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To cite this article: Elliot Samuel Paul (2022): Cartesian intuition, British Journal for the History of Philosophy, DOI: [10.1080/09608788.2022.2142197](https://doi.org/10.1080/09608788.2022.2142197)

To link to this article: <https://doi.org/10.1080/09608788.2022.2142197>



Published online: 13 Dec 2022.



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RESEARCH ARTICLE



Cartesian intuition

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ABSTRACT

This paper explicates Descartes' theory of intuition (*intuitus*). Departing from certain commentators, I argue that intuition, for Descartes, is a form of clear and distinct intellectual perception. Because it is clear and distinct, it is indubitable, infallible, and provides a grade of certain knowledge he calls 'cognitio'. I pay special attention to why he treats intuition as a form of perception, and what he means when he says it is 'clear and distinct'. Finally, I situate his view in relation to those of his Scholastic predecessors on one hand and current theories on the other. His view anticipates the contemporary 'perceptual model of intuition', though it is much bolder with its promise of certainty.


ARTICLE HISTORY Received 10 December 2022; Revised 20 July 2022; Accepted 27 October 2022

KEYWORDS Bengson; Descartes; intuition; perception; rationalism

In this paper, I explicate Descartes' theory of intuition and and situate it in relation to the views of Scholastic predecessors on the one hand as well as current theories on the other. My discussion unfolds over six sections.

In §1, I unpack Descartes' view of what intuition *is*: it is a kind of perception which is intellectual rather than sensory or imaginative, clear and distinct rather than obscure or confused, and synchronic rather than diachronic in that it presents its content 'all at once'. Of particular importance is the fact that Descartes treats intuition as a form of clear and distinct perception, despite a trend of scholarship which has suggested otherwise.

In §2, I explain Descartes' take on what intuition *does*: because it is clear and distinct, it provides a decisive reason for assent, such that it would be irrational to doubt (so it's rationally indubitable); it irresistibly compels assent (so it's psychologically indubitable); it guarantees truth (so it's infallible); and it provides a grade of certain knowledge he calls *cognitio*, which I render as 'grasp'. Intuition provides these epistemic goods precisely because it is clear and distinct.

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In §3, I acknowledge that Descartes' thinking evolves from his early work, the *Rules*, where he presents his theory of intuition, to his *Meditations* and other later works, and I show that these changes are compatible with his consistently maintaining the view of intuition I attribute to him.

In §4, I situate Descartes in relation to his Scholastic predecessors and show that he departs from them in restricting intuition to the pure intellect.

In §5, I confront the thorny question of what Descartes means by 'clear' and 'distinct'. On my reading, distinctness is just the highest degree of clarity – complete clarity – so clarity is the key. And clarity is *presentationality* – the quality you experience when you have a perception which presents its content to you as true. Further, I argue, the presentational nature of clarity explains why it provides reason for assent or judgement. Descartes is committed to *Presentationalism*: When you have the intuition that *p*, you have reason to assent to *p* as true precisely because your intuition makes *p* clear to you – i.e. precisely because it presents *p* to you as true.

In §6, I offer the first detailed, systematic study of exactly where Descartes' treatment of *intuitus* stands in relation to current positions. It turns out that he anticipates 'the perceptual model of intuition' in contemporary epistemology, though his approach is much bolder with its promise of certainty.

1. What intuition is

The place to begin is with Descartes' early work, the *Rules for the Direction of the Mind* (*Regulae ad Directionem Ingenii*). In Rule 3, he introduces intuition and deduction as:

the only two [...] actions of the intellect [g] by means of which we can come to **grasp** [*cognitionem*] things with [f] **no fear of being mistaken**.

(AT 10:368*[†])¹

Elaborating on the former, he adds:

By 'intuition' [*intuitus*] [b] I do **not** mean the fluctuating testimony of the **senses** or the deceptive judgment of the **imagination** as it botches things together, but the [a] **conception** of a [c] **clear** and attentive mind, which is so easy and **distinct** that [e] there can be **no room for doubt** about what we are *understanding*. Alternatively, and this comes to the same thing, intuition is the [e] **indubitable** [a] **conception** of a [c] **clear** and attentive mind which [b] proceeds solely from the **light of reason**. Thus everyone can mentally intuit that he exists, that he is thinking, that a triangle is bounded by just three lines, and a sphere by a single surface, and the like.

(AT 10:368*[†])

¹For Descartes' works, I refer (by volume and page number) to the Adam and Tannery (AT) edition of the original, and generally quote from the standard translation (CSM[K]). For all authors quoted, I use (*) to indicate when I have altered the translation or provided my own, and I use (†) to indicate when I have added italics or boldface.

Later, in Rule 11, he writes:

Two things are required for mental intuition: first, the proposition intuited must be [c] **clear and distinct**; second, the whole proposition must be understood [d] **all at once** [*tota simul*], and not bit by bit.

(AT 10:407[†])

Intuition, for Descartes, is a kind of (a) *perception* or ‘conception’. It is (b) *intellectual* rather than sensory or imaginative, “proceeding solely from the light of reason”. It is (c) “*clear and distinct*” rather than obscure or confused. And it is (d) *synchronic* rather than diachronic, presenting its content “all at once”. These features characterize the nature of intuition – what intuition *is* – and I will elaborate on them here in §1.

Further, Descartes holds that, because intuition is clear and distinct, it also has the following epistemic features: it is (e) “indubitable”, leaving “no room for doubt”; it is (f) infallible, allowing “no fear of being mistaken”; and (g) it provides a special kind of knowledge “grasp” (*cognitio*). These features characterize the psychological and epistemic functions of intuition – what intuition *does* – and I will turn to them in §2.

(a) Perception

Intuition, Descartes says, is a kind of perception. He uses the term ‘conception’ (*conceptum*) in the passage from Rule 3 cited above, but within a few pages he also refers to intuition as a kind of ‘perception’, ‘vision’, or ‘experience’ (*perceptio, visio, experientia*). Derived from the verb ‘*intueri*’ – which means to see, to look at, or to gaze upon – ‘*intuitus*’ denotes a kind of sight. The root verb ‘*tueri*’ by itself means to see, and the intensifying prefix ‘*in-*’ suggests a particularly focused and penetrating quality of not just seeing something but seeing *into* it – a kind of *insight*.²

Today, we use the English term ‘perception’ to refer to sensory perception, chiefly vision. But like many of his contemporaries in the seventeenth century, Descartes uses the Latin and French terms *perceptio* and *la perception* much more broadly. He posits three kinds of perception: sensory perception, imagination, and intellectual perception or intellection. Intuition is a kind of *intellectual* perception (more on this in a moment). But what does Descartes take perception to be, such that states of sense-perception, imagination, and intellection all count as perceptions? I’ll focus on Descartes’

²Indeed, ‘insight’ often seems to capture Descartes’ meaning: it connotes an intellectual rather than sensory mode of apprehension, and in keeping with the infallibility of Descartes’ *intuitus*, ‘insight’ is factive: you cannot be said to have the insight that *p* unless *p* is a fact. However, not every Cartesian *intuitus* would properly be called an insight, since we reserve the latter term for things that are relatively novel, revealing, or deep. Scholars have noted the difficulties of translating ‘*intuitus*’ into English (Sepper, *Descartes’ Imagination*, 124–6) and even into French (see Marion’s “Annex 1” in Descartes, *Règles*, 295–302).

comparison between vision and intuition as two kinds of perception delivered to “the corporeal eye” and “the mind’s eye”, respectively. Both possess five features that are characteristic of Cartesian perceptions.

- (i) *Contentful*. A perception or idea is always *of* or *about* something; it always represents some object and thus it always has representational content. “Some of my thoughts are as it were the images of things”, Descartes writes, “and it is only in these cases that the term ‘idea’ is strictly appropriate—for example, when I think of a man, or a chimera, or the sky, or an angel, or God” (AT 7:37; see also AT 7:44). The term ‘perception’ refers to the *act* of perceiving. The term ‘idea’ can also refer to the act of perceiving, but it more often refers to the *object* of perception, the thing perceived (AT 7:181, 185). We can specify the perceived object either with a noun-phrase (e.g. ‘I have a visual perception or idea of *this wax*’) or with a sentential complement expressing a proposition (e.g. ‘I visually perceive *that this wax is round*’). We have the same kind of choice when conveying what we intellectually intuit: we can say, ‘I have an intuition of *a triangle*’ or ‘I intuit *that a triangle must have three sides*.’ For Descartes, this is merely a verbal difference: we may use either kind of formulation, depending on what we need to communicate (AT 3:417–8; see also AT 3:395).
- (ii) *Conscious*. In the Cartesian mind, every occurrent mental state, and thus every perception, is a thought, and we are conscious of all our thoughts:

Thought. I use this term to include everything that is within us in such a way that we are immediately **conscious** [*consci*] of it.

(20/R, AT 7:160*[†])

By the term ‘thought’ I understand everything which we are **conscious** [*consciis*] of happening within us, in so far as we have **consciousness** [*conscientia*] of it.

(Pr. i.9, AT 8A:7*[†]; see also AT 7:49, 232, 246)

Importantly, consciousness of a thought is not a separate, higher-order act of introspecting or reflecting on that thought. Rather, in Descartes’ view, consciousness of a thought is a reflexive property built into the nature of that very thought.³ That is why consciousness accompanies *all* of your thoughts, even when you are not reflecting on or introspectively attending to your thoughts.

- (iii) *Non-doxastic*. A perception by itself is not a doxastic state like belief or judgement, though it provides the content for a possible judgement (AT 7:56). When you perceive a given content, *p*, you may respond in

³See Barth (“Leibnizian *Conscientia*”), Lähteenmäki (“Orders of Consciousness”), and Simmons (“Cartesian Consciousness Reconsidered”).

one of three ways: you may *assent* to *p* (i.e. judge that *p* is true); you may *dissent* from *p* (i.e. judge that *p* is false); or you may withhold assent and *suspend* judgement altogether in a state of doubt. These responses – assent, dissent, and suspension – are all additional operations of the mind, over and above the perceptions to which they are responses. In his early work, the *Rules*, Descartes seems to adopt the view, common among Scholastic Aristotelians, that assent and perception are both acts of the intellect. But even on this view, assent (as well as dissent and suspension) is a *further* act whereby the intellect responds to a perception by affirming its content as true.⁴ In his mature work, including the *Meditations*, Descartes reassigns assent (as well as dissent and suspension) from the intellect to the will.⁵ Despite this change, one thing that Descartes maintains consistently is that a perception by itself is not an act of assent, dissent, or suspension, but a prerequisite for these responses.

- (iv) *Passive*. As you look at this page, you cannot change the content or character of your perception through a direct act of will. Of course, you may alter your perceptions *indirectly*, by willfully looking away or redirecting your attention or doing something which in turn causes you either to perceive different things, or to perceive the same things differently (see Newman, “Attention”). But even when your perception happens as a result of other things you do voluntarily, it is still something that happens to you, not an action that you perform. This is what Descartes means when he stresses that, in contrast to acts of will, which are fundamentally active, perceptions are fundamentally “passive” (AT 7:55, 332; AT 10:412).
- (v) *Gradable*. One might assume that, for Descartes, only intellectual perceptions can be clear and distinct. But his view is more nuanced. All three kinds of perception – sensory, imaginative, and intellectual – can vary in the degree to which they are clear and distinct. Every token perception falls somewhere on the continuum from the most obscure and confused to the most clear and distinct. Sense-perception is often “clear and distinct enough [*satis clarae & distinctae*]” for practical purposes (AT 7:83), but it can never be fully clear and distinct, as required for certainty (AT 7:145). Because he maintains that perceptions which are strictly clear and distinct cannot be found in the senses or imagination but only in the pure intellect or reason (*ratio*), Descartes is known as a Rationalist.

⁴Descartes states in Rule 12, for example, that we must “distinguish between the faculty by which our intellect intuits and knows things and the faculty by which it makes affirmative or negative judgements” (AT 10:420).

⁵*M3*, AT 7:37; *M4*, AT 7:58–60; *5O/R*, AT 9A:204; *Comments on a Certain Broadsheet*, AT 8B:363. On the significance of this shift, see Maritain (“Le Conflit”, §3) and Jayasekera (“Responsibility”).

Intellection is not always totally clear and distinct, but when it is, it counts as intuition, or deduction, or both, as we will see in a moment.

Altogether, a perception, for Descartes, is an occurrent, conscious mental event which has content, happens to us passively (without direct voluntary control), is gradable in terms of clarity and distinctness, and is pre-doxastic in the sense that it is not a judgment but merely provides the content for a possible judgment. Like visual experience, intuition has all these features, and so it too is a kind of perception.

(b) Intellectual

Commenting on the difference between ideas of the pure intellect on the one hand and those of the senses or imagination on the other, Descartes says in the *Rules*, “Those simple natures which the intellect recognizes by means of a sort of innate light, *without the aid of any corporeal image*, are purely intellectual” (AT 10:419). Much later, he reiterates: “it is the manner of conceiving them which makes the difference: whatever we conceive *without an image* is an idea of the pure mind, and whatever we conceive with an image is an idea of the imagination” (To Mersenne, July 1641, AT 3:395). This tells us what intellection is not: it is not imagistic. What intellection *is* is something Descartes prefers to convey not by formal definition but rather by example. The *Meditations* is designed to get readers to *have* intellectual perceptions, which they can then reflect upon and juxtapose with perceptions of the senses and imagination. One example of this comes in Meditation Two, where Descartes considers a piece of wax, as an example of a body, to investigate its essence or nature. He comes to understand the wax to be something which can take on indefinitely many shapes; no imagistic representation captures that range of possibilities; so, he understands the nature of the wax not through his imagination (or senses) but just through his intellect (M2, AT 7:30).⁶

Recall these four examples of intuition from Rule 3:

Thus everyone can mentally intuit *that he exists, that he is thinking, that a triangle is bounded by just three lines, and a sphere by a single surface*, and the like. Perceptions such as these are more numerous than people realize, disdaining as they do to turn their minds to such simple matters.

(AT 10:369)

The last two examples – axioms of geometry – are necessary truths or ‘eternal truths’, as Descartes would say. Call these *modal intuitions*. Necessary truths grasped through modal intuition include truths concerning the nature or

⁶Another example is in Meditation Six, where Descartes contrasts his distinct understanding of a chiliagon (as a thousand-sided figure) with his confused mental image of a chiliagon (AT 7:72).

essence of things, the axioms of logic, mathematics, and metaphysics, and the entailment relations in deductive inferences.

The first two examples above – *I exist* and *I am thinking* – are contingent propositions about one's self and one's thoughts. Call these *introspective intuitions*. In later works, Descartes claims to be certain of having various specific thoughts – I am doubting; I seem to see a piece of wax; I think I am walking; I think I am breathing, etc. – and these cases also exemplify introspective intuitions. To introspect or 'reflect' (*reflectere*) is a higher-order perception of one's own mind or thoughts, an act of looking inward (AT 5:149; AT 3:357). Insofar as we regard introspection as an empirical mode of awareness, we may be surprised that Descartes counts (certain instances of) introspection as intuitions. But in his view, introspection is always intellectual, even when the lower-order thoughts you are introspecting are sensory or imaginative (AT 3:357; AT 5:221). Introspection does not always count as intuition, for Descartes, but it does when it meets the pivotal requirement of being clear and distinct.⁷

(c) *Clear and distinct*

Intuition, for Descartes, is a form of clear and distinct perception – and deduction is too. This point clashes with a certain trend of scholarship. Some commentators contend that Descartes employs 'intuition' and 'deduction' only in his early work, the *Rules*, which he began in 1619 but never finished or published.⁸ These commentators also claim that in later writings such as the *Discourse* (1637), the *Meditations* (1641), and the *Principles* (1644), Descartes drops 'intuition' and 'deduction' and replaces them with a new notion: 'clear and distinct perception'. It is not always clear whether these scholars are alleging that Descartes merely changed his terminology or that he substantially changed his views.⁹ Either way, there is in fact no discontinuity on this score.

⁷For a bit more on this point, see footnote 15 below.

⁸The dating of the *Rules* is in question. Descartes worked on it intermittently in the 1620's, and, until recently, historians generally agreed that he abandoned it around 1628 (Weber, *La Constitution*, 194–207; Schuster, *Mathesis Universalis*; "Cartesian Method"; *Descartes-Agonistes*, 307–49). However, due to the recent discovery of what appears to be an earlier draft of the *Rules* (forthcoming care of Edwards and Serjeantson), some historians now suggest that the version we've all been working with is one that Descartes continued to revise later (Garber, "Discussion", 5–6; Dika, "Origins", 336), perhaps as late as 1635 (K. Smith, "Life and Works", §2) when he was already composing the *Discourse*. If that is right, then it's even less surprising that the *Rules* is continuous with later works in the ways I suggest. And the remaining discontinuities (see §3 below) may still explain why he set that work aside.

⁹Evert van Leeuwen asserts that while "intuition plays a crucial role in the *Regulae* [...] it is completely missing in [...] the *Discourse*" (*Method*, 231). Edwin Curley says the "the phrase 'clear and distinct' occurs only rarely in the *Regulae* and then not in the statement of a criterion of truth" (*Skeptics*, 37); and he cites Kemp Smith (*New Studies*, 55–60) with approval for claiming that Descartes ceases to use 'intuition' after the *Rules*. Regarding terminology, Daniel Garber says "the 'intuition' of the *Rules* is later called 'clear and distinct perception'" (*Descartes' Metaphysical Physics*, 56, my italics), implying that the latter terminology is not in the *Rules*, though he acknowledges that "Descartes

As a matter of terminology, Descartes employs all of these terms – ‘intuition’, ‘deduction’, and ‘clear and distinct perception’ – throughout his career. He uses them with different frequency at different times, but that is just as well because – as a matter of substance – the relation between them is perfectly straightforward: *intuition and deduction are both forms of clear and distinct perception.*

We saw this point begin to emerge when Descartes introduces intuition in Rule 3 as

... the conception of a [c] **clear** and attentive mind, which is so easy and **distinct** that there can be no room for doubt about what we are *understanding*. Alternatively, and this comes to the same thing, intuition is the indubitable conception of a [c] **clear** and attentive mind ...

(AT 10:369[†])

Admittedly, as a point of grammar, Descartes uses ‘clear’ (*pura*) in this bit of text to qualify the ‘mind’, not the perception (or ‘conception’). But this does not mean the perception is not clear. The mind is always in some state or another, and so the only way for the mind to be clear is for it to be in a state which is clear. The state in question here is an intuition, so if the mind is clear while it has this intuition, then the intuition itself must also be clear. Further, as far as grammar is concerned, Descartes uses ‘distinct’ (*distincte*) – the close cousin of ‘clear’ – to qualify the perception, not the mind, even within this passage. A few lines down, he remarks on what we “clearly intuit” (*perspicue intuitentis*) and on the “evidentness” of intuition, where *evidentia* is another term for intuitive clarity (de Buzon and Kambouchner, *Le dictionnaire*, 61). And throughout the *Rules*, he uses Latin terms for ‘clear’ (*clarus*, *perspicuus*) over 25 times and *distincte* over 40 times to describe intuitions and deductions alike. This is in fact “the first thing required for mental intuition: the proposition intuited must be **clear and distinct**” (Rule 11, AT 10:407[†]). Indeed, Descartes says he designed the *Rules* in order help readers “acquire the habit of intuiting the truth **distinctly and clearly**” (Rule 9, AT 10:400–1[†]).

Both forms of clear and distinct perception are still hard at work in the later writings. In a letter dated 1648, Descartes invokes his *cogito* argument – “I am thinking, therefore I am” – to illustrate “intuitive grasp [*la connaissance intuitive*]” (To [Silhon], March or April 1648, AT 5:138*). When you use the *cogito* argument, he says in the Second Replies, you grasp your existence through

does, on occasion, use his earlier terminology [of ‘intuition’] in his later writings, suggesting that it has not been entirely superseded” (325 n. 46). Regarding Descartes’ substantive view, Garber grants that throughout the corpus “we are dealing with the immediate grasp of a truth by a mind appropriately clear of bias and prejudice”, but he also asserts that there are “important differences between intuitions and deductions on the one hand, and clear and distinct perceptions on the other” (326 n. 46; see also Garber, “Science and Certainty”, 119).

“a simple intuition of the mind [*mentis intuitu*]” (20/R, AT 7:140). Many of his other references to intuition are lost in the standard translation (CSM) which often renders *intuitus* as ‘vision’ (e.g. AT 2:599) and *intueri* as ‘see’ (e.g. AT 7:36).

Further, Descartes has many ways of invoking intuition without using that term. When he intuits a truth, he calls it a “first principle” or “axiom”, or says it is “evident” (*evidens*) or “known by itself” (*per se notum*) – terms that are rife throughout the corpus. In a letter of 1639 Descartes speaks interchangeably of “the natural light or mental intuition [*la lumière naturelle ou intuitus mentis*]” (To Mersenne, 13 November 1639, AT 2:599), just as he does in the *Rules*, so he is plainly reporting an intuition whenever he proclaims that something is “manifest by the natural light”. He does this with exasperating regularity, playing the ‘light’ card for everything from the freedom of the will to the causal axioms of Meditation Three. So, under various guises, Descartes appeals to intuition pervasively in later works.

(d) Synchronic

Recall the following statement from Rule 11:

Two things are required for mental intuition: first, the proposition intuited must be [c] **clear and distinct**; second, the whole proposition must be understood [d] **all at once** [*tota simul*], and not bit by bit.

(AT 10:407[†])

In the first clause, Descartes identifies the genus that is clear and distinct perception of which intuition and deduction are two forms. In the second clause, he says that intuition is differentiated by presenting its content “all at once”, or *synchronically*.

Deduction is differentiated by presenting *an argument*, such that when you have a deduction you are “inferring one thing from another”, inferring the conclusion of the argument from its premise or set or premises. As he puts it in Rule 3, “By ‘deduction’ we mean the inference of something as following necessarily from some other propositions which are known with certainty” (AT 10: 369). Then he gives a simple example:

$$1 + 3 = 4$$

$$2 + 2 = 4$$

Therefore,

$$2 + 2 = 3 + 1$$

When you perform this deduction, Descartes explains, you intuit each of the premises, you intuit the fact that the conclusion “follows necessarily from”

these premises, and you thereby gain a clear and distinct perception of the conclusion. So a deduction comprises multiple intuitions.

Furthermore, contrary to what many scholars have assumed, a deduction itself can be an intuition. The *cogito* argument – ‘I am thinking, therefore I am’ – is a case in point.¹⁰ It is an argument – the use of ‘therefore’ (*ergo/ donc*) plainly indicates that *I exist* is to be inferred from *I am thinking* – so it is grasped through deduction. But with only one inference, the argument is short enough to be grasped all at once, synchronically, so it also grasped through intuition – through an intuitive deduction. This dissolves the old puzzle, over which so much ink has been spilled, as to whether the *cogito* is seen through intuition or deduction. It is both (see Markie, “The Cogito”). The puzzle was based on a false dichotomy.

With longer arguments involving multiple inferences, however, you typically cannot grasp the whole argument at once, at least not initially, and so you have to hold earlier steps memory while you turn your attention to later steps one after another, diachronically. In this case, the act of deduction is not an intuition, and Descartes sometimes calls it “enumeration” (*enumeratio*) (Rule 7, AT 10:388) to emphasize that it involves a *number* of inferences transpiring successively rather than a single inference performed all at once.¹¹ He grants that such longer deductions, or enumerations, are less certain than intuition to the extent that they involve memory, which is not a form of clear and distinct perception and which is “weak and unstable”. So he prescribes a remedy: “That is why it is necessary that I run over them again and again in my mind until I can pass from the first to the last so quickly that memory is left with practically no role to play, and I seem to be intuiting the whole thing at once” (Rule 11, AT 10:408–9; see Pasnau, *After Certainty*, ch. 5). Through repeated practice, you can learn to grasp a long argument synchronically, turning it into an intuitive deduction.

In later work, the same point is illustrated in Meditation Three, for example, where the meditator follows a complex argument to deduce God’s existence from her own existence.¹² She initially pieces the argument together diachronically, through enumeration. But then she recaps the entire argument in the penultimate paragraph of the meditation, and the text suggests that she dutifully rehearses it until she is able to comprehend it at a glance. That is why she can then end the meditation, in the next and final paragraph, with her poetic, almost prayerful intonation of intuiting God: “I should like to pause here to spend some time in contemplation of God; to reflect on his attributes; to

¹⁰This argument first appears in the *Discourse*. It does not appear in the *Rules*, where, as we saw, *I exist* and *I am thinking* are each listed as objects of intuition, in that order, with no ‘therefore’ between them.

¹¹This is not Descartes’ only use of the term ‘*enumeratio*’; for other uses, see Dika, “Descartes’ Method”, §2.4; and Dika and Kambouchner, “Descartes’ Method”.

¹²I am simplifying here. For an illuminating exposition, see Schechtman, “Descartes’ Argument”.

intuit, to admire, to adore [*intueri*, *admirari*, *adorare*] the beauty of this immense light" (AT 7:52*). She is still deducing God's existence from her own, but through rehearsal, enumeration has been replaced with intuitive deduction.

In Meditation Five, the meditator progresses even further as she learns to intuit God's existence directly, without having to deduce it at all. By reflecting on the very essence or nature of God, she comes to intuit that it is impossible for God not to exist, just as she can intuit that it is impossible for there to be a mountain without a valley (or a convex curve without a concave curve). The relevant passage (AT 7:64–70) is often called Descartes' 'ontological argument' but, as Nolan ("Ontological Argument") explains, it isn't an argument so much as a spelling out of something the meditator comes to see intuitively. Recapping this passage later, Descartes says that if people reflect properly on the nature of God,

this alone, without a train of reasoning [*discursu*], will make them realize that God exists; and this will eventually be just as self-evident [*per se notum*] to them as the fact that the number two is even or that three is odd, and so on.
(AT 7:163–4)

People normally fail to intuit God's existence, but that is only because their idea of God is confused with various preconceived opinions. After the preparatory work of the preceding meditations, Descartes thinks, the meditator is finally in a position to overcome those confusions such that she can intuit God's existence directly.

2. What intuition does

(e) *Indubitable*

Recall, once again, this bit of Rule 3:

Intuition is ... the conception of a clear and attentive mind, which is so easy and distinct that [e] there can be **no room for doubt** about what we are understanding. Alternatively, and this comes to the same thing, intuition is the [e] **indubitable** conception of a clear and attentive mind ...

(AT 10:368)

Because intuition is clear and distinct, it is (e) indubitable.

The same claim reappears in later texts, with a temporal qualification: "[M]y nature is such that **so long as** I perceive something very clearly and distinctly I *cannot but believe* it to be true" (M5, AT 7:69[†]); "we cannot help assenting to things ... **during the time** they are clearly and distinctly understood" (To Regius, 24 May 1640, AT 3:64[†]; see also AT 7:38, 65). I will explain why Descartes adds this temporal caveat below in §3.

Part of what Descartes means in these statements is that clear and distinct perception is psychologically indubitable: for as long as you perceive

p clearly and distinctly, you are irresistibly impelled to assent to *p*; you are unable to doubt or withhold assent. But clear and distinct perception does not cause assent by brute force, without providing a normative reason for assent. Descartes tells Mersenne that a perception can provide *titre* for assent – where ‘*titre*’ is a normative term meaning ‘entitlement’, ‘authorization’, ‘justification’, or, as CSM renders it, “warrant” (13 November 1639, AT 2:598). You have justification or warrant to assent to your perception to the extent that it gives you a normative reason to assent to it. In Meditation Four, Descartes says that we “should” assent to clear and distinct perceptions and that we use our will “properly” (*recte/ comme il faut*) when we do. Indeed, he says, it would be “irrational ... to doubt something which is ... manifest by the very light of nature” (20/R, AT 7:134) – we cannot doubt it rationally. So when a perception is clear and distinct (whether intuition or deduction) it is (e1) rationally indubitable as well as (e2) psychologically indubitable.

(f) *Infallible*

Intuition and deduction are infallible. Recall that Descartes introduces the pair in Rule 3 as “the only two actions of the intellect by means of which we are able to arrive at knowledge of things with *no fear of being mistaken*” (AT 10:368). Since intuition and deduction are forms of clear and distinct perception, this amounts to the same claim he makes in later works when he asserts that clear and distinct perception is infallible: “Everything which I clearly and distinctly perceive is of necessity true” (M5, AT 7:70). Descartes describes this as a “general rule” (M3, AT 7:35) and commentators refer to it as “the Truth Rule”.¹³

(g) *Provides grasp (cognitio)*

When you assent to a proposition which you clearly and distinctly perceive, you thereby know that proposition to be true. More precisely, you enjoy a grade of knowledge which Descartes calls *cognitio*, which I render as ‘grasp’. Insofar as what we call ‘knowledge’ can have a fallible basis, *cognitio* seems to be more rarified: it is an occurrent mental event, characterized by certainty, whereby you are consciously locking onto some bit of reality – capturing, apprehending, or grasping some truth.¹⁴

¹³The Truth Rule is neutral on the metaphysics of truth, or what truth consists in. Descartes’ view, however, is that the truth of a thought consists in “the conformity of a thought with its object” (AT 2:597*). For an extensive study of what this means, see Olivo (*Descartes et l’essence*).

¹⁴This coheres with recent work by Maria Rosa Antognazza, who characterizes a kind of knowledge countenanced by Descartes and many other past philosophers in which there is a “mental ‘grasping’ or ‘seeing’ the object of cognition with no gap between knower and known” (Antognazza, “Distinction

Recall that in Rule 3, Descartes introduces his two forms of clear and distinct perception, intuition along with deduction, as “the only two ... means by which we can come to grasp [*cognitionem*] things” (AT 10:368*[†]). In later work, he reaffirms that clear and distinct perception is necessary for grasping truths with certainty: “A perception which can serve as the basis for a certain and indubitable judgement needs to be not merely clear but also distinct” (*Pr.* i.44, AT 8A:21–2; see also AT 7:145, 146). And he reiterates further that when you assent to clear and distinct perception, as you must, this is sufficient for grasp. The authors of the *Second Set of Objections to the Meditations* suppose otherwise when they read Descartes as holding that one must grasp God in order to grasp anything else. In reply, Descartes explains that this is a *misreading*:

The fact that an atheist can ‘clearly grasp [*clare cognoscere*] that the three angles of a triangle are equal to two right angles’ is something I do not dispute ...
(2O/R, AT 7:141*)

Even if you are an atheist, you can still perceive truths clearly and distinctly, you cannot help but rationally assent to them when you do, and the judgements you thereby form are states of grasping or having *cognitio* of those truths. As Descartes goes on to explain, however, assenting to clear and distinct perception is not sufficient for the highest form of knowledge, *scientia*, which, at least in Descartes’ later work, does require grasping God – a point we will return to momentarily.

Thus far, I have cited evidence from the *Rules* and later works in parallel to show that – throughout his career – Descartes continuously maintains an approach I will call ‘Clarity First’, which includes his view of the nature and function of intuition:

Clarity First (partial formulation)

Clear and distinct perception (in the strict sense) comes in two forms – intuition and deduction – and because it is clear and distinct, it is (e1) rationally indubitable, (e2) psychologically indubitable, (f) infallible, and thus (g) provides grasp (*cognitio*).

I will expand on this view below in §5, where it will become clear why I call it ‘Clarity First’. Perhaps one reason some scholars have denied that Descartes maintains this view consistently is because they have not distinguished it from the surrounding ways in which his thinking evolves.

3. Differences between the *Rules* and later works

For starters, the early Descartes seems more dogmatic than the later one. There is no scepticism in the *Rules*. He indicates that sense-perception and

in *Kind*, 280; see also Antognazza, “Benefit to Philosophy” and *Thinking with Assent*; and Ayers and Antognazza, “Knowledge and Belief”.

imagination are fallible, but he does not employ any sceptical arguments to demonstrate as much. Meanwhile, he announces that clear and distinct intellection – whether intuition or deduction – is *infallible*, but he does not subject this claim to sceptical scrutiny or offer any argument to defend it.

However, he was writing at a time when many intellectuals saw scepticism as a force to reckon with (Popkin, *History of Scepticism*), and some scholars speculate that it was at least partly because he began to take scepticism seriously in the 1620s that he ultimately ditched the *Rules* (Curley, *Skeptics*, 35–6). The next time he writes a work on method, his *Discourse on the Method* (1637), he not only confronts scepticism but incorporates it into his method. This new “method of universal doubt” (AT 7:203) comes into full maturity in the *Meditations* (1641), where he is most explicit that scepticism can undermine *all* beliefs, even ones that were formed on the basis of clear and distinct perception.

When Descartes comes to engage with universal doubt, he revises some of his views. Three of these changes might respectively make it seem that while the intuitions and deductions of the *Rules* secure (e) indubitability, (f) infallibility, and (g) *cognitio*, the clear and distinct perceptions of the later works do not. But let’s look closely.

First, as I noted earlier, the mature Descartes adds a temporal caveat to his claims of indubitability. You cannot doubt a proposition, *p*, “during the time” or “so long as” you perceive *p* clearly and distinctly (AT 3:64; AT 7: 38, 65, 69). Unless you have *scientia*, however, you can doubt *p* later, when you no longer have a clear and distinct perception but merely remember having one. Looking back, it can seem possible that a deceiving God made you in such a way that even your clear and distinct perceptions are fallible (AT 7:25, 69–70; see Della Rocca, “Cartesian Circle”). Countenancing such retrospective doubt does not force Descartes to give up on the indubitability of clear and distinct perception *when someone is having one*.

Second, having raised the sceptical hypothesis that clear and distinct perception is fallible, Descartes must now refute it. He tries to do so in *Meditations* Three and Four, where he argues that God cannot, in fact, be a deceiver, and that God must therefore guarantee that all clear and distinct perceptions are true (the Truth Rule). Descartes had always been committed to the Truth Rule; it’s just that he comes to develop an argument for it instead of declaring it dogmatically as he did in the *Rules*.

Third, he makes grasping this new argument a requirement for *scientia*. Throughout, Descartes maintains the view, expressed in the *Rules*, that “all *scientia* is certain and evident *cognitio*” which is “incapable of being doubted” (AT 10:362). However, he does not say that *scientia* requires grasping God in the *Rules*, whereas in later works he does, because it is only by grasping God that we can fend off retrospective doubt. Here, more fully, is the passage I cited earlier from the Second Replies:

The fact that an atheist can “clearly grasp [*clare cognoscere*] that the three angles of a triangle are equal to two right angles” is something I do not dispute. But I maintain that this grasp of [the atheist] is not true *scientia*, since no act of grasping that can be rendered doubtful seems fit to be called *scientia*. Now since we are supposing that this individual is an atheist, he cannot be certain that he is not being deceived on matters which seem to him to be very evident (as I fully explained). And although this doubt may not occur to him, it can still crop up if someone else raises the point or if he looks into the matter himself. So he will never be free of this doubt until he acknowledges that God exists.

(20/R, AT 7:141*)

Descartes does not rescind his claim that clear and distinct perception provides *cognitio*. He just adds a new requirement for progressing beyond *cognitio* to *scientia*.

In sum, when Descartes comes to confront scepticism in his mature works – culminating with the apparent possibility of a deceiving God – it forces him to do three new things: to devise an argument which appeals to God to prove the infallibility of clear and distinct perception, to note that indubitability is temporary without grasping God, and to make grasping God a requirement for *scientia*. All these changes are compatible with the Clarity First doctrine he maintains, including his view that intuition is a form of perception which is clear and distinct and which therefore delivers the cognitive goods identified above.¹⁵

With Descartes’ theory of intuition now in view, let us consider how he compares to his Scholastic predecessors.

4. Looking backward: scholastic intuition

In Rule 3, after giving his characterization and examples of intuition, Descartes warns that his use of *intuitus* and related terms is “novel”, and that “he is paying no attention to the way these terms have lately been used in the Schools” (AT 10:369). In her excellent book, *Anges et bienheureux* (Chapter 3, §2), Emanuela Scribano explains that two conceptions of intuition were prominent in late Scholasticism, one due to Thomas Aquinas, and the other to Duns Scotus.¹⁶ Like Descartes, both of them associate intuition

¹⁵Another change concerns Descartes’ method as he comes to view “doubt as a *means* of acquiring a clearer knowledge of the truth” (50/R, AT 7:203–5), specifically in metaphysics, beginning with his “first principle”, the *cogito*, which requires us to introspect our own minds clearly and distinctly. I argue elsewhere that, in his mature work, he holds that although introspection is often very clear it ordinarily isn’t distinct because it is confused with sensory perceptions. To make introspection distinct, we need to “sharply separate” it from all sensory perceptions, and the way to do that is by *doubting* all sensory perceptions (Paul, “Descartes’ Anti-Transparency”). This change, too, is compatible with the Clarity First view of intuition.

¹⁶Alanen and Yrjönsuuri (“Intuition, Judgement”; see also Alanen “Intuition”) are on the right track with one strand of the history when they juxtapose Descartes with a figure from the Scotist tradition, though it is unclear why they single out Ockham.

with certainty, but unlike Descartes, they both countenance sensory intuition, albeit for different reasons.

Aquinas contrasts *intuitus* with *discursus* or inferential reasoning.¹⁷ Moreover, he says the object of intuition must, in some way or another, be “present to the mind”. He countenances three forms of *intuitus*:

- (i) intellectual “vision of God” enjoyed by the blessed in the afterlife,
- (ii) intellectual apprehension of first principles (basic necessary truths) concerning abstract matters, and
- (iii) sensory perception of physical objects.¹⁸

In all three cases, the subject in question enjoys a non-inferential form of awareness wherein the object – God, a first principle, or a sensible object – is present to the mind. Aquinas seems to be referring to representational presence here: something is present to the mind when it is the object of any mental state, when it is represented by the mind “in any way [quocumque modo]”.¹⁹ One problem for Aquinas is that this notion of presence is too weak to differentiate intuition. After all, it is trivially true that the object of any mental state is represented by that state, even when it is obscure or unclear, in which case one could hardly enjoy the kind of certainty that Aquinas thinks is characteristic of intuition. Henry of Ghent may be seen as taking a step toward redressing this problem when he introduces a new notion of presence which he equates with clarity: when you have a clear grasp of something, that thing is clear to you or, in other words, present to you.²⁰ It is a tricky question what Henry means when he speaks, interchangeably, of what is “present” or “clear”.

What matters for our purposes, however, is that Scotus adopts Henry’s equation between presence and clarity, and goes further by construing this notion in causal terms as he uses it to define intuition, or what he calls

¹⁷This contrast is preserved in the standard late Scholastic distinction between three mental operations: (i) simple intuition (*simplex intuitus*), (ii) judgement, and (iii) reasoning (*discursus*) by which we infer other things (*aliud inferimus*). This tripartite division is found in many seventeenth-century textbooks, including Eustachius’ *Summa* (Part I, Preface, p. 163), first published in 1609, which Descartes commends as “the best of its type ever produced” (AT 3:232). As noted above in §1, Descartes denies that *intuitus* and *discursus* (or *deductio*) are mutually exclusive, because, in his view, a *deductio* is made up of multiple *intuitus*, and moreover a *deductio* itself can be a (complex) *intuitus*, in the case where a subject grasps an argument all at once.

¹⁸See, e.g., (i) *De Veritate*, q10, a11, c; *Summa Theologica* q101, a2, c; (ii) *De Veritate*, q9, a15c; (iii) *De Veritate*, q10, a8.2 – qtd. in Scribano, *Anges*, ch. 3, n. 72, 73, 74.

¹⁹“Intellection is said to be nothing other than intuition, because it is nothing other than intelligible presence to the mind in any way” [Intelligere nihil aliud dicit quam intuitum, quia nihil aliud est, quam praesentia intelligibilis ad intellectum quocumque modo] (Commentary on the Sentences, I, 3, q4, a5, c*; Latin qtd. by Marion in Descartes, *Règles*, 125).

²⁰“Now because visual grasp itself is of the clear presence of a thing in itself, it suffers no obscurity in itself, but is completely clear and perfect [De cognitione autem visionis, quia ipsa propter rei praesentiam claram in seipsa, nulla in se patitur obscuritatem, sed est omnino clara et perfecta]” (*Summa*, a. XIII, q7; vol. I, p. 96 – Latin qtd. by Scribano, *Anges*, ch. 3, n16).

“intuitive cognition” (*notitia intuitiva*). For Scotus, intuitive cognition is non-inferential and involves the *causal presence* of its object: when you intuit something, that very thing is what causes you to see it. Only existing things have causal power, and so Scotus builds existence into his definition when he says that intuitive cognition is “of a thing insofar as it is *present in its existence*” (*Lectura* II, dn3). Only two of Aquinas’s objects of intuition satisfy Scotus’ causal requirement: God and sensible objects. Both of these are used to illustrate the Scotist theory in late Scholastic texts, including the Coimbrian commentaries (*De Anima* 2, 3, 6, 1; Latin qtd. in Gilson’s *Index*, §87), which Descartes says he was assigned to read in school (AT 3:185). The vision of God is intuitive because God causes the blessed to see God “face to face” (citing St. Paul). Sense-perception is intuitive when, in the example reported by the Coimbrians, the white wall causes you to see the white wall. In contrast, abstract necessary truths are causally inert, so they cannot be clear and cannot be intuited, for Scotus, as they can for Aquinas and Descartes. Instead, Scotus holds, necessary truths are grasped through “abstractive cognition” (*notitia abstractiva*), which abstracts from, or is indifferent to, whether or not its object is causally present.²¹

As we will now see, Descartes also says links clarity with presence but, unlike Scotus, he does not mean causal presence.

5. Descartes’ presentationalism

Descartes says that intuition is “clear and distinct” – but what does that mean?²² The only place where Descartes explicitly answers this question is in *Principles* i.45. Beginning with the former term, he writes:

I call something ‘clear’ when it is **present** and open <Fr. manifest> to the attentive mind – just as we say that we see something clearly when, being **present** to the eye’s gaze, it strikes it with enough force and openness. [*Claram voco illam, quae menti attendenti praesens & aperta <Fr. manifeste> est: sicut ea clarè à nobis videri dicimus, quae, oculo intuenti praesentia, satis fortiter & apertè illum movent.*] (AT 8A:22*†)

Clarity is *presentationality* – the quality you experience when something is not merely represented by your perception, but is presented to you, or strikes you, as true. This is a phenomenal quality, a matter of what it is like, or how it feels, when you perceive things clearly.

Like many philosophers, Descartes holds that phenomenal qualities are *primitive* or unanalyzable in the sense that they cannot be defined in terms

²¹Alanen and Yrjönsuuri (“Intuition, Judgement”) are on the right track in juxtaposing Descartes with a figure from the Scotist tradition, though it is unclear why they single out Ockham.

²²I develop the following reading of clarity and distinctness at length in other work (Paul, “Cartesian Clarity”).

of other, more basic qualities. The only way to understand what it is like to see a certain colour, for example, is to experience examples of that colour for yourself – a point Descartes himself illustrates with the colour white.²³ Since clarity is a phenomenal quality, it, too, is primitive. That is why, even in the characterization above, Descartes never attempts to define clarity by analyzing it. Instead, he *points* to clarity, partly by using equivalent terms by which we might recognize it. In the text above, he uses ‘open’ and ‘manifest’ (*aperta, manifeste*) as synonyms for ‘clear’ (*clarus*). In other texts, when something is completely clear he says it is ‘perspicuous’ (*perspicuus*) or, specifically for intuition, ‘evident’ (*evidens*) (AT 10:369–70, 408). In addition, the terms ‘lively and vivid’ (*vives & expresse*) refer to (relatively weaker) imagistic clarity in the senses and imagination (AT 6:38; AT 8A:34; AT 7:75).

The term boldfaced above – ‘present’ (*praesens*) – deserves closer inspection. It occurs twice: once in the first clause where Descartes characterizes intellectual clarity, and again in the second clause where he describes sensory clarity by comparison.

In the second clause, he adverts to the familiar situation in which a physical object is, in Scotus’ sense, *casually present* to the observer – “present to the eye’s gaze” such that it “strikes it [the eye] with enough force and openness”. But for Descartes, unlike Scotus, causal presence does not constitute clarity. In his view, the causal presence of an object is not sufficient for clarity (because even if an object is causing you to see it, you can fail to see it clearly if your vision is impaired or you are not paying attention, etc.). Nor is it necessary (because the brain can generate clear, vivid, lively images even of non-existent objects, as it sometimes does in dreams). He invokes causal presence here not because it is constitutive of clarity, but because it is a typical cause of clear sensory perception, and identifying this cause is a way of pointing to its effect, a way of getting readers to notice which of their sensory perceptions are (to some degree) clear.

In the first clause, where Descartes is concerned with intellectual clarity, he cannot be referring to causal presence at all when he says that what is clear is “present and open <Fr. manifest> to the attentive mind”. Two viable alternatives are consistent with my reading. He could mean that the object is *representationally present*, in Aquinas’ sense, which is to say, in Descartes’ lingo, that the object is perceived. As I noted earlier, it is trivially true that the object of any perception is perceived, even if it is obscure or unclear. So if ‘present’ just means ‘perceived’ here, then Descartes is saying that what is clear is present and is *moreover* open/manifest (i.e. clear) to the attentive mind.

²³“Thus it would be pointless trying to define, for someone totally blind, what it is to be white: in order to know what white is, all that is needed is to have one’s eyes open and to see white” (*Search*, AT 10:524).

It seems to me, however, that, like Scotus, Descartes' usage here follows Henry of Ghent's equation between 'present' and 'clear', except that instead of construing that notion causally, he construes it phenomenally. On this reading, he is saying that the object must be *phenomenally present* in the sense of being clear, so he is using '*praesens*' just like '*aperta/manifeste*' as another synonym for '*clarus*', as another part of his strategy of pointing to clarity by means of equivalent terms. Readers who are not convinced may revert to Aquinas' notion of presence instead. The point remains that, for Descartes, something is clear to you to the extent that it strikes you, or is presented to you, as true, even if he does not himself use the term '*praesens*' to denote that presentational quality.

In keeping with the primitive nature of clarity, Descartes says the difference between clarity and its opposite, obscurity, is to be "learned by examples rather than by rules" or formal definitions (2O/R, Geometrical Appendix, AT 7:164). So let's consider examples.

Start with visual experience. If you're looking at a deer from far away, it may be obscure to you that it's a deer. When you get closer, it may then become clear to you that it's a deer. There is something it's like to see the deer clearly, a quality which is absent when you see it only obscurely. The more clearly you see that it's a deer, the more strongly it is *presented* to you as true – it strikes you as true; it seems, feels, or appears to be true – that it's a deer.

Now for intellection. The only propositions that can be completely clear to the pure intellect are truths, according to Descartes, and the relevant truths range across mathematics, logic, and metaphysics. It is especially useful to consider a case where a truth *becomes clear* to you after being obscure to you at first:

The sum of the numbers 1, 2, and 3 is equal to their product.

This proposition should become clear to you through a simple deduction:

$$1 + 2 + 3 = 6$$

$$1 \times 2 \times 3 = 6$$

$$\text{Therefore, } 1 + 2 + 3 = 1 \times 2 \times 3$$

When the targeted proposition becomes clear to you, it goes from being a proposition you are merely considering to one that is presented to you, or strikes you, as true. Notice what it's like when that happens. It's like the truth gets *illuminated*. That is why Descartes describes intellectual clarity as "a light in the intellect" (3O/R, AT 7:192).

All three kinds of perception – sense-perception, imagination, and intellection – can vary in degrees of clarity. The more clearly you perceive something, the more strongly it strikes you as true – and, consequently, the more strongly you are inclined to assent to it as being true. Sense-perception can be very clear, but it can never be completely clear. As Descartes tries

to show with his method of doubt, even when a sense-perception is as clear as it can be, it is dubitable: you can withhold assent from it (at least if you have sufficient reason for doubt). Sensory clarity is also fallible: what it presents as true may in fact be false. So, in the case of sense-perception, at least, clarity need not involve the presentation of actual truth or reality.

By contrast, intellection can be completely clear, and when it is, it is infallible: what it presents as true is always some truth, some bit of reality. Completely clear intellection is a *factive* mental state, a state you can have only in relation to a fact.

What about distinctness? Continuing the passage above from *Principles* i.45, Descartes writes:

I call a perception 'distinct' when, as well as being **clear**, it is so sharply separated from all other perceptions that it contains within itself **only what is clear**. [*Distinctam autem illam, quæ, cum clara sit, ab omnibus aliis ita sejuncta est et præcisa, ut nihil plane aliud, quam quod clarum est, in se contineat.*]

(AT 8A:22[†])

Clarity is more fundamental. Distinctness is defined in terms of clarity. Moreover, distinctness is defined *negatively*, not as clarity combined with some additional feature, but as clarity *in the absence of* – 'sharply separated' or literally 'cut off' and 'separated' (*sejuncta et præcise*) from – anything unclear. Distinctness is simply the purest case of clarity, obtaining when a perception 'contains within itself *only what is clear*' – when it is wholly or completely clear. When they are used in their strict senses, then, the terms 'clear' and 'distinct' are synonyms, and the conjunction 'clear and distinct' is much like 'the one and only' – a literary device known as hendiadys in which redundancy is used for emphasis.

We have now uncovered further elements of Descartes' Clarity First framework. At its most abstract level, Clarity First has two planks: clarity is a *primitive* (indefinable) phenomenal quality, and clarity is *prior* to other qualities or properties in either of two ways, definitionally or explanatorily. Clarity is *definitionally* prior to the three other perceptual qualities Descartes identifies – obscurity, confusion, and distinctness – since each of these is defined in terms of clarity. *Obscurity* is the absence of clarity in a perception. *Confusion* is the condition whereby one perception is literally 'fused with' (*confusio*) another in a way that lessens its clarity. *Distinctness* is complete clarity. And from this last point, it follows that since intuition and deduction are forms of clear and distinct perception, they too are defined in terms of clarity. An *intuition* is a completely clear perception which is synchronic, presenting its content all at once. A *deduction* is a completely clear perception which presents an argument as a whole.

A further dimension of Clarity First says that clarity is prior in a different way – not definitionally but *explanatorily* – to cognitive goods. We have

already seen that a perception delivers the package of four goods associated with certainty – it is rationally indubitable, psychologically indubitable, infallible, and provides *cognitio* – when and because it is clear and distinct, that is, when and because it is completely clear. Clarity explains these four cognitive goods. More could be said about each of the relevant explanatory relations, but I want to zoom in on the first one, where clarity explains rational indubitability. When your perception is completely clear, it provides *reason* or justification for assent such that you rationally should assent, and it would be irrational to doubt. Thus, in the only place where Descartes identifies the thing that gives us reason for assent – in what I call *the Clear Reasons passage* from the Second Replies – the thing he names is nothing other than clarity:

We must distinguish between the subject-matter [*materiam*], or the thing itself which we assent to, and the formal reason [*ratio formalis*] which moves the will to give its assent: it is only in respect of the reason that transparent clarity is required [*sola ratione perspicuitatem requirimus*].

(20/R, 2:105/AT 7:147–8*)

Descartes contrasts the *content* or ‘subject-matter’ of a perception with the form of perception – namely clear perception – which provides a reason to assent to the content. Indeed, Descartes adds, “this formal reason **consists in** a certain inner light [*haec ratio formalis consistit in lumine quodam interno*]” (*Ibid.*); and, as he explains elsewhere, this “‘light in the intellect’ means transparent clarity of cognition” (30/R, AT 7:192). Mental illumination – clarity – is something over and above the content it shines upon, and what gives you reason to assent is not the content itself but the clarity with which you perceive it. Descartes does not even mention distinctness, because he does not need to: distinctness is just complete clarity, and the term he uses, ‘*perspicuitatem*’, is one that he reserves for complete clarity. Clarity, by its nature, is presentationality. So, clarity provides reasons because of its presentational nature. This is a version of what contemporary philosophers call ‘Presentationalism’. The basic idea is intuitive, and we can formulate it as follows:

Descartes’ Presentationalism

Because of the (presentational) nature of clarity, to the extent that you are perceiving *p* clearly (i.e. to the extent that *p* is presented to you as true) you thereby have reason to assent to *p*, and so you should assent to *p* – unless your reason for assent is defeated by reason for doubt.

Presentationalism implies that even if clear perceptions were fallible, or unreliable, or even false, they would still provide us with reasons to assent to whatever it is that you perceive clearly. They would do so because of the phenomenal nature of clarity itself – because, by its nature, clarity presents its content as true.

As I argue elsewhere (Paul, *Clarity First*), just as clarity comes in degrees, for Descartes, so too does the strength of the reasons it provides. Complete clarity – available only in intellection – provides *indefeasible* reasons for assent: For as long as you perceive *p* with complete clarity, you thereby have an *indefeasible* reason to assent to *p* – one that cannot be defeated by reasons for doubt – such that it is (e1) rationally indubitable. As we’ve seen it is also (e2) psychologically indubitable, (f) infallible, and (g) provides grasp or *cognitio*.

Clarity First also extends to weaker degrees of clarity – available in any kind of perception, sensory, imaginative, or intellectual – which deliver correspondingly weaker versions of the aforementioned goods. For as long as you perceive *p* with some weaker degree of clarity, you thereby have an accordingly weaker, *defeasible* reason to assent to *p* – a reason that may be defeated by reasons for doubt. At the end of Meditation One, for example, the meditator still has sensory perceptions which are very clear, and, accordingly, they still provide strong reasons to believe their contents concerning the physical world – reasons that make these contents “highly plausible” and “still *much more reasonable to believe than to deny*” (AT 7:22). Sensory perceptions are not completely clear, however, so the reasons they provide for assent can be defeated, and they *are* defeated, in this context, by “strong and powerful reasons for doubt”.

So even though weaker degrees of clarity are not rationally indubitable, they nevertheless (e1-) provide weaker, defeasible reasons for assent. Furthermore, Descartes indicates that although they are not psychologically indubitable, they (e2-) are to some degree persuasive, generating weaker, resistible *inclinations* to assent.²⁴ Although they are not infallible, they are generally (f-) *reliable* in representing truths – not truths concerning the “essential nature of bodies” (M6, AT 7:80), which is the preserve of the pure intellect, but truths about “what is beneficial or harmful” for our survival (M6, AT 7:83; see Simmons, “Sensory Perception”, 263–269, and Hatfield, “Sixth Meditation”). Although they do not deliver certain *cognitio* which is required in pure inquiry, they (g-) may provide “moral certainty”, which is sufficient for action and “the conduct of life” (AT 8A:327; see also AT 6:37–38). And arguably, if Descartes could have considered the question, he would grant that they often provide what we ordinarily call ‘knowledge’ in English today.

While Descartes is explicit that these weaker goods come through the senses which have weaker degrees of clarity, we’ll soon see that his theory implies that these goods are also furnished by the intellectual states that

²⁴Descartes uses the terms ‘*impetus*’ (AT 7:38) and ‘*propensionam*’ (AT 7:80) in Latin and ‘*inclination*’ (AT 9A:30) in French. For discussion see Beck (*Metaphysics*, 257–8) and especially Loeb (“Priority of Reason”, 13–14).

we call ‘intuitions’ in philosophy today, to the extent that they, too, exhibit weaker degrees of clarity.

6. Looking forward: the contemporary perceptual model of intuition

Intuition is a hot topic in contemporary philosophy. Philosophers across nearly every subfield describe cases (sometimes real but usually imagined thought experiments) ostensibly to elicit intuitions about whether the given case instantiates some property of interest: knowledge, justice, persistence through time, personal identity, art, etc. They treat the resulting intuitions as a priori data against which to measure competing theories. This occurs so frequently that some regard it as “our standard justificatory procedure” in “philosophy” (Bealer, “Incoherence”, 100). So it is not surprising that the last few decades have seen a groundswell of philosophical reflection on the nature and epistemic functions of intuition.

There is a virtual consensus among contemporary theorists that intuition is fallible. Some of them invoke Descartes for the opposing idea that intuition is infallible.²⁵ But we should be wary of equivocation. When Descartes gives his theory of what he calls ‘*intuitus*’ and current philosophers debate about what we call ‘intuition’, are they targeting the same thing? We cannot answer that question without a careful study of what mental phenomenon is targeted on each side, so I aim to make headway on that comparative study here. With the Descartes piece in place, let’s zero in on the relevant strand of current thought.

The tradition Descartes belongs to – one that goes back to Plato in treating intuition as akin to perception – was derided by critics throughout the half-last century.²⁶ But it has been making a comeback in recent years. One exemplary iteration of this resurgence is John Bengson’s essay, “The Intellectual Given” (2015), which lays out a thorough, finely honed defense of “the perceptual model of intuition”.²⁷ He grants that intuition differs from perceptual experience in certain ways. Nevertheless, he argues that there is an important similarity between them, in that they are both “presentational states, or presentations”.²⁸

²⁵See, e.g. Sosa, *Virtue Epistemology*, ch. 3. Bealer seems to have Descartes (and company) in view when he asserts that “the (early modern) infallibilist theory of intuition is incorrect” (“Intuition and Autonomy”, 202, his parentheses).

²⁶See, e.g. Wittgenstein (“Cause and Effect”, 417–9) and Hintikka (“Emperor”, 130–3).

²⁷Bengson expands on related themes in several articles, including “Grasping the Third Realm”.

²⁸Construed broadly, the perceptual model of intuition is a family of approaches which agree that intuition and perception share a distinctive phenomenal quality which confers reason or justification for belief. Members of the family characterize that quality differently. Berghofer (*Justificatory Force*, 38) agrees with Bengson that the relevant quality is presentationality, while others describe as a “seeming” or “appearance” (Bealer, “Incoherence”, 102; Pust, *Intuitions as Evidence*; Huemer, *Skepticism*; Brogaard, “Intuitions”; Dabbagh, “Intuiting”), or as a “push” (Koksvik, *Intuition*). Chudnoff (*Intuition*)

Presentations, for Bengson, are a special subclass of contentful mental states, ones which present their contents as true. Some contentful states do not present their content as true. If you merely consider, assume, pretend, guess, hope, or doubt that it's sunny, for example, then you are in a mental state which has as its content the proposition that it's sunny; but it wouldn't thereby be presented to you, or strike you, as true that it's sunny. By contrast, if you were to look out the window and have the visual experience that it's sunny, it *would* thereby be presented to you, or strike you, as true that it's sunny. Visual experience is presentational.

Compare intuition. If you merely consider, assume, pretend, guess, hope, or doubt the proposition, *1729 is the smallest number expressible as the sum of two positive cubes in two different ways*, then you are in a mental state which has that proposition as its content, but it wouldn't thereby be presented to you, or strike you, as true. By contrast, we are told, the prodigy Ramanujan saw the truth of this proposition intuitively, during which time it was presented to him, or struck him, as true (711, citing Hardy, *Ramanujan*, 12). Similarly, if you're like most people, when you consider Gettier's famous thought experiments in which a subject has justified belief which turns out to be true by luck, the proposition, *The subject lacks knowledge*, is one that intuitively strikes you, or is presented to you, as true (Gettier, "Justified True Belief"). Intuition, like visual experience, is presentational.

Like Cartesian clarity, Bengsonian presentationality is a phenomenal quality which is primitive in the sense that it cannot be defined or analyzed in terms of more basic properties. Instead of attempting to define presentationality, Bengson "explicates" it (p. 729), largely by way of examples. As we've seen, those examples suggest that intuition and visual experience are both presentations.

Spelling out the comparison in more detail, Bengson writes:

Perceptual experience [e.g. visual experience] and intuition ... bear a number of non-trivial similarities: both are **conscious, contentful**, non-factive, **gradable** ... **fundamentally non-voluntary [i.e. passive, receptive]**, compelling, rationalizing presentational states, or presentations—conscious states that present, rather than merely represent, things as being a certain way.

(724)

He holds further that perceptual experience and intuition are both "**non-doxastic**": "Intuition is neither a doxastic attitude, such as a belief or judgement, nor a mere tendency to form such an attitude" (708).

refers to it as "presentational phenomenology", but unlike Bengson and Descartes who regard it as a primitive quality which can be explicated but not analyzed (see below), Chudnoff proposes to analyze it into a pair of seemings with a certain structure. Bengson responds in "Review of Chudnoff".

Notice the five features boldfaced above: presentations are (i) contentful, (ii) conscious, (iii) non-doxastic, (iv) passive, and (v) gradable. As we saw earlier, these are precisely the five features Descartes uses to characterize *perceptiones*.

There are differences, however. Four of them are merely terminological. First, remember that Descartes uses the Latin and French terms '*perceptio*' and '*la perception*' much more broadly than we (and Bengson) use 'perception' today. Bengson argues that intuition is an intellectual or non-sensory mental state that is importantly *similar to* what he (and we) call 'perception' or 'perceptual experience' – terms he reserves for sensory states. In contrast, Descartes' '*perceptio*' covers all conscious mental representations – whether sensory, imaginative, or intellectual – and so, in his lingo, *intuitus* is not just similar to *perceptio*; it literally *is* a form of *perceptio*.

Second, Bengson argues that presentationality is built into the nature of what he (and we) call 'perceptions', so in his scheme there are no perceptions which are not presentations. In Descartes' usage, by contrast, there are many kinds of *perceptiones* (conscious mental states) which are not presentations, such as states of merely considering, assuming, pretending, guessing, hoping, or doubting.

Third, Descartes does not use any noun that corresponds to 'presentation', and instead of saying that a mental state is 'presentational', he says that its object is (phenomenally) 'present' (*praesens*/ *present*) – or in other words, 'clear' – to the mind. In his usage (the phenomenal sense of) '*praesens*' is a synonym for '*clarus*', and both are scalar terms: something can be more or less present/ clear to you. Somewhat differently, Bengson uses 'presentation' and 'presentational' as binary terms: a mental state is either presentational or it isn't. Even so, he grants that presentations are "gradable", and agrees with Descartes that things can be presented "more or less clearly, vividly, etc." (721). If this is more than a verbal difference, not much seems to turn on it.

Fourth, Bengson's (and our) use of the term 'intuition' is much more inclusive than Descartes' use of the term '*intuitus*'. As noted, Bengson holds, and I think we should agree, that what he (and we) call 'intuitions' can be more or less clear. But what we call an 'intuition' will count as an '*intuitus*' for Descartes only if it is completely clear.

Thus far, we've seen that Descartes and Bengson posit similar taxonomies of mental states, using terms in slightly different ways. Descartes' terminology is bolded in [Figure 1](#).

On this scheme, what we call 'intuition' is what Descartes would describe as a (synchronic) intellectual perception which is at least to some degree clear. What Descartes calls '*intuitus*' is a species of what we call 'intuition', differentiated by being completely clear. The substantive difference is that Bengson neither affirms nor denies the existence of *intuitus*. But even this

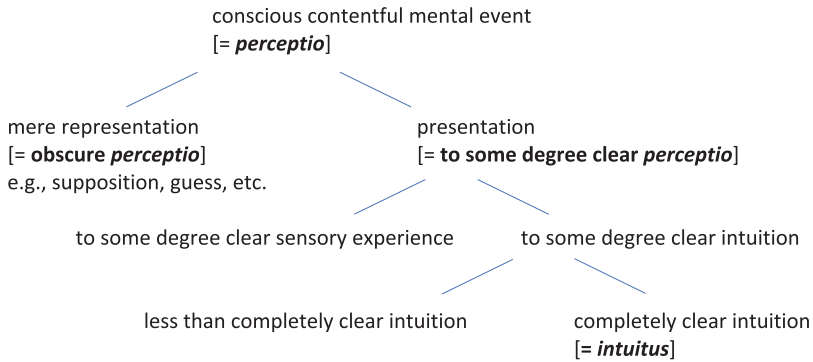


Figure 1.

difference needs to be understood against a background of substantive similarities.

Bengson and Descartes agree that there are mental states answering to all of the other categories above. Further, as they respectively treat *intuitus* as a kind of *perceptio* and intuition as quasi-perceptual, both approaches are set apart from competing views which classify intuitions as other kinds of states such as guesses or hunches (Parsons, “Platonism”, 59), beliefs (Lewis, *Philosophical Papers*, x), or dispositions to believe (Van Inwagen, “Materialism”, 309). And once we turn to weaker degrees of clarity, more comparisons emerge.

As noted above, part of Descartes’ Clarity First thesis says that to the extent that a perception is clear without being totally clear, it delivers weaker versions of the goods associated with certainty: (e1-) it provides defeasible reason for assent, (e2-) it is to some degree persuasive, (f-) it is to some degree reliable, (g-) and, if all goes well, it may provide ordinary knowledge. Sense-perception provides these weaker goods to the extent that it has weaker degrees of clarity – and Descartes’ theory implies the same outcomes when intellection exhibits weaker degrees of clarity. As a Rationalist, he insists that intellection differs from sense-perception in that the former can be fully clear while the latter cannot. But to the extent that intellection has weaker degrees of clarity – as we’ll see it often does in states that we call ‘intuitions’ – it is like sense-perception in providing these weaker goods.

Bengson concurs. Like Descartes, he holds that, by its very nature, presentationality provides reason or justification for assent. Thus he adopts a version of ‘Presentationalism’, which he formulates as follows: “Given the nature of presentations, so long as x lacks reason to question x’s presentation, then x has at least some *prima facie* justification for believing that things are the way they are presented as being” (741). He suggests further that “clear, vivid” intuitions and visual experiences provide “*more justification*” than

| Perceptual experience & (what we call) intuition | Descartes's <i>intuitus</i> |
|---|--|
| (c-) is to some degree clear | (c) is completely clear |
| (e1-) provides defeasible reason for assent | (e1) is rationally indubitable |
| (e2-) is to some degree persuasive | (e2) is psychologically indubitable |
| (f-) is to some degree reliable | (f) is infallible |
| (g-) may provide ordinary knowledge | (g) provides grasp (<i>cognitio</i>) |

Figure 2.

those which are “hazy or fuzzy” (743). The justification for assent provided by clear intuitions (for example, of simple axioms like the law of transitivity) and clear visual experiences (had in good lighting etc.) are accordingly less vulnerable to being defeated. But we are still dealing with “*prima facie* justification” or *defeasible* justification, meaning that – even during the time you have such a justification – it could in principle be defeated or outweighed by reasons for doubt. So Bengson holds that intuition (c-) may be clear to some degree, and (e1-) provide defeasible reason for assent. He holds further they are (e2-) to some degree persuasive or “compelling”; that they are (f-) to some degree reliable, presenting truths rather than falsehoods a good portion of the time; and that when all goes well – when the justification they provide is undefeated, when they are true, and when they are formed in a way that reliably connects them to truth – (g-) they can provide what we ordinarily call knowledge. Without denying the possibility of Cartesian *intuitus* (with its superlative clarity and superlative goods), Bengson affirms that weaker clarity and weaker goods can be found in presentations: intuitions and sensory experiences alike. Taking stock, see Figure 2.

Descartes and Bengson agree on everything in the first column.²⁹ Descartes goes further by defending the second column, on which Bengson remains silent.

There is a temptation (one that Bengson resists) to ridicule Descartes for the naive idea that intuition is infallible. But that overlooks the fact that his ‘*intuitus*’ is narrower than our ‘intuition’. Examples of false intuitions (in our sense) are no threat to Descartes. He has examples of his own. Various propositions may intellectually strike us as true although, in his view, they are false: that there can be empty space, that God might not exist, that God might be a deceiver, etc. In those moments, we have conscious mental states that are intellectual rather than sensory (though they may be confused with sensory information) and their contents are presented to us as true. We

²⁹Most other contemporary epistemologists would agree on some or all of the bottom four rows of the first column: (e1-) through (g-). Those who reject the perceptual model of intuition would either reject or remain silent on the claim that intuitions are (c-) at least somewhat clear.

have what we call ‘intuitions’, in other words, and Descartes is as keen as anyone to pronounce on their fallibility.

The substantive question that remains is whether we ever enjoy genuine *intuitus* – intuitions which are completely clear – and whether such clarity delivers the advertised goods. Perhaps Descartes is wrong to posit this state. But the contemporary platitude that intuitions are fallible does nothing whatsoever to refute him.

Acknowledgements

I am very grateful to John Bengson, Colin Chamberlain, Nathan Dowell, Michael Della Rocca, William Egri, Adham El Shazly, Daniel Garber, Christia Mercer, Robert Pasnau, Tad Schmaltz, Whitney Schwab, Lisa Shapiro, Alison Simmons, Marleen Rozemond, the editors of this special issue on the history of intuition for BJHP (Maria Rosa Antognazza and Marco Segala), and two anonymous referees for their insightful comments on earlier drafts of this paper or helpful conversations about related ideas.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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