Descartes's Embodied Minds

Luis Castro
(Universidad de Génova)

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Las Mentes Encarnadas de Descartes

Luis G. Castro M.
(Universidad de Génova)

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Abstract: Descartes's philosophy of mind does not reduce to the mind-body dualism of his *Meditations*. Indeed, we can find a certain theory of consciousness scattered throughout his writings; though the term 'consciousness', understood as phenomenal consciousness, is not part of his vocabulary. His dualistic ontology is a consequence of the conceptual limitations and the metaphysical preconceptions of his time. However, Descartes's theory of perception, his concept of 'mind', his theory of ideas, and his theory of the passions form a sophisticated theory of human experience commensurable with contemporary theories of consciousness.

Keywords: Consciousness, Perception, Experience, Mind-Body Union.

Resumen: La filosofía de la mente de Descartes no se reduce al dualismo mente-cuerpo de sus *Meditaciones*. De hecho, podemos encontrar una cierta teoría de la conciencia dispersa en sus escritos; aunque el término 'consciencia', entendido como consciencia fenoménica, no es parte de su vocabulario. Su ontología dualista es una consecuencia de las limitaciones conceptuales y los prejuicios metafísicos de su tiempo. Sin embargo, la teoría de la percepción de Descartes, su concepto de 'mente', su teoría de las ideas y su teoría de las pasiones forman una sofisticada teoría de la experiencia humana, comparable con las teorías contemporáneas de la consciencia.

Palabras clave: Consciencia, Percepción, Experiencia, Unión Mente-Cuerpo.

The philosophy of Renè Descartes is one of the foundations of contemporary Western philosophy of mind. His mind-body dualism is a common starting point for contemporary philosophers of mind. In fact, his *Meditations on First Philosophy* provide a playground for supporting or even rejecting dualistic explanations of the mind. Although Descartes was not particularly interested in the phenomenal character of consciousness, he was certainly troubled by the seeming dissimilarity between our experiences and the objects or events they are about.

I will show that Descartes's philosophy of mind does not reduce to the mind-body dualism of his *Meditations*. Indeed, we can find a certain theory of consciousness scattered throughout his writings; though the term 'consciousness', understood as phenomenal consciousness, is not part of his vocabulary. I will also argue that his dualistic ontology is a consequence of the conceptual limitations and the metaphysical preconceptions of his time. Descartes's theory of perception, his concept of 'mind', his theory of ideas, and his theory of the passions form a sophisticated theory of human experience commensurable with contemporary theories of consciousness. However, I want to start by making a short terminological comment.

Consciousness has not always been an essential feature or property of the mind. In fact, in Descartes's times the Latin term 'conscientia' was much closer in meaning to today's English term 'conscience': a normative faculty of the mind. Although the Latin noun 'conscientia' and the Latin adjective 'conscius' appear dispersedly in Descartes's writings, it is noteworthy that in the main text of his *Meditations* 'conscientia' never appears and that 'conscius' appears only once: "if there were such a power in me [some power enabling me to bring it about that I who now exist will still exist a little while from now], I should undoubtedly be aware [*conscius*] of it"[1]. However, in the *Third Replies* we find an instance of the term 'conscientia' that will later allow us to understand his conception of the mind: "There are other acts which we call 'acts of thought', such as understanding, willing, imagining, having sensory perceptions, and so on: these

[1] DESCARTES, R. 'Meditations on First Philosophy' in *The Philosophical Writings of Descartes*, Vol. II, J. Cottingham, R. Stoothoff, & D. Murdoch, Trans., Cambridge University Press, 1984, p. 34, AT VII 49.

all fall under the common concept of thought or perception or consciousness [*conscientiae*], and we call the substance in which they inhere a 'thinking thing' or a 'mind'"[2].

Descartes's Model of Human Perception

I will not address Descartes's physiology because, being expressed in fully functional terms, it also applies to non-human animals and, according to Descartes, non-human animals do not have souls or minds; which means that they cannot have perceptions in the proper sense[3]. Non-human animals only have what Descartes calls "organic sensation"[4], defined as a kind of functional sensation[5].

One important feature of Descartes's approach to perception is that he sees his theory as a model that does not need to correspond with reality: "you are not obliged to believe that things are as I suggest. But what is to prevent you from following these suppositions if it is obvious that they detract not a jot from the truth of things, but simply make everything much clearer?"[6]. Recall that a perception is: 'clear', "when it is present and accessible to the attentive mind –just as we say that we see something clearly when it is present to the eye's gaze and stimulates it with a sufficient degree of strength and accessibility"; and 'distinct' "if, as well as being clear, it is so sharply separated from all other perceptions that it contains within itself only what is clear"[7].

Now, the first paragraph of *The World* summarizes Descartes's theory of perception:

> The subject I propose to deal with in this treatise is light, and the first point I want to draw to your attention is that there may be a difference between the sensation we have of light (i.e. the idea of light which is formed in our imagination by the mediation of our eyes) and what it is in the object that produces this sensation within us (i.e. what it is in a flame or the sun that we call by the name 'light'). For although everyone is commonly convinced that the ideas we have in our mind are wholly similar to the objects from which they proceed, nevertheless I

[2] *Ibid*., p. 124, AT VII 176.
[3] See: DESCARTES, R. 'The Correspondence', in *The Philosophical Writings of Descartes*, Vol. III, J. Cottingham, R. Stoothoff, D. Murdoch, & A. Kenny, Trans., Cambridge University Press, 1991, p. 181, AT III 370.
[4] DESCARTES, R. 'Meditations on First Philosophy'. p. 288, AT VII 426.
[5] See: BEN-YAMI, H. *Descartes' Philosophical Revolution: A Reassessment*, Palgrave Macmillan, 2015, pp. 146-147.
[6] DESCARTES, R. 'Rules for the Direction of the Mind', in *The Philosophical Writings of Descartes*, Vol. I, J. Cottingham, R. Stoothoff, & D. Murdoch, Trans., Cambridge University Press, 1985, p. 40, AT X 412.
[7] DESCARTES, R. 'Principles of Philosophy', in *The Philosophical Writings of Descartes*, Vo. I, J. Cottingham, R. Stoothoff, & D. Murdoch, Trans., Cambridge University Press, 1985, pp. 207-208, AT VIII 22.

> cannot see any reason which assures us that this is so. On the contrary, I note many observations which should make is doubt it[8].

The guiding principle of Descartes's theory of perception is straightforward: there is no necessary connection between our sensations and the objects or events they are about. Although in this passage Descartes is specifically speaking of light, the distinction between our sensations and their objects is extended to every other sensory perception.

> [T]he properties in external objects to which we apply the terms light, colour, smell, taste, sound, heat and cold –as well as the other tactile qualities and even what are called 'substantial forms'– are, so far as we can see, simply various dispositions in those objects which make them able to set up various kinds of motions in our nerves which are required to produce all the various sensations in our soul[9].

Although sensations are caused by movements in the sensory organs, their properties do not need to resemble the properties of their bodily causes. Sensory properties, like color, taste, sound, etc., are not in the objects, and neither in the movements of the nerves in the brain. As Clarke says, "[t]he primary focus of Descartes's comments about non-resemblance is the lack of similarity between the causes of sensations and the subjective experiences that we have when we sense something"[10]. What produces a particular sensation in the mind is a brain pattern formed by a particular configuration or arrangement of the sensory organs[11].

Sensations, being acts or modes of thinking, are "qualitative ideas produced by perceived bodies"[12], and, as such, they are representations that correspond to the objects and events that caused them. However, going back to Descartes's model, they do not need to resemble those objects or events:

> [I]t often happens that in order to be more perfect as an image and to represent an object better, an engraving ought not to resemble it. Now we must think of the images formed in our brain in just the same way, and note that the problem is to know simply how they can enable the soul to have sensory perceptions of all the various qualities of the objects to which they correspond –not to know how they can resemble these objects[13].

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[8] DESCARTES, R. 'The World and Treatise on Man', in *The Philosophical Writings of Descartes*, Vol. I, J. Cottingham, R. Stoothoff, & D. Murdoch, Trans., Cambridge University Press, 1985, p. 81, AT XI 3-4.
[9] DESCARTES, R. 'Principles of Philosophy'. p. 285, AT VIII 322-323.
[10] CLARKE, D. *Descartes's Theory of Mind*, Oxford University Press, 2003, p. 52.
[11] See: BEN-YAMI, H. *Descartes' Philosophical Revolution: A Reassessment*, Palgrave Macmillan, 2015, p. 14.
[12] BEN-YAMI, H. *Descartes' Philosophical Revolution: A Reassessment*, Palgrave Macmillan, 2015, p. 14.
[13] DESCARTES, R. 'Optics', in *The Philosophical Writings of Descartes*, Vol. I, J. Cottingham, R. Stoothoff, & D. Murdoch, Trans., Cambridge University Press, 1985, pp. 165-166, AT VI 113.

The scope of Descartes's model of perception is explaining how different movements in the brain cause sensations in the mind, not the relation between the sensation and the object that causes it. Thus, Descartes's theory of perception is about what is accessible, 'clear', to the mind through the sense organs, though sensory perceptions might not be 'distinct', i.e., "sharply separated from all other perceptions"[14].

Now, is this a version of the so-called 'homunculus fallacy'? If the mind perceives brain patterns, perhaps there is a second or higher level of perception: the mind might perceive the movements of the sensory organs as brain patterns and then form a sensation. However, Descartes explicitly denies that sensations are second order perceptions:

> Now, when this picture [the picture, or pattern, formed in the brain by means of perceiving an object through our sensory organs] thus passes to the inside of our head, it still bears some resemblance to the objects from which it proceeds. […] [W]e must not think that it is by means of this resemblance that the picture causes our sensory perception of these objects –as if there were yet other eyes within our brain with which we could perceive it. Instead we must hold that it is the movements composing this picture which, acting directly upon our soul in so far as it is united to our body, are ordained by nature to make it have such sensations[15].

When an object causes movement in the sense organs, this forms a pattern in the brain, which Descartes calls an 'imagen'. The reason why he says that the image "still bears some resemblance to the objects from which it proceeds" is that, being a material image, it has properties similar to the objects that caused it. But this image is not yet a sensation, for a sensation does not have material properties. The properties of sensations, such as color, taste, smell, etc., are not properties of the objects. Moreover, sensations are not a second order perception: the mind does not 'see' brain patterns, just as the body does not 'see' objects either. The sensory organs are moved by the external objects, through causal relations, and this produces 'images' in the brain; it is the mind that sees, in the proper sense, by means of the 'images' formed in the brain. The mind directly perceives brain patterns or 'images' as sensations. The explanation of the interaction between the mind and the body is not a part of this model of human perception.

Ideas and Sensations

[14] DESCARTES, R. 'Principles of Philosophy'. pp. 207-208, AT VIII 22.
[15] DESCARTES, R. 'Optics'. p. 167, AT VI 130.

According to Descartes's theory of perception, sensory organs are moved by external objects, and these movements produce a brain pattern or image. Sensations are, thus, caused by brain patterns, and what the mind perceives, i.e., particular sensations, are what Descartes calls 'ideas'. Ideas correspond or represent objects and events but they do not resemble their objects. Therefore, the objects of our sensory perceptions are ideas that represent or correspond to external objects indirectly: "we are directly aware of the sensory qualities in our mind, and not of the things in the material world that they represent; and these sensory qualities do not resemble what they represent"[16]. Since the mind's capacity to perceive external objects is determined by brain states or patterns, "[t]he soul has sensory awareness only in so far as it is in the brain"[17]. Consequently, Descartes's theory of perception can be seen as a representational or intentional one. But, what is an idea?

> I understand this term [idea] to mean the form of any given thought, immediate perception of which makes me aware [*conscius*] of the thought. Hence, whenever I express something in words, and understand what I am saying, this very fact makes it certain that there is within me an idea of what is signified by the words in question. Thus it is not only the images depicted in the imagination which I call 'ideas'. Indeed, in so far as these images are in the corporeal imagination, that is, are depicted in some part of the brain, I do not call them 'ideas' at all; I call them 'ideas' only in so far as they give form to the mind itself, when it is directed towards that part of the brain[18].

This is one of the few passages where Descartes uses the term 'conscius'. In general, English translators prefer to translate the term as 'aware' for reasons that will be clarified later however it must be said the term is not used in the contemporary sense of 'phenomenally conscious'. Recall also that, in the cited passage of the *Third Replies,* Descartes paralleled the term 'consciousness' with the terms 'perception' and 'thought'; which is also evidence that Descartes did not used the term in its phenomenal sense.

According to Descartes, an idea is what the mind immediately perceives when it is directed towards images or brain patterns. Technically speaking, the term 'idea' has two different senses: 1) as an image, pattern or brain state[19]; and 2) as a mental representation of which the mind can be immediately aware, as stated in the passage above. Strictly speaking, only mental representations are ideas because the mind cannot be immediately aware of physical images.

[16] BEN-YAMI, H. *Descartes' Philosophical Revolution: A Reassessment*, Palgrave Macmillan, 2015, p. 33.
[17] DESCARTES, R. 'Principles of Philosophy'. p. 283, AT VIII 319.
[18] DESCARTES, R. 'Meditations on First Philosophy'. p. 113, AT VII 160.
[19] DESCARTES, R. 'Rules for the Direction of the Mind'. p. 41, AT X 414.

Ideas are, then, the conceptual or representational or intentional content of particular thoughts, what they are about.

> Some of my thoughts are as it were the images of things, 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. Other thoughts have various additional forms: thus when I will, or am afraid, or affirm, or deny, there is always a particular thing which I take as the object of my thought, but my thought includes something more than the likeness of that thing. Some thoughts in this category are called volitions or emotions, while others are called judgements[20].

Ideas are representations of different kinds of things but the mind can also have other kinds of thoughts. Every thought is about something, i.e., has an idea as its content, but some are not just images or representations of things. When I wish my favorite football team wins tonight's match, my thought is not just about my favorite team winning, it also contains my desire, which is not a representation of an object or event.

Furthermore, ideas are classified according to their origins, "[a]mong my ideas, some appear to be innate, some to be adventitious, and others to have been invented by me"[21], and a few paragraphs after Descartes claims that "[i]n so far as the ideas are considered simply as modes of thought, there is no recognizable inequality among them: they all appear to come from within me in the same fashion. But in so far as different ideas are considered as images which represent different things, it is clear that they differ widely"[22]. This is an important clarification because we could think, as many have, that every particular innate idea is somehow 'hardwired' into the mind. All ideas, being the contents of thoughts, result from exercising the mind's different faculties, i.e., through the mind's attentive activity. Thus, innate ideas are grasped by the mind's purely intellectual activity; adventitious, or sensory, ideas are passively caused by brain patterns or images that call the mind's attention; and invented, or imaginary, ideas are generated by the mind when it abstracts and mixes different adventitious ideas, as when I imagine a flying pig from the idea of a pig and the abstract idea of a winged animal.

Now, given that the mind, when united to the body, has different kinds of sensory perception, "neurally caused perceptions may be subdivided into three groups, depending on the

[20] DESCARTES, R. 'Meditations on First Philosophy'. pp. 25-26, AT VII 37.
[21] *Ibid*., p. 26, AT VII 37-38.
[22] *Ibid*., pp. 27-28, AT VII 40.

remote causes to which we attribute different thoughts: (1) perceptions that we refer to external objects and events, which are called sensations; (2) perceptions that we attribute to states of the body that are known by internal sensation, such as hunger or pain; and (3) perceptions that are attributed to the soul itself"[23]. Considering that the terms 'consciousness', 'perception' and 'thought' are equivalent; that ideas, as modes of thought, are all equal, differing only in the origins or causes of their object; and that ideas are the immediately accessible contents of thoughts; we can say that all perceptions are intentional, insofar as they all have ideas as their content, and that those contents are attributed to external objects, internal states of the body, or purely mental states. As Clarke puts it, "[t]he intentionality of our thought, then, is that familiar feature in virtue of which each act of thinking is about something or has some content, however vague it may be"[24].

Embodied Minds

Philosophers tend to focus on the dualistic ontology of the *Meditations*, but this does not seem to be the way Descartes's thought developed. If the mind is 'really distinct' from the body, how could it be aware of the states of the body and its environment?

> Strictly speaking, a *real* distinction exists only between two or more substances; and we can perceive that two substances are really distinct simply from the fact that we can clearly and distinctly understand one apart from the other. […] [E]ven though we may not yet know for certain that any extended or corporeal substance exists in reality, the mere fact that we have an idea of such a substance enables us to be certain that it is capable of existing. […] Similarly, from the mere fact that each of us understands himself to be a thinking thing and is capable, in thought, of excluding from himself every other substance, whether thinking or extended, it is certain that each of us, regarded in this way, is really distinct from every other thinking substance and from every corporeal substance. And even if we suppose that God has joined some corporeal substance to such a thinking substance so closely that they cannot be more closely conjoined, thus compounding them into a unity, they nonetheless remain really distinct[25].

Notice that the definition of the real distinction is presented in epistemological terms. Descartes is not claiming that the mind actually exists separated from the body, but that, since he has a clear and distinct idea of the mind, independent of the idea of the body, then the mind must be capable of existing independently. In Alanen's words, "[s]aying that there is a real distinction

[23] CLARKE, D. *Descartes's Theory of Mind*, Oxford University Press, 2003, p. 114.
[24] *Ibid*., p. 194.
[25] DESCARTES, R. 'Principles of Philosophy'. p. 213, AT VIII 28-29.

between mind and body implies that it is possible for the two to exist apart, though they are actually united"[26]. The distinction is grounded in the mind's faculty to conceive the ideas of mind and body separately, though our ideas do not need to resemble reality. In addition, substances are known indirectly by means of clear and distinct ideas of their attributes: "This term [substance] applies to everything in which whatever we perceive immediately resides, as in a subject, or to everything by means of which whatever we perceive exists. By 'whatever we perceive' is meant any property, quality or attribute of which we have a real idea"[27]. My suggestion is that the real distinction between the mind and the body should be seen as a conceptual distinction between ideas, not between the objects that those ideas represent.

In addition, in a letter to Princess Elizabeth dated June 28, 1643, Descartes says that there are "three kinds of primitive ideas or notions, each of which is known in its own proper manner and not by comparison with any of the others: the notions we have of the soul, of body and of the union between the soul and the body"[28]. According to Descartes, the idea of the mind-body union is grasped by the mind regardless of the other two.

> The soul is conceived only by the pure intellect; body (i.e. extension, shapes and motions) can likewise be known by the intellect alone, but much better by the intellect aided by the imagination; and finally what belongs to the union of the soul and the body is known only obscurely by the intellect alone or even by the intellect aided by the imagination, but it is known very clearly by the senses. […] Metaphysical thoughts, which exercise the pure intellect, help to familiarize us with the notion of the soul; and the study of mathematics, which exercises mainly the imagination in the consideration of shapes and motions, accustoms us to form very distinct notions of body. But it is the ordinary course of life and conversation, and abstention from meditation and from the study of the things which exercise the imagination, that teaches us how to conceive the union of the soul and the body[29].

The mind grasps different ideas by exercising different cognitive faculties. The idea of the mind is reached by pure intellect and the idea of the body is reached by the intellect and the imagination, but the idea of the union is grasped in a very different manner, it is grasped by experience. Thus, as Alanen says, "by making sense perception and experience dependent on what he calls a third primary notion, Descartes has blocked their reduction to either purely mental

[26] ALANEN, L. 'Descartes' Mind-Body Composites, Psychology and Naturalism', *Inquiry, 51*(5), 2008, p. 467.
[27] DESCARTES, R. 'Meditations on First Philosophy'. p. 114, AT VII 161.
[28] DESCARTES, R. 'The Correspondence'… p. 226, AT III 691.
[29] *Ibid*., p. 227, AT III 691-692.

or purely corporeal modes, or even to a conjunction of the two"[30]. However, this third notion does not contradict Descartes's dualistic ontology because the mind-body union is not a substance.

Cartesian explanations are subject-sensitive, they depend on the way in which the mind conceives different ideas. Thus, each explanation needs a specific kind of methodology and a proper terminology. Human physiology, mainly developed in *The World*, the *Optics*, and other works, is explained in purely mechanical terms, and this is why Descartes says that all living bodies are bound by the same physiological-mechanical principles. Human perception, as I have described above, is caused and sustained by the physiology of the human body, but this is not enough to explain it, for it is the soul that perceives in the strict sense. Moreover, sensations, emotions and passions, as we have also seen, take ideas as their contents, so they also presuppose the union. Thus, we can see that Descartes's explanations vary in complexity and that some of them presuppose the mind-body union; for some modes or acts of thought, such as imagination and sensory perception, depend on the mind's perception of brain images or patterns. Human beings are, then, embodied minds. Embodied minds can only be understood, according to what Descartes told Princess Elizabeth, through those body-dependent acts of thought, i.e., through experience. As Alanen says,

> The senses are not reliable when used uncritically as sources of information about the nature of extended body. But they are irreplaceable in informing us about our environment and how it affects us. The sensory experience bestowed upon us through the institution of nature has been given to us for both cognitive and practical purposes. Not only do the senses connect us to the world that our science models, making us see the light and the rainbow, the nature and causes of which our scientific theories explain. They also inform us about what serves the preservation and well-being of the body and of the union itself[31].

Human beings, i.e., embodied minds, have knowledge of their environment and of themselves by means of sensory perception. Thus, if we want to trace what Descartes might have said about phenomenal consciousness, we would need to look within experience.

Human Experience

[30] ALANEN, L. 'Descartes' Mind-Body Composites, Psychology and Naturalism', *Inquiry*, *51*(5), 2008, p. 469.
[31] *Ibid*., pp. 476-477.

Descartes never provided a complete explanation of human nature. However, we have a mechanistic physiology that explains the human body in purely functional terms. The human body is capable of moving, and sustaining life, independent of being attached to a mind. On the other hand, we have a sort of rational psychology that explains the different kinds of thoughts that the mind can have, independently of being attached to a particular body. The mind is the one that perceives, even if the contents of some of its perceptions come from outside the mind. But these cannot explain human experience; experience is an independent field of research by its own right. How should we understand experience then? In the *Second Replies*, Descartes defines 'thought', the defining attribute of the mind, as follows:

> I use this term to include everything that is within us in such a way that we are immediately aware [*conscii*] of it. Thus all the operations of the will, the intellect, the imagination and the senses are thoughts. I say 'immediately' so as to exclude the consequences of thoughts; a voluntary movement, for example, originates in a thought but is not itself a thought[32].

The term 'thought', in the broad sense, equivalent to 'perception' and 'consciousness', encompasses all the operations of the mind. Although in this passage Descartes mentions four different kinds of operation, the list is not exhaustive; in other passages, the list is shorter and in others longer. What matters here is that: 1) the mind is 'immediately aware' of its current thoughts; 2) each operation forms a different kind of idea, with the exception of the will, which is an operation that takes other thoughts as its content; and 3) just as brain patterns cause sensations in the mind that do not resemble those movements, the mind's thoughts can move the body, though those thoughts are not movements.

One relevant feature of Descartes's use of the term 'thought' is that some kind of self-awareness is built-in it; although this self-awareness is not a second order thought that operates over thoughts. Self-awareness is a pre-requisite of thought. As Alanen explains, "what is essential to the Cartesian mind is the exercise of its rational, cognitive capacities –not the fact of its being conscious of its thoughts. Consciousness or awareness […] may be a precondition for the exercise of its power of cognition, but is not […] its main or distinctive feature"[33]. If we assume that 'awareness' means the same as 'consciousness', then we could agree with Simmons when

[32] DESCARTES, R. 'Meditations on First Philosophy'. p. 113, AT VII 160.
[33] ALANEN, L. 'Self-Awareness and Cognitive Agency in Descartes's Meditations', *Philosophical Topics*, 44(1), 2016, p. 5.

she claims that all occurrent thoughts are conscious[34]. However, we must be careful not to take this as meaning that all thoughts are 'phenomenally conscious'. Presumably, all thoughts feel a certain way, but there is no strong evidence to support this. Moreover, the two terms do not seem to be equivalent: awareness is a pre-condition of thought, while consciousness is a general concept coextensive with thought. Thus, Alanen is right in saying that:

> Whatever thinking is, it is coextensive with and presupposes consciousness. Any being with a mind, even infants in their mother's womb, would be conscious of all their thoughts. […] [W]e are aware of any *actual* thoughts, as well as of powers as they are exercises. We do not, however, retain all our thoughts in memory, and do not pay attention to powers not in use, that we are potentially aware of. […] [A]lthough consciousness may be coextensive with ongoing, more or less focused thinking, it cannot be the essential characteristic or defining mark of thinking[35].

The mind is conscious inasmuch as it is immediately aware of its actual or occurrent thoughts. The mind is always immediately aware of its own occurrent thoughts, but this does not mean that consciousness is a sufficient condition of thinking; indeed, "it may not even be necessary"[36]. The mind's awareness is not reflexive consciousness either:

> The initial thought by means of which we become aware [*advertimus*] of something does not differ from the second thought by means of which we become aware that we were aware of it, any more than this second thought differs from the third thought by means of which we become aware that we were aware that we were aware[37].

Self-awareness may be a pre-requisite or pre-condition of thought, but it is not a distinctive feature of the mind, "[t]here is reflexivity built into thought, which is immediate, not a separate act"[38]. What about the phenomenal character of certain thoughts? Is it a feature of the mind or a pre-condition of certain thoughts? By combining two passages of the Sixth meditation, we can build an argument that resembles the so-called 'zombie argument', now popular among contemporary philosophers of mind. The first passage reads:

> Although I feel heat when I go near a fire and feel pain when I go too near, there is no convincing argument for supposing that there is something in the fire which resembles the heat, any more than for supposing that there is something which resembles the pain. There is

[34] See: SIMMONS, A. 'Cartesian Consciousness Reconsidered', *Philosophers' Imprint, 12*(2), 2012.
[35] ALANEN, L. 'Self-Awareness and Cognitive Agency in Descartes's Meditations', *Philosophical Topics*, 44(1), 2016, pp. 8-9.
[36] *Ibid*., p. 9.
[37] DESCARTES, R. 'Meditations on First Philosophy'. p. 382, AT VII 559.
[38] ALANEN, L. 'Self-Awareness and Cognitive Agency in Descartes's Meditations', *Philosophical Topics*, 44(1), 2016, p. 11.

> simple reason to suppose that there is something in the fire, whatever it may eventually turn out to be, which produces in us the feelings of heat and pain. And likewise, even though there is nothing in any given space that stimulates the senses, it does not follow that there is no body there[39].

Considering that the body can function independent of the mind, Descartes cautions us not to confuse the properties of our sensations and feelings with the properties of the objects that cause them. The functions of the body, conceived as a natural machine in *The World* and other works, do not produce the phenomenal character of sensations. In this sense, the Cartesian conception of the human body is similar to what contemporary philosophers call a 'philosophical zombie': bodily functions without phenomenal properties are logically possible, because human beings are not just bodies, they are embodied minds. The second passage reads:

> But why should that curious sensation of pain [*iste nescio-quod doloris sensus*] give rise to a particular distress of mind; or why should a certain kind of delight follow on a tickling sensation? Again, why should that curious tugging in the stomach [*nescio-quae vellicatio ventriculi*] which I call hunger tell me that I should eat, or a dryness of the throat tell me to drink, and so on? I was not able to give any explanation of all this, except that nature taught me so. For there is absolutely no connection (at least that I can understand) between the tugging sensation and the decision to take food, or between the sensation of something causing pain and the mental apprehension of distress that arises from that sensation[40].

Notice that the Latin expressions translated as "that curious sensation" and "that curious tugging", "je ne sais quelle" in the French version, are more appropriately translated as 'that I know-not-what sensation'. Although Descartes did not pay much attention to the phenomenology of thinking, this passage evidences his firm idea that sensations do not resemble their causes and that the qualitative properties of sensations cannot be reductively explained. Regarding these expressions, Cottingham, one of the translators of Descartes's writings into English, says that:

> What seems to be implied is that there is something here that defies cognitive specification or objective description, but which you have to experience, from the point of view of a subject, to know what is being talked about. Such modes of sensory awareness will certainly be beyond the reach of Cartesian science, since their nature, as Descartes seems to be suggesting, is irreducibly qualitative, rather than quantitative[41].

Among the different acts or operations of the mind, sensory perception and imagination, being modes of the mind that depend on the body, form qualitative experiences. The so-called

[39] DESCARTES, R. 'Meditations on First Philosophy'. p. 57, AT VII 83.
[40] *Ibid*., pp. 52-53, AT VII 76.
[41] COTTINGHAM, J. 'Descartes and the Problem of Consciousness', in *Cosciousness and the Great Philosophers*, S. Leach, & J. Tartaglia (Eds.), Routledge, 2017, p. 70.

'curious' sensations can only be known through experience, which implies that they are accessible only to embodied minds. The knowledge obtained through these modes allows the mind to know about the nature of its union to the body, and to act accordingly to preserve the union.

> 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. […] [T]hese sensations of hunger, thirst, pain and so on are nothing but confused modes of thinking which arise from the union and, as it were, intermingling of the mind with the body[42].

Sensations, feelings, passions, and every other kind of thought caused by sensory perception evince the mind's embodiment. From a sense, they are passive thoughts caused by bodily movements but, in a different sense, they are active thoughts that allow the mind to interact with the body's environment. According to Descartes, these are not two different thoughts, the movement of the sensory organs causes a sensation in the mind and that very sensation is the cause of the mind's reaction.

These modes or acts of thought are 'confused' only when compared to thoughts generated by the intellect alone, but recall that sense perception is the 'clearest' way of understanding the idea of the mind-body union. While purely intellectual ideas or thoughts allow the mind to grasp the concepts of mind, body and, in general, to acquire 'objective' knowledge, the ideas or thoughts that come from the senses provide the mind with practical knowledge. Thus,

> the proper purpose of the sensory perceptions given me by nature is simply to inform the mind of what is beneficial or harmful for the composite of which the mind is a part; and to this extent they are sufficiently clear and distinct. But I misuse them by treating them as reliable touchstones for immediate judgements about the essential nature of the bodies located outside us; yet this is an area where they provide only very obscure information[43].

The clarity and distinctness of different ideas is a relative epistemological criterion, ideas are more or less clear and distinct when compared to each other. Practical knowledge, is clear and distinct enough to let the mind preserve its union to the body, based on the information that the senses provide about the body's environment and its internal states. Understanding our experience is, therefore, not a kind of 'objective' knowledge that could ground scientific

[42] DESCARTES, R. 'Meditations on First Philosophy'. p. 56, AT VII 81.
[43] *Ibid*., pp. 57-58, AT VII 83.

knowledge because our particular way of perceiving through our senses could be different and still effective for preserving the union. As Alanen points out, our sensations "inform us at best of the neuro-physiological mechanisms underlying certain kinds of experience, but contribute no light on the content of those experiences, which depends on one's former experiences and the whole context of beliefs, well-based or not, that provide them with their meaning"[44].

Human nature, specially its phenomenal character, is a complex phenomenon that arises from the mind's embodiment. The order of Descartes's reasoning shows that: 1) there is a physiological dimension that explains the human body in merely functional terms and, in this sense, the same kind of explanation is extended to all non-human animals; 2) the relation between the functional organization of the human body and our sensory perceptions can be explained by means of an artificial model; 3) all thoughts, including sensations, take ideas as their content, i.e., thoughts are about ideas; and 4) given that a human being is an embodied mind, human nature can only be investigated by means of experience.

Of course, it is not clear how the mind is connected to the body, for Descartes only says that this is done by 'natural institution', as when he says that the passions "are all ordained by nature to relate to the body, and to belong to the soul only in so far as it is joined with the body"[45]. Though Descartes makes a clear distinction between our sensations and their objects, this is not enough to claim that Descartes addressed what contemporary philosophers call the 'phenomenal character' of consciousness. There is a terminological tension between the way in which he explains human nature and his dualistic ontology: Descartes's dualism seems to be a consequence of terminological and methodological limitations, not the foundation of his conception of human nature. However, there is no doubt that Descartes's conceptual framework has deeply influenced Western contemporary science and philosophy.

[44] ALANEN, L. 'Cartesian Scientia and the Human Soul', *Vivarium, 46*(3), 2008, p. 433.
[45] DESCARTES, R. 'The Passions of the Soul', in *The Philosophical Writings of Descartes*, Vol. I, J. Cottingham, R. Stoothoff, & D. Murdoch, Trans., Cambridge University Press, 1985, p. 376, AT XI 430.