SPINOZA’S THEORY OF SCIENTIA INTUITIVA

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Many prominent distinctions involving kinds of knowledge or cognition are dichotomous: a priori or a posteriori, necessary or contingent, analytic or synthetic, conceptual or empirical, certain or probable, self-evident or inferential, general or particular, intellectual or imaginative. In his Ethics, however, Spinoza distinguishes and discusses not two but three kinds of cognition [cognitio, often translated as ‘knowledge’].¹ These three kinds are: (i) opinion or imagination [opinio, vel imaginatio], which are further distinguished into random experience [experientia vaga]² and cognition from signs [ex signis]; (ii) reason [ratio]; and (iii) scientia intuitiva [often left in Latin by commentators, but signifying “intuitive knowledge” in a much stricter sense of ‘knowledge’]. While they are foreshadowed by a similar distinction among “kinds of perception” in two earlier works (the unfinished Treatise on the Emendation of the Intellect [TdIE §§18-29] and the long-unpublished Short Treatise on God, Man, and his Well-Being [KV II.1-2]),³ Spinoza introduces them into the Ethics at the conclusion of a

¹ The English translation of Spinoza’s term ‘cognitio’ as ‘knowledge’ is well entrenched. However, following Jonathan Bennett (1984), I will instead use the cognate term ‘cognition’, since Spinoza’s ‘cognitio’ includes within its scope ideas that he characterizes as “inadequate” and “false.” In any case, it must be clearly distinguished from knowledge in the much stricter sense of ‘scientia’, which constitutes just one kind of cognition.

² For a highly informative discussion of experientia vaga, see Gabbey 1996.

³ All quotations from the Treatise on the Emendation of the Intellect [Tractatus de Intellectus Emendatione] and the Short Treatise on God, Man, and His Well-Being [Korte Verhandeling van God, de Mensch en deszelfs Welstand] employ the translation of Edwin Curley in Spinoza 1985, except that ‘cognition’ replaces ‘knowledge’ in translating ‘cognitio’ and ‘scientia intuitiva’ is left untranslated. Citations of the former begin with ‘TdIE’ and give the paragraph numbers; citations of the latter begin ‘KV’ and give the book and chapter numbers. The Treatise on the Emendation of the Intellect counts four kinds of perception.
discussion of the “universal notions” that allow us “to perceive many things.” He begins by defining them:

[I]t is clear that we perceive many things and form universal notions:

I. from singular things which have been represented to us through the senses in a way that is mutilated, confused, and without order for the intellect (see P29C); for that reason I have been accustomed to call such perceptions cognition from random experience;

II. from signs, e.g., from the fact that, having heard or read certain words, we recollect things, and form certain ideas of them, which are like them, and through which we imagine the things (P18S). These two ways of regarding things I shall henceforth call cognition of the first kind, opinion or imagination.

III. Finally, from the fact that we have common notions and adequate ideas of the properties of things (see P38C, P39, P39C, and P40). This I shall call reason and the second kind of cognition.

In addition to these two kinds of cognition, there is (as I shall show in what follows) another, third kind, which we shall call scientia intuitiva. And this kind of knowing proceeds from an adequate idea of the formal essence of certain attributes of God to the adequate cognition of the essence of things.

He then provides an example that he had also used in the earlier works:

I shall explain all these with one example. Suppose there are three numbers, and the problem is to find a fourth which is to the third as the second is to the first. Merchants do not hesitate to multiply the second by the third, and divide the product by the first, because they have not yet forgotten what they heard from their teacher without any demonstration, or because they have often found this in the simplest numbers, or from the force of the Demonstration of P7 in Bk. VII of Euclid, viz. from the common property of proportionals. But in the simplest

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rather than three because perception from signs and from random experience are counted as two different kinds of perception. The term ‘scientia intuitiva’ occurs only in the Ethics.
numbers none of this is necessary. Given the numbers 1, 2, and 3, no one fails to see what the fourth proportional number is and we see this much more clearly because we infer the fourth number from the ratio which, in one glance, we see the first number to have the second (E2p40s2). Spinoza clearly regards the third kind of cognition—the only one on which the Ethics bestows the honorific title ‘scientia’—as the best and most desirable of the three; yet in many ways it is also the most puzzling. One question concerns its very nature: What are the essences of attributes and of things on which scientia intuitiva depends, and how does it proceed from the former to the latter? A second question concerns its relation to other kinds of cognition: Given that all cognition, according to Spinoza, requires an adequate idea of an attribute of God, how does scientia intuitiva differ from other kinds of cognition? A third question concerns its scope: Given that it is characterized as “intuitive,” independent of “universal notions,” and concerned with “essences,” can everything be known by scientia intuitiva, or are some truths beyond its reach? A final question concerns the reasons for its value: Given that Spinoza characterizes cognition of both the second and third kinds as “adequate” and “true,” why does he nevertheless regard scientia intuitiva as the best and most valuable kind of cognition?

I. The Nature of Scientia Intuitiva

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4 All quotations from the Ethics employ the translation of Edwin Curley in Spinoza 1985, except that ‘cognition’ is used to translate ‘cognitio’. In the main text, citations from the Ethics begin with ‘E’ and the part number, employing the usual system of single-letter abbreviations for ‘definition’, ‘axiom,’ ‘proposition’, ‘demonstration’, ‘scholium’, etc. In quotations, Spinoza’s own internal citations are left as they occur in the original—i.e., without part numbers where reference is made to an element within the same part of the Ethics.
In order to understand how _scientia intuitiva_ depends on essences, it is necessary to understand both some familiar features of Spinoza’s metaphysics and some less familiar features of his theory of essences.

According to Spinoza, everything is either a substance or a mode of a substance (E1p4d). A substance is both _in itself_ and _conceived through_ itself (E1d3), whereas the modes of a substance are in and conceived through the substance of which they are modes (E1d5). God (i.e., Nature) is the only substance (E1p14) and has infinitely many _attributes_, each in an infinite or unlimited way (E1d6). These attributes are fundamentally different dimensions (as we might put it) of God’s existence and reality, and they constitute God’s essence (E1d4). Of these attributes, our minds can conceive only two: Extension and Thought. *Ethics* 1a4 states that “the cognition of an effect depends on, and involves, the knowledge of its cause”; thus, just as whatever is in something must be conceived through it, so too whatever is conceived through something must also be caused by it, and vice versa. Hence, God, who is conceived through himself, must also be self-caused; and the modes of God, which are conceived through God, must also be caused by God. Everything is necessarily caused to be just as it is by God and could not have been otherwise (E1p33). Furthermore, there is a precise parallelism between the causal “order and connection” of things and the causal “order and connection” of the ideas of those things (E2p7). In particular, every mode of extension is both paralleled by and identical to the idea that is the idea of that mode of extension (E2p7s); one example of this is the human mind, which is both “the idea of” and “one and the same thing as”

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5 This use of the term ‘in’ implies inherence, rather than a relation of parts to wholes or spatial inclusion.
6 Although it is not clear from the formulation of 1a4 whether it is intended as a biconditional or not, Michael Della Rocca (1996, Chapter 1) establishes from its employment that it is so intended. There is not significant distinction between conception and cognition in this context.
the corresponding human body (E2p13). As the idea of the human body, the mind perceives—i.e., has some idea of—“everything that happens in” that body (E2p12). Moreover, every human mind is literally in God as an element in God’s infinite intellect (E2p11c), although ideas may have much less power as they are in a human mind in comparison with the power they have as they are in God. Causal relations themselves are attribute-specific: for example, each mode, insofar as it is extended, has only extended causes and effects, whereas insofar as it is thinking, it has only thinking causes and effects (E2p6). Hence, the power of an idea is its “power of thinking” [potentia cogitandi]. An adequate idea is one that has all of the “internal denominations” (notably, intellectual clarity and distinctness) of a “true idea” (E2d4). A true idea, according Ethics 1a6, is one that fully agrees with what it represents.

God’s modes are of two kinds: infinite and finite. Infinite modes follow from the “absolute nature” of God’s attributes (E1p21-E1p23), doing so either immediately or mediately (in the latter case, by following from other infinite modes that follow more directly from God’s attributes). They are therefore pervasive throughout the attributes of which they are modes. Among them are the pervasive features of the attributes that constitute the more general and more specific “laws of nature”—included in what Spinoza in the Treatise on the Emendation of the Intellect calls “the series of fixed and eternal things … and the laws inscribed in these things as in their true codes, according to which all singular things come to be and are ordered” (TdIE §§100-101). Presumably, the more specific laws are caused by the more general laws from which they follow. Finite modes, in contrast, follow not from God’s “absolute nature,” but rather from God’s

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7 For further interpretation of the meaning and significance of this claim, see Garrett 2008.
8 For a discussion of power of thinking and its identification by Spinoza with consciousness, see Garrett 2008.
nature—i.e., essence—insofar as it is modified by other finite modes; thus, finite modes are local and temporary variations in the attributes of which they are modes (E1p28). The infinite individual composed of all finite modes, however, is itself an infinite mode (lemma 7s following E2p13s), one which therefore follows from God’s absolute nature. The finite modes are singular things (E1p25c)—humans, animals, plants, stars, rocks, and all other things that “are finite and have a determinate existence” (E2d7). These singular things may in turn have their own modes or (as Spinoza often says) “affections.”

According to *Ethics* 1d4, God’s attributes constitute his essence; but what is an essence? In the *Treatise on the Emendation of the Intellect* (TdIE §§95-96), Spinoza distinguishes a thing’s essence [*essentia*] from its properties [*proprium or proprietas* indifferently]. The essence of a thing makes it what it is and is captured by a satisfactory definition of it, whereas its properties (in this technical sense, henceforth always intended by the English term) follow from this essence without themselves constituting it. Since a thing’s properties follow strictly from its essence, the thing can never be without them—in contrast to the thing’s merely accidental qualities, which may be either present or absent through the efficacy of external forces. In many cases, however, things with

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9 For fuller discussion of the way in which infinite and finite modes follow necessarily from God’s nature, see Garrett 1991.
10 Spinoza’s examples are often drawn from mathematics, even though mathematics concerns only “beings of reason.” In his example of a circle (TdIE §96), the essence is being “a figure that is described by any line of which one end is fixed and the other movable”; the properties include “having the lines drawn from the center to the circumference equal.” As Spinoza here emphasizes, the understanding of a thing’s essence always involves an understanding of how it is or can be caused. In his example of the fourth proportional, having the product of the means be equal to the product of the extremes is a common property of all proportionals, as demonstrated by Euclid.
11 The distinction among essences, properties, and what I am calling “mere” accidents, is of course a common scholastic one. In scholastic philosophy, the term ‘accident’ alone can cover both qualities that do and qualities that do not follow from the essence; hence, the latter are often called “contingent accidents.” However, this latter term has misleading connotations for a necessitarian such as Spinoza, and he does not use it.
different essences may have some of the same properties in common. Spinoza applies the distinction between essence and properties throughout the *Ethics*, both to God and to the singular things that are among God’s modes. In *Ethics* 1p16 and its demonstration, he writes:

P16: From the necessity of the divine nature there must follow infinitely many things in infinitely many modes (i.e., everything which can fall under an infinite intellect).

Dem: This Proposition must be plain to anyone, provided he attends to the fact that the intellect infers from the given definition of any thing a number of *properties* that really do follow necessarily from it (i.e., from the very *essence* of the thing); and that it infers more *properties* the more the definition of the thing expresses reality …. (emphasis added)

As this indicates, Spinoza regards all of the modes of God as properties (in the technical sense) that follow from God’s essence; not surprisingly, given that everything happens by necessity and nothing is external to God, God has no mere accidents. Since a thing’s properties are conceived through its essence, from which they follow, they are also (as Spinoza repeatedly confirms) caused by that essence.12

In considering singular things, the *Ethics* discusses two different kinds of essences: the *actual essence* [*essentia actualis*] and the *formal essence* [*essentia formalis*]. The actual essence of a singular thing is the thing’s *conatus*, or striving to persevere in its own existence (E3p7). This *conatus*—which serves as the starting point for Spinoza’s psychology and political theory, as well as the basis for “teleological” explanation in natural science more broadly—is possessed by every singular thing (E3p6), and it

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12 For an excellent account of the significance to Spinoza of the idea that causation is fundamentally “immanent” causation (E1p18) in which a thing causes it properties through its essence, see Viljanen 2007.
endures for as long as the singular thing endures. A singular thing acts only through its conatus (E3p7d), which is expressed in both extension and thought, and which may properly be called “appetite” (E3p9s). Through its conatus, a singular thing acts to preserve itself both by being the sole cause of its properties and by being a partial cause of other modes both of itself and of other singular things.¹³

The formal essence of a singular thing (sometimes simply “the essence,” where context makes this clear), on the other hand, is often contrasted with its existence: for example, Ethics 1p25 characterizes God as the efficient cause of not only the “existence” but also the “essence” of things. As Spinoza indicates at Ethics 2p8, there are formal essences even for singular things that do not exist:

2P8: The ideas of singular things, or of modes, that do not exist must be comprehended in God’s infinite idea in the same way as the formal essences of the singular things, or modes, are contained in God’s attributes.

The corollary to this proposition refers to “singular things that do not exist, except insofar as they are comprehended in God’s attributes” (emphasis added), and its scholium compares the way in which such singular things are comprehended in God’s attributes to the way in which undrawn or undelineated rectangles are comprehended within a circle. Thus, as commentators have often noted,¹⁴ the formal essence of a thing constitutes in some way the “possibility” or “actualizability” of that thing. Since whatever is contained “in” God’s attributes is a mode for Spinoza (E1d5) rather than a substance, it follows that formal essences must themselves be modes; and since the formal essences of singular things do not come into and go out of existence as singular things themselves must do,

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¹³ For further discussion of conatus and its role is self-preservation, see Garrett 2002.
¹⁴ See, for example, Donagan 1973 and 1988, Delahunty 1985, and Matson 1990.
these formal essences must be infinite modes rather than finite modes. More specifically, the formal essence of a singular thing is the pervasive feature of an attribute that consists in the compatibility of the laws of nature of that attribute with the existence of the thing itself, so that the thing itself can exist at any place where the requisite finite causes may prove to be present.\footnote{See Garrett forthcoming for a fuller argument for this interpretation of formal essences. Insofar as the singular thing is a complex body, its existence and maintenance can be understood as the existence and maintenance of a particular pattern or ratio \textit{[ratio]} of motion and rest ("Physical Digression" following E2p13s).}

Spinoza provides a general characterization of what “belongs to” an essence at \textit{Ethics} 2d2:

To the essence of any thing belongs that which, being given, the thing is necessarily posited and which, being taken away, the thing is necessarily taken away; or that without which the thing can neither be nor be conceived, and which can neither be nor be conceived without the thing.

The distinction between actual and formal essences arises, then, because an essence can be “given,” and a thing can be “posited,” in more than one way. An actual essence is something such that when it is \textit{given as actually existing}, the thing itself is \textit{posited as actually existing}. A formal essence, in contrast, is something such that (i) when it is \textit{given as actually existing}, the thing itself is \textit{posited as possible}; and (ii) when it is \textit{given as instantiated}, the thing itself is then \textit{posited as actually existing}. Since a singular thing actually exists if and only if its actual essence does, we may also think of the actual essence of a singular thing as itself being the \textit{actualization} or instantiation of the thing’s formal essence, and hence as that which renders the thing itself actual. Thus, the
instantiation of the formal essence of a singular thing produces the singular thing by constituting that singular thing’s actual essence.\footnote{Spinoza’s \textit{Treatise on the Emendation of the Intellect} and his \textit{Short Treatise on God, Man, and His Well-Being} also use the term ‘\textit{essentia objectiva}’ [objective essence], a term that does not occur in the \textit{Ethics}. An \textit{objective essence} is simply the idea of an essence (specifically, it seems, of a formal essence), so that when an objective essence is \textit{given as existing}, the formal essence of the thing is \textit{posited “objectively”} in the scholastic and Cartesian sense—i.e., posited in thought.}

In the case of a singular thing, as we have seen, there is an important distinction between its formal \textit{essence} and its actual \textit{existence}; this distinction collapses, however, in the case of God, for “God’s existence and his essence are one and the same” (E1p20). This is because God’s very existence consists in the divine attributes that are also God’s essence: Extension cannot be distinguished from the one infinite and necessarily existing extended substance, and Thought cannot be distinguished from the one infinite and necessarily existing thinking substance. Likewise, the distinction between the two \textit{kinds} of essences, actual and formal, collapses in the case of God. Since God’s power for existing is infinite and cannot encounter any external obstacle, it is perhaps improper to characterize God as having a \textit{conatus} or “striving” for existence at all; but in any case, the infinite power by which God exists is the same as the infinite power by which God acts, and this power, too, consists precisely in the attributes themselves (E1p34 and E1p34d). Because Extension \textit{is} the extended substance and Thought \textit{is} the thinking substance for Spinoza, God’s attributes are also their own instantiations.

We are now in a position to see how \textit{scientia intuitiva} depends on essences. It begins, as Spinoza says, from “an adequate idea of the formal essence of certain attributes of God”—that is, from an adequate idea of God’s essence itself as expressed in one or both of the attributes that we can comprehend as constituting that essence. (It is not entirely clear why Spinoza uses the seemingly redundant phrase ‘formal essence of certain
attributes of God’ in Ethics 2p40s2. Presumably the formal essence of God’s essence, if there is such a thing, is just that very essence itself. Perhaps he was striving awkwardly to include both the term ‘essence’ [since reliance on essences is crucial to scientia intuitiva] and a reference to the plurality of attributes [since scientia intuitiva can be of either extension or thought]. In any case, Ethics 5p25d says more simply that scientia intuitiva begins from “an adequate idea of certain attributes of God.”) This idea is always available to the human mind because, according to Ethics 2p46, “the cognition of God’s eternal and infinite essence which each idea involves is adequate and perfect”: any idea of anything requires an adequate idea of the attribute of which that thing is an expression.

From this starting point in adequate cognition of God’s self-causing and self-caused essence, scientia intuitiva proceeds to an understanding of the effects of that essence, which are God’s properties. These properties include those infinite modes—presumably following from the infinite modes that constitute the laws of nature—that are the formal essences of singular things. However, they also include the finite modes, which are all actually existing singular things. To understand an actually existing singular thing, in turn, is to understand that thing’s actual essence—i.e., the force that is brought into existence when the thing begins to exist, constitutes its activity while the thing exists, and ceases to exist when the thing is destroyed. Scientia intuitiva thus proceeds by its nature from adequate cognition of the necessarily-existing divine attributes to adequate cognition of both the formal essences and the actual essences of singular things, essences that follow from and are caused by the divine attributes.

Spinoza’s description of the highest kind of perception in the earlier Treatise on the Emendation of the Intellect distinguishes two subclasses, one of which is characterized
causally: “Finally, there is the Perception we have when a thing is perceived through its essence alone, or through knowledge of its proximate cause” (TdIE §19). This is in no way incompatible with the corresponding definition in the *Ethics*, however. As he later clarifies in the same work, only something in itself and caused by itself—i.e., God—is perceived through its own essence alone (TdIE §92); and this is essence is constituted by the attributes that are the starting point of *scientia intuitiva*. And when the mind proceeds to grasp the essences of singular things, it does so, as we have seen, precisely by grasping them through their causes in proper causal order—concluding with the proximate cause.

II. *Scientia Intuitiva* and Other Kinds of Cognition

*Scientia intuitiva* thus follows the causal order of nature, moving from cognition of causes to cognition of effects, beginning with adequate cognition of an attribute of God.17 According to *Ethics* 1a4, however, all cognition of things depends on and “involves” cognition of the causes of those things; and according to *Ethics* 2p46, all cognition “involves” an adequate idea of an attribute of God. How, then, is *scientia intuitiva* different from the other kinds of cognition?

The most obvious way in which the highest and lowest kinds of cognition differ from each other is that *scientia intuitiva* is always adequate and true, whereas opinion or imagination is always inadequate and false. An idea is inadequate in a given mind if and only if the causes of that idea are fully within that mind, so that the mind is its adequate cause. As Spinoza explains it in the *Ethics* (E2p13-E2p30), all imagination—which includes sensory perception—consists fundamentally in awareness of a state of one’s

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17 This is the key element in the “ordering” interpretation of the third kind of cognition proposed and defended in the very important article Carr 1978. Carr does not, however, offer an interpretation of the essences of singular things that constitute the later elements in this ordering.
own body. (In the specific kind of opinion or imagination that is cognition through signs, one bodily state and its correlative idea reproduce, respectively, another bodily state and its correlative idea with which they have become associated.) However, in being aware of a state of one’s body, one is also indirectly and confusedly aware of the various external causes of that state of one’s body; when many such objects have contributed to the bodily state, one will be indirectly aware of them all together in a confused way. All ideas as they are in (and thought by) God are adequate and true (E2p32), with the ideas of causes producing ideas of their effects—just as they do in human minds experiencing scientia intuitiva. Since the external causes of a human being’s bodily states are not themselves in the human body, however, adequate and true ideas of them are not present in the human mind either, even though they are, of course, in God.

How is this compatible with Ethics 1a4? The term generally translated as ‘involve’ is ‘involvere’ a technical logical term in late scholasticism, perhaps best translated more specifically as ‘implicate’. And while it is true that ideas of effects always depend on and “involve” cognition of their causes—which is why ideas of bodily states can also constitute some representation of their causes—it is one thing to say that having an idea of an effect implicates (i.e., carries with it, or requires as a precondition) some conception of the cause, and another thing to say that an idea of an effect exists in a given mind because the presence of the idea of the cause explains its presence and power in that particular mind. In the case of scientia intuitiva, the mind produces or sustains its ideas of effects from the adequate ideas of their causes that it already possesses, a process that therefore serves to explain the possession of the ideas of the effects by that mind with

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18 See Gabbey forthcoming for a discussion of the history and interpretation of this term.
whatever degree of power they may have. In imagination or opinion, in contrast, the mind has ideas of bodily states simply because the human mind is the idea of, and perceives everything that happens in, the human body; and in having ideas of these bodily states the mind also necessarily has an inadequate subsidiary or derivative conception of the cause, without fully understanding the essence of either the cause or the effect.

Although opinion or imagination can be distinguished from scientia intuitiva in terms of the adequacy and truth of its ideas, reason [ratio] cannot: like scientia intuitiva, reason’s ideas are always adequate and true. As we have seen, however, reason does differ from scientia intuitiva—and resembles opinion or imagination—for Spinoza in constituting a way in which we “perceive many things and form universal notions.” According to Ethics 2p40s2, reason arises from “the fact that we have common notions and adequate ideas of the properties of things.” The “properties of things,” of course, are to be contrasted with their essences. Spinoza explains common notions in Ethics 2p37-2p39: they are ideas of features that are “common to all” bodies and are “equally in the part and in the whole.”¹⁹ Because the human mind perceives everything that happens in its body, the human mind must include perception of these common features; and because they are equally in the part and in the whole—i.e., fully and not merely partially present wherever they exist—they can only be conceived fully and adequately. (His suggested example of a common notion is that bodies “can move now more quickly and now more slowly.”)

¹⁹ Presumably the parallelism of things and ideas guarantees that just as there are common notions concerning all bodies, so too there are common notions that concern all ideas or minds. For simplicity of exposition, however, I will follow Spinoza procedure in this part of the Ethics by discussing only the former, leaving the application to the latter as something easily made.
Because these common features must be possessed by all bodies, they must themselves be properties of bodies, following from and “involving” their essences.20 Moreover, because the ideas of these bodies themselves involve the attribute of extension, the ideas of these common properties must do so as well. Nevertheless, the common notions are in the mind, initially at least, not because they are caused to be in the mind by the presence in the same mind of the ideas of essences of bodies or ideas of the attribute of extension; rather, they are in the human mind simply because they must be an element or aspect of any perception of any body whatever, whether one’s own or another. Just as the ideas of the attributes provide the starting point for scientia intuitiva, the common notions provide a starting point for reason. Precisely because they are common to all things, however, the objects of the common notions cannot themselves constitute the essence of any particular thing (E2p37).

Common notions and adequate ideas of other properties of things allow the mind to “perceive many things” and to form “universal notions” because they allow the mind to represent in a single idea some or all of the many things, with different essences, that share in a certain property and to draw conclusions from these universal representations. Because these representations are adequate, they allow the mind to cognize or infer “without danger of error” (TdIE §28) that something is true; because they do not proceed through the causal order of essences, however, they do not allow the mind to see how and why it is true. Thus, in Spinoza’s case of the fourth proportional, one who follows the demonstration of Euclid knows that it is a common property of proportions that the

20 Miller 2004 identifies the common notions with (ideas of) the laws of nature. However, this seems to me to conflate common properties of bodies, which are therefore modes of those bodies, with pervasive features of Extension, which are therefore infinite modes of God. This is not, of course, to deny that there is an intimate relation between these properties and the infinite modes that constitute the laws of nature, whereby the latter explain the former through their causal contributions to the essences of things.
product of the means equals the product of the extremes, which allows a calculation \( \frac{1}{2} = \frac{3}{x} \). But one who has the highest kind of cognition sees through an understanding of the particular ratio expressed by \( \frac{1}{2} \) that \( \frac{3}{6} \) is equally an expression of that same unique ratio.

In *Ethics* 5p36s, Spinoza provides another example, one more important to his own philosophical project. There he contrasts the cognition of the human mind’s dependence on God that arises from reason with the cognition of it that arises from *scientia intuitiva*. In Part 1 of the *Ethics*, he writes, he had demonstrated (specifically, in E1p25) that all things depend for their existence and their essence on God. Since the human mind is something, it follows that it does so as well—dependence on God is therefore a property of the human mind. But because the demonstration relies on this universal property without deriving it from the essence of the human mind in particular, it provides cognition only of the second kind. By Part 5 of the *Ethics* in contrast, he has explained how the essence of the human mind consists in cognition of the human body and how that cognition depends on and is in God. This cognition of the specific character of the mind’s essence and of its dependence on God, he claims, constitutes cognition of the third kind:

Again, because the essence of our Mind consists only in knowledge, of which God is the beginning and foundation (by IP15 and IIP47S), it is clear to us *how* our Mind, with respect both to essence and existence, follows from the divine nature, and continually depends on God.

I thought this worth the trouble of noting here, in order to show by this example how much the cognition of singular things I have called intuitive, or cognition of the third kind (see IIP40S2), can accomplish, and how much more powerful it is than the universal cognition I have called cognition of the second kind. For although I have shown generally in Part I that all things (and consequently the
human Mind also) depend on God both for their essence and their existence, nevertheless, that demonstration, though legitimate and put beyond all chance of doubt, still does not affect our Mind as much as when this is inferred from the very essence of any singular thing which we say depends on God.

Just as the *Treatise on the Emendation of the Intellect* adds an explicitly causal element to the description of the highest kind of perception, so too it adds one to the description of the next highest kind of perception, that corresponding to reason:

Then there is the Perception that we have when the essence of a thing is inferred from another thing, but not adequately. This happens, either when we infer the cause from some effect, or when something is inferred from some universal, which some property always accompanies. (TdIE §19)

In addition to stating that this kind of perception involves inference from some universal notion or idea of a property, Spinoza here explicitly states that causes can sometimes be inferred from effects\textsuperscript{21}—despite the requirement of *Ethics* 1a4 that cognition of effects already “involve” some cognition of causes. This occurs, presumably, when the mind observes or infers the presence of a property and, based on general knowledge of causal relations, infers something about the cause of that property in that case. Although he indicates that this inference may not proceed “adequately,” this does not entail that the resulting ideas are themselves inadequate and false ones in his later technical sense; since he claims in the *Ethics* that all ideas constituting reason are adequate and true, he presumably means only that the inference fails to show exactly what the essence of the cause is and how that essence produces the effect.

\textbf{III. The Scope of Scientia Intuitiva}

\textsuperscript{21} This runs directly contrary to the statement of Nadler (2006: 181) that cognition of the second kind proceeds by inference of effects from causes.
The term ‘intuitiva’ suggests something direct and immediate in some manner; for example, in his *Regulae ad directionem ingenii* Descartes distinguishes between *intuition* and *deduction*, with the former constituted by immediate intellectual apprehension and the latter by a series of connected steps in which each step is an intuition. Moreover, in his description of the example of the fourth proportional in the *Treatise on the Emendation of the Intellect*, Spinoza writes that those who perceive it by the highest kind of perception “see it not by the force of that Proposition [of Euclid] but intuitively, or without going through any procedure” (TdIE §24).

Spinoza cannot mean by this, however, that no cognitive steps can be distinguished in the highest kind of perception. The definition of the highest kind of perception on which this passage elaborates explicitly allows that it can occur in perceiving something through perception of its proximate cause (TdIE §19).22 Furthermore, as G.H.R. Parkinson (1954) has observed, the definition of *scientia intuitiva* in the *Ethics* specifies that it proceeds from one cognition (of attributes) to others (of essences of things), and its description in the *Ethics* version of the example of the fourth proportional explicitly characterizes it as least partly inferential: “we see this much more clearly because we infer the fourth number from the ratio which, in one glance, we see the first number to have to the second” (2p40s2). Indeed, *Ethics* 2p47s adds concerning God’s essence that “we can deduce from this cognition a great many things which we know adequately and so can form that third kind of cognition of which we spoke.” In denying that the highest kind of perception involves any “procedure,” therefore, Spinoza cannot mean that we are unable to distinguish ordered steps within it—although in a sufficiently powerful mind, these

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22 As Carr (1978) notes, this passage counts against the suggestion of Curley (1973) that the distinction between reason and *scientia intuitiva* originated as a distinction between an inferential and a non-inferential kind of cognition in the *Treatise on the Emendation of the Intellect* but changed its character in the *Ethics*. 
steps might well be taken instantaneously—but rather that these steps, proceeding as they do directly from ideas of essences, will not require any quasi-syllogistic operations with generalizations and their instances. That such a grasp of the things themselves through their essences is intended to supersede inference through universal intermediaries is strongly confirmed by his remarks in the Short Treatise that the highest kind of cognition “has no need … of the art of reasoning” (KV II.1, emphasis added) but is “an immediate manifestation of the object itself to the intellect” (KV II.22).

If scientia intuitiva does not operate with universal notions, then it may seem that there must be some general truths—i.e., truths that are not about merely local or changeable matters—that it cannot reach. This impression may be strengthened by Spinoza’s description of his example at Ethics 5p36s as aiming to show “how much the cognition of singular things I have called intuitive, or cognition of the third kind … can accomplish” (emphasis added). Largely on the basis of this passage, it has been proposed that scientia intuitiva, in the Ethics at least, extends only to the essences of singular things and not to the attributes of God (Curley 1973). As Spencer Carr (1978) argues, however, Spinoza’s remark does not entail that scientia intuitiva is only of singular things, but merely that the example he is giving in Ethics 5p36s, concerning the human mind as a singular thing, does not illustrate how much can be accomplished by scientia intuitiva that is not of singular things. Certainly, all truths are in and known to God; and it would be surprising indeed if there were some general or pervasive truths—and particularly truths about the divine essence itself—that even God could not know by the highest kind of cognition.

23 Parkinson (1954) suggests that scientia intuitiva differs from reason in requiring no “application of a rule”; see also Miller (2004, Section 4). However, given that no “universal notions” are involved at all, it seems that a somewhat stronger conclusion, excluding the use of generalizations, may also be warranted.
Fortunately, however, we are in position to see how God can know all general and pervasive truths by *scientia intuitiva*. For God’s knowledge simply follows the causal order of nature, beginning with an adequate idea of the essence of God—who is self-caused and so understood through himself—and proceeding to adequate ideas of the essences of things. In proceeding to the formal essences of things, *scientia intuitiva* must follow the proper causal order, thereby grasping along the way the infinite modes that constitute the laws of nature. While these laws may properly be characterized as “general” insofar as they are pervasively true and not limited to specific times and places, Spinoza rejects the view that they are themselves “universals” (i.e., that they are either in nothing or in multiple things); rather they are properties in and of a single substance, God, and as such are present everywhere. Thus he writes in the *Treatise on the Emendation of the Intellect*, presumably referring to all infinite modes, both laws of nature and formal essences of things, which he contrasts with “singular changeable things”:

> Although these fixed and eternal things are singular [i.e., particular], nevertheless, because of their presence everywhere, and most extensive power, they will be to us like universals, or genera of the definitions of singular, changeable things, and the proximate causes of all things” (TdIE §101, emphasis added).

On the other hand, the fact that *scientia intuitiva* concerns essences may inspire a somewhat opposite worry about the scope of God’s cognition—namely, that (aside from the case of God’s own existence, which cannot be distinguished from his essence) it cannot include cognition of the actual existence and changing accidental properties of things. Formal essences, no matter how specific, seem at least in principle to be multiply-
instantiable—indeed, instantiated whenever and wherever the requisite finite causes occur. The beginning and ending of existence of a singular thing cannot be determined from its formal essence alone, and each singular thing will have a succession of mere accidents that also do not follow from the formal essence either. Fortunately, however, we are also in a position to see how God can know such local and changeable truths by \textit{scientia intuitiva} as well. For the highest kind of cognition extends to the “essences of singular things” \textit{simpliciter}—presumably including not only their formal essences but also their actual essences. In understanding the actual essences of all singular things—singular things that are part of the infinite individual, and which follow from the infinite modes together with other singular things—in their proper causal order and relations, God is also able to grasp how those singular things necessarily come to be, interact with one another, and are then destroyed, permitting \textit{scientia intuitiva} not only of what singular things exist at what times and places, but also what properties and mere accidents they have at each stage in their histories.

God’s attributes, God’s infinite modes, and God’s finite modes (including all the modes and affections of these finite modes) together constitute all that there is to know. In having \textit{scientia intuitiva} of them all, then, God understands everything: not only his own self-sufficient essence but also how and why each mode follows as it does from that essence. Unfortunately, however, while all truths can thus in principle be known by \textit{scientia intuitiva}, such omniscience is limited to God. For only God has such great power

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24 For this reason, Bennett (1984) argues that ideas of essences, as general natures, cannot constitute thought specifically about particular individuals. But while it is plausible that an idea of a singular thing’s \textit{formal essence} alone cannot achieve unique reference to that individual, the parallelism and identity of ideas with their objects guarantees, for Spinoza, the unique reference of each idea to that of which it is properly the idea. In particular, the adequate idea of a singular thing as it is in God achieves in this way unique reference to that singular thing.
of thinking that he can deduce the actual existence of singular things from the divine essence. At best, human beings are limited to *scientia intuitiva* of the divine attributes and the infinite modes (including the formal essences of things). This may be one reason why, in the official definition of *scientia intuitiva* at Ethics 2p40s, he does not explicitly invoke the distinction between actual essences and formal essences: while God can know both kinds of essences by the highest kind of cognition, readers of the *Ethics* can know only formal essences in this way. Human cognition of actual essences—even one’s own—is limited to cognition of the first kind.

Human cognition also differs from divine cognition in another way. Human beings generally achieve *scientia intuitiva* as the result of their first achieving cognition through reason. For *scientia intuitiva* begins with adequate cognition of God’s attributes; but this adequate cognition is itself in the human mind originally because it is “involved” in the common notions that constitute the starting point of reason; and it is by developing the power of one’s thoughts of the common notions that one is able to think of God’s attributes themselves with sufficient power of thinking to make significant progress in the highest kind of cognition possible.25

Of course, since everything is in God, there are no ideas in human minds that are not also in some way in God. This is true of ideas constituting the lower kinds of cognition as much as it is true of ideas constituting *scientia intuitiva*. But what an idea represents is relative to the mind in which it occurs.26 As the idea of a particular human body is in God, it occurs together with adequate ideas of the causes of that human body and its many modes or affections. While this idea of the human body of course “involves” (by

25 For an excellent account of the mutually reinforcing character of the two highest kinds of cognition in Spinoza’s account of human intellectual development, see Malinowski-Charles 2003.
26 See Della Rocca 1996 for a compelling argument to this effect.
E1a4) these other ideas of causes that are also present, the idea considered in itself, need only represent the human body itself, which is its proper object \([objectum]\). As this same idea constitutes a human mind, however, the ideas of the causes of the bodily affections are external to it, and hence (by E1a4), the ideas in the human mind must also serve in their own right to represent their external causes to at least some extent. Similarly, the ideas of properties that constitute the “universal notions” of reason, as they occur in God, represent them individually as properties of the particular things from whose essences they follow. As they occur in the less powerful mind of a human being cognizing by reason rather than scientia intuitiva, in contrast, they represent all of the things having that property collectively and without distinction among the essences involved.

IV. The Value of Scientia Intuitiva

Reason and scientia intuitiva both provide cognition that is adequate and true; only opinion or imagination is inadequate and false. Accordingly, both kinds of cognition put matters “beyond all chance of doubt” (E5p36s). Both together lessen the possessor’s fear of death (E5p38), and both together constitute the intellect, which is the “part of the mind that is eternal” (E5p40c). Yet Ethics 5p25 ascribes the highest value to scientia intuitiva alone: “The greatest striving of the Mind, and its greatest virtue is understanding things by the third kind of cognition.” Why is this so?

The demonstration of Ethics 5p25 is as follows:

The third kind of cognition proceeds from an adequate idea of certain attributes of God to an adequate cognition of the essence of things (see its Def. in IIP40S2), and the more we understand things in this way, the more we understand God (by P24). Therefore (by IVP28), the greatest virtue of the Mind,
i.e. (by IVD8), the Mind's power, or nature, or (by IIIP7) its greatest striving, is to understand things by the third kind of cognition, q.e.d.

This demonstration infers the greatness of the mind’s virtue in having *scientia intuitiva*—which Spinoza equates, via *Ethics* 4d8, with greatness of power—from its constituting a greater understanding of God; and it infers that *scientia intuitiva* constitutes a greater understanding of God, in turn, from *Ethics* 5p24: “The more we understand singular things, the more we understand God.” But this itself is initially puzzling: since there is nothing but God and modes of God, it seems that all adequate and true cognition—reason as well as *scientia intuitiva*—must be understanding of God.

While reason may also provide understanding of God, however, it will not do so as *powerfully* nor in a way that is fully *of God* as *scientia intuitiva* does. Since effects, for Spinoza, must acquire whatever power they have from their causes, the total cause of an effect is always more powerful than the effect itself. And since the order and connection of ideas is the same as the order and connection of things, the idea of a total cause is always more powerful than the idea of its effect. But whereas reason proceeds from ideas of properties and from ideas of effects to ideas of causes, *scientia intuitiva* proceeds from ideas of essences, which are the causes of properties, and from ideas of causes to ideas of their effects; hence, the latter is naturally more powerful. Furthermore, in *scientia intuitiva* the mind appropriates within itself the same perfect causal structure of cognition that exists eternally in God: rather than employing universal notions, it allows the mind to understand God and God’s modes directly, in just the way that God himself does. Accordingly, *scientia intuitiva* provides not merely truths about God, but direct apprehension of the actual causal structure of God himself.
Scientia intuitiva is not merely more powerful cognitively, however; it is also, as Ethics 5p36s emphasizes, more powerful emotionally: “it affects our Mind” more. The emotional character of this kind of cognition was important to Spinoza from the beginning: in the Short Treatise, the lowest kind of cognition (there called “opinion” [Waan]) is identified as the source of passive emotions, the second kind of cognition (there called “belief” [Geloof]) as the source of “good desires,” and the highest kind of cognition (there called “clear cognition” [klaare Kennis]) is identified as the source of “true and genuine love, with all that comes of that” (KV II.2). According to the mature Ethics, scientia intuitiva produces “the greatest satisfaction of Mind there can be” (E5p27) and gives rise to “the intellectual love of God” (E5p33).

These conclusions of the Ethics are straightforward consequences of Spinoza’s psychology. Joy, according to Ethics 3p11s, is a passage to a greater perfection, which is also a greater power for action. Satisfaction of the mind or self-esteem, by “Definition of the Affects” 25 of the appendix to Part 3 of the Ethics, is joy that results from considering oneself and one’s own power. Intellectual love of God, by Ethics 5p32, is joy together with the idea of God as the cause of one’s joy. Precisely because scientia intuitiva renders one most powerful intellectually, it provides the greatest increase in one’s own perfection and power, hence the greatest joy and satisfaction of mind. Because it proceeds from ideas of God’s very essence to ideas of God’s properties, mirroring and participating in the God’s own cognition, it not only provides greater joy than mere reason can do; it also fully and forcefully identifies God as the true cause of one’s joy far more than mere reason can do. This intellectual love of God, considered as something eternal in which one participates, is blessedness (E5p33s).
As Spinoza understands it, then, *scientia intuitiva* is the best and most powerful kind of cognition because it uniquely mirrors the causal structure of God (i.e., Nature). The fundamental causal structure of God, in turn, is one in which properties follow from essences; while he fully acknowledges and emphasizes the importance of “laws of nature,” these have the metaphysical character of properties (specifically, infinite modes) that follow from and are caused by the divine attributes that constitute God’s essence. The epistemological merits of *scientia intuitiva* are a consequence of its metaphysical merits. As with everything in Spinoza, however, its ultimate value lies in its ethical merits—above all, in its capacity to make its possessor blessed.
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