

Causality and (dis)similarity in Descartes

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Abstract: The article examines certain tensions generated between causality and (dis)similarity in the scope of relationship between idea and thing. Descartes' starting point is that causality does not imply similarity. He must, however, recover this last notion; otherwise, the very notion of causality does not survive (and indeed, the truth). In this sense, Descartes needs to negotiate with the fact that, in general, a cause is eminent (and, therefore, unlike to the effect), whereas the doctrine of causality requires it to be, at least, formal (similar to it). This last requirement allows reintroducing in some way the notion of similarity, but makes it difficult to apprehend cognitive determinations in the direction in which causality (from cause to effect) are produced, which leads Descartes to give axiomatic and methodological primacy to effect.

Keywords: Descartes; causality doctrine; (dis)similarity; eminent cause and formal cause; temporality; axiomatic primacy of effect.

1. Introduction

Although he did not write any treatise on the subject, Descartes provided us with a doctrine of causality, especially in his metaphysical texts. More than that, we can find, in the midst of this doctrine, many traces from which the great debates on the subject were held at the time. This does not mean to say, however, that Descartes is responsible for fully instituting the modern notion of causality (if, by any chance, there is one) or for establishing, *ab ovo*, a totally original and unprecedented concept of cause, although it seems possible to affirm that his thought is the turning point between the traditional conception, Aristotelian in inspiration, and the one that served as one of the pillars of the nascent thought and science.

One of the marks of Cartesian reflection on causality is the way it was introduced and developed, insofar as it emerged in the context of the (extremely problematic) epistemic relationship between idea and thing, and, therefore, amidst the central questions that guided the author's metaphysical and epistemological investigations. In this sense, doubt itself is born and nourished by a supposed causal link between ideas and things, as we can see in its first degree, based on the causality between external objects and sensations supposedly coming from them. Now, if the doubt - and with it, all Cartesian metaphysical reflection - emerges and advances in the midst of issues linked to causality, although often treated only obliquely, this highlights the fruitful and also problematic character of this concept, so that, effectively, it is configured as a propellant of certain tensions that will mark Cartesian thought.

It is, however, through its conflicting coexistence with another notion, that of similarity, that causality gives rise to such tensions. In fact, it is not causality by itself that intrigues Descartes, but the relationship, of dissociation or not, between causality and similarity. To what extent is there similarity between an entity-cause and its idea-effect? To what extent does causality imply similarity? This is the theme-focus of analysis in the present text, from which others will be investigated.

The submission of ideas (in particular, of their objective reality)¹ to the yoke of causality meant an important step in its universalization process (ideas, insofar as they contain reality, become things and, as such, require a cause),² but, concomitantly, it brought certain problems, such as the suspicion of (relative) heterogeneity between cause and effect, either by the representational character of the objective reality of the idea compared to the formal reality of the cause, or, as in the case of the ideas of sensible things, by the spiritual nature of ideas compared to the material nature of objects, or even by the existence of false ideas, arising precisely from the lack of correspondence between a thing and the idea-effect. The tensions brought by dissimilarity, in this sense, not only coexist, but also expand concomitantly with the growing universalization of causality, so it can even be said that a good part of Cartesian philosophy is always trying to

¹Descartes distinguishes between objective reality and formal reality in ideas. As forms of thinking, in which case there is no difference between one and the other, ideas have formal reality, just as any other entity also has it. Thus, all things have formal reality (insofar as they are something or exist): an idea, a stone, God, a mathematical object... On the other hand, only ideas have objective reality, since only they have the capacity to represent (to be an "image" of) something: they "are for" something else, they "objectify" something outside of them. As such, they are distinct from each other, since one represents one thing, and another, something else. If we were to compare an idea to a photograph, the formal reality would correspond to the photograph itself (whose shape and material could be the same as others), while the objective reality would correspond to the image printed on each of them. On this distinction, see the Third Meditation (DESCARTES, 2004, p. 81; AT VII, p. 40₅₋₂₀; AT IX-1, p. 31-32) and the so-called Arguments ... Arranged in Geometrical Fashion (DESCARTES, 1983, p. 169; AT VII, p. 161₄₋₉; AT IX-1, p. 124), annexed to the Second Replies. Quotations of Descartes' texts will be made from the Portuguese language editions (whenever possible), accompanied by the references of the standard edition of the philosopher's complete works, edited by Charles Adam and Paul Tannery (AT). If there is no indication of an edition in Portuguese, the translation is ours. Similarly, translations of texts by other authors, unless there is an express indication of publication in Portuguese, are our authorship. For citations in Portuguese of texts prior to the last orthographic reform, the writing has been updated.

² Another step towards the full universalization of causality comes when Descartes asserts the thesis of God as causa sui, with nothing else escaping causal determination.

balance on the abyss opened by them. It is certain that Descartes, because of this, was led to face difficulties in understanding the concept of causality both in relation to the effective production of the effect and in relation to the intelligibility of the component elements of the causal link, as well as to investigate issues such as the distinction between eminent cause and formal cause and the temporality between cause and effect, among others. Finally, the dissimilarity, insofar as it will not allow a simple and immediate solution for the knowledge of the entities involved in causality taking into account the direction (the sense) in which the causal exercise occurs, also ends up imposing obstacles and placing itself at the center of the author's methodological reflections. As we will have the opportunity to see, Descartes will recognize, as a way to overcome this type of difficulties, a certain priority or anteriority of the effect over the cause.

Without proceeding to a broad study of causality (although it seems feasible) that would serve as an alternative reading of Descartes' reflexive-meditative dynamic, the present text is limited to discussing these and other tensions emerging from what we have just exposed. Neither will it establish relations, of historical nature, with the perspective of other authors of the time and with the previous tradition.

2. The (dis)similarity problem

The notion of cause, once introduced in such a way as to play a substantial role in Cartesian thought, is presented in the context of the relationship between idea and thing (thought and object) from the perspective of the tension that is established between causality and similarity. Causality implies similarity? If an idea is caused by a certain thing, does it follow that it must be similar to it? It is, therefore, in the context of the problem of representation (and the problem of knowledge and truth) that the Cartesian theme of causality emerges We are interested in examining two moments in which Descartes investigates this relationship: in the *Meditations*, especially the *Third Meditation*, and in the initial chapters of the treatise *The World*.

Let's start with the latter.⁵ Despite being an eminently natural philosophy work, *The World*, in its first chapter⁶, it does not begin with a study about objects of the world (as it was expected), but with a "theory of perception" of these objects, having, as a starting point, not the object "light", but the sensation we have of it, and the problem that emerges is, therefore, that of correspondence and similarity between idea and object. He says:

In proposing to treat here of light, the first thing of which I wish to warn you is that there may be a difference between the feeling we have of it, that is, the idea of it formed in our imagination by our eyes, and what there is in objects which produces this feeling in us, that is, what there is in the flame or sun, which is called by the name of "light. For although every one commonly persuades himself that the ideas which we have in our thoughts are entirely similar to the objects from which they proceed, yet I see no reason to assure us that this is so; but, on the contrary, I observe several experiences which should make us doubt this (DESCARTES, 2009, p. 15-17; AT XI, p. 3,-4,).

It is thus, in this apparently simple and direct way, that the problem of the dissociation between causality and similarity is instituted, and with it that of the link between our ideas and the objects represented in them. Descartes, of course, does not want to "make us believe absolutely that this light is something different

 $^{^{3}}$ On a certain emptying of the study on the essence of causality and its substitution by the study on the causal exercise, see Gilson (1984, p. 226-227).

⁴It is not the intention of this text to discuss the Cartesian notion of truth or issues related to the "problem of knowledge", except if they are imbricated with themes that appear in the text. Even so, it is worth quoting Descartes' definition of truth, given the proximity between the notion of conformity (correspondence) that appears therein and that of similarity: "this word 'truth', in its proper signification, denotes the conformity of thought to the object" (AT II, p. 597₁₁₋₁₃; see also LANDIM FILHO, 1992, p. 23).

⁵ The work (whose full title, The World or Treatise on Light, is illustrative; see DESCARTES, 2009) is born as a study of certain physical phenomena, which lead Descartes to expose the structure of matter and of the world. See Beyssade (1996, p. 32).

⁶ Its title, quite significant (although not by Descartes, but by the editors), is: "Of the difference that there is between our feelings and the things that produce them" (DESCARTES, 2009, p. 15; AT XI, p. 3).

in the objects and in our eyes," but only wishes, he says, that you, readers, "doubt it," taking into account that there is "no reason which compels us to believe that what exists in the objects from which the feeling of light comes to us is more similar to this feeling" (DESCARTES, 2009, p. 21; AT XI, p. 6). The thesis of dissimilarity, once put in place, will produce an "epistemic inversion": if knowing something is, somehow, to establish the correspondence between idea and thing, knowledge should be understood as a process of construction of similarity from dissimilarity, which is why it will be necessary, in the following chapters, to mobilize other epistemic criteria for the achievement of knowledge of the world.

The initial reflection of *The World*, in fact, because of this open abyss between causality and similarity, opens two major fronts of investigation.

The first of these, which is most evident in the work, is that the way of knowing the world, in order to be successful, must account for the cognitive deficiencies arising from the causal relationship without guarantees of similarity. The opening chapters of the work account, in their own way, for this difficulty. Since it is not the case here of the rigorous establishment of the foundations of knowledge, Descartes is content to stipulate minimum criteria, anchored in divine immutability,⁷ and to compare them, in terms of simplicity, ease of understanding, and sufficiency, with those of his adversaries.

In these terms, Descartes supposes that there is, in the sphere of occurrence of a physical phenomenon, only what he considers indispensable or absolutely necessary and sufficient for the occurrence and consequent explanation of the phenomenon. There is no need for a detailed exposition of this theme here, since the Cartesian theses regarding the "reduction" of every phenomenon to its minimal components are well known. According to Descartes, the divisibility of matter and varied movements are sufficient to understand not only light, but all physical phenomena, given the existence of a single homogeneous physical structure. Thus, faced with the impossibility of relying, in an effectively sufficient manner, on causality as a means to explain the world, it was necessary for Descartes to mobilize supplementary expedients that could account for the determination of the nature of the cause-entity involved in the events studied. *The World* offers us such expedients, and it would be worthwhile to make a study (although not understand things.

This does not mean, however, that causality ceases to have a function in knowledge, since the causal exercise effectively serves as a guarantee of the connection between elements of an event, as a means of stipulation of its configuration and as an occasion to eliminate "enigmatic" explanations that appeal to incomprehensible entities that only exist "in the head of those who conceive them". Under this aspect, causality, reduced to sufficient and indispensable requirements, becomes associated, to some extent, with the notion of similarity and becomes valid even for the scope of the causal relation of a thing with its idea.

 $^{^7}$ Says Descartes, "Indeed, what firmer and more solid foundation could one find for establishing a truth, even if one wanted to choose it at will, than the very firmness and immutability that is in God?" (DESCARTES, 2009, p. 23-25; AT XI, p. 7_{13} - 8_3).

⁸Let me be permitted to quote a passage from the work as an illustration of this reflection: "Let anyone imagine, if he will, in this wood the form of the fire, the quality of the heat, and the action which burns it, as things which are all different; as for me, who fear I should be mistaken if I suppose something more than what I see there must necessarily be, I am content to conceive of the movement of its parts. Indeed, set fire to it, put heat to it, and make it burn as much as you wish; if you do not suppose, moreover, that there is any part of it that moves or detaches itself from its neighbors, I cannot imagine how it will undergo any alteration or change. But, on the contrary, deprive it of fire, suppress its heat, prevent it from burning; provided you only grant me that there is some power which violently moves the more subtle of its parts and separates them from the thicker ones, I consider that this alone will be able to bring about all the same changes in it that are observed when it burns. (DESCARTES, 2009, p. 23-25; AT XI, p. 7₁₃-8₃).

 $^{^{9}}$ Descartes further states: "Now, following on from this consideration, there is a means of explaining the cause of all the changes that take place in the world and of all the varieties that appear upon the earth; however, I shall content myself here with speaking of those that serve my purpose". (DESCARTES, 2009, p. 33; AT XI, p. $12_{5,9}$).

The similarity becomes minimally valid in the internal sphere of the phenomenon, insofar as, having been brought back to matter and movement, cause and effect will be nothing more than events that occur in the sphere of transformations of the basic constituents (homogeneous and commensurable among themselves) of the material world. By extension of these transformations, if we associate our rational capacity for analysis with our sensitive perception of the phenomenon (as in Descartes' example of a piece of wood on fire), we can conclude the similarity between what we see (the violent movement of particles of fire and matter) and the necessary and sufficient elements for the occurrence of the phenomenon (matter and movement, with their different configurations). On the other hand, the link between what we see and what is "really in the phenomenon" seems to emerge only after the "reduction" of the phenomenon to what is indispensable and sufficient. In any case, we have in *The World* the affirmation of the disconnection between causality and similarity and the subsequent rearticulation of these notions under a critical and vigilant perspective in which similarity is perhaps more the result of the process than an element that constitutes it as such.

The second front opened by the interruption of the passage between causality and similarity in the context of the relation between idea and thing appears only indirectly in *The World*, although it is resumed in *Man* (Descartes, 2009, pp. 297-301; A.T. XI, pp. 143-45) and becomes an important theme in later works. And, although it does not belong to the core of the present text, it is worth presenting, even if briefly, some general features of this theme, given its richness and implications. It is a component present in our sensations, but which, instead of leading us to the knowledge of corresponding objects, allows us to "know" ourselves: dissimilarity denounces a "cognitive function" of an informative and meaningful nature (and not, strictly speaking, of the apprehension of scientific knowledge), aimed at providing "teachings established by nature", instituted as "signs". If dissimilarity does not lead us to know the thing, it produces signs that lead us to meanings concerning the nature of the percipient subject, fundamental to its conservation, preservation and well-being (in a word, to its health and happiness). 10

This is one of the "secrets" revealed by dissimilarity. Problematic in terms of the production of scientific knowledge, it has a function of producing meanings and information that causality, by itself, does not reveal. Descartes introduces the term "sign" and the notion of "teachings" instituted or established by nature to characterize this new "epistemic register" of information. The sign actually reveals a second type of dissimilarity, since neither does it have similarities with the content of perception or sensation. There is no similarity between perception and object, nor between perception and sign. Let's look at the passage in which Descartes refers to the notion of sign:

You are well aware that words, without having any resemblance to the things they signify, do not fail to make us conceive them, and often without our paying attention to the sound of the words or their syllables, so that it may happen that, after having heard a speech whose meaning we understand very well, we are unable to say in what language it was uttered. Now, if words, which mean nothing except by the institution of men, are enough to make us conceive things with which they bear no resemblance whatsoever, why can't nature herself *have established a certain sign* that makes us have the feeling of light, even if *this sign has nothing in itself that is similar to this feeling?* Is it not thus that she has established laughter and tears to make us read joy and sorrow in the faces of men? (DESCARTES, 2009, p. 17; AT XI, p. 43.19; emphasis in italic is our own).

Thus, just as a tear is a sign of sadness (or joy), 11 a dry throat, as Descartes states in the Sixth Meditation, is a sign of the dehydration of the organism (occasionally, otherwise, in the case of the hydropic), a "pinch" in the stomach is a sign of hunger, pain is a sign of sadness, and there is no similarity there, but rather the transmission of information useful for my health and conservation. 12 The relation between idea and sign,

¹⁰These themes are Descartes' constant concern. Health and happiness, the general good of all men, knowledge useful to life (medical and moral themes) are central, for example, in the last parts of the Discourse on Method and also in the Passions of the Soul.

¹¹The dissimilarity is such that a "same tear" can mean sadness or joy.

¹² See different places in the Sixth Meditation (DESCARTES, 2004, p. 165, p. 183, p. 191; AT VII, p. 76, p. 85, p. 89; AT IX-1, p. 60, p. 67, p. 71). An excerpt as an example: "For there is [...] no affinity [...] between that pinching and the desire to take food,

unlike the relation between idea and thing, is not produced by causality and foreshadows issues that will belong to the realm of soul-body union and human nature: this second kind of dissimilarity takes us to a totally new horizon and away from causality. Not being produced by causality (although it is constituted "in the midst" of the exercise of causality), it is instituted, established by nature.¹³

Let us move on to the text of the *Meditations*. The problem of the dissociation between causality and similarity, being at the core of the implantation of doubt, as we said, already operates in the *First Meditation* and reappears in moments in which, by requirement of the examination of the specificity of the problem under consideration, arguments related to the sensation are mainly taken up again. More than this, if doubt languishes in a process that follows the same steps of its implantation, but in the opposite direction, it is to be expected - and in fact it occurs - that the problematic relation between causality and similarity will be maintained until the last pages of the *Sixth Meditation*, given that the first degrees of doubt are overcome exactly on the occasion of the closing of this last meditation. In this respect, the *Sixth Meditation* provides a rich and complex reflection on causality in its relation to sensibility, human nature, and the emergence of the passions, as was said earlier.

Now, it is in the *Third Meditation* that Descartes lays out the central theses of his doctrine of causality and explicitly states that origin or production of an idea does not imply similarity. In the context of discussing the natural inclination that leads us to believe in the occurrence of this implication, Descartes concludes:

And, thirdly, even if [the ideas] proceeded from things different from me, it would not follow from this that they should be similar to those things. On the contrary, I often seemed to notice in many a great discrepancy between the object and its idea (DESCARTES, 2004, p. 79; AT VII, p. 39_{15-18} ; AT IX-1, p. 31).

The explicit assertion of causality without guarantees of similarity could perhaps be questioned here, since it appears in a provisional context and examination of sensitive ideas from the perspective of common sense, whose path of analysis will be abandoned. For this reason, in the sequence of the text another path of analysis will be proposed. It is necessary to distinguish, however, in moments like this, what will be kept as problematic and the theses that will be retained: the examination of the theses defended by common sense has not only the function of implanting and updating the doubt or of collecting the data of the problem at a given moment, but of evidencing what is revealing in it and the (new) foundations on which the theses to be re-elaborated are based. Although originating from an analysis of sensations from a common sense point of view, the thesis of dissimilarity, in the terms exposed here, is here to stay: no matter how much one may want to eliminate it, it becomes increasingly established, in the same way that, as we have already seen and will develop later, the similarity requirement will also be reactivated, so that causality will have to "account" for both.

The doctrine of causality, in the *Third Meditation*, is fundamentally composed of the following conceptual marks: after presenting the distinction between objective reality and the formal reality of an idea, both of which must submit to the yoke of causality (insofar as they are realities), Descartes exposes what is called the "principle of causality", from which the thesis of the universality of the "efficient and total

or between the sensation of the thing that causes the pain and the thought of sorrow arising from that sensation." (DESCARTES, 2004, p. 165; AT VII, p. 76; AT IX-1, 60_{13-16}).

¹³ The Sixth Meditation, at least its second half, can be considered a study of human nature and its teachings, as Descartes investigates the soul-body composite. On the theme of the "institution of nature," see Guenancia (2000, p. 320-349).

 $^{^{14}}$ Indeed, the text says immediately afterwards: "But another way presents itself to me nevertheless to investigate whether things, whose ideas are in me, exist outside me". (see DESCARTES, 2004, p. 81; AT VII, p. $405_{s,\gamma}$; AT IX-1, p. 31).

¹⁵ It is for this reason that in other places there is a kind of resumption of these reflections which might seem mere repetitions: this is the case of the Sixth Meditation in which there is a long discussion on the theme, when Descartes again examines sensation (DESCARTES, 2004, p. 161-165; AT VII, p. 74-76; AT IX-1, p. 58-60).

cause" is derived, and in whose midst the Cartesian distinction between formal cause and eminent cause is presented. ¹⁶ It is within this conceptual framework that the analysis of the idea of God is inserted and the first proof of its existence is presented. ¹⁷

The "principle of causality" states that it is "manifest to the natural light that in the efficient and total cause there must be as much as there is in its effect" and, consequently, "it is not possible that something should result from nothing, nor also that the most perfect, that is, that which contains in itself the most reality, should result from the least perfect". In effect, Descartes asks himself: "For, I ask, from where could the effect receive its reality if not from the cause? And how could it give it, if it did not also possess it?" (Descartes, 2004, p. 81-83; AT VII, p. 40-41; AT IX-1, p. 32). Since nothing can produce anything, nor the less perfect the more perfect - there being, therefore, nothing in the effect that is not in the cause - it follows that everything that exists (given that it is something) requires a cause, the cause being at least as excellent as the effect. As the following text says, the cause is required by every kind of reality, on account of its existence or reality, whether a thing (a stone or God, as another text will say), properties or attributes (heat), or the representation of things or properties (the objective reality of the idea of stone, heat, or God). Pevery reality requiring a cause, this becomes an unrestricted universal requirement, and the required cause must be "efficient and total," so that it (or the sum of several) must be efficient and totally sufficient in producing the effect.

The analysis of the idea of God is an extremely fruitful case, full of consequences, when it comes to understanding causality and its exercise: inserted in a context of analysis of dissimilarity, the causal relation denounced by the idea of God is, on the other hand, a precise case of proof of the "similarity" between cause and effect: ²⁰ God is proved to exist, insofar as he is necessarily the cause of the idea of God, given that only an infinite and perfect being, necessarily unique, can have produced the infinitude and perfection represented in the idea of God. Thus, the infinite content of the idea of God requires that infinity itself, an actually existing being, be its cause, so that there is similarity between idea and thing.

The first proof of the existence of God (to which we will restrict ourselves here) contains certain particularities, constituting an exemplary case in which causality implies similarity. Causality implies similarity because of the relations contained in the notion of infinity: the infinite content of the idea of God can only correspond to the infinite being itself, which, by definition, is unique, since there cannot be more than an infinite being. Thus, a second mode of "existence" of the infinite can only be by representation and by similitude to the original and unique. God, by his nature, excludes any other infinite nature, and this exclusion implies an individuation of the cause. In this sense, there is no possibility that the relation of the idea to the corresponding causal being - external and independent - brings us some problem of identification of that being. This is why the principle of causality works, in the sense of guaranteeing similarity (and truth), as long as it is supported by the notion of infinity, so that the *infinite* objective reality

¹⁶ One should be careful not to confuse the Cartesian notion of formal cause (although it has historical antecedents) with the notion of formal cause in the Aristotelian tradition. It is also necessary to distinguish, within Cartesian thought, formal cause and formal reality.

¹⁷ There is another central text in which the theses that configure the Cartesian doctrine of causality are presented: it is the exposition of the *Axioms or Common Notions in the Arguments . . . Arranged in Geometrical Fashion* (DESCARTES, 1983, p. 172-173; AT IX-1, p. 127-128; AT VII, p. 164-166). A systematic study of this text will not be done.

¹⁸ V. Carraud (2002, p. 170) prefers to call this principle "axiom of causation," to avoid Kantian-type contaminations and because Descartes never named it as such. We will not follow Carraud's suggestion here to facilitate the use of the term "axiom" in strict reference to the axioms of the *Arguments ... Arranged in Geometrical Fashion*, without having to compare them with what the Meditations state.

¹⁹ Even from God a cause will be required, since there is nothing, not even God, that has no cause. See the quotation given later.

²⁰ And so, as we shall see, dissimilarity leads to similarity, and this again to that.

of the idea can only have as its cause the *infinite being itself*, a formal and actual reality. The principle of causality is applied to an extreme (maximum) case of reality, infinitude, which allows us to conclude that there is a need for causation by "equating" the two infinities implied in the idea. It is infinitude that, as a criterion of individuation, determines the exclusivity of the cause and guarantees the similarity between cause and effect. Therefore, the establishment of similarity does not happen through causality, but through an additional criterion, the infinitude.²¹

In fact, God is, from different perspectives, similar and dissimilar to the idea of God. Measured by the causal relation, he is similar to it, but as an entity in itself, because he alone is infinity itself, he is dissimilar to it. The similarity established between cause and effect, detected at the very moment of the examination of the idea of God, cannot imply that God is reduced to what the idea reveals: God is much more than what there is in the idea that represents him. For this reason, Descartes introduces the distinction between knowing and understanding God,²² which will lead him to the distinction between formal cause and eminent cause. Thus, we have two situations. God "is much more" than what we attribute to him, so that we cannot understand the infinite; God is eminently superior to the perfections and degrees of being that we know in him. However, the proof is by "equating" the infinitudes, which are ultimately one. The uniqueness of infinity requires that there be similarity between the two infinitudes, whose difference is exactly the fact that one is real and the other is a representation of the real.

And so the first proof is effected through causality and with similarity, but similarity does not follow from causality directly, requiring additional criteria. The analysis of the notion of divine infinitude, on the other hand, immediately highlights the "superiority" of God's reality in relation to the idea of God: it is evident that God possesses immensely more degrees of being or perfection than the idea, either because the latter's infinite reality is only "virtual", or because God's infinite reality is not restricted to what the idea reveals to us, which is why it is necessary to proceed to the distinction between knowing and understanding and to recognize that God does not allow himself to be measured entirely by a finite reason.

The analysis of the idea of God, thus, brings to light the difference between what an entity is (determined by different, complementary ways) and what is "extracted" from it and required from it at the exact moment of the causal exercise. In the case of God, what is required of the cause, on the occasion of the analysis of the causal link, is what the effect requires, so that, respecting the doctrine of causality, the cause is at least as excellent as the effect: this minimum requirement is "equality" between infinities, which is why we claim that God is the formal cause of the idea of God, and therefore similar to it. On the other hand, God is infinitude itself, which nothing compares to in terms of degrees of being or perfection, so that the idea of God and all other beings are inferior to it in perfection. This present duplicity of the God entity will introduce another problem because of the difficulty or even impossibility of proceeding methodologically from cause to effect. Now, if God immensely surpasses the effect and all other beings, so that there is heterogeneity, not to say incommensurability, between God and the rest of the existent beings, ²³ there is no cognitive passage in the sense from God to his effects and creatures. For this reason, the proof is effective in the sense of the effect towards the cause, which is why the tradition calls it the proof by effects,

²¹There seems to be no need for the invocation, in this proof, of a "correspondence principle," as Gueroult does (1956, I, pp. 175-176, pp. 194-203; 2016, pp. 2052-06, pp. 226-236). Moreover, the effectuation of correspondence (and resemblance) is a result or construction of the process, although the notion of truth evidently implies correspondence. Under this aspect, given the need for additional criteria, we also depart, it seems to us, from the position of Landim Filho (1992, p. 32-35).

²² On this distinction, see, among other texts, the reflections that follow the first proof (DESCARTES, 2004, p. 93; AT VII, p. 46; AT IX-1, p. 36-37).

²³Therefore, there is no proof of the existence of God from creatures directly (except in the case of the idea of God) or of the cosmological kind.

which means that the cause allows itself to be measured by the effects and can only be known in the exact proportion required by the effect.²⁴

From the analyses presented, other tensions emerge, generally already indicated and partially explored. The first of these is the distinction between eminent cause and formal cause.

3. Eminent cause and formal cause

The tense relationship between causality and similarity brings in its core, as Cottingham calls it, the principle of "non-inferiority of the cause" (1995, p. 28): the cause cannot be inferior, in degrees of being or perfection, to the effect, so that there must be at least as much reality in the cause as in its effect, since the effect cannot draw its reality except from the cause. As the most perfect cannot come from the least perfect, the effect cannot be superior to the cause. Therefore, it can either be as perfect as the cause or inferior to it. Descartes defines these two types of possibilities of the causal relation as eminent causality and formal causality. A thing possesses its effect "formally" when it contains within itself the "same things" that are found in the effect, and it possesses its effect "eminently" when it contains "more excellent things" than those found in the effect. Thus, the cause can be "superior" (eminent) or "equal" (formal), in degrees of being, to the effect (DESCARTES, 2004, p. 83; AT VII, p. 41; AT IX-1, p. 32; see also DESCARTES, 1983, p. 169; AT VII, p. 161; AT IX-1, p. 125).

In this sense, if the problem of (dis)similarity led Descartes to expound his doctrine of causality, once the "principle of causality" was established, the introduction of the distinction between the two types of causality seems to follow immediately from these reflections. In other words, if dissimilarity were absolutely assured, it would always require a cause of the eminent type. The fact is that it is configured, first of all, as a problem and as a possibility, so that similarity is not totally ruled out either. In fact, the doctrine of causality requires that the cause be at least similar (formally) to the effect, without being able to assure us, it is true, that it (as an entity) is restricted to the minimum required. Thus, causality reintroduces similarity (without being able to guarantee it), and reintroduces it as a minimum condition, by reason of the requirement that a cause be at least formal. In other words, if on the occasion when one thing (cause) produces another (effect), causality is of the formal kind, there will be similarity between them. On the other hand, this does not eliminate the possibility of the cause-entity being superior to the effect, something that occurs with the entity God, so that God is not just what the idea of God says he is. Thus, he contains "more excellent things" than are found in the effect.

The idea of God stands as an exemplary case of explicitness of this set of tensions. First, because the possibility of God-cause being an eminent reality in relation to the idea-effect is forbidden: God is the formal cause of the idea of God, since, in a word, there is only one infinitude, being in God, although "borrowed" from the idea of God, reason for which it is possible to conclude by the correspondence (similarity) between idea and thing, and, therefore, that God exists as the (formal) cause of the idea of God. Infinitude and absolute perfection "are formally" in God "such as we conceive them" in the idea of God; hence, infinitude and perfection of the idea of God resemble the infinitude and perfection of God Himself.

On the other hand, we know that God contains more degrees of being or perfection than the idea of God, as well as every other thing or creature. In this respect, God exceeds in reality all things. Thus, the reality of God exceeds the objective reality of the idea of God in three main respects, either because the

²⁴ This relation of similarity and dissimilarity of God to the idea and the distinction between knowing and understanding bring about the problem of the superabundance of the cause in front of the effect and, therefore, the problem of the (in)intelligibility of the cause: in what terms does the cause remain unknown in the causal relation? This theme is particularly addressed by Carraud (2002).

latter is only "virtual" (because it is in the realm of representation), or because effectively the existence of the infinite is unique and therefore can be attributed only to God, or because God contains many more "things" than the idea offers us, which is why we can know him but not understand him. Thus, the divine reality is "infinitely" more excellent than the objective reality of the idea of God (and the rest of what exists). Therefore, the entity God and the idea of God, taken in themselves, have a relationship of the eminent kind, not the formal kind.

It turns out that there is a difference between the apprehension or knowledge of a thing in itself (which can occur on different occasions and cumulatively) and the apprehension of this thing within the framework of a certain causal nexus. And here two new chapters on causality and resemblance open up. The first concerns the relation between causality and temporality, and the second deals with the relation between causality and the determination of the elements of the causal relation.

Thus, to the extent that the distinction between formal causation and eminent causation rearticulates the problematic relationship between causation and (dis)resemblance, an interesting question is to investigate the possibility that the causal relationship, taken strictly in itself, may indicate causation of the eminent type. We assess that, in the strict exercise of causality, it would be difficult for us to be able to conclude to the eminent nature of causation (except if we consider what we already know of it or what we come to know by other means), given that the causal relationship only reveals what is required, in the precise sense, by formal causality. Under this aspect, the requirement of the minimum in formal causality is associated with the minimum required as a necessary and sufficient condition, as we explained above on the occasion of the analysis of a physical phenomenon.

In this sense, the distinction between eminent cause and formal cause brings the following difficulty: on the one hand, the minimum required in the causal relation is that the cause be formal, but, as the first proof of the existence of God reveals, the cause-entity may be eminent. It turns out that, in fact and in general, the cause-entity is eminent in relation to the effect. In other words, compared the two entities involved, not under the relation of causal determination, but in themselves, the cause is more excellent than the effect. The only clear exception known and enunciated by Descartes is again God, insofar as he is understood as *causa sui*: since everything has a cause, God also has a cause; but the cause of God cannot be other than himself; therefore, the cause is identical to what is caused, and cannot be more excellent than it.²⁵ Apart from God as the cause of himself, there seems to be no other case in which it is forbidden to think of the cause-entity as exceeding in perfection itself in the form in which it reveals itself in strict relation to its effect.

There are other cases where it would be worthwhile to examine some points related to the present discussion, among which the most interesting relate to "proofs" of existences. Here we will give a quick exposition of the verification of the existence of the thinking self and the proof of the existence of bodies.

In the case of the thinking being, at the beginning of the *Second Meditation*, the verification of its existence occurs because of the impossibility of not existing a being that minimally executes and sustains doubt: the exercise of doubt or thinking requires (as a producing cause) a being that doubts or thinks. Now, what can I affirm from this existing being? Only what the act of doubting requires or allows. That is why Descartes, after "carefully examining things," restricts this judgment of existence to the circumstances and temporality of the exercise of doubt: this judgment "is necessarily true, every time it is uttered by me or conceived in my mind." For this reason, Descartes warns me "not to take other things imprudently in my place, thus erring also in the knowledge which I intend to be the most certain and the most evident of all that I have had before" (DESCARTES, 2004, p. 45; AT VII, p. 25; AT IX-1, p. 19-20), so that I can only conclude, at

²⁵ On the subject of causa sui, among other texts, one can consult the First Replies (AT VII, p. 108; AT IX-1, p. 86).

this moment of meditation, that "I am, therefore, precisely, only a thinking thing" (DESCARTES, 2004, p. 49; AT VII, p. 27; AT IX-1, p. 21).

It is true that there are serious difficulties concerning the determination of the identity of the thinking being or about what we can extract (as a condition) from doubt. This, however, confirms the argument that we can only extract from this intuition the minimum necessary and sufficient for the exercise of doubt, even if there is disagreement about what this minimum would be. One might think, on the other hand, that it would be inadequate to qualify the relation between act and subject of the act as formal causality: how should this existing being not be more excellent than what the act presupposes? What happens, in the first place, is that doubt does not allow us to conclude beyond what it "contains in itself": doubt accepts, from those who seriously support it, that we extract from it only what is presupposed in it, "the same things" that it contains. Otherwise, we could not be sure of what we would conclude, precisely because we would exceed the limits of what underlies the doubt as its condition. Therefore, what we "infer" cannot go beyond what the doubt presupposes. What happens is that we commonly add still uncertain attributes to the subject, inflating its identity, or else, we exaggerate the independence of the relation between act and subject of the act. The fact is that, for Descartes, the act of thinking is inseparable and, therefore, already "contains" the subject of the act, there being no dissociation between them, which is why it is the act that "establishes" the subject as the subject of the act. And so, no matter how many difficulties there may be, one cannot attribute to the subject anything other than what the exercise and actuality of doubt require; therefore, we cannot affirm that there is, in this case, a causality of the eminent type, no matter how much we know that the thinking thing will not be restricted to what the doubt requires.

Finally, we can note, here too, the existence of an additional criterion, which operates alongside causality, as a means of determining cause. The identification of the thinking being (of an "I") does not occur because of the impossibility of the existence of competing entities, as happened with God, but because of the nature of thought: when doubting, the subject becomes aware that he is the subject of this act of doubting. Therefore, each one of us can affirm that he exists and not that another thinking being exists. The identification and individuation of the existing thinking being are effected through the notion of "consciousness" present in the relation between the act of thinking and the subject of the act: the thinking being realizes, when he doubts, that it is he himself who exercises the act of doubting, so that there is a single action with a double direction. Finally, the identification of the thinking being occurred without the need to determine his nature, so that the question about who he is is subsequent, precisely because, at the moment of apprehension of his existence, he revealed himself only to the exact extent that doubt required. Thus, the thesis of causality of a formal nature between the act of doubting (effect) and the thinking being (cause) does not seem to be unfounded.

The other case to be examined is that of the proof of the existence of bodies. Taking sensitive ideas as the starting point of his proof, Descartes concludes to the existence of an active faculty, external to and independent of the mind, corresponding to our (the thinking being's) passive capacity to feel and produce sensitive ideas. Such an active faculty, Descartes literally asserts, must reside in an external substance in which is contained formally or eminently all the objective reality of the ideas produced by that faculty. If the cause is eminent, it can be either God, or another creature that also has more degrees of reality than the sensible ideas require. If it is a formal cause, that cause will be the body itself and will correspond in degrees of being to that required by the ideas. If there is a natural and incorrigible inclination to believe that it is bodies that send me such ideas - and God, as the truthful and non-misleading Being, cannot disprove this natural inclination - it follows that bodies exist and are the formal cause of sensible ideas.

Let's look at this excerpt from Descartes' text:

²⁶ Cf. About this Landim Filho (1997, p. 48).

So the only alternative is that it [this active faculty] is in another substance distinct from me – a substance which contains either formally or eminently all the reality which exists objectively in the ideas produced by this faculty (as I have just noted). This substance is either a body, that is, a corporeal nature, in which case it will contain formally and in fact everything which is to be found objectively or representatively in the ideas; or else it is God, or some creature more noble than a body, in which case it will contain eminently whatever is to be found in the ideas.

But since God is not a deceiver, it is it is quite clear that he does not transmit the ideas to me either directly from himself, or indirectly, via some creature which contains the objective reality of the ideas not formally but only eminently. [...] It follows that corporeal things exist.

What we also see here, and explicitly, is the exercise of a formal type of causality. If there were an eminent cause, God would be deceiving us, not because the cause cannot be eminent, but because we have a clear and distinct perception of a natural inclination, instituted by him, that states that bodies are the causes of sensible ideas. Therefore, bodies exist and they are what produce in us, as formal causes, the sensible ideas. No matter how there are different interpretations about the way the proof of the existence of bodies is given, it seems unequivocal the statement that the causality it denounces is of the formal kind.

From the point of view of identifying bodies as being the formal causes producing sensible ideas, we can distinguish two stages. The first consists in eliminating possible eminent causes (God or another creature with a more excellent reality than that required by the idea), something that the text makes clear on the grounds that God is not deceitful. The second, more difficult to point out, concerns how we can be sure that, although we know that the cause must be formal, that cause is the bodies. This difficulty is even greater insofar as a sensible idea has, as Gueroult says, a tiny degree of objective reality, close to zero, so that it requires a reality as formal cause with degrees of perfection close to nothingness.²⁷ Descartes' solution is not clear, and interpreters differ on this, and the solution proposed here is that, since an idea (its objective reality) does not give information about its cause, the least that is required of the latter is that it exerts its action on the thinking being and that the latter suffers coercion from it, without, therefore, anything in terms of content being transmitted to the idea. Thus, the coercion exerted by the cause makes possible the constitution and individuation of the idea itself, and this, by reason of the causal exercise of a formal nature, requires the individuation of the cause itself. Given the incorrigible natural inclination that this cause is bodies, there would be two possible causes: either homogeneous and indeterminate matter, or matter already containing internal diversity and therefore containing distinct bodies. The first option does not seem feasible (since homogeneous, static matter cannot produce coercion, such as air which, being static, unlike wind, cannot be felt), so that an idea can only be produced - and the thinking being coerced - by a body with individualized determination. Therefore, the proof of bodies is a proof of the multiplicity of bodies and an admission of the effective divisibility of matter (which will imply, in the sequence of Cartesian research, especially in Part II²⁸ of the Principles of Philosophy, the inclusion of movement as a component of the physical universe).

It is certain that the cause of sensible ideas is of a formal nature, and the proof of the existence of bodies is given through this causal relationship. In addition, since the objective reality of sensible ideas is very small, the reality of the cause will also be very small, reduced to something that does not bring information about content (in a way that we do not know bodies through the content of sensible ideas), but only of existence, of identification of the cause and capacity of the exercise of coercion and production of sensible ideas. Bodies are an opposite case to that of God: there it was infinite reality that was the producer of the idea of God, here it is a reality close to nothingness that produces the sensible ideas, both being at the

 $^{^{27}}$ Descartes effectively states that there is a certain "material falsity" in sensible ideas, "when they represent a non-thing as if it were a thing" (DESCARTES, 2004, p. 87; AT VII, p. 43 $_{29.30}$; AT XI, p. 34). On the subject, see, among others, Gueroult (see, for exemple, 1953, II, p. 90-92; 2016, p. 541-543; see also BATTISTI, 2011).

 $^{^{28}}$ The inclusion of motion as one of the "principles of material things" is made in art. 23 of this part of the Principles (AT VIII, p. 52-53; XI-2, p. 75). See, for exemple, De Buzon; Carraud (1994).

extreme of what entails an idea (the determination of the existence of the thinking being also a case located at the extreme, this time at the extreme of doubt). And so there is similarity between cause and effect here too, in the sense that both merely constitute themselves as entities, one as cause of the other. That is all we can know of them, and in this they resemble each other.

4. Causality and temporality

The distinction between causality of the formal type and causality of the eminent type leads us to another tension, within the scope of this study, between causality and temporality. It happens that, although the minimum requirement of causality is of the formal type, effectively the reality of the cause need not, as has often been said above, be restricted to what is required by the effect: as a general rule, the causal entity is more excellent, in degrees of being, than the effect entity. In turn, something parallel occurs in the temporal realm: the cause becomes cause only at the exact moment when it produces the effect, so that cause and effect are correlative and contemporary, since there is no entity that is cause prior to the effect and if there is no effect. On the other hand, one cannot, of course, conclude that a causal relationship, when producing the effect, can simultaneously produce the cause: it is not produced in the act of producing the effect, but must normally be prior to it. Finally, if an entity is established as a cause on the occasion of the production of its effect, and it is this effect that imposes the minimum that is required of it, the knowledge of the causal relation seems unable to proceed from cause to effect, since, since it may be more excellent, there is no possible determination, from it, of the correlated entity. It is different if we proceed from the effect to the cause, since, since it must contain all that it contains, it can be determined correspondingly to what it is, that is, as its formal cause.

Thus, the relationships between causality and temporality are quite complex, so that a cause can be said to be, in different respects, prior, simultaneous, and posterior to the effect.

The entity cause is prior to the effect. A cause is prior since it exists independently of its effect and "before" it. It is not a requirement of causality that the cause-entity be temporally prior to the effect; otherwise, God could not be a cause of itself.²⁹ Nor can it, in general, be self-producing. Perhaps the exception here is self-determination of the will (but we will not examine this topic). Apart from these exceptions, every other cause-entity is in general independent of the effect, so that it, as an entity, exists before the effect. This is what happens in the material world and in the human universe. God created the universe (and maintains it), and every other causal relation in the physical world occurs from the act of divine creation, through which every existing entity has its respective degrees of perfection and, therefore, a certain causal potentiality. Similarly, God creates human beings, composed of body and soul, each with its own capacities and respective properties. Thus, such cause-entities are prior to their respective effects, every causal connection between creatures beginning only after the act of divine creation.

The cause is, on the other hand, simultaneous to the effect. It is the causal link, in turn, that establishes an entity as cause, in the exact measure in which it produces the effect. Therefore, cause and effect are made simultaneously; they are solidary entities.³⁰ The cause becomes a cause on the occasion of the production of the effect, at the exact moment in which the effect is constituted or comes into existence. It is in this process that it lends its reality to the effect, which can be inferior or as excellent as it is. It is this process that is understood as the production of the effect and in it the cause exerts its strength as an efficient cause, since it effects, realizes, produces the effect. Descartes speaks of an "efficient and total" cause, because the

²⁹ In the First Replies, Descartes tells us that he never claimed it was impossible for a thing to be the cause of itself (AT VII, p. 108; AT IX-1, p. 86). See also the Fourth Replies (AT IX-1, p. 185; AT VII, p. 239-240).

 $^{^{30}}$ The thesis of the reciprocal institution between cause and effect had already been stated in the sixth rule of the Rules: "causa et effectus sunt correlativa" (DESCARTES, 1985, p. 35; AT X, p. 383_{5.6}).

cause must fully account for the production of the effect, and it can be a sum of factors or just one. It need not, however, precede the effect. Let's see what Descartes says:

natural light does not absolutely tell us that it is proper for the efficient cause to precede its effect in time: on the contrary, properly speaking, it has neither the name nor the nature of efficient cause until it produces its effect; and therefore it is not prior to it. (AT IX-1, 86; AT VII, 108_{14-18}).

Thus, as discussed earlier, an entity becomes cause at the very moment it produces the effect and by reason of the production, by it, of the effect. Although an entity may exist previously, it, in itself, is only possible cause (given the productive capacity it contains by reason of its reality or degrees of being), becoming cause effectively by reason of the existence or reality of the effect. Therefore, cause and effect are correlative, solidary and temporally simultaneous entities.

Finally, the cause is "subsequent" to the effect. The most innovative thesis, however, in this context - and which, in some way, is already present in the doctrine of causality exposed above - appears more clearly (but neither explicitly, to the point of not having been commented on by the interpreters) in the appendix to the *Second Replies*, the *Arguments . . . Arranged in Geometrical Fashion*. In this text, on the occasion of the exposition of the axioms, or common notions, which are part of the synthetic structure of the exposition, Descartes offers us a set of reflections on causality, resuming in a general way what has been said so far. We are particularly interested in the first axiom. Descartes states:

I. There is no existing thing of which one cannot ask what is the cause by which it exists. For this can be asked even of God: not that he needs any cause to exist, but because the very immensity of his nature is the cause or reason why he needs no cause to exist. (DESCARTES, 1983, p.172; AT IX-1, p. 127; AT VII, p. 164₂₈-165₃).

This text has several points that can be discussed: about God as the cause of himself; about the double function of the cause, to produce the effect and to be the reason for the effect, etc. What we are interested in examining, however, is fundamentally its first sentence. What it affirms, first of all, is the universal and unrestricted scope of efficient causality, something already mentioned above, but also, and mainly, the thesis that if everything has a cause, then everything is an "effect" (the exception here is God: he is not an effect, but as he also admits a cause and submits to causality, we will continue using the expression "effect" as a synonym of admitting a cause). Thus, the universality of causality implies the universality of the thesis that everything that exists, be it an entity, a property of it, everything that is real and not reduced to nothingness, is effect. Thus, to be or to exist is to be effect.

In this sense, everything that exists is an effect. And if it is an effect, it requires a cause. Therefore, we know beforehand, no matter how unknown something is, that it is an effect. And, therefore, that it has a cause that must be at least as excellent as the effect. Therefore, we know that the cause can be determined and known from the effect and that it must fulfill these requirements.

Thus it belongs to the identity of something to be an effect (whether this be an entity, a property, a phenomenon, something simpler or more complex, etc.), as much as it is registered in it to be something, to exist, to have certain identity and unity, to have certain duration, etc. It is of the identity of every existing thing not only that it is and that it is in one way or another, but that it is a thing-effect; and, as such, it requires a cause that is at least of the formal kind. This existing thing is not a thing-cause except potentially, but is thing-effect actual and effectual.

It follows that, since it is axiomatically established that everything is an effect and, therefore, that everything requires a cause, it seems to us that, methodologically, one should go from the effect to the cause. This is what the present reflection indicates: everything requires and claims its cause. Moreover, the effect stipulates the minimum elements required of the cause: it cannot be inferior to the effect, it

must be at least as excellent as the effect. Thus, when we analyze anything, knowing axiomatically that it is an effect, we set out to find the cause. Moreover, we cannot go beyond this and attribute to the cause things that are not necessary for the production of the effect, because we would be attributing things to it randomly and arbitrarily.³¹

In this sense, in methodological terms, that is, in terms of the way Descartes proceeds in his research in the search for truth, his path goes from effect to cause.³²

5. "Effectus similis est causae"

The tensions examined so far show the difficulties of the passage from the causal process to the establishment of similarity between cause and effect, particularly between object and corresponding idea. On the other hand, the notion of similarity is present, and needs to be present, in the causal relationship, being "sister" to others such as commensurability, correspondence, conformity, truth, homogeneity, in short, rationality and knowledge. In other words, how could one know one thing from another if they are incommensurable and absolutely dissimilar? Paradigmatic examples of this problem of incommensurability are those that emerge in the context of the soul-body union: how to understand the union, sensations, emotions and passions, and therefore the causality between these two types of entities, heterogeneous, that occurs in the very horizon of the human being?

Thus, similarity is a constituent element of the process of knowledge and of the production of the intelligibility of something: sooner or later it must make itself present in this journey. One could even examine similarity as a component of the notion of truth as "conformity of thought with the object". The dissimilarity between idea and thing must meet similarity, as we elucidated through examples and tensions examined above.

In this sense, resemblance is reintroduced into the causal relationship. Perhaps this is what Descartes has in mind when he states, in the Conversation with Burman, that the effect resembles the cause. Asked about the possibility that God could create us other than in his image, Descartes replies clearly that the effect must in any case resemble the cause: "For the effect resembles the cause, this is an axiom that has no exception." (AT V, p. 156; DESCARTES, 1981, p. 54).

In our case, as human beings, divine creatures, however incommensurable finite and infinite, we resemble God at least insofar as, like him, we exist, we are each a being, a "substance," etc.; and, as such, we are in his image (see AT V, p. 156). Similarity relations analogous to this occur in every causal relation. The requirement of formal causality guarantees this: even if a cause is eminent, it leaves its mark on the effect, since the effect, insofar as it comes to be what it is, requires that in it be all that it contains. This minimal relation is a relation of "similarity".

Since *Rules* (DESCARTES, 1985, p. 73-74; AT X, p. 419-420) Descartes deals with the subject of simple natures, and divides them, in this work, between those that are purely intellectual, purely material, and the common ones. Among the common ones, he points to existence, unity, duration, and the like, and also

³¹ The example could again be God: we cannot attribute to him anything more than we deduce from the evidence we have of him. As such, he cannot be completely known. This theme that the cause remains unknowable, not only God but the cause in general, highlights its eminent nature as an entity in the face of the demands of a formal type causality. On the theme of the unknowability of the cause see Carraud (2002).

³²We do not intend here to assert the impossibility of proceeding from cause to effect, but the methodological inefficiency in this direction and the fact that, in general, Descartes proceeds in the opposite direction. All the examples examined above go from effect to cause, and the Cartesian method of analysis is characterized in this way. See, on this point, Loparic (1997, pp. 129-158), Battisti (2002, pp. 343-359), and Alquié (1988-1989, II, p. 582, n. 1).

includes the "ties" that bind these common notions together, on which our "reasonings" rest. Counting among the simple natures also privation and negation, Descartes states that such natures are known by themselves, containing nothing false and not capable of being known except once (since they are simple), all other things being composed from them, so that to know is also to separate compositions actually real from those that are deceptive and resulting from our imagination. Each thing thus presupposes a number of common simple natures, as well as those that pertain to this thing while it is spiritual or material. Now, this is common to all beings and must be transmitted by the causal relationship. Therefore, all these elements already guarantee a first level of similarity between cause and effect.

A second level of similarity is configured in the ambit of the minimal ingredients internally constituting each ambit of reality, material, spiritual, and concerning God. Thus, res cogitans and res extensa each have their essence, their main attribute, in short, their ultimate irreducible elements, which guarantee the communion between cause and effect, when the causal link is internal to each sphere of reality. As things become more diverse, the dissimilarity increases, be it internally to each type of reality, or, even more, among the different types, where a constant conflict between commensurability and incommensurability, homogeneity and heterogeneity is established, to the point that it is even possible to question the existence of a real causal link between ontologically distinct entities. Thus, if absolute dissimilarity makes the exercise of causality impossible, this proves, in reverse, the need for some elements related to similarity, when causality occurs. Thus, if there is causality, some kind of similarity in the causal link will be assured.

6. Closing words

There is no way to take further, at this point, the analysis of points that, in some way, were mentioned without having been examined in detail. Nor is it the intention here to resume the theses developed throughout the text.

Two observations to finish.

The first intends only to reaffirm a mark of Cartesian thought: the constant return, but differentiated and critical, to its starting point. The *Meditations* can be read as "going and returning" with doubt (or certainty) as a parameter. But they can also be read with causality as a parameter. In this case, Descartes starts from the thesis of causal similarity, as affirmed by common sense, proceeds to its critique and deconstruction, affirms the thesis of dissimilarity, exposes his doctrine of causality and, finally, rescues similarity at its minimum necessary level.

The second observation concerns the two "basic functions" of causality, that of producing the effect and that of being the reason (*ratio*) for the effect. Although we have not examined the subject directly, we believe that these functions have been made comprehensible throughout the text.

The importance of causality is because, through it, we understand the relations that occur between things. Thus, what interests us, deep down, is the understanding, the intelligibility that causality provides. But it provides intelligibility, for Descartes, to the extent that it has a productive, efficient function. Causal production leaves its marks on the effect, and by them we understand the relations that occurred. The understanding of a thing relies on the unveiling of its production process, even if it is not necessary to go through it in the same direction, and can (should) do so in the opposite direction.

References

ALQUIÉ, F (ed.). 1988-1989. Œuvres philosophiques de Descartes. Paris: Classiques Garnier. 3 v.

BATTISTI, C. A. 2002. *O método de análise em Descartes: da resolução de problemas à constituição do sistema do conhecimento*. Cascavel (PR): Edunioeste.

BATTISTI, C. A. 2011. "A prova da existência da multiplicidade de corpos na 'Sexta Meditação'". *Educação e Filosofia*, Uberlândia, v. 25, n. esp., p. 181-214.

BEYSSADE, J-M. 1996. "Scientia perfectissima. Analyse et synthèse dans les Principia". In: ARMOGATTE, J.-R., BELGIOIOSO, G. (dir.). *Descartes: Principia Philosophiae (1644-1994)*. Nápoles: Vivarium. p. 5-36.

CARRAUD, V. 2002. Causa sive ratio: La raison de la cause de Suarez à Leibniz. Paris: PUF. COTTINGHAM, J. 1995. Dicionário Descartes. Rio de Janeiro: Ed. Zahar.

DE BUZON, F.; CARRAUD, V. 1994. Descartes et les "Principia" II. Paris: PUF.

DESCARTES, R. 1983. Discurso do método; Meditações; Objeções e respostas; As paixões da alma; Cartas.

3. ed. São Paulo: Abril Cultural. (Os Pensadores).

DESCARTES, R. 1985. Regras para a direcção do espírito. Lisboa: Ed. 70.

DESCARTES, R. 1996. Œuvres de Descartes. Public. Charles Adam e Paul Tannery (AT). Paris: Vrin. 11 v.

DESCARTES, R. 2004. *Meditações sobre filosofia primeira*. Edição em latim e em português. Trad. de Fausto Castilho. Campinas, SP: Editora da UNICAMP.

DESCARTES, R. 2009. *O mundo ou Tratado da luz; O homem*. Trad. e notas: C. A. Battisti e M. C. de O. Franco Donatelli. Campinas, SP: Editora da UNICAMP.

DESCARTES, R. 2018. Discurso do método & Ensaios. Trad. de C. A. Battisti, É. Andrade, G. Rodrigues Neto, M. C. de O. Franco Donatelli e P. R. Mariconda. São Paulo: Ed. UNESP.

GILSON, E. 1984 (1930). Études sur le rôle de la pensée médiévale dans la formation du système cartésien. Paris: Vrin.

GUENANCIA, P. 2000. Lire Descartes. Paris: Gallimard.

GUEROULT, M. 1953. Descartes selon l'ordre des raisons. Paris: Aubier-Montaigne. 2 v.

GUEROULT, M. 2016. Descartes segundo a ordem das razões. Trad. É. Andrade, E. Forlin, M. Donatelli,

C. Battisti e A. Soares. São Paulo: Discurso Editorial.

LANDIM FILHO, R. 1992. *Evidência e verdade no sistema cartesiano*. São Paulo: Ed. Loyola. LOPARIC, Z. 1997. *Descartes heurístico*. Campinas: IFCH/UNICAMP.