

Transparency of Mind: The Contributions of Descartes, Leibniz, and Berkeley to the Genesis of the Modern Subject

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Philosophers often use classical positions as paradigms for defining their own views, usually in contrast. In the philosophy of mind, the notion of the Cartesian subject is one such paradigm. This notion is often used to represent tendencies in the conception of the subject that today's philosophers wish to avoid. John McDowell and Hilary Putnam¹, among others, portray the Cartesian subject – and specifically the Cartesian mind – as a step backward from an earlier, preferable Aristotelianism, whose concept of mind might be made serviceable today if adjusted to fit modern science.

Such paradigms, whose use is unavoidable, are typically caricatures, whether slight or gross. The Cartesian mind as standardly portrayed by McDowell, Putnam, and others² is a gross caricature. This would be important enough for its potential to mislead us about the actual historical development of philosophy. But even more crucially for the philosophy of mind, the use of a caricatured picture as a counterparadigm against which one defines one's own, comparatively better position, can lead to a pyrrhic victory that avoids or misrepresents the real problems. If the opponent has been tailored to one's desired virtues as conquering hero, one may give the impression that one's own position solves great problems, deeply embedded in the tradition, when in fact one has simply rejected a fairly recent problematic position, which one has perhaps also misunderstood and misidentified.³

The Cartesian mental paradigm is frequently defined in terms of four factors: consciousness as essence, intentionality as exclusively mental, the veil of perception, and the transparency of mind. More fully:

- (S1) The Cartesian mind collects “the mental” into an immaterial substance, divorced from nature, whose essence is consciousness;
- (S2) In the mind-body divide, intentionality is removed from material nature and becomes the sole preserve of mind;
- (S3) The mind is cut off from direct epistemic contact with the material world by a veil of perception (epistemic indirect realism);

¹ J. McDowell: *Mind and World*, Cambridge, Mass., 1996; H. Putnam: *The Threefold Cord: Mind, Body, and World*, New York 1999.

² Including S. Shoemaker: *The First Person Perspective and Other Essays*, Cambridge 1996.

³ R. Rorty: *Philosophy and the Mirror of Nature*, Princeton 1979, purveys this sort of misplaced diagnosis of modern philosophy, on which, see G. Hatfield: “Epistemology and Science in the Image of Modern Philosophy: Rorty on Descartes and Locke”, in: J. Floyd, S. Shieh (eds.): *Future Pasts: The Analytic Tradition in Twentieth-Century Philosophy*, New York 2001, 393–413.

- (S4) The mind is fully transparent: if it has a thought or sensation or other mental state, it knows it.

Theorists typically hold that S1 and S2 are basic; that S3 is the result of the loss of “natural intentionality” in S2; while S4 follows from the fact that the essence of mind is consciousness. Theorists may also contrast these four points with Aristotelian hylomorphism, according to which (1) mental processes need not all be conscious; (2) intentionality is found in natural states (such as “sensible species”); (3) knowledge is direct, through similitudes in which “like knows like”; and (4) only some mental states are available to reflection.⁴

In calling this Cartesian paradigm a gross caricature, I have signaled that it does not describe the position of Descartes himself, for whom it is named. In fact, I hold that of points S1 to S4, only S2 fully fits Descartes. Part of S1 fits, the positing of a mental substance, but the essence of that substance arguably is not consciousness but thought, which has two aspects, perception and will, with perception, or the ability to represent, as the fundamental (essential) aspect.⁵ Regarding S3, indirect realism with respect to thought is not Cartesian, for he held that the mind has direct intellectual insight into the essence of matter (which is extension); indirect realism with respect to the senses is more controversial: a case can be made on both sides, and I favor reading Descartes as a direct realist.⁶

My main focus here is S4, the transparency of thought. Many recent philosophers assume that Descartes believed the mind to be “transparent”⁷: since all mental states are conscious, we are therefore aware of them all, and indeed incorrigibly know them all. Transparency includes both features:

- (T1) We are aware of all our thoughts or other mental states;
 (T2) We have incorrigible knowledge of our mental states.

It is easy to see how Descartes’ unification of the mental in an immaterial substance whose occurrent states are all conscious states could lead one to believe that he affirmed

⁴ Putnam: *The Threefold Cord* (op. cit.), 22, 100, and McDowell: *Mind and World* (op. cit.), 108 ff., invoke various virtues of an Aristotelian position, which is more closely specified here. On Aristotelian theories of sense perception and sensible species, see A. Simmons: “Explaining Sense Perception: A Scholastic Challenge”, in: *Philosophical Studies* 73 (1994), 257–275, and G. Hatfield: “The Cognitive Faculties”, in: M. Ayers, D. Garber (eds.): *Cambridge History of Seventeenth Century Philosophy*, Cambridge 1998, 953–1002. On Aristotelian mental operations not accessible to consciousness, see G. Hatfield, W. Epstein: “The Sensory Core and the Medieval Foundations of Early Modern Perceptual Theory”, in: *Isis* 70 (1979), 363–384.

⁵ G. Hatfield: *Descartes and the Meditations*, London 2003, 123 f., 259, 325 ff.

⁶ See B. O’Neill: *Epistemological Direct Realism in Descartes’ Philosophy*, Albuquerque 1974; G. Hatfield: *The Natural and the Normative: Theories of Spatial Perception from Kant to Helmholtz*, Cambridge, Mass., 1990, 46–60.

⁷ This notion of the mind’s translucence, its unfettered access to its own states, is to be distinguished from the more recent notion of the phenomenal “transparency” of the world to perception, by which philosophers mean that our visual experience seems to be “of the world” and not “of some inner state”, on which see M. G. F. Martin: “The Transparency of Experience”, in: *Mind and Language* 17 (2002), 376–425.

the transparency thesis, and how his *cogito* premise might be paired with an incorrigibility thesis. More generally, it may seem as if the transparency of the Cartesian subject set the terms for the “modern subject” at least through the time of Kant with his unity of apperception, and that it was overturned only during the nineteenth century with its (allegedly original) theoretical introduction of unconscious thought processes.

And yet, the genesis of the modern subject is not so simple. Or rather, the early modern concept of the subject isn’t so simple. Focusing specifically on transparency, I want to explore T1 and T2 most fully in Descartes, but also in Berkeley and Leibniz. In the remainder of this section, I lay out my claims about the transparency thesis as applied to these three philosophers (leaving textual evidence to the following section).

Descartes and Berkeley do indeed make statements that seem to endorse one or both of the transparency theses. However, they also make systematic theoretical statements that directly countenance “unnoticed” thoughts or mental states, that is, thoughts or mental states of which the subject is unaware and does not “perceive”. Descartes, having identified the essence of mind with thought or representation, distinguishes bare states of mind from states of which we have reflective awareness, thereby providing a theoretical tool for understanding both his seeming endorsement of transparency and his actual denial of it: Descartes distinguished between a basic perceptual state, or a *basic awareness*, and *reflectively conscious states* that involve explicit noticing and cognizing on the part of the subject. Leibniz directly endorsed a similar distinction between bare perception and reflective consciousness, using the term “perception” for the first and “apperception” for the second. In these cases, bare perceptions are not transparently available to the subject, and so in fact the subject does not have knowledge, hence does not have incorrigible knowledge, of all its occurrent mental states.

More generally, early modern philosophers endorsed an elaborate psychology of the subject, which gave important roles to reflex and habit and to the passions in the genesis of human behavior. In the case of reflex, habit, and adaptive responses to passion-invoking situations, these responses are mediated by the body, not the mind. The responses are produced by bodily mechanisms alone. Descartes thought that many human behaviors, and Leibniz (as well as Spinoza) thought that all human behavior, even that deriving from reason, could be given a mechanical explanation.⁸ Berkeley, of course, afforded mechanical explanation a more limited scope.

Berkeley also differed from Descartes and Leibniz on the intentionality of sense perception. Arguably Descartes, and certainly Leibniz, held that sensory mental states are intrinsically intentional: they are intrinsically “as of” the world. This does not conflict with what is right in S2 from above, that Descartes excluded intentionality from *material* nature. But, contrary to the position that Putnam⁹ (for example) foists upon him, Descartes did not treat sensations as mere “subjective effects”, as mere causal products of an external world that must itself be inferred from behind a veil of perception. Gen-

⁸ G. Hatfield: “Rationalist Theories of Sense Perception and Mind–Body Relation”, in: A. Nelson (ed.): *Blackwell Companion to Rationalism*, Oxford 2005, 31–60, 47 f.

⁹ Putnam: *The Threefold Cord: Mind, Body, and World* (op. cit.), 23.

erally, he treated sensations as a species of perception, and attributed them “objective” (or “representative”) “reality”¹⁰, which renders them as (ostensible) *presentations of objects*. Berkeley, by contrast, did deny intentionality to sensory ideas, but without introducing a veil that cuts us off from material things: in his immaterialist world, sensory ideas become associated with other sensory ideas, but because there is no material world, the ideas are merely associative signs of one another. (These Berkeleyan ideas are, of course, veils with respect to their true cause, God as infinite immaterial substance.)

Leibniz, like Descartes, treated the two fundamental aspects of mental substance as perception and will, or, in his terms, perception and appetite. Unlike Descartes, he rendered everything as, in the first instance, soul-like. The states of his famous monads are constituted from sequences of perceptions and appetites, the former following from one another in accordance with the latter. Perceptions are fundamentally of a world: they represent the multiplicity of the world, each from a point of view that resides in a simple substance.

In the subsequent sections, I first interpret some passages that support the claims I’ve made; I then elaborate the complex psychology of the subject found in Descartes and other early moderns; and I note some ways in which these early moderns contributed to the genesis of the modern subject. Finally, I compare McDowell’s positions with those of Descartes, Berkeley, and Leibniz on each issue addressed in S1 to S4. I claim that, leaving aside substance dualism, McDowell agrees with the early moderns on these issues, and, further, that by focusing on disagreements that are not real, he misses the actual basis of his difficulty in connecting mind with world, which arises from a point of agreement between McDowell and Descartes: the removal of intentionality from material sensory systems. But whereas Descartes could relocate sensory intentionality in mental states, McDowell is left to account for it with his overly cognitivized “second nature” conceptual schemes.¹¹

¹⁰ R. Descartes: *Meditations on First Philosophy*, in: *Philosophical Writings of Descartes*, Vol. 2, ed. and trans. J. Cottingham, R. Stoothoff, D. Murdoch, Cambridge 1984, 28–30, 74; Descartes says “there can be no ideas that are not as it were of things” (30), a position that flows from his treatment of thought (perception, representation) as the essence of mind. Hereafter, the *Meditations* are cited in this translation but using the page numbers of the standard edition of Descartes’ *Oeuvres*, ed. C. Adam, P. Tannery, new ed., Paris 1964–1976, cited as “AT” followed by volume and page numbers. The passages just cited are AT 7:41–4, 102. I flag translations that I have altered with an asterisk (*).

¹¹ McDowell: *Mind and World* (op. cit.), 76 ff. and *passim*. Of course, I do not intend a blanket indictment of the notion of a second nature, which has a place not only in moral philosophy but also in describing acquired conceptual schemes. I criticize the attempt to use it to replace nonconceptual sensory contact with the world.

Bare Perception vs. Reflective Consciousness

First, let's review some passages in which Descartes seems to endorse T1. Here are two from the *Meditations*:

“*Thought*. I use this term to include everything that is within us in such a way that we are immediately conscious of it. Thus all the operations of the will, the intellect, the imagination and the senses are thoughts.”¹²

“there can be nothing in the mind, insofar as it is a thinking thing, of which it is not conscious. [...] we cannot have any thought of which we are not conscious at the very moment when it is in us.”¹³

The context to the second passage even suggests that, if we concentrate on such thoughts, we would have indubitable knowledge of them, as in T2.

But in other passages, Descartes indicates that there are states of mind, including occurrent states, that we do not notice or of which we are unaware. From the *Discourse*:

“many people do not know what they believe, since believing something and knowing that one believes it are different acts of thinking, and the one often occurs without the other.”¹⁴

In this passage, Descartes distinguishes the act of believing, which I take here to be occurrent, from knowledge of that act. However, in the *Passions* he explains that some acts of mind, and in particular willings, are such that “we cannot will anything without thereby perceiving that we are willing it”.¹⁵

In a famous passage from the Sixth Replies (in the *Meditations*), Descartes invokes unnoticed operations of judgment. When we perceive the size of something from its visual angle and perceived distance, we do this through an act of judgment; but we do not notice that we are making the judgment, so we treat the resulting state as a simple sense perception:

“we make the calculation and judgment at great speed because of habit, or rather we remember the judgments we have long made about similar objects; and so we do not distinguish these operations from simple sense-perception.”¹⁶

The operation of these habits of judgment is not transparent to us.

Finally, in discussing infants, Descartes remarks that they may have thoughts, but that the subject will not know about these thoughts because it does not remember them. In making these points, he distinguishes bare thoughts and perceptions from reflective knowledge of them:

¹² *Meditations*, AT 7:160*.

¹³ *Ibid.*, AT 7:246*.

¹⁴ R. Descartes: *Discourse on the Method*, in: *Philosophical Writings of Descartes*, Vol. 1, ed. and trans. J. Cottingham, R. Stoothoff, D. Murdoch, Cambridge 1985, cited using AT numbers; here, AT 6:23.

¹⁵ R. Descartes: *Passions of the Soul*, art. 19, in: *Philosophical Writings*, Vol. 1, ed. Cottingham et. al., AT 11:343.

¹⁶ *Meditations*, AT 7:438.

“I do not doubt that the mind begins to think as soon as it is implanted in the body of an infant, and that it is immediately aware of its thoughts, even though it does not remember this afterwards because the impressions of these thoughts do not remain in the memory.”¹⁷

One will not be aware of having had a thought if one cannot remember that one had it. This claim might not be surprising if a considerable temporal gap separates the thought and the lack of memory. But Descartes draws a more general distinction between bare consciousness, or basic awareness, and a higher order consciousness in which the subject is not merely aware of some content, but is aware that it has the thought at the time it has it. In a letter for Arnauld (29 July 1648), Descartes explicitly distinguishes bare consciousness from reflection.

“I call the first and simple thoughts of infants *direct* and not reflective – for instance the pain they feel when some wind distends their intestines, or the pleasure they feel when nourished by sweet blood. But when an adult feels something, and simultaneously perceives that he has not felt it before, I call this second perception *reflection*, and attribute it to the intellect alone, in spite of its being so linked to sensation that the two occur together and appear to be indistinguishable from each other.”¹⁸

Adults are, at least some of the time, reflectively aware that they are having a particular kind of sensation. In the same letter, Descartes also allows that there are some acts of mind, such as directing the animal spirits to the nerves, of which we have no awareness at all.¹⁹

Not only are we not reflectively aware of all our thoughts, but we may be mistaken about the character of some thoughts of which we are aware. Thus, in Meditation III, Descartes speaks of habitual beliefs which he mistakenly took to be clear and distinct perceptions, when they were not:

“I previously accepted as wholly certain and evident many things which I afterwards realized were doubtful. [...] there was something else which I used to assert, which through habitual belief I thought I perceived clearly, although I did not in fact do so.”²⁰

Accordingly, we may be mistaken about the character (the clarity and distinctness, in this instance) of some of the thoughts of which we are aware.

A similar distinction can be found in Berkeley, between ideas in the mind and the notice we take of them. Let us consider some passages from the *New Theory of Vision*. In the first passage, he is discussing a topic from optics: lines of sight and their con-

¹⁷ Ibid., AT 7:246.

¹⁸ R. Descartes: *Correspondence*, in: *Philosophical Writings of Descartes*, Vol. 3, ed. and trans. J. Cottingham, R. Stoothoff, D. Murdoch, A. Kenny, Cambridge 1991, AT 5:220 f.

¹⁹ Ibid., AT 5:221 f.: “we are not conscious of the manner in which our mind sends the animal spirits into particular nerves.” We do of course have at least bare awareness of the intentions to move our limbs that result in the mind directing the material animal spirits into one or another nerve tubule.

²⁰ *Meditations*, AT 7:35.

vergence for near or far vision. He assumes that if something is in the mind, he would perceive it:

“But those lines and angles, by means whereof some men pretend to explain the perception of distance, are themselves not at all perceived, nor are they in truth ever thought of by those unskilful in optics. [...] Everyone is himself the best judge of what he perceives, and what not. In vain shall any man tell me, that I perceive certain lines and angles, which introduce into my mind the various ideas of distance, so long as I myself am conscious of no such thing.”²¹

From this passage, it may seem that Berkeley ascribes to T1. But we must consider two other passages from the *New Theory*, in which he speaks of thoughts or ideas that become so closely associated that, even though both of them enter the mind, we perceive only one of them, and are unaware that it has replaced another idea:

“No sooner do we hear the words of a familiar language pronounced in our ears, but the ideas corresponding thereto present themselves to our minds: in the very same instant that sound and the meaning enter the understanding: so closely are they united that it is not in our power to keep out the one, except we exclude the other also. We even act in all respects as if we heard the very thoughts themselves.”²²

“So swift, and sudden, and unperceived is the transit from visible to tangible ideas that we can scarce forbear thinking them equally the immediate object of vision.”²³

In the second passage, he calls the transition that occurs between visible and tangible ideas – which is a transition of state of mind – something so “swift” that it is “unperceived”. Here, a change of state occurs in our mind, but we do not perceive it, hence are unaware of it, hence *a fortiori* do not have incorrigible knowledge of it.

Finally, Leibniz explicitly drew the distinction that is found in Descartes’ correspondence, between bare perception and reflective awareness, terming the latter “apperception”. Discussing his celebrated monads, or individual substances, he says:

“it is well to make a distinction between perception, which is the inner state of the monad representing external things, and *apperception*, which is consciousness or the reflective knowledge of this inner state itself and which is not given to all souls or to any soul all the time. It is for lack of this distinction that the Cartesians have made the mistake of disregarding perceptions which are not themselves perceived, just as people commonly disregard imperceptible bodies.”²⁴

²¹ G. Berkeley: *An Essay Towards a New Theory of Vision*, Dublin 1709, § 12. In interpreting this passage, we need not read Berkeley as actually asserting the principle that if he has an idea, he must know it at the time; he may be asserting the weaker principle that if he has a kind of idea, he will be able to know he does through attentive consideration of his ideas in good circumstances for introspection.

²² *Ibid.*, § 51; see also § 66.

²³ *Ibid.*, § 145.

²⁴ G. W. Leibniz: *Principles of Nature and Grace*, § 4, in: *Philosophical Papers and Letters*, ed. and trans. L. E. Loemker, Dordrecht 1969. The extent to which Leibniz’s charge of “disregarding” unnoticed perceptions extends to any Cartesians is a matter for further research: as we have seen, it does not extend to Descartes; Leibniz, who was not a Descartes scholar, apparently didn’t know that.

In this case, *apperception* involves awareness of our thoughts, whereas perception is simply a soul-like state that represents something else. Basic perceptions that are not themselves apperceived are, in Descartes' terms, "conscious". In this passage, Leibniz restricts that term to apperceptive or reflective perception. But his *perceptions* are soul-like states that have the phenomenal character of experienced perceptions and which he sometimes compares to a dull awareness.²⁵ Hence we may conclude that, terminology aside, Leibniz would be amenable to a distinction between basic consciousness and reflective consciousness, as was Descartes.

The Psychology of the Modern Subject

Those who invoke the notion of the Cartesian subject typically suppose that Descartes drew a clean, bright line between the mental and the psychological, on the one hand, and the material and mechanistic, on the other. They suppose that he brought psychology into the conscious mind, subject again to the transparency thesis. If that were so, the philosophical and psychological admonition to "know thyself" should be easy to achieve. Not only one's thoughts, but all psychological processes that guide behavior should be open to an incorrigible view. It would be more difficult to discover latent beliefs and mental capacities, but to the extent that one could formulate a question about these beliefs or capacities, one should be able to discover their presence.²⁶ One would suppose that, again, the same should hold for behavior-guiding psychological capacities.

We have already seen that Descartes did not hold that we are reflectively aware of all our mental acts, or even that we could become reflectively aware of all of them. Perhaps even more surprisingly, Descartes and other early moderns did not simply ship all of psychology into the mind – into, in Descartes' case, an immaterial substance that constitutes a ghost in the machine of the human body. Rather, Descartes and others assigned significant psychological roles, even in the human case, to bodily mechanisms that respond adaptively to current situations in such a way as to preserve the health of the body. This ranges from (what we would term) simple reflexes, such as the eye-blink when a hand is thrust in our face²⁷, to protecting one's head when one stumbles, and to activities such as walking and singing²⁸, and other activities governed by instinct or habit.²⁹ These behaviors are produced physiologically, through mechanisms in the brain to which we have no introspective access and which can operate independently of the mind.

²⁵ G. W. Leibniz: *Monadology*, §§ 14–24, in: *Philosophical Writings*, trans. M. Morris, G. H. R. Parkinson, London 1973.

²⁶ *Meditations*, AT 7:246 f.

²⁷ *Passions*, art. 13, AT 11:338 f.

²⁸ *Meditations*, AT 7:229 f.

²⁹ G. Hatfield: "The *Passions of the Soul* and Descartes' Machine Psychology", in: *Studies in History and Philosophy of Science* 38 (2007), 1–35; G. Hatfield: "Animals", in: J. Carrero, J. Broughton (eds.): *Companion to Descartes*, Oxford 2007, 404–425.

In order to appreciate the complexity of Descartes' conception of the psychology of the human subject, we should pause to ask what we mean by "psychology". In Descartes' time, the term "psychology", when it was used, applied to everything covered in Aristotle's *De anima*: the functions of the vegetative, sensitive, and rational souls, including nutritive, reproductive, sensory, motor, appetitive, and rational functions. The modern use of the term "psychology" was created in the eighteenth century by Christian Wolff, when he left the vegetative part to physiology and included sensory, motor, appetitive, and rational functions within his empirical and rational psychology.³⁰ But even in the seventeenth century, as indeed in Aristotle's own work, there was a tendency to focus mainly on the cognitive functions – sensory, motor, appetitive, and rational – at the expense of the vegetative functions.

Descartes claimed to be able to *mechanize* the functions of the vegetative and sensitive souls.³¹ Beyond the vegetative functions, this meant giving a *purely mechanical* explanation of sensory, motor, and appetitive behaviors. Such would include all nonhuman animal behavior and all behavior in human beings that did not depend directly on thought. The explanatory domain is, then, by no means restricted to simple reflexes, but includes complex adaptive behavior such as running from a strange animal.³² It also includes associative learning.³³ Indeed, in his *Treatise on Man* and *Passions*, Descartes laid out an ambitious program in physiological psychology, which he hyperbolically claimed was adequate to explain *all* human behavior.³⁴ We know, however, that he exempted consciousness, reasoning, meaningful use of language, and the human will from this mechanistic psychology. That, however, leaves a large domain remaining for his machine psychology, including sensory-motor instincts, corporeal (i. e., purely bodily) imagination, memory, appetites, and passions – all of them primary functions of the Aristotelian sensitive soul, now mechanized. These psychological functions are carried out by brain mechanisms that operate independently of the mind. In human beings, some of these physiological operations yield mental states, including experienced images, memories, appetites, and passions. But, as in the case of the passions, the bodily mechanisms may already have produced adaptive behavior (as in running from the strange animal) before the mental experience occurs.³⁵

³⁰ C. Wolff: *Psychologia empirica*, Frankfurt, Leipzig 1738; C. Wolff: *Psychologia rationalis*, Frankfurt, Leipzig 1740.

³¹ R. Descartes: *Treatise on Man*, in: *The World and Other Writings*, ed. S. Gaukroger, Cambridge 1998, AT 11:202.

³² *Passions*, art. 35, AT 11:355 f.

³³ *Treatise on Man*, AT 11:178 f.

³⁴ *Ibid.*, AT 11:185: "But the effect of the memory which seems to me to be the most worthy of consideration here is that, without there being any soul in this machine, it can be disposed naturally to imitate all the movements that real human beings, or even other similar machines, will make when the soul is present."

³⁵ On the relation between Cartesian and Aristotelian psychology see G. Hatfield: "Psychology in Philosophy: Historical Perspectives", in: S. Heinämaa, M. Reuter (eds.): *Psychology and Philosophy: Inquiries into the Soul from Late Scholasticism to Contemporary Thought*, Dordrecht 2008, 1–27 and "Descartes' Machine Psychology" (op. cit.).

Interestingly, the monistic philosophers Spinoza and Leibniz each claimed an even larger domain for purely mechanistic processes; they each claimed that all human behavior, including that which stems from reason, could be given a mechanistic explanation. For Spinoza, this doctrine follows from his monistically based parallelism: all thoughts and thought processes have their bodily counterpart.³⁶ Leibniz's doctrine of monads did not require him to adopt a full parallelism (in principle, some thoughts might not have counterparts in the domain of bodily phenomena), but he interpreted his doctrine of pre-established harmony in such a way that each thought does have a bodily counterpart. Accordingly, he held that a completely convincing, wholly material "counterfeit" human being would be possible if, contrary to fact, our world were wholly material.³⁷ Neither Spinoza nor Leibniz intended to *replace* mentalistic explanation with mechanical explanation, as Hobbes purported to do; but they did conclude that both sorts of explanation are in principle always available, even for actions governed by reason.

Beyond the shock value of the existence of early modern mechanistic psychology, the more salient point is that the early modern subject was a complex being. She was not a pure reason inhabiting a body as a kind of puppeteer. She was, in Descartes' terms, a mind-body complex, in which the mind interacts with a highly intricate body that not only conditions sensory perceptions, but also produces the passions, stores memories in material format, forges associative connections unmediated by the mind, and adaptively responds by itself to environmental circumstances. Further, the associative connections in the brain, many of which are formed during infancy, seemingly can rival Freudian explanation in offering causes for otherwise rationally opaque adult emotional responses, as witnessed by this charming passage from Descartes' letter to Chanut of 1 February 1647:

³⁶ B. de Spinoza: *Ethics*, Pt. II, prop. 7, in: *Collected Works of Spinoza*, Vol. 1, ed. and trans. E. Curley, Princeton 1985. Spinoza explicitly affirmed that all human behavior has a mechanical explanation, Pt. 3, prop. 2: "They will say, of course, that it cannot happen that the causes of buildings, paintings, and of things of this kind, which are made only by human skill, should be able to be deduced from the laws of nature alone, insofar as it is considered to be only corporeal; nor would the human Body be able to build a temple, if it were not determined and guided by the Mind. But I have already shown that they do not know what the Body can do, or what can be deduced from the consideration of its nature alone, and that they know from experience that a great many things happen from the laws of nature alone which they never would have believed could happen without the direction of the Mind – such as the things sleepwalkers do in their sleep, which they wonder at while they are awake."

³⁷ G. W. Leibniz: "Reply to the Thoughts on the System of Preestablished Harmony Contained in the Second Edition of Mr. Bayle's Critical Dictionary, Article Rorarius", in: *Philosophical Papers*, ed. Loemker, 574–585, 575: "if this world were nothing but a composite of a finite number of atoms which move in accordance with the laws of mechanics, as the hypothesis of some thinkers holds, it is certain that a finite spirit could be so enlightened as to understand and to foresee demonstratively everything which would occur in a determinate time, so that this spirit not only could construct a ship capable of sailing by itself to a designated port, by giving it the needed route, direction, and force at the start, but could also form a body capable of counterfeiting a man." The human being would be "counterfeit" presumably because, being wholly material, it would lack genuine perception and appetite (which are metaphysically grounded in soul-like monads); but it would be a complete counterfeit, i. e., behaviorally equivalent to a real human being.

“Those four passions [joy, love, sadness, hatred], I believe were the first we had, and the only ones we had before our birth. I think they were then only sensations or very confused thoughts, because the soul was so attached to matter that it could not yet do anything else except receive various impressions from it. Some years later it began to have other joys and other loves besides those which depend only on the body’s being in good condition and suitably nourished, but nevertheless the intellectual element in its joys or loves has always been accompanied by the first sensations which it had of them, and even the motions or natural functions which then occurred in the body. Before birth, love was caused only by suitable nourishment which, entering in abundance into the liver, heart and lungs, produced an increase of heat: this is the reason why similar heat still always accompanies love, even though it comes from other very different causes. [...] But I will only say that it is because of these confused sensations of our childhood, which remain joined with the rational thoughts by which we love what we judge worthy of love, that the nature of love is difficult for us to understand.”³⁸

Bodily functions become associated with feelings of love in ways that explain adult behavior, but that are opaque to adult consciousness.

If Descartes and other early moderns are not responsible for the idea of the early modern subject as a transparent reason, what did they, and first of all, what did he, Descartes, actually do in this area? The primary grain of truth in the usual image of the Cartesian subject pertains to the unity of consciousness. Whereas Aristotle assigned sense and imagination to one faculty and reason to another, Descartes unified them within a single mental substance and made the difference between sense and reason depend on the mind’s relation to the body. Sense perception is a *passively caused intellectual representation*.³⁹ It is obscure and confused, because it doesn’t fully represent either its immediate cause in the brain or its distal cause: it simply represents distal causes well enough for the purposes of navigation.⁴⁰ Similarly, whereas Aristotle assigned the passions to sensitive appetite, Descartes renders them as passively caused mental perceptions that confusedly represent what is good, bad, or novel in the present situation, as it pertains to what is good and bad for the human body.⁴¹

Why would Descartes collapse the mental aspects of all sensory, appetitive, and rational functions into the one substance of the mind? A technical reason may be found

³⁸ *Correspondence*, AT 5:605 f.

³⁹ *Meditations*, AT 7:78 ff.

⁴⁰ *Ibid.*, AT 7:82 f. Having suggested that sensory ideas do not reveal the true nature of reality (that being the role of the intellect), Descartes indicated the proper function of sensory perception taken by itself: “the proper purpose of the sensory perceptions given me by nature is simply to inform the mind of what is beneficial and harmful for the composite of which the mind is a part; and to this extent they are clear and distinct enough” (AT 7:83*). Of course, the intellect (or the person having the intellect) may use sensory perception in other pursuits, including natural philosophy, as when it uses sensory data to determine the refractive properties of various substances (AT 6:101 f.) or to measure the size of the sun (AT 7:80).

⁴¹ *Passions*, aa. 75, 137, AT 11:384, 430.

in S2: he excluded intentionality from material nature and he held that the phenomena just listed all involve representation: sensory and appetitive phenomena involve a representational relation to the environment, while reason represents the basic properties of things. Beyond this technical reason, the unity of all mental phenomena in Descartes also allowed him to capture a basic aspect of human mental life: that all sorts of thoughts, from itches to seeings to dreams to metaphysical theorizing, inhabit a common arena of consciousness. The grain of truth to the Cartesian subject is that it does bring together, in a unified arena of awareness, those thoughts of which we are reflectively conscious. And that seems like a good thing, where by “good” I mean something that fits the facts, or fits our experience.

That is one Cartesian contribution. There were others. Descartes introduced a notion of *embodiment* into the modern subject, with his really distinct mind that nonetheless feels its body⁴² and has its mental experiences mysteriously determined by its body’s history (as in the long quotation on love, above). Berkeley, the matter-denying immaterialist, took the notion of embodiment further. In his theory of vision, he elaborated the theory that touch educates vision.⁴³ This means that all experience of three-dimensional space is produced from tactile feelings of space, or feelings that arise from the activities of touch and the position of the body and its limbs. Vision, in Berkeley’s view, is shot through with tactile feeling. In seeing the tree over there, we feel the bodily motions it would take to walk to it. These feelings are not transparent to the mind, so that their source is not readily recognized. They well up from the dark recesses of prior associations, of unreflective experience in moving and touching. (Shades of Merleau-Ponty.)

Finally, we should note a further aspect of modern subjectivity, not usually associated with the early moderns but with nineteenth-century philosophy: Leibniz’s notion that each subject is defined by a point of view. Leibniz did not invent point of view: it is an old notion in optics; it was understood by Descartes; it was brought to heightened awareness by Copernican astronomy. Leibniz added this: he defined individual substances by their points of view:

“just as the same town, when looked at from different sides, appears quite different and is, as it were, multiplied in perspective, so also it happens that because of the infinite number of simple substances, it is as if there were as many different universes, which are however but different perspectives of a single universe in accordance with the different points of view of each monad.”⁴⁴

⁴² *Meditations*, AT 7:81: “Nature also teaches me, by these sensations of pain, hunger, thirst and so on, that I am not merely present in my body as a sailor is present in a ship, but that I am very closely joined and, as it were, intermingled with it, so that I and the body form a unit. If this were not so, I, who am nothing but a thinking thing, would not feel pain when the body was hurt, but would perceive the damage purely by the intellect, just as a sailor perceives by sight if anything in his ship is broken.”

⁴³ Berkeley: *An Essay Towards a New Theory of Vision* (op. cit.), § 45. On the relation between sight and touch in Berkeley, see Hatfield: *Natural and Normative* (op. cit.), 41 ff.; Hatfield, Epstein: “The Sensory Core” (op. cit.), 363–384.

⁴⁴ Leibniz: *Monadology*, § 57, in: *Philosophical Writings*, trans. Morris, Parkinson.

Individuals are not defined by a momentary point of view, for different individuals may share the same point of view at different moments. What he contributed is the idea that synchronically unique points of view are each but a moment in a diachronically unique series of perceptions. He invented the idea of the point-of-view space–time worm. Only for him, of course, the individual monads are not in space–time, but space–time is in them. Each is defined by its perspective, a perspective that unfolds through the sequence of perceptions and appetites that define any individual monad.

Tallying up

I hope to have given some indication of what I mean by the complexity of the early modern subject. Now I want to take stock by comparing Descartes, Berkeley, and Leibniz with McDowell on some key issues.

First, let's tally up their relations on selected aspects of the allegedly "Cartesian" subject:

	Descartes	Leibniz	Berkeley	McDowell
S1 Consciousness as essence	no	no	no	no
S2 Intentionality extracted	yes	yes	yes	yes
S3 Veil of perception	no?	no	no	no
S4 Transparency	no	no	no	no

Because McDowell worked with a caricature, he got the real Cartesian subject wrong. He believed that he partially shared only S2 with the Cartesians – only partially, because he introduced "natural intentionality" via second-nature conceptual capacities – but that he stood apart on S1, S3, and S4. Not so. Contrary to his caricature of the Cartesian, or early modern, subject, the essence of that subject was not consciousness, the adherence to a veil of perception is in question, and transparency must be rejected outright.

There has been some progress since the time of Descartes and Leibniz, but the problems that they raised remain open. Regarding S1, substance dualism has largely been abandoned in philosophical circles, but the mind–body problem has not been solved. Regarding S2, there are attempts to reintroduce intentionality into material nature, whether in the form of Dretskean "information"⁴⁵, or as a natural psychological property of sensory systems⁴⁶, or through a McDowellian conceptual "second nature". The topic of S3, the analysis of the perceptual relations between subject and object, remains unsettled, though there has of late been a ground swell of enthusiasm for naive realism. Finally, as regards S4, the domain of unconscious processes has been expanded in the past 150 years, to include not only unnoticed states that have the traditional marks of

⁴⁵ F. Dretske: *Naturalizing the Mind*, Cambridge, Mass., 1995.

⁴⁶ G. Hatfield: "The Reality of Qualia", in: *Erkenntnis* 66 (2007), 133–168, and *Natural and Normative*, ch. 7, sec. 2.

the mental, such as phenomenal character – as in Descartes' and Leibniz's basic perceptual states – but also mental or psychological states that are assigned intentional content without phenomenality. So, it is true to say that the subdomain of transparent mental states has been comparatively reduced, through expansion of the subdomain of unconscious states to include mental states that lack even basic awareness.

McDowell and others mistakenly believe that they can distance themselves from the Cartesian subject through the issue of transparency, which is one focus of their attempts to critically separate themselves from modernity. The other focus is the veil of perception and indirect realism. In analyzing sensory capacities, McDowell shares with the Cartesians the exclusion of intentionality from (in his case, nonhuman) material nature, reserving it for human second nature. He does allow that material intentionality might be needed in *psychological* accounts of sensory capacities⁴⁷, by contrast with his own *epistemological* account, and here he breaks from his unwitting lock-step agreement with Early Modern Philosophy.

Ironically, McDowell's denial of the epistemological relevance of nonconceptual sensory intentional content may be the source of his frustrating inability to bring mind and world together. Like many recent epistemologists, McDowell is repulsed by sense data and any sort of perceptual mediation. He assimilates Descartes' and other early modern positions to a myth of the given: sensory processes provide nonconceptual content that is epistemically relevant.⁴⁸ His reasons for disliking such content are difficult to fathom, but they seem to follow traditional objections against sense data: that the notion of "is red" is prior to "looks red", that we don't seem to see our own experience but rather seem to see objects directly, that nonconceptual content can't serve as a basis for knowledge on pain of psychologism, and the like. Here, he confuses witting mediation – constructive processes that reflectively take sense data as "given" working material – with accounts of sensory cognition that recognize mediating perceptual representations in the form of sensory experiences that function in guiding the subject's navigation by representing the world from a point of view.

If the mind were transparent, we might wittingly construct the world from sense data, along the lines once sketched by Bertrand Russell.⁴⁹ But if we acknowledge that the senses simply present us with a world – even if by representing it from a point of view and in a manner that is conditioned by characteristics of the perceiving subject – and that they do so with nonconceptual, intentional content that in fact can show better or less good "fit" to the world and that is subject to various conceptualizations, then

⁴⁷ McDowell: *Mind and World* (op. cit.), 55, 121.

⁴⁸ Ibid., xiii–xiv, 37; Rorty: *Philosophy and the Mirror of Nature* (op. cit.), chs. 1, 3, offers a similar analysis, on which see Hatfield: "Epistemology and Science in the Image of Modern Philosophy" (op. cit.). In their attacks on the "given", McDowell and Rorty acknowledge a debt to W. Sellars: "Empiricism and the Philosophy of Mind", in: W. Sellars: *Science, Perception and Reality*, London 1963, 127–196.

⁴⁹ B. Russell: "The Relation of Sense-Data to Physics", in: *Scientia* 16 (1914), 1–27; reprinted in B. Russell: *Mysticism and Logic, and Other Essays*, new edn, London 1963, 108–131. Of course, Russell only required that we *could* become reflectively aware of such constructions.

our being in sensory contact with the world can be an epistemological starting point.⁵⁰ Perceptual representations present a world. They don't incorrigibly "give" it to us in the form of sense data that we inspect; they present it, in a manner characteristic of the perceiving subject, under better or less good conditions of observation, with better or less good fit to the world's properties.⁵¹ We take it from there.

It is a misguided fear of representations, partly grounded in a caricatured view of the early modern subject, that leads McDowell, here joined by Putnam⁵², to posit a mystical sort of perceptual connection at the base of their respective naive realisms. They want to avoid the "given", but they then ask us to accept that our senses somehow commune with objects in a "direct" (or, in Putnam's manipulated lingo, a "natural") manner. For my part, I prefer a direct realism in which causally produced, psychologically and epistemologically mediating representations *present* a distal world in a *phenomenally and epistemically direct and immediate way*, to the obscurity of McDowell's and Putnam's naive realisms. But to say more on that here would be to switch topics, from critical history regarding conceptions of the modern subject to the open questions that remain concerning how to understand the subject at all.

⁵⁰ Hatfield: "Reality of Qualia" (op. cit.). Here I also allude to the *critical direct realism* of Roy Wood Sellars and others, which may be approached through *Essays in Critical Realism: A Co-Operative Study of the Problem of Knowledge*, ed. D. Drake, New York 1920), which contains Sellars' paper, "Knowledge and Its Categories" (187–219). The critical direct realists contended that our "given" sense experience provides a basis for judgments using learned concepts. They affirmed a dualism of phenomenal content and conceptual scheme, as did Wilfrid Sellars in "Empiricism and the Philosophy of Mind", esp. §§ 60–62.

⁵¹ For further discussion of the relation between phenomenal content and object properties and the (presumably learned) conceptual resources that allow us to be in referential and epistemic contact with material objects, see G. Hatfield: "On Perceptual Constancy" and "Getting Objects for Free: The Philosophy and Psychology of Object Perception", in: *Perception and Cognition: Essays in the Philosophy of Psychology*, Oxford 2009, chs. 6 f.

⁵² Putnam: *The Threefold Cord: Mind, Body, and World* (op. cit.), 10. Putnam uses the maneuver of renaming the naïve direct realism of McDowell as "natural" realism, avowedly in order to avoid the conceptual web arising from the notion of "directness" so as to get back to the perceptual realism of the "common man". This move assumes that the common man has a coherent theory of perception, which is doubtful. It also robs "natural" of its connotation of having to do with the way nature actually works.