

## The Contents of a Cartesian Mind

### I. INTRODUCTION

In a letter to Huygens, Descartes affirms that there is an intellectual memory that remembers one's friends after one's death: "Those who die pass to a sweeter and more tranquil life than ours; I cannot imagine otherwise. We shall go to find them some day, and we shall still remember the past; for we have, in my view, an intellectual memory which is certainly independent of the body" (Descartes to Huygens, 10 October 1642, AT III, 798). This passage raises many questions regarding the contents of a disembodied mind: is there a supra-sensible knowledge of others' minds in which one can recognize the others in a disembodied form? Are there intellectual memories of particulars? In what way does the content acquired through senses subsist without the help of a sensible memory? My paper, however, tries to answer a more fundamental question that could orient the answers to previous ones, i.e. the question of what the content of a disembodied Cartesian mind is. This question requires some clarifications regarding the domain of inquiry and the place of Descartes' answer in the history of ideas.

The first clarification concerns the domain and the methods of inquiry. In the same letter to Huygens, Descartes offers the two frameworks in which an inquiry into the problem of intellectual memory can be pursued. On the one hand, one can inquire what Descartes' entire system of thought (i.e. including revealed theology) has to say about intellectual memory. On the other hand, there is a purely metaphysical answer to this problem:

And although religion teaches us much on this topic, I must confess a weakness in myself which is, I think, common to the majority of men. However much we wish to believe, and however much we think we do firmly believe all that religion teaches, we are not usually so moved by it as when we are convinced by very evident natural reasons. (Descartes to Huygens, 10 October 1642, AT III, 798–799)

In my analysis, I shall pursue the second approach, focusing on what a purely metaphysical inquiry, based on doubt and *cogito*, has to say about the contents of a Cartesian mind.

A further clarification regards the place of Descartes' metaphysics in the evolution of the conceptions regarding the mind in Western metaphysics. Phillip Cary (2000) in his *Augustine's Invention of the Inner Self: The Legacy of a Christian Platonist* draws a history of the evolution of the mind as a topological evolution from Neoplatonism to Locke focusing on Augustine invention of the inner self:

As we go from Plotinus to Augustine to Locke, we find the inner world shrinking—from a divine cosmos containing all that is ultimately real and lovely (in Plotinus) to the palace of an individual soul that can gaze upon all that is true and lovely above (in Augustine) to a closed little room where one only gets to watch movies, as it were, about the real world (in Locke). (Cary 2000, 5)

For Plotinus there is only the mind of God, which contains all Platonic Ideas. This mind is encircled by the sphere of individual souls who look outside at the material, imperfect world. If these souls gaze inside, they will be looking directly into the mind of God. For Augustine the possibility of seeing God is prevented by the Fall, therefore, when the soul gazes inside, it will see its "inner self," an open palace populated by memories and abstract ideas. Moreover, if it gazes inside and upwards it will see the light of God. In the final stage of this evolution, with John Locke, the mind is reduced to a *camera obscura*, a closed space illuminated only by the images of external things that come through the senses, on which the mind applies logical operations. What is the place of Descartes in this history? Is he closer to an Augustinian picture in which the mind is a place populated by innate ideas, illuminated by the light of God and filled with intellectual and sensible memories (maximalist interpretation) or is he closer to a Lockean picture in which the mind consists only of different processes of thought that can construct the ideas through demonstration, beginning from the evidence of *ego cogito*, and which contain no intellectual memory (minimalist interpretation)? The present paper tries to make the necessary distinctions and clarifications in order to be able to decide whether Descartes is metaphysically committed to a minimalist or to a maximalist interpretation or whether he stands somewhere in between. Considering his entire system and his Catholic faith, Descartes as a person is definitely closer to the maximalist interpretation while the internal logics of his metaphysics seems to point in the opposite direction.

## II. THE INNATE IDEAS

The first place to look for an answer to the problem concerning the content of the Cartesian mind is the second *Meditation*, where Descartes, after eliminating all content as doubtful, begins to construct his “inner self”. The first certitude that Descartes has is that he is a thinking thing and the self consists, first and foremost, solely in the processes of thinking, i.e. in volitions and judgements: “But what then am I? A thing that thinks. What is that? A thing that doubts, understands, affirms, denies, wills, refuses, and that also imagines and senses” (AT VII, 28). All the content, the ideas<sup>1</sup> processed by these operations of the mind, is illusory. Descartes enumerates the content of the mind that he discovers at the highest point of doubt and makes clear that, except for the idea of the ‘I’, all is just illusion.

Is it not the very same ‘I’ who now doubts almost everything, who nevertheless understands something, who affirms that this one thing is true, who denies other things, who desires to know more, who wishes not to be deceived, who imagines many things even against my will, who also notices many things which appear to come from the senses? [...] although perhaps, as I supposed before, absolutely nothing that I imagined is true, still the very power of imagining really does exist, and constitutes a part of my thought. (AT VII, 28–29)

Therefore, the mind, in the middle of the second *Meditation*, at the highest point of the hyperbolic doubt, has no content, but only powers. In the beginning of the third *Meditation* Descartes “look[s] more deeply into [him]self” (AT VII, 35) and he discovers there nothing but “merely modes of thinking, [which] do exist within me” (AT VII, 36). Hence, Descartes affirms that there is in me the idea of this ‘I’ which appears to be nothing else but the substratum of those powers, an idea that, giving credit to the minimalist interpretation, may be constructed by thought, by the power of judgement through self-contemplation. The interpretation that the idea of the ‘I’ is constructed through deduction seems to be supported by the response he gives to Hobbes’ objections, in which Descartes admits that to have the idea of the soul could mean that one infers it through reasoning:

[Hobbes] adds that there is no idea of the soul, but rather that the soul is inferred by means of reasoning, this is the same thing as saying that there is no image of it depicted in the corporeal imagination, but that nevertheless there is such a thing as I have called an idea of it. (AT VII, 183)

<sup>1</sup> “Some of these thoughts are like images of things; to these alone does the word ‘idea’ properly apply, as when I think of a man, or a chimera, or the sky, or an angel, or God” (AT VII, 37).

I have frequently noted that I call an idea that very thing which is concluded to by means of reasoning, as well as anything else that is in any way perceived. (AT VII, 185)

The ‘I’ being a special idea, which seems to be inferred from the powers that appear with the highest clarity, distinction and evidence, one can inquire, together with Descartes of the third *Meditation*, if the idea of God is a proper content of a Cartesian mind, i.e. an idea that somehow subsists in the substance called thought and which Descartes has identified as ‘I’. Are ‘there’ “other things belonging to me that up until now I have failed to notice” (AT VII, 36)?

In the third *Meditation* Descartes affirms that “among [the] ideas, some appear to me to be innate” (AT VII, 37). If innate ideas, i.e. an ever-lasting content of the mind, do exist, what are these? Initially, the potential candidates for innate ideas are: the ideas of the ‘I’, of corporeal things and of God. Examining all the ideas that one has, Descartes affirms that all of them “could be fashioned from the ideas that I have of myself, of corporeal things, and of God” (AT VII, 43). The idea of the ‘I’ is merely the evidence of some processes that are identified as mine; therefore, it may be either an innate idea or an idea created by me by deduction from the evidence of thinking. “As to the ideas of corporeal things, there is nothing in them that is so great that it seems incapable of having originated from me” (AT VII, 43). The ideas of time, space, substance, etc. originate in the idea of the ‘I’. Only the idea of God cannot originate in the idea of the ‘I’. Therefore, the idea of God originates from a substance that is outside myself. The idea of God, says Descartes, must be an innate idea that is always in my mind. Descartes insists that the idea of God really is in every mind “like the mark of the craftsman impressed upon his work”:

It is not astonishing that in creating me, God should have endowed me with this idea, so that it would be like the mark of the craftsman impressed upon his work, although this mark need not be something distinct from the work itself. [...] when I turn the mind’s eye toward myself, I understand not only that I am something incomplete and dependent upon another [...] but also that the being on whom I depend has in himself all those greater things—not merely indefinitely and potentially, but infinitely and actually, and thus that he is God. The whole force of the argument rests on the fact that I recognize that it would be impossible for me to exist, being of such a nature as I am (namely, having in me the idea of God), unless God did in fact exist. God, I say, that same being the idea of whom is in me. (AT VII 52–53)

The idea of God is of the highest importance for Descartes’ philosophy because science, mathematics, and all knowledge are impossible without it. Since Descartes demonstrates the existence of God based on the idea that he finds in himself, one must concede that this is an innate idea that always subsists in the

soul. It seems like any Platonic Idea that subsists in the realm of Ideas and that is formed about an external object. *Prima facie*, the idea of God is and must be an idea that always subsists in one's mind, probably like an intellectual memory.

Nevertheless, there are passages in Descartes that show that the idea of God should not be a subsistent idea. Descartes says that the idea of God is "like the mark of the craftsman impressed upon his work" (AT VII, 52) which, even if it is always within one, "need not be something distinct from the work itself" (AT VII, 52). This can be understood, in a minimalist interpretation, that there is nothing like a Platonic Idea that subsists in one's mind but that the constitution of one's mind and one's thinking is such that, upon reflection, it is most necessary to arrive at the idea of God, with all its attributes. The same process is involved in the case of other innate ideas, those pertaining to mathematics and logics, where no subsistent idea is required, but the constitution of our minds necessarily determines us to think in this manner and to arrive "by means of reasoning" at these ideas. For a circle to be a square is as impossible as for the three angles of a triangle to be more or less than two right angles. These are ideas our minds arrive at by simply constructing circles and triangles and thinking about them without the need of special ideas that specify their properties. Likewise, for the idea of God, if one, "by means of reasoning", arrives at it, it appears most impossible for God not to exist, not to be infinite, not to be the creator of everything, etc. It is in the constitution of our minds to arrive at the idea of God with all its attributes, as it is in the construction of our knees for them to bend in one direction and not in the other.

The reply given to Hobbes regarding innate ideas makes the minimalist interpretation of the mind more plausible. According to this, innate ideas, or any ideas, do not have to subsist in one's mind like some intellectual memories but should only be possible to be elicited "by means of reasoning": "When we assert that some idea is innate in us, we do not have in mind that we always notice it (for in that event no idea would ever be innate), but only that *we have in ourselves the power to elicit the idea*" (AT VII, 189, my emphasis).

The same point is made in *Note in Programma quoddam*:

I never wrote or concluded that the mind required innate ideas which were in some way different from its faculty of thinking; but when I observed the existence in me of certain thoughts which proceeded, not from external objects or from the determination of my will, but solely from the faculty of thinking within me, then, in order that I might distinguish the ideas or notions (which are the forms of these thoughts) from other thoughts adventitious or factitious, I termed the former 'innate'. (AT VIII-2, 358–359)

In addition, in a letter to Regius, Descartes concedes that the idea of God is a constructed one based on our qualities augmented *ad infinitum*. Nevertheless,

such an idea can be constructed, can be arrived at, “by means of reasoning” only because there is the mark of the Creator in the mind and the constitution of one’s mind originates in and is shaped accordingly by God:

As to your objections: in the first you say: “that it is from the fact that there is in us some wisdom, power, goodness, quantity, etc., that we form the idea of infinite, or at least of indefinite, wisdom, power, goodness and the other perfections that are attributed to God, as well as the idea of an infinite quantity.” I readily concede all of this, and am entirely convinced that *there is in us no idea of God not formed in this manner*. But the whole force of my argument is that I claim I cannot be of such a nature that, by thinking, I can extend to infinity those perfections, which in me are minute, unless we have our origin from a being, in whom they are actually infinite. (AT III 64, my emphasis)

Among the innate ideas, which can be considered not subsistent ideas but only conditions of intelligibility, are, along with the ideas of God and of the ‘I’, the ideas of space, motion, pain, all the colours, all the tastes, etc. For Descartes the entire framework that allows the mind to receive sensory ideas must be innate, otherwise our embodiment would be angelic, i.e. one would perceive only certain dispositions of the pineal gland and not colour or pain or odour:

It follows that the ideas of the motions and figures are themselves innate in us. So much the more must the ideas of pain, colour, sound, and the like be innate, so that our mind may, on the occasion of certain corporeal motions, represent these ideas to itself, for they have no likeness to the corporeal motions. (AT VIII-2, 359)

There are several problems regarding the innate ideas that pertain to the union: the correlation between external motions and qualitative sensation elicited in the mind must be arbitrary (Cottingham 2008, 158); there have to be modalities of dispositions in pineal gland that match modalities of sensations in the mind such that one does not feel a certain taste when he looks at a certain colour; as a corollary to the previous point, each sense or sensual modality must have a corresponding modality of motion in the pineal gland that does not overlap with other modalities; one should not be capable to elicit the sensual modalities in the mind (the red colour or salty taste) in the state of a disembodied mind otherwise one can feel the smell of a rose just by the power of imagination or thinking. Therefore, when in the second *Meditation* Descartes affirms that the mind is a thing that senses, one should understand that the mind is a thing that senses colours, tastes, odours, temperature, etc., each according to its own modalities, without the real presence of red colour or salty taste in the mind as subsistent ideas. In this sense, the mind could be pictured as a very complex machine, with various dispositions to act on many inputs having, by construction, no initial material to manipulate.

Concluding this part of the analysis about the contents of the mind, one can see that the innate ideas should not be subsistent ideas in one's mind but only logical necessary consequences of one's thinking power. Regarding innate ideas, we can say that the mind does not have those as a content, they are not entities that subsist in one's mind, but they can be elicited or constructed or arrived at "by means of reasoning".

### III. INTELLECTUAL MEMORY

For Augustine, "the inner space of the soul is primarily to be identified with the vast inner world called memory" (Cary 2000, 126). In contrast, Descartes pictures the mind rather differently. For him, the mind is mainly a power of thinking and one may even question if intellectual memories exist. In this part of the paper, I shall examine the claim that intellectual memories constitute a genuine content of one's mind. One could consider different categories of intellectual memories that should be examined in order to assign their status: intellectual memories of demonstrations (some of which may be fallacious) and of particular conclusions (some of which may be false), intellectual memories of past facts, of particular things and of persons, intellectual memories of types (like the triangle, assuming that it is not an innate idea).

One of the most important types of intellectual memories is remembering. Remembering is performed by the mind itself and not through the traces in the brain, of particular steps of an ongoing demonstration. This is most necessary in metaphysical demonstration for which the ideas do not have adequate images or traces in the brain. In a metaphysical demonstration the intermediate steps concern immaterial things that have to be stored, presumably in the intellectual memory, at least until one reaches his final conclusion. Given Descartes' claim that a scientific statement cannot be true if it is not based on the knowledge that God exists, it follows that in order to prove, for example, a simple mathematical statement, one must keep in mind several immaterial things. Firstly, one must remember that God exist. Secondly, one must consider the idea that logical and mathematical principles that are clear and distinct are true. Thirdly, one must bear in mind all particular conclusions, the intermediary steps that establish the given statement without doubt. This process can be done with the help of corporeal memory in the case of mathematics, but corporeal memory is no longer available for metaphysical demonstrations. Therefore, the obvious question arises: is there an intellectual memory, at least a temporary one, which preserves the intermediate steps? Is there at least a temporary stored content of the mind? *Prima facie*, the answer is affirmative. Nevertheless, as Peter Dear (2015) shows based on the *Rules*, such demonstrations are reduced to the intuition of the conclusion in which the intermediary steps do not have to be kept in a temporary intellectual memory:

Deductive reasoning reduces to brute intuition—in its most primitive form, to the irreducible leaps from accepted statements to a new, derived one. These leaps just have to be seen; nonetheless, the perception can be improved by training one’s capacity to encompass an entire deductive sequence as if it were a single intuitive act. (Dear 2015, 19)

Descartes shows that through disciplining one’s mind one can make a leap from the intuition of God’s existence to being able to prove the statement, maintaining the whole evidence of the entire demonstration but discarding the intermediary steps:

I should run over them several times with a continuous movement of the imagination that gives an intuition of every single one and at the same time passes to others, until I had learned to pass from the first to the last so rapidly that next to no part was left to memory, but I seemed to intuit the whole thing at once. (AT X, 388)

In practice, of course, one does not always have to begin with the doubt, *cogito* and God to arrive at particular conclusions. It suffices to begin with already established statements inscribed in the corporeal memory and to proceed forward. Once the logical and mathematical truths are established as sure and evident in the *Meditations*, one can take them as granted and proceed further, although their evidence is based on a corporeal memory. The reverse process, from our particular statement to the existence of God, through intermediary steps and principles, can be always constructed again if necessary. Nevertheless, the existence of a temporary intellectual memory, capable of storing intermediary steps of demonstration and particular conclusions, is not needed. Therefore, the existence of an everlasting intellectual memory of particular conclusions and demonstrations is not needed either.

Memories of past events, particular things and persons form another important type of alleged intellectual memories that can constitute ever-lasting content in a Cartesian mind. Descartes allows the existence of these intellectual memories in various parts of his work.<sup>2</sup> Nevertheless, he does not indicate a mode of existence for such entities and the existence of such memories is men-

<sup>2</sup> “I do not think that there has to be a very large number of these folds to supply all the things we remember, because a single fold will do for all the things which resemble each other. Moreover, in addition to the corporeal memory, whose impressions can be explained by these folds in the brain, I believe [*je juge*] that there is also in our intellect another sort of memory, which is altogether spiritual, and is not found in animals. It is this that we mainly use” (Descartes to Mersenne, 6 August 1640; AT III, 143) and “Those who die pass to a sweeter and more tranquil life than ours; I cannot imagine otherwise. We shall go to find them some day, and we shall still remember the past; for we have, in my view, an intellectual memory which is certainly independent of the body” (Descartes to Huygens, 10 October 1642; AT III, 798).



tioned only in some letters and not in the published works. Moreover, in the letter to Huygens that clearly stated the existence of such memories Descartes shows that he founded this idea on revealed theology and not on metaphysical grounds. The possibility of intellectually remembering particular things would identify the Cartesian mind with the Augustinian one and theologically this would be the right thing for Descartes to believe. Nevertheless, metaphysically Descartes rejects such a possibility: “However, this intellectual memory has universals rather than particulars as its objects, and so it cannot enable us to recall every single thing we have done” (AT V, 150).

The above passage, quoted from the conversation with Burman, raises a further issue regarding the possibility of an intellectual memory, that of an intellectual memory for types, such as ‘triangle’, ‘cat’, ‘furniture’, etc.:

I do not refuse to admit intellectual memory; it does exist. When for example, on hearing that the word K-I-N-G signifies supreme power, I commit this to my memory and then subsequently recall the meaning by means of my memory, it must be the intellectual memory that makes this possible. For there is certainly no relationship between the four letters (K-I-N-G) and their meaning, which would enable me to derive the meaning from the letters. It is the intellectual memory that enables me to recall what the letters stand for. (AT V, 150)

Certainly, the sounds that compose the name of the type ‘king’ as well as the graphic representation of the word can be stored as traces in the memory. What Descartes seems to imply is that the meaning associated with kind terms, the categories arrived by abstraction from particular things, are stored intellectually in *res cogitans*. In addition, in a letter to Mesland, Descartes recognizes his inability to provide a sound explanation of the way these meanings are stored in the intellectual memory:

As for memory, I think that the memory of material things depends on the traces which remain in the brain after an image has been imprinted on it; and that the memory of intellectual things depends on some other traces which remain in the mind itself. But the latter are of a wholly different kind from the former, and I cannot explain them by any illustration drawn from corporeal things without a great deal of qualification (Descartes to Mesland, 2 May 1644; AT IV 114).

Nevertheless, the assurance displayed by Descartes in the previous two passages is jeopardised and contradicted in a reply to Hyperaspistes, in which no intellectual memories are admitted, at least not in the usual sense of the word ‘memory’, i.e. entities stored and capable of being retrieved.

But where purely intellectual things are concerned, memory in the strict sense is not involved; they are thought of just as readily irrespective of whether it is the first or second time that they come to mind—unless, as often happens, they are associated with certain names, in which case, since the latter are corporeal, we do indeed remember them. (Descartes to Hyperaspistes, August 1641; AT III, 425)

There is one possible way to account for the passages about intellectual memory in the conversation with Burman and in the letter to Mesland without contradicting the response given to Hyperaspistes. It is to consider intellectual memory not as a certain space in which certain entities are stored like in a warehouse but as the power to retrieve the definitions or the definite descriptions of those kind-terms in the corporeal memory and to bring them before the mind's eye. As such, no intellectual memories need to be posited, hence no everlasting content of the Cartesian mind, but only a power of memory, a species of thinking, which presents memories before the mind's eye when needed, the contents retrieved in the brain and recombined as needed.

#### IV. WONDER AND MEMORY

The most difficult passages related to intellectual memory are those from the letters to Arnauld from 1648. Here the discussion deals not with specific entities that can claim the status of intellectual memories but to the “reflective recognition of novelty” (Fóti 2000) that extends over all possible memory, be it corporeal or intellectual.

I agree with you that there are two different powers of memory; but I am convinced that in the mind of an infant there have never been any pure acts of understanding, but only confused sensations. Although these confused sensations leave some traces in the brain, which remain there for life, that does not suffice to enable us to remember them. For that we would have to observe that the sensations which come to us as adults are like those which we had in our mother's womb; and that in turn would require a certain reflective act of the intellect, or intellectual memory, which was not in use in the womb. (Descartes to Arnauld, 4 June 1648; AT V, 192–193)

If we are to remember something, it is not sufficient that the thing should previously have been before our mind and have left some traces in the brain which give occasion for it to occur in our thought again; it is necessary in addition that we should recognize, when it occurs the second time, that this is happening because it has already been perceived by us earlier. [...] it is clear that it is not sufficient for memory that there should be traces left in the brain by preceding thoughts. The traces have to be of such a kind that the mind recognizes that they have not always been present in us, but were at

some time newly impressed. Now for the mind to recognize this, I think that when these traces were first made it must have made use of pure intellect to notice that the thing which was then presented to it was new and had not been presented before; for there cannot be any corporeal trace of this novelty. Consequently, if ever I wrote that the thoughts of children leave no traces in their brain, I meant traces sufficient for memory, that is, traces which at the time of their impression are observed by pure intellect to be new. (Descartes to Arnauld, 29 July 1648; AT V 219–220)

If something is to be remembered it should fulfil three conditions: the intellectual power of memory must acknowledge the new experience as new upon its first reflexive appearance, the intellectual power of memory should acknowledge that one had previously the same experience upon further appearances, the traces in the corporeal memory should be created through a reflexive act and not through a mere mechanical one. The main theme that Descartes introduces in these passages is the intellectual recognition of novelty. Such a recognition cannot be corporeal but must be intellectual, must pertain to the mind.

One way to understand this statement would be to allow each and every reflected experience to become an intellectual memory, to become an entity stored in *res cogitans*. Such an interpretation cannot account for the phenomenon of forgetfulness or for the fact that some memories require time to be remembered. Moreover, if such a realm of all reflected memories exists, what is the role of the corporeal memory?

The other way to understand Descartes' claim is to consider intellectual memory not as a realm fulfilled with intellectual memories, but only as a power, an act of thinking. This is in fact the way the quoted passages speak about intellectual memory: 'powers of memory' (*memoriae vim*), 'certain reflective act of the intellect' (*quadam reflexione intellectus*), and 'pure intellect' (*intellectione pura*). Even if one considers the intellectual memory to be a power or an act of the intellect while the specific memories are only traces in the brain, there would be the problem of the access of the intellect to these memories/brain-traces: from the physical point of view there seems to be no difference between brain-traces made in infancy or without reflection and the brain-traces made with the concurrency of the pure intellect. Given the alleged similarity between these traces, Descartes posits nevertheless an irreducible difference.

The answer to this puzzle may lie in the consideration of two related phenomena: on the one hand Cartesian passion, wonder, on the other hand the perception and memory of animals. The reflexive recognition of novelty plays an important role not only in the letters to Arnauld but also in passages about the passion of wonder. For Descartes, wonder is excited only by new experiences. Moreover, wonder, as a passion, has no opposite, as all the other passions, because the experiences recognized as experienced previously elicit no reaction from the soul:

When our first encounter with some object surprises us and we find it novel, or very different from what we formerly knew or from what we supposed it ought to be, this causes us to wonder and to be astonished at it. Since all this may happen before we know whether or not the object is beneficial to us, I regard wonder as the first of all the passions. It has no opposite, for, if the object before us has no characteristics that surprise us, we are not moved by it at all and we consider it without passion. (AT XI, 373)

The description of wonder in *Passions* clarifies the operations of intellectual memory presented to Arnauld. “It must have made use of pure intellect to notice that the thing which was then presented to it was new” (AT V, 220) wrote Descartes to Arnauld. Or, the alleged use of pure intellect reveals itself as wonder, as the first passion of the soul. The identification of intellectual memory with wonder at the moment of impressing a trace for the first time shows us that memory is a mode of union. All talk about intellectual memory in Descartes seems to point to the irreducible reality of this union. As Véronique M. Fóti points out,

Descartes’ reply emphasises the substantial union of mind and body [...] Genuine memory, therefore, involves the mind at one with the body. It does not consist in the mere activation of brain traces or the consequent recurrence of certain thoughts; but rather, these thoughts must be recognized as referring back to an initial experience. [...] Since Descartes, in this last formulation, identifies intellectual memory with the power of reflection, and since ordinary memory must involve reflection [...] he can no longer recognize a strictly bodily memory that humans would share with animals. Although he is not explicit on the issue, one would have to grant that animals do not possess genuine memory, but that their behaviour attests only to the conditioning of their bodily mechanisms. (Fóti 2000, 597–598)

This brings us to the second related phenomenon, i.e. the perception and the memory of animals, which is similar to infants’ perception and memory. As Descartes remarked in his reply to Fromondus from October 1637: “animals do not see as we do when we are aware that we see, but only as we do when our mind is elsewhere” (AT I, 413). An animal does not see its predators as predators and it does not follow orders because it understands them but only because its bodily parts are linked in such a way that a certain type of input elicits a certain type of output mechanically. Those mechanical links, which probably pass through the brain as well, are improperly called the memory of the animal. The same thing happens with the memory of the infant: every repeated action leaves traces in his brain. To call those traces memories would be a mistake because those cannot be remembered and lack the qualitative characteristics required for a human memory. It would be similar to stating that animals feel the qualitative

characteristics of seeing colours which pertain, according to Descartes, only to conscious human perception. In order to elicit a memory, the trace in the brain must be encoded as qualitative, as already sanctioned by the intellect. A brain-trace can reach the status of a memory only if the mind was aware of the experience that caused it.

As a consequence of these considerations, one must assume that the traces imprinted by “making use of pure intellect” have certain characteristics that testify their intellectual or conscious origin. For Descartes, there is no strictly body memory because every memory is in a way intellectual by its constitution. Similarly, there is no strictly intellectual memory because memory pertains to the union of mind and body. In addition, remembering things with no brain-traces is like having sensations without a body.

## V. CONCLUSION

Is Descartes Augustinian or Lockean with respect to the contents of the mind? On the one hand, the Cartesian mind is not a *tabula rasa* or an empty *camera obscura*. For Descartes the logical intuition of the principle of non-contradiction cannot be attained through generalizations on the sensible facts. On the other hand, the logical and mathematical principles are not subsistent ideas in *res cogitans*, although they must be inscribed in the workings of the mind as ideas that can be elicited “by means of reasoning”. Therefore, although Descartes maintained a certain constitution of the *cogito*, with different thinking powers and modalities of the union, he dismissed all everlasting content of the mind, which places his metaphysics as the precursor of the mind as a *camera obscura*. Although Descartes’ metaphysics allows for intellectual memories and innate ideas as entities of a pure intellectual realm, the internal logics of his systems does not need these entities in order to be consistent and sound. This article has shown how one can eliminate intellectual memories completely according to Descartes. Nevertheless, if one eliminates intellectual memories and conceives memory as a mode of the union between the mind and the body, one can explain some alleged contradictions and difficult passages in Descartes pertaining to memory more adequately.

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