition 15: "A circle is a plane figure contained by one line such that all the straight lines falling upon it from one point among those lying within the figure equal one another."
6. Since the point B is the center of the circle CAE, BC is equal to BA.	Def. 15, again.
7. But CA was also proved equal to AB. Therefore, each of the straight lines CA and CB is equal to AB. Therefore CA is also equal to CB. Therefore the three straight lines CA, AB, and BC are equal to one another. Therefore the triangle ABC is equilateral.	Common Notion 1: "Things which are equal to the same thing are also equal to one another."[8]

Such is how the construction of a triangle must be carried out, fulfilling the task I set for this part at the outset. I will now turn to the second question and investigate the source of the demonstrative power Kant ascribed to the constructive method, that is, its ability to supply us with necessary and universal synthetic judgments a priori.

[8] The Common Notions are laid out in a separate section of the *Elements*. They state some basic laws of inference. The implication of simply presupposing the Common Notions seems to be, according to Kant, that they serve the mechanics of moving the demonstration forward, and not in the construction of the figures themselves, nor in exhibiting the concepts a priori in intuition: "To be sure, a few principles that the geometers presuppose are actually analytic and rest on the principle of contradiction; but they also only serve ... for the chain of method and not as principles, e.g., a=a, the whole is equal to itself, or (a+b) > a, i.e., the whole is greater than its part" (B16-7). And again: "Now the entire final aim of our speculative *a priori* cognition rests on such synthetic, i.e., ampliative principles; for the analytic ones are, to be sure, more important and necessary, but only for attaining that distinctness of concepts which is requisite for a secure and extended synthesis as a really new acquisition" (A9-10/B13-4).

Part II. The Necessity and Universality of the Results of Construction

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It is not anything about the specific diagram which we had to draw or conjure up in imagination that allows us to claim that the conclusions arrived at thereby were arrived at with necessity. After all, our object in the above proof is the equilateral triangle in general, not the particular one which we sketched or conjured up in imagination. Nor did we arrive at such a conclusion through conceptual analysis, without appeal to any actual production of a figure.

What one must guard against in attempting to understand geometrical construction is the temptation to see it as somehow trying to abstract universal conclusions from the particular figures we are asked to sketch; rather, to repeat Kant's gloss, it exhibits the universal *in* the particular. Besides being a simply inaccurate conception of the procedure, conceiving of construction inductively also misses the role played by intuition in the procedure. Construction is emphatically not an inductive proof procedure. While in some way derived from our tracing out of a single triangle with arbitrary dimensions, proof by construction is not supposed to be abstracting from that particular case or any number of particular cases to the universal conclusion. Rather, Kant's argument is that construction furnishes us with necessary and universal conclusions in the strict sense, thereby yielding judgments that are valid a priori (the Definitions become expressive of synthetic a priori judgments).

For Kant, it is nothing about the particular diagram we have before us which demonstrates anything with necessity. Rather, the demonstrative power of construction lies in the activity of producing the diagram, that is, the very "constructing" of the figures. In his words:

> At issue here are not analytic propositions, which can be generated through mere analysis of concepts (here the philosopher would without doubt have the advantage over his rival), but synthetic ones, and indeed ones that are to be cognized *a priori*. For I am not to see what I actually think in my concept of a triangle (this is nothing further than its mere definition), rather I am to go beyond it to properties that do not lie in this concept but still belong to it. Now this is not possible in any way but by determining my object in accordance with the conditions of either empirical or pure intuition. The former would yield only an empirical proposition (through measurement of its angles), which would contain no universality, let alone necessity, and propositions of this sort are not under discussion here. The second procedure, however, is that of mathematical and here indeed of geometrical construction, by means of which I put together in a pure intuition, just as in an empirical one, the manifold that belongs to the schema of a triangle in general and thus to its concept, through which universal synthetic

propositions must be constructed. (A718/B746; translation modified)[9]

In our example, an equilateral triangle was produced by appealing only to the relationships obtaining between the acts of extending straight lines and describing circles, the purportedly self-evident Postulates. The activity of combining (synthesizing) the representations that make up the triangle was thus carried out entirely independently of any knowledge of the properties of such a triangle, or indeed any other spatial properties, that were not already acquired through construction (more on this shortly). It is this property of construction which makes the definition of an equilateral triangle a synthetic a priori judgment: this is the intuition which such a judgment "contains … in itself" (A719/B747). It is this property of construction which allows it to secure synthetic judgments a priori, accounting for construction's capacity for demonstration proper (see footnote 12 below).

2

Kant maintained that synthetic a priori judgments are necessary and universal. A necessary judgment indicates that the state of affairs to which it refers "could not be otherwise" (B3). By (1) subtracting the empirical conditions from the demonstrative activity of construction and (2) working only with the self-evident non-empirical Postulates, the construction of the equilateral triangle may be said to have been carried out in such a way that allows for no variation in the procedure, all such variation being a product of empirical conditions.

The universality of the demonstrated Definitions is closely tied with their necessity. Note that both necessity and universality are the "marks" by which one can determine whether a certain claim is a priori in the strongest sense (B3). While necessity is a product of a judgment's independence from experience in its justification, universality stands for securing the judgment against any refutation by appeal to experience, such that "no exception [to the judgment] is *allowed* to be possible" (B4, emphasis added). So we can say that a judgment is necessary if it did not in fact rely on experience in its justification, universal if it guarantees that no experience would ever be capable of refuting it.

Given that no appeal was made to any specific measurement (or any other

[9] Note that when Kant says that construction "in accordance with the conditions of ... empirical ... intuition ... would yield only an empirical proposition ..., which would contain no universality, let alone necessity," he is not talking about our deriving conclusions from empirically drawn figures, but only about drawing conclusions "in accordance with the conditions of ... empirical ... intuition," that is, about drawing these conclusions inductively, in which case the conclusions would only have subjective or inductive universality. Kant had already maintained that construction can be carried out "by exhibiting an object corresponding to [a] concept, either through mere imagination, in pure intuition, or on paper, in empirical intuition, but in both cases completely *a priori*, without having had to borrow the pattern for it from any experience" (CPR A713-4/B741-2). His reservation about construction in accordance with the conditions of empirical intuition is, therefore, a methodological one about what we decide to make of the empirically produced figures, not about the possibility of drawing necessary and universal conclusions from them.

empirical property), the fact that the constructed triangle is a particular one, with sides of a particular length, drawn on a particular plane, with a particular instrument, etc., becomes accidental, indeed irrelevant. Let us call this restriction that prevents empirical determinations from entering into the activity of construction "the arbitrariness condition," since it ensures that the empirical properties of the constructed figures become entirely immaterial with respect to the demonstration, and that the shapes used therein are arbitrarily chosen and thus play no role in determining the procedure of construction.

Divested from its empirical strappings, the only thing left in the demonstration is the activity of constructing the triangle, which guides the production of all the latter's empirical instantiations:

> The individually drawn figure is empirical, and nevertheless serves to express the concept without damage to its universality, for in the case of this empirical intuition we have taken account only of the action of constructing the concept, to which many determinations, e.g., those of the magnitude of the sides and the angles, are entirely indifferent, and thus we have abstracted from these differences, which do not alter the concept of the triangle. (A714/B742)

This is the meaning behind Kant's statement that in each particular construction, we are "consider[ing] the concept *in concreto*, although not empirically" (A715/B743). By now, the intention of the last statement should be clear: the particular figures we employ in the demonstration are concrete illustrations of their corresponding concepts (triangles, lines, circles, etc.); however, when inferring conclusions from the construction of these concepts, we are not taking into account any of their empirical attributes. The result is that we are taking the construction to stand for a concrete expression of a (universal) concept. It is this aspect of construction which allows Kant to claim that the "very same formative [*bildende*; imaginative, image-making] synthesis by means of which we construct a figure in imagination is entirely identical with that which we exercise in the apprehension of an appearance in order to make a concept of experience of it" (A224/B271); that is, the activity that enables the construction in pure intuition and empirical intuition is one and the same (this is why I allowed myself to start with construction in empirical intuition and work my way up to the more abstract kind of construction in pure intuition).

This unique proof procedure, assuring that original and exhaustive[10] constructions

[10] Kant seems to argue that it is this property of geometrical demonstration which invests its conclusions with their necessity and universality, as they ensure that their objects have been defined "exhaustively", "originally", and "within their boundaries" (A727/B755). Kant explains these key aspects in a footnote: "**Exhaustiveness** signifies the clarity and sufficiency of marks; **boundaries**, the precision, that is, that there are no more of these than are required for the exhaustive concept; **original**, however, that this boundary-determination is not derived from anywhere else and thus in need of proof…" (A727/B755 note). – We can

are obtainable while satisfying the arbitrariness condition is what accounts for Kant's singling out of geometry for its ability to provide us with "concepts … containing an arbitrary synthesis which can be constructed *a priori*" (A729/B757). Since geometry can satisfy these requirements, the proof of which is its ability to provide a priori constructions of its objects in the manner we just saw, geometry earns the right to claim universality as well as necessity for the judgments it demonstrates. Construction thereby enables us to produce "the intuition" — which in my illustration is the empirical triangle we just finished sketching — "corresponding to the concept" — the concept of equilateral triangle as given in Definition 20 — "a priori" — that is, without aid from previously acquired knowledge of the properties that must obtain in such a triangle.

3

We can now be a little more precise about just what it is that construction "exhibits" a priori. Why, in other words, do the procedures and conclusions of geometry strike us as self-evident? The reason, according to Kant, is that the *activity* of constructing the geometrical figures and relations, on which the conditions of construction rigorously determine us solely to focus, is really expressive of the formal properties of space, of which we possess an intuition a priori:

> Now of all intuition none is given *a priori* except the mere form of appearances, space and time, and a concept of these, as *quanta*, can be exhibited *a priori* in pure intuition, i.e., constructed, together with either their quality (their shape) or else merely their quantity (the mere synthesis of the homogeneous manifold) through number. (A720/B748)

What is constructed in geometry, in other words, is the form of spatial magnitudes ("a concept of … *quanta* … together with … their quality (their shape)"). And the formal intuition of space, as we know from the Transcendental Aesthetic, contains the principles by which intuitions may be related to each other (A26/B42). The pure mathematical sciences contain the exposition of these principles.

The more elaborate the constructions, the more complex the principles we can derive, and the more properties we are able to determine about the form of spatial

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see that "exhaustiveness" corresponds to what I have been referring to as the laying out of the analytic elements of a definition in the "analytic step" of demonstration, "boundaries" to the requirement that these elements be sufficient, and thus include only and all of that which is necessary for the construction of the object, and "original" to the requirement that the construction of the object from its exhaustively laid out elements within its boundaries be done independently of experience. The satisfaction of these conditions can be first verified by exhibiting them in a particular construction. But *if* that particular construction was also an assuredly arbitrary line (i.e., satisfying the arbitrariness condition), then the steps we have taken to construct it are equally assuredly exhaustive, bounded, and original, and thus apply necessarily not only to that particular line with which we started, but universally to any line of any length. As Friedman puts it: "Such constructive operations have all the generality or universality of the corresponding concepts: they yield, with appropriate inputs, any and all instances of these concepts" (Friedman 2012, 5).

relations as such, all the while securing the necessity and universality of our derivations. The self-evident or intuitive nature of the results of construction derives from the intuitive nature of the formal principles it exhibits.

Part III. The Self-Evidence of Geometrical (but not Metaphysical) Concepts

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Unfortunately for the metaphysician, Kant also argued that the expositions of philosophy can only take place discursively, unlike the intuitive demonstrations of pure mathematics. Nothing in the discursive treatment of concepts, according to Kant, corresponds to geometry's "secur[ing] all inferences against mistakes by placing each of them before one's eyes" (A734/762). This is only natural, since conceptual analysis works by breaking down the given concept ("equilateral triangle") into its constituent representations ("the concept of a straight line, or of an angle, or of the number three," etc.). Since it is "conducted by means of mere words" (A735/B763), analysis does not amplify our knowledge, although it may serve to clarify it. Kant's intentions in arguing thus are, first, that we may define a concept however we wish and, second, that the analysis of the defined concept can never show us whether that concept corresponds to its intended object (A729/B757). While if done correctly, it does serve to clarify what we understand by a given concept, conceptual analysis provides no way by which we can tell that an object exists which corresponds to our definition: "In vain, therefore, would I reflect on the triangle philosophically, i.e., discursively, without thereby getting any further than the mere definition with which, however, I had to begin" (A718/B746).[11]

Kant is unwavering in his conviction that philosophical cognition is discursive (ibid.). One of the salient features of discursive cognition is its incapacity to exhibit its propositions intuitively in the manner that geometrical cognition can. Thus Kant maintains that "what geometry does by an ostensive or geometrical construction (of the objects themselves) … discursive cognition could never achieve by means of mere concepts" (A717/B745). Kant, of course, is not simply stipulating the discursivity of philosophical cognition. Rather, if we follow his argument in "The Discipline of Pure Reason," philosophical cognition must be discursive because it has no "intellectual" intuition at its disposal. Geometry, on the other hand, has the capacity to draw upon our

[11] So what is metaphysics good for? Kant gives a relatively clear restatement of his otherwise well-known position in "The Discipline of Pure Reason": "There is, to be sure, a transcendental synthesis from concepts alone, with which in turn only the philosopher can succeed, but which never concerns more than a thing in general, with regard to the conditions under which its perception could belong to possible experience" (A719/B747). In other words, transcendental propositions cannot exhibit the concept of a thing in general, i.e., they cannot give us rules for the making (construction) of their objects. Rather, a transcendental proposition can only give us "the mere rule of the synthesis of that which perception may give *a posteriori*, but never the intuition of the real object, since this must necessarily be empirical" (A720/B749) – that is, it can only give us the necessary conditions under which we can synthesize our perceptions (e.g., as belonging in a causal relation, inhereing in substance, having a quantity, etc.).

formal intuition of space, in which it constructs and thus fully demonstrates its concepts.[12]

2

For the endeavor of deriving the formal principles of space to be meaningfully carried through, we have to account for the base-level elements out of which all the constructions of geometry are developed. These are the simple operations of extending a line and rotating it (Postulates 1-3). This account will help us understand the way in which Beck, Fichte, and Schelling, among others, challenged Kant's argument against the availability of intellectual intuition. Here, the "intuitive" — as opposed to discursive — nature of geometrical demonstration takes center stage once again, for the proof of the possibility of these basic elements takes place straightaway through construction in intuition, and not by inference.

The Postulates may be taken simply as base-level intuitive (i.e., self-evident) propositions, or basic propositions. While the Propositions of the *Elements* are demonstrable by reference to previous constructions of simpler Propositions, the extension of a line and description of a circle are not the products of any prior construction. Recall that the equilateral triangle presupposed the extension of straight lines and the description of circles; the line and circle, on the other hand, do no presuppose simpler shapes, keeping in mind that the circle is nothing but the rotation of the line with one of its end-points being fixed.

To understand the significance of the Postulates, Michael Friedman draws our attention to the following statement from Kant from 1790, in the context of the controversy with Eberhard,[13] which illustrates what has just been explained more straightforwardly than the statements we find in the *Critique*:

> [I]t is very correctly said that 'Euclid assumes the possibility of drawing a straight line and describing a circle without proving it'—which means without proving this possibility *through inferences*. For *description* [in the sense of 'describing a circle,' i.e., of drawing it], which takes place a priori through the imagination in accordance with a rule and is called construction, is itself the proof of the possibility of the object…. However, that the possibility of a straight line and a circle can be proved, not *mediately* through inferences, but only immediately through the construction of these

[12] In this regard, Kant draws a technical distinction between demonstration proper and (discursive) proof: "only mathematics contains demonstrations, since it does not derive its cognition from concepts, but from their construction, i.e., from the intuition that can be given *a priori* corresponding to the concepts. ... Philosophical cognition, on the contrary, must do without this advantage, since it must always consider the universal *in abstracto* (through concepts), while mathematics can assess the universal *in concreto* (in the individual intuition) and yet through pure *a priori* intuition, where every false step becomes visible" (A734-5/B762-3).

[13] That is, the controversy where Eberhard, in his capacity as editor of two philosophical journals, advocated the position that Kant was a dogmatic Leibnizean.

> concepts (which is in no way empirical), is due to the circumstance that among all constructions (presentations determined in accordance with a rule in a priori intuition) some must still be *the first* — namely, the *drawing* or describing (in thought) of a straight line and the *rotating* of such a line around a fixed point — where the latter cannot be derived from the former, nor can it be derived from any other construction of the concept of a magnitude. (Quoted in Friedman 2012, 10-11*n*.)

Thus, according to Kant, the possibility of the geometrical line and circle (and, indeed, of all the constructions of geometry) is not something to be arrived at by analysis of their concepts, for we do not require this kind of mediated cognition when we can construct these forms straightaway and thereby exhibit their necessary and universal properties. As we saw, the actuality of these forms can be expressed immediately via geometrical construction. The only additional item we learn from the passage at hand is the foundational role of the Postulates. Given the possibility of immediately constructing the Postulates, the rest of the conclusions of geometry follows. But, once again, Kant denies the existence of similar postulates for metaphysics. The argument for Kant's denial of intellectual intuition stems from his conception of the categories, to which I now turn.

3

A key feature of Kant's conception of the categories is that they "are not grounded on sensibility, as are the **forms of intuition**, space and time" (B305). This poses a problem with regard to their applicability, since the categories "therefore seem to allow an application extended beyond all objects of the senses" (ibid.). But the fundamental difference between the categories (the forms of thought) and the forms of sensible intuition (space and time) is, as Kant had already argued in the Transcendental Deduction, that "the manifold for intuition must already be **given** prior to the synthesis of understanding and independently from it" (B145).

Kant had argued that the categories "are nothing other than … functions for judging, insofar as the manifold of a given intuition is determined with regard to them" (B143). True, the categories are by no means "second-rate" with respect to the manifold in a given intuition, for the latter "also necessarily stands under categories" (ibid.), but the categories can only account for "the unity that is added to the intuition through the understanding" (B144). This is why they are categories of *transcendental* logic. It still remains the case for Kant, therefore, that the categories presuppose a something-given to which they, as functions for judging, must apply (A147/B186).[14]

[14] This is what creates the need for the schemata: "Without schemata, therefore, the categories are only functions of the understanding for concepts, but do not represent any object. This significance comes to them from sensibility, which realizes the understanding at the same time as it restricts it" (A147/B187).

The search for intellectual intuition for Kant is therefore an entirely misguided effort. Such an intuition, if it could ever exist, would not be knowable through the categories, and thus not knowable to us at all, on pains of contradicting the very nature of the categories, which according to Kant are the basic forms of thought itself. The formal structure of thought, for its part, cannot be built from the bottom up via simple "intellectual" postulates, as geometry builds up the formal structure of space from its intuitive postulates, since Kant believed that a precondition for the intelligibility of discursive thought is its applicability to a given manifold in intuition, not its production of that intuition a priori. We have already seen that, for Kant, we can conceptually define what such an intuition *should* or even *must* look like all we want, but definition is one thing and demonstrating that a true object corresponds to our concept is an altogether different one.

By keeping in mind the way in which Kant argued for the demonstrative power of geometrical construction and what geometry proves when it proves its propositions, we can understand what he meant when he said that "the possibility of a thing can never be proved merely through the non-contradictoriness of a concept of it [viz., by 'conceptual analysis'], but only by vouching for it with an intuition corresponding to this concept" (B308). We cannot intuitively construct the forms of thought precisely because they have significance by relating to intuition, not by producing an intuition that exhibits their properties.

4

At bottom, the question of the possibility of "intellectual" intuition turns on whether we can discover certain postulates that will serve the same function for the formal structure of thinking, and thus knowledge (if nothing else), as the postulates of geometry serve for the formal structures of outer sensibility.

Kant's conclusion was that metaphysics cannot aspire to the a priori scientific status of the mathematical disciplines and that its claims must rather be confined to the realm of possible experience. The reason for thus limiting the claims of philosophy was due to the unavailability of an intellectual intuition that would do for philosophy what sensible intuition does for geometry, enabling it to construct its propositions and exhibit them intuitively.

In the "The Discipline of Pure Reason," Kant tried to argue that demonstration proper consists in exhibition in intuition. Since the forms of intuition available to the human mind are sensible and not intellectual, only those fields of study that demonstrate their claims in sensible intuition deserved the status of pure science. In contrast, metaphysics' claim to cognize things in themselves, unrestricted by the conditions of sensibility, leaves it with a slew of essentially indemonstrable arguments (CPR A728-9/B756-7). These conclusions were soon challenged by Kant's idealist successors.

Part IV. Post-Kantian Idealism and Metaphysical Construction

1

Challenging Kant's claim about the unavailability of intellectual intuition and his conclusion that metaphysics must be denied the status of demonstrative science thus became a central question for Kant's successors, beginning most explicitly with Beck and Fichte in the first half of the 1790's,[15] and later carried on by Schelling for some time. Along the way, novel attempts were made at fashioning a constructive method suitable specifically for metaphysical demonstration, again in line with Kant's insight that construction (i.e., exhibition in intuition) was the only viable method of a priori demonstration (CPR A734/B762).

In attempting to develop a method of metaphysical construction, Beck, Fichte, and Schelling revealed themselves to be working within a fundamentally Kantian framework, tacitly accepting Kant's overriding point regarding the centrality of intuition to a priori deductive demonstration, which amounts to a foundationalism based on a priori intuitive representations. The battleground was drawn within that territory and the dispute with Kant basically turned on whether we can speak of the possibility of intellectual (that is, non-sensible) intuition. The demonstrative necessity of intuition for

[15] The relationship between Fichte and Beck deserves a study on its own, particularly with regard to the conscious influence (or lack thereof) of Beck on the "Two Introductions to the *Wissenschaftslehre*." I say this for the following reason. In 1796, Beck published the third volume of his *Explanatory Abstract of the Critical Writings of Professor Kant, Prepared in Consultation with the Same*, with the subtitle *The Only Possible Standpoint from which the Critical Philosophy Must be Judged*. The first volume, already articulating a "standpoint" approach to the reading of the *Critique* had been published in 1793. Fichte, meanwhile, has been laboring on his *Wissenschaftslehre* — a task that will consume his entire life, and which will arrive at no conclusion to the satisfaction of its author. In 1793, the first blossom in the rather thorny history of the *Wissenschaftslehre* appears as the essay, "Concerning the Concept of the *Wissenschaftslehre*." In 1794 Fichte completes and publishes the bulk of his *Foundations of the Entire* Wissenschaftslehre. The *Foundations* did not include talk of standpoints in the form in which it appeared in 1794. In 1797, the famous "Two Introductions to the *Wissenschaftslehre*" are appended to the *Foundations*, in which we find not only high praise for Beck, but also Fichte's adopting the vocabulary of standpoints. Naturally, we find criticism of Beck in the "Two Introductions," as well. Fichte's engagement with Beck might be explained in part by Beck's review of Fichte's 1793 and 1794 works, which accused Fichte of foundationalism and attempting to develop first principles out of the mere analysis of concepts, without inquiring as to the original activity of representation that makes concepts possible to begin with (for more, cf. Nitzan 2014: 87-9). Beck, in fact, bluntly thought that the project of the *Wissenschaftslehre* was a joke (Beck 1797: 246 *n*.4), something of which Fichte was already well aware when he was writing the 1795 Preface to the *Foundations*, and to which he responded in kind: "The Halle reviewer [viz., Beck] gives it as his opinion that I have been writing merely in jest; the other judges ... appear to have taken a similar view; so lightly do they treat the matter, and so facetious are their objections, as though it was their duty to answer one joke with another" (Fichte 1982, 91-2). – This complex and not always humorous history deserves to be the subject of a dedicated study.

metaphysical demonstration, together with the deductive procedure associated with it, was not a point on which Kant's successors challenged the master.[16]

Thus we find Beck establishing his reading of Kant on the basis of "*the original use of the understanding*, which we express in the postulate: *to represent originally*" (Beck 1797, 9). Here we have one of the earliest metaphysical appropriations of postulation as laid out in Kant's exposition of geometrical construction. This postulate acts just in the way ascribed by Kant to the postulates of geometry. While Postulate 1 of the *Elements*, for example, without preamble demands from the geometer to extend a straight line, Beck's postulate demands of the metaphysician: "represent originally!" By this, Beck is presupposing that we have an a priori intuition of what it is to represent something to oneself, a transcendental activity of the understanding which is just as basic as our a priori representations of the forms of space and time. That we have this intuition was for Beck the ground on which the answer may be deduced to the question: "what connects the conception of an object with this object?" (ibid., 7), the guiding question of transcendental idealism.[17] This question, Beck insists, "cannot be answered from mere concepts, as a mere concept is nothing but the representation of a thing, which represents its object by adding certain designations, under which this band [i.e., what connects the conception with the object] is not contained" (ibid., 7-8). Rather, it must be answered by appeal to the original cognitive *activity* of representing itself, of which one may become directly aware by answering the summons "to represent originally." Elaborating on the nature of his proposed postulate, Beck states:

> A postulate is no hypothesis…. Our postulate postulates the original use of understanding itself. We are here in the situation of the geometrician, who does not deduce his science from concepts of space borrowed from any philosophical school…. He postulates the original representing, *space*, and on this superstructs his science. (ibid., 9-10)

There is no need to explain just what the postulate meant for Beck; my interest is in the fact that he adapted the notion of postulation to metaphysical demonstration, thus contradicting Kant on the suitability of construction for metaphysical inquiry. One may argue that Beck's original representing functioned to all intents and purposes as the intellectual intuition whose availability to rational humans Kant had denied. Yet it was

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[16] By a deductive demonstration (or justification in general) I intend no more than the form of justification whereby the truth of the conclusions is *guaranteed* by the truth of the premises. A rigorous demonstration would accordingly have to be based on an unconditionally true first premise or principle.

[17] Translation modified. This formulation of the guiding question of Kant's critical philosophy corresponds to the latter's formulation in the February 21, 1772 letter to Herz: "What is the ground of the relation of that in us which we call 'representation' to the object?" (Kant 1999, 133).

with Fichte that the connection between postulation (in the geometrical sense) and intellectual intuition took center stage.[18]

2

Fichte's career is characterized by his insistence on the necessity of basing metaphysics, even if only the kind of metaphysics that is permitted by transcendental idealism, on an intuitive principle. Before him and before Beck, Reinhold had already made some headway in recognizing an invariant structure in the way objects present themselves in consciousness. As his Principle of Consciousness states, "*in consciousness representation is distinguished through the subject from both object and subject and is referred to both*" (Reinhold 2000, 70). Naturally, this principle was intuitive. That is, it was deemed to be known "not through any inference of reason … but through simple *reflection* upon the actual fact of consciousness" (ibid.). It possessed the immediacy and self-evidence that is necessary for grounding all subsequent cognitions from pure reason (ibid., 72).

In the first *Critique*, Kant had already highlighted the necessity that metaphysics be systematic if it is to attain scientific status (Axx). Through the efforts and arguments of Reinhold, this became a *sine qua non* condition for post-Kantian idealism. Thus Fichte was after an intuitive first principle that would ground the system of pure and practical reason. He found that principle by going to the root of Reinhold's Principle of Consciousness and arguing that the representational activity referred to therein originated exclusively in the representing activity of the subject. The Principle of Consciousness turned out to be at its core a Principle of Self-Consciousness.

At least one central motivation behind Fichte's defense of an intuitive philosophical foundation is the familiar classical rationalist one: unless philosophy was grounded on a self-evident representation, which can be possessed a priori and immediately, then we open the door to infinite regress and nothing could be demonstrated in the strict ("scientific") sense (Fichte 1992, 108-9). However, Fichte introduces a Kantian twist to the story by considering self-evidence to be not a property of any representation, but of the very activity of representing and, in particular, of the ultimate agency responsible for that activity (ibid., 114). Thus we find him asserting that what possesses intuitive self-evidence is the *activity* of self-consciousness as opposed to, for

[18] It would be a mistake to think that in their seemingly common search for metaphysical postulates, Kant's idealist successors were in agreement on the meaning of postulation, although the latter served the same justificatory *function* in their systems. Fichte, for example, disagreed with what he saw as Beck's identification of the postulate with something given, opting instead to focus on the original activity of self-consciousness (Fichte 1992: 109). Beck does not, in fact, treat the categories as "given," but as "originally represented" (Beck 1797: 10ff.). – Still less were Kant's successors in agreement about the nature intellectual intuition, as we will shortly see. Yet intellectual intuition played the same justificatory role in their arguments.

example, consciousness of some given representation or self-consciousness itself considered merely as an object of reflection (Fichte 1982, 93). The influence of Kant's account of the activity of producing a priori geometrical relations in the imagination are clear. The pure self becomes the site of metaphysical or, to follow Fichte's preference, "transcendental" construction, very much in the way that the a priori intuition of space fulfills the same role for geometrical demonstration according to Kant.

3

Fichte had the ambition of becoming for philosophy what Euclid had been for geometry (Wood 2012). In quasi Cartesian fashion, Fichte singles out the self as the prime candidate and organ of intellectual intuition. Since the self, according to Fichte, is something that cannot be thought without at once acknowledging its existence, it is also the agent of intellectual intuition. This means that in the intellectual intuition of the self, the act and the object of the act are one and the same: "Through immediate consciousness [i.e., intuition],[19] the self-consciousness of the acting subject is identical with its consciousness of acting" (Fichte 1992, 113). In the parlance of post-Kantian idealism, this relationship expresses the coincidence of "thinking" and "being" or subjectivity and objectivity, the condition for securing knowledge with absolute certainty.[20] This is what lends the intellectual intuition of the self its foundational status:

> The I simply posits itself …. In other words, that the I posits itself within immediate consciousness as a subject-object is itself something that occurs immediately, and no reasoning can go beyond this. Reasons can be provided for all the other specific determinations that occur within consciousness, but no reason can be given for immediate consciousness. Immediate consciousness is itself the ultimate reason or foundation upon which everything else is based and to which everything else has to be traced back, if our knowledge is to have any foundation. (Fichte 1992, 114)

With this intuitive foundation at hand, Fichte is free to construct a system of philosophy that would have a rightful claim to the status of science in the Kantian sense. Fichte himself is quick to address this issue explicitly, referring to the significance of the a priori acquisition of the intuition of the self as the basis of constructing a doctrine of

[19] "I posited myself as positing – this is intuition; I represented myself as engaged in the act of representing; I acted and was conscious of my acting: these were one and the same" (Fichte 1992, 113). – "I posited myself as both the subject and object of consciousness, and we have thereby discovered the immediate consciousness we have been seeking. I simply posit myself. Such consciousness is called 'intuition;' and intuition is an act of positing oneself as positing, not a mere act of positing" (ibid., 113-4).

[20] "[A]ll intuition is an identification of thought and being," as Schelling (and Hegel) put it in "Further Presentations from the System of Philosophy" (Schelling 2001b, 382).

science. Referring specifically to the section discussed above from the first *Critique*'s "Doctrine of Method," we find Fichte remarking that philosophy does not have to be conceived as cognition by means of concepts alone, according to Kant's contention (Fichte 1992, 117). Given Fichte's self-ascribed discovery of an intellectually intuitive principle, a system of philosophy may be "constructed" in the technical sense.

Given its foundational role, the principle serves the same purpose as the *cogito* did in Descartes' account of knowledge. Indeed, Fichte saw his principle as an improvement over Descartes' *cogito* insofar as it does not restrict the existence of the self to the activity of thought: "we do not necessarily think when we exist, but we necessarily exist whenever we think" (Fichte 1982, 100). That is, instead of mapping the road from thought to being, as Descartes did according to Fichte's reading, Fichte's intellectual intuition secures being straightaway as the most fundamental acquisition of transcendental self-consciousness. *Cogito, ergo sum* gives way to *sum, ergo sum* (ibid.); thinking is derived from the ontological structure of the self, not the other way around (Fichte 1992, 114).

The derivations involved in Fichte's first serious systematic effort, the *Foundations of the Entire* Wissenschaftslehre of 1794/95, are of an unusual kind, certainly unlike the *more geometrico* deductions of the classical rationalists, at least not at first blush. Appearances to the contrary, however, I think it clear that Fichte's method of derivation shared the basic top-down model of *more geometrico* deductions, whereby the entailments of the first principle inherit the latter's truth value and impart it on what is further entailed, and so on in a rigorously determined chain of inference. It is true that the purpose of the exposition that opens the *Foundations* seems to be the systematic elimination of equivocal determinations in the initial intuition by reconciling what seems like contradictory determinations in its concept. Yet it must be emphasized that what is being thereby reconciled is merely the *philosopher's* understanding of the intuitive principle – what the principle stands for, the intuition itself, is fixed once and for all upon its original acquisition. The source of validity for all subsequent conclusions remains the absolute validity of the first intuition. No subsequent insight can dialectically invalidate the intuition of the self (and its complementary intuition of the not-self) or even restrict its validity. Were this not an essential feature of Fichte's method, one would be hard pressed to see how he would have managed to translate the *Wissenschaftslehere* into a *more geometrico* presentation in 1796/1799, where he also concedes that his intuitive principle occupies the place of a postulate that is necessary to construct the world from the laws of the original activity of the self:[21]

[21] Seebohm 1991 argues that Fichte's method was decidedly dialectical. While it is true that Fichte described his procedure in those terms, the procedure remains at odds with the strict sense of dialectics that we find in Hegel's *Phenomenology*, as I will show in the subsequent chapters. The "dialectical" nature of Fichte's exposition, at least in the *Foundations*, emphatically never opens up the foundational intellectual intuition for revision, never cancels it out or negates it: "the absolute first principle [i.e., of the

> The first principle is a postulate. Just as geometrical instruction begins with the postulate that one describe space, so too must the reader or student of philosophy begin by doing something. Anyone who understands the first proposition is put into the proper frame of mind for philosophy. (Fichte 1992, 110)

5

I would like now to show how deeply entrenched was the commitment to an absolutely certain intuitive foundation in the post-Kantian debate over the availability of intellectual intuition by turning, all too briefly, to Schelling. As Daniel Breazeale notes, Schelling's conception of intellectual intuition differed from Kant's insofar as the former saw in it a means to exhibit the particular in the universal (Breazeale 2014, 94-5; Schelling 2008, 275), whereas Kant saw construction as "consider[ing] the universal in the particular, indeed even in the individual" (A714/B742).

Schelling slowly departed from his initial Fichtean contentions after the publication of his *System of Transcendental Idealism* in 1800. However, he still referred to his demonstrative procedure as "construction," since its demonstrative force depended on a form of exhibition in intuition.[22] Naturally, the intuition in which the results of Schelling's construction were exhibited was intellectual, not sensible.[23] Unlike Fichte's conception, however, the intuition was "intellectual" not in the sense of its belonging to a thinking self, but more emphatically in the sense of being non-sensible or pure, transcending the self/non-self dichotomy (Breazeale 2014, 100). Intellectual intuition became, for Schelling, coincident with the standpoint of reason and therefore marks "the total indifference of the subjective and objective" (Schelling 2001a, 349), as he put it in his 1801 "Presentation of My System of Philosophy," which itself was written *more geometrico*. In another formulation, we find intellectual intuition described as the "point

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Wissenschaftslehre] embraces the entire sphere of our knowledge. This principle is always valid in relation to any consciousness whatsoever" (Fichte 1992, 118). Rather, what is described as "dialectical" by Fichte is no more than the activity of determining that same first intuition with increasing precision. The "dialectical" aspect of this determinative procedure is restricted to the unveiling and reconciliation of possible contradictory determinations in the *philosopher's* grasp of the intuition, which is only abstractly and thus equivocally cognized at first.

[22] Indeed, Breazeale argues that more than following Kant's focus on the *activity* of construction, Schelling found the demonstrative force of construction for philosophy to lie in what it manages to exhibit or present immediately in intuition (Breazeale 2014, 104).

[23] Schelling also argued that *Kant's* conception of the kind of intuition that is at work in geometrical construction was intellectual, not sensible (Schelling 2008, 274). However, I would argue that Schelling's reading of Kant suffers from confusing "non-empirical" with "non-sensible" intuition; compare CPR A713/B741, A734/B762.

where knowledge of the absolute and the absolute itself are one," as the young Schelling and his collaborator, *Hegel*, wrote in their 1802 "Further Presentations from the System of Philosophy" (Schelling 2001b, 376).[24]

The Schellingian take on the standpoint of intellectual intuition, from which construction must proceed, reveals the reason for his adoption of a constructive method to build his system. In fact, this is explicitly shown in the manner of progression of the essays of "Further Presentations," where the necessity (if not the existence) of intellectual intuition is first established before showing how systematic philosophy may be constructed after being grounded on intellectual intuition. Similar remarks are also to be found scattered in Schelling's seldom studied 1803 essay, "On Construction in Philosophy" (Schelling 2008).[25]

The necessity for metaphysically endorsing construction derives from the intuitive cognition which it facilitates. Echoing Fichte again, and despite their fundamental differences, we find Schelling claiming that intuition's demonstrative force lies in its "identification of thought and being" (Schelling 2001b, 382), which is far superior to the "mere *thought* of the absolute" (ibid.) – a thought, that is, accompanied by no intuition. As such, intellectual intuition surpasses "mere thought" and is, in fact, basically incommunicable to the latter, except obliquely. In line again with Fichte, Schelling reminds us that intellectual intuition should not be "viewed as something whose whole reality must first be proved in some other reality, or else explored by analysis, or even, in other contexts, believed on moral grounds" (Schelling 2001b, 384). (This despite the radical departure he takes from Fichte in his conception of the foundational intuitive principle after 1800.) Despite his injunctions against "mere thought," however, the depiction of Schelling as endorsing a mystical form of intuition – something of which even Hegel was culpable – remains a gross oversimplification of his early 1800's project, which in spirit if not in execution was much closer to a form of Platonic archytipal "hyperrationalism," to borrow Beiser's expression (2013, 246; Schelling 2001b, 382, 382*n.*6).

I only touch on Schelling's conception of intellectual intuition to highlight the fact that he assigns it the same demonstrative role in his system as his predecessors, despite its

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[24] As Frederick Beiser (2013) shows, Hegel together with Schelling were staunch proponents of metaphysical construction during their brief collaborative period between 1801-1804. This is why we find Hegel defending "transcendental intuition" in early writings such as the *Differentzschrift* and *Faith and Knowledge*.

[25] The reason I derive Schelling's views on intellectual intuition and construction from his two "Presentations" and not this essay, which seems to deal with construction directly, is because the essay is not so much concerned with Schelling's system but with reviewing a work by a Swedish philosopher called Benjamin Karl Henrich Höijer. The comments on intellectual intuition and construction one finds therein are therefore not systematically developed. Naturally, they reflect and often repeat the views found in the two "Presentations."

altogether different character from the intellectual intuition of Fichte and the original representing of Beck. Schelling's approach attempts to envisage construction from an absolute standpoint that purports to surpass the subject-object dichotomy altogether. As such it may be placed at the opposite pole to Fichte's approach, which decidedly starts from a subjective intuition (the unity between "thought" and "being" in Fichte remains a subjective acquisition, at least initially). However, the appeal to construction in both cases rests on the argument that construction from an intuitive foundation is the adequate procedure for a priori demonstration. This is precisely what Hegel takes to task in his critique of construction and, by extension, in his own development of systematic philosophy.

Conclusion

I hope the foregoing condensed account of Beck, Reinhold, Fichte, and Schelling's position on the necessity of an intuitive foundation for philosophy has fulfilled its minimal task of showing their essential agreement on intellectual intuition's demonstrative function. At this point, we may list the agreed upon basic characteristics of intellectual intuition shared by these figures, with an eye specifically to the role played by intuition as demonstrative evidence. In seeking an exhaustive list, some of the items will naturally fall in the pointing-out-the-obvious category. Nonetheless, it is central to my argument regarding Hegel's position in the *Phenomenology* that one can tease out exactly what he accepted and what he had to reject from his predecessors' conception. In the following list, I use "intellectual intuition" to refer both to the act or cognitive episode and to its content, as its proponents often did, unless otherwise noted. We can say that in advocating a notion of intellectual intuition as evidence, Kant's successors shared a conception of it as:

1. A priori: As the name indicates, intellectual intuition is conceived as non-sensible and thus accessible only a priori.
2. Immediate: There is a self-evidence to what is intuited intellectually – and to the activity of intellectual intuition itself – which yields its unconditional certainty (item 4) and its foundational status (item 5).
3. Non-inferential: Given its immediacy, the state of affairs for which intellectual intuition stands cannot be justified on further grounds. It is a non-inferential cognitive episode and the propositions expressing it are in this sense self-justifying. *A fortiori*, intellectual intuition is non-discursive, since it is arrived at immediately and through no stepwise process of reasoning.
4. Certain: Intellectual intuition produces unconditionally certain knowledge since it expresses a state where "thought" and "being" coincide entirely, as discussed above.

5. Foundational: As the only cognitive possession that bears the mark of absolute certainty, intellectual intuition represents the paradigm of knowledge in the strict sense, that is, of "science." Put in the language of post-Kantian idealism, the form of intellectual intuition is the form of science as such. The self-justifying proposition(s) expressing it are for this reason designated as the principle of all knowledge. The proposition or set of propositions expressing the content of intellectual intuition therefore have their place at the head of the system of philosophy.
6. Infallible: As non-inferential and unconditionally certain, the content of intellectual intuition cannot be proven false by experience or by argument. (Nor can it be challenged intuitively; see item 9.)
7. Incorrigible: Following from its infallibility, intellectual intuition cannot be revised or corrected.[26]
8. Simple: Intellectual intuition is simple in the sense that any and all of its "parts" represent the "whole" (cf. CPR A24-5/B39). In this light we can understand why Fichte's procedure, for example, rests on delving deeper into the self-same initial intellectual intuition, resolving the equivocations that seem to present themselves in its concept. Yet in breaking down the initial intuition into its seemingly contradictory parts, he remains within the domain of the first, just as in breaking down the intuition of space only results in further "spaces" that have the same characteristics as the space with which one starts.
9. Singular: Due to its simplicity, the content of intellectual intuition cannot be challenged by another intellectual intuition; simplicity entails that there is no "outside" to intuition, making it a unique object. Perhaps a better word to describe this characteristic would be "monadic," but this is not how it was referred to by Kant and his successors. The simplicity and singularity of intellectual intuition derive merely from its intuitive character, not its "intellectual" character. Kant has attributed the same to the forms of sensible intuition.

These are, as far as I can see, the basic characteristics of intellectual intuition one can glean from its post-Kantian idealist proponents. Once again, in giving this list, I am not denying or dismissing the differences in detail between the contending parties. They remain differences in detail nonetheless, and make no substantial difference in the methodological role attributed to intellectual intuition in philosophical demonstration. Whether intellectual intuition is understood as a postulate, a fact, an activity, or a fact-act

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[26] On incorrigibility and infallibility, I am indirectly referencing Laurence BonJour's insights on the demonstrative role of a priori intuition in BonJour 1998, 110-120.

– even if it is not called “intellectual intuition” explicitly – does not make a difference with regard to its demonstrative role as such, that is, its role as grounding the construction of a system of philosophy. This role is what is vouched for by the characteristics I have just listed. And it was this role which Hegel criticized in the Preface to the *Phenomenology*, thereby opening a new demonstrative path for post-Kantian idealism.

Bibliography

In adopting the following translations of Kant, Beck, Fichte, Schelling, and Hegel's works, I have tried to keep the capitalization of terms to a minimum, to ensure greater uniformity in referencing their works. Wherever I had to modify the translation substantially, I have given the original German in brackets.

The following abbreviations were used in this paper:

CPR = Kant, Immanuel. 1998. *Critique of Pure Reason*, trans. & eds. Paul Guyer & Allen Wood. Cambridge: Cambridge University Press. [Referenced simply by relying on the standard "A/B" format. "CPR" only added when context requires it.]

EL = Hegel, Georg W. F. 1991. *The Encyclopedia Logic*, trans. T. F. Geraets, W. A. Suchting, H. S. Harris. NY: Hackett. [Referenced by section number.]

PN = Hegel, Georg W. F. 1970. *Hegel's Philosophy of Nature: Being Part Two of the Encyclopedia of the Philosophical Sciences (1830)*, trans. A. V. Miller. Oxford: Oxford University Press. [Referenced by section number.]

PS = Hegel, Georg W. F. 1971. *The Phenomenology of Spirit*, trans. Terry Pinkard. [Unpublished], 2008. [Referenced by paragraph number, which corresponds to the standard *Phenomenology of Spirit*, trans. A. V. Miller. Oxford: Oxford University Press. I have indicated substantial departures from Pinkard's translation by supplying the original German from Hegel 1952.]

SL = Hegel, Georg W. F. 2010. *The Science of Logic*. Trans. G. Di Giovanni. Cambridge: Cambridge University Press. [Referenced by the Felix-Meiner *Gesammelte Werke* pagination (*Wissenschaft der Logik. Erster Teil: Die Objektive Logik. Erster Band: Die Lehre vom Sein* (1832), ed. F. Hogemann and W. Jaeschke, *Gesammelte Werke*, vol. 21 (Hamburg: Felix Meiner Verlag, 1985)), included on the margins of Di Giovanni's translation.]

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