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Was Descartes a Cartesian? Descartes, Quine and "Epistemology Naturalized"

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Abstract

In this paper I intend to argue for an interpretation of Descartes' theory of knowledge that may be called "Descartes' naturalized epistemology". Against Willard Quine, and the tradition of interpretation that followed the publication of Quine's "Epistemology naturalized" in 1969, I intend to show that Descartes himself thought of his investigation into the nature of human knowledge as an intellectual project coherent with the method of the sciences of his own time. In many respects, as I intend to show, Descartes was neither "Cartesian" nor a strict "rationalist" as Quine's characterization of Cartesian epistemology suggests.

Keywords

Descartes; Quine; Cartesianism; epistemology naturalized; empiricism

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Introduction

According to a familiar understanding of Cartesian epistemology, Descartes considered the philosophical investigation into the foundations of human knowledge as an intellectual project utterly independent of the methods of the natural sciences. This interpretation gained much force after Willard Quine published an influential paper entitled "Epistemology naturalized" in 1969. Against Quine, and the tradition of interpretation ensuing from the 1969 paper, I intend to put forward a different approach to Descartes' epistemology. My intention is not to argue against "epistemology naturalized" as such. My aim is, rather, to show that Descartes understood his own philosophical project in line with the idea that Quine calls "epistemology naturalized". In many respects, as I intend to show, Descartes was neither "Cartesian" nor a strict "rationalist." The interpretation I would like to advance here might be referred to as "Descartes' naturalized epistemology" (Gaukroger 2010, 683).

In the first section of this paper I present Quine's defence of "epistemology naturalized". Quine understands his own epistemological project both as a criticism and as an alternative to Cartesian epistemology. In the second section I show that Quine's conception of "Cartesian" epistemology resulted from a historical understanding of modern philosophy that has been much criticized over the last decades and which assumes that there is a clear-cut opposition between the so-called "rationalist" and "empiricist" philosophers. Recent scholarship shows that Descartes was not such a strict rationalist and that he ascribed great importance to the concept of experience in his methodological and scientific texts. In the third, fourth, and fifth sections of this paper my aim is to show that important empirical aspects of Descartes' epistemology appear not only in his methodological and scientific writings, but also in the *Meditations*. My thesis is that the

method of inquiry that Descartes applied in the *Meditations* presupposes the reliability of the methods of mathematics and physics.

1. Quine's "Naturalized Epistemology" and "Cartesian" Epistemology

In his 1969 article, "Epistemology naturalized", Quine defends the idea that epistemology, as it had been traditionally pursued, was a philosophical project doomed failure: "the Cartesian quest for certainty had been the remote motivation for epistemology, both on its conceptual and its doctrinal side; but that quest was seen as a lost cause" (Quine 1969, 74). The traditional or Cartesian epistemology consisted, according to Quine, in the attempt to provide the ultimate foundations of knowledge, including scientific knowledge. But the traditional epistemology did not rely on the methods of natural sciences, for it assumed that this procedure would entail a circular reasoning. Thus, Cartesian or traditional epistemology had to be comprehended as a field of inquiry independent of the methods of natural sciences. It means that regardless of the results one might possibly obtain by means of scientific investigation, science itself could not provide its own foundations.

Since Cartesian epistemology could not employ a scientific method in order to justify scientific knowledge, traditional epistemology had to rely on a different kind of a method. In the specific case of Descartes' epistemology, this method, according to a common understanding of Descartes' theory of knowledge, was the solipsistic methodical doubt. The idea here, to use a metaphor that became popular among authors who rejected the traditional epistemology, was that of a philosopher confidently delving into the nature of human knowledge from the comfort of one's armchair, unconcerned by the methods of empirical sciences. As Richard Foley puts it:

> Cartesian epistemology, in particular, is the common enemy. Descartes thought of epistemology as first philosophy; the epistemologist task is to tell what intellectual methods and procedures we are justified in employing. Science can be of no help in this project, since a part of the project's motivation is to lay down rules for science itself. In the eyes of the naturalized epistemologist, this conception of epistemology forced Descartes and epistemologists influenced by him to resort to armchair speculation about what intellectual procedures, methods, and practices are to be trusted. Not surprisingly, they come to different conclusions. Descartes recommended the method of doubt […] (Foley 1996, 374; see also Foley 1994)

The task of traditional epistemology, thus, was to overcome the sceptical doubts that stood in the way of the project of providing the foundations of scientific knowledge. Quine's "naturalized epistemology", on the other hand, consists in a criticism and an alternative to traditional or Cartesian epistemology. On Quine's view, human knowledge is a phenomenon just like any other in the natural world. For this reason, the problem of knowledge should be examined with the same methodological tools provided by the science of one's own time. Our sensory organs, Quine argues, are stimulated in such a way that we are led to have beliefs about the external world. The task of epistemology, therefore, is not so much that of providing the foundations of human knowledge, but, rather, of investigating how our sensory experience causes us to have a plethora of beliefs about the external world:

> Epistemology, or something like it, simply falls into place as a chapter of psychology and hence of natural science. It studies a natural phenomenon, viz., a physical human subject. This human subject is accorded a certain experimentally controlled

> input – certain patterns of irradiation in assorted frequencies, for instance – and in the fullness of time the subject delivers as output a description of the three-dimensional external world and its history. (Quine 1969, 82-3).

The aim of naturalized epistemology is not *to justify* knowledge, but *to explain* how we acquire beliefs about the external world through the "meager input" of our sensory experience and the "torrential output" of our scientific theories (Quine 1969, 83). For Quine, the attempt to provide the foundations of human knowledge without using a scientific method of investigation amounts to providing no foundations at all. The sceptical challenge, which calls into question the reliability of scientific knowledge as whole, originates from science itself and must be addressed with tools available within science. As Quine puts it:

> If the epistemologist's goal is validation of the grounds of empirical science, he defeats his purpose by using psychology or other empirical science in the validation. However, such scruples against circularity have little point once we have stopped dreaming of deducting science from observation. If we are simply to understand the link between observation and science, we are well advised to use any available information, including, that provided by the very science whose link with observation we are seeking to understand (Quine 1969, 75-6).[1]

Because naturalized epistemology does not aim at a justification, but at an explanation of how we have knowledge of the external world, we can, without any charge of circularity, address the sceptical challenge by means of science itself. As regards the problem of the circle, Quine argues in *Roots of Reference* that:

> […] this fear of circularity is a case of needless logical timidity, even granted the project of substantiating our knowledge of external world. The crucial logical point is that the epistemologist is confronting a challenge to natural science that arises from within natural science (Quine 1974, 3).

As I stated above, Quine understands his naturalized epistemology firstly as a criticism of the "old epistemology", and secondly as an alternative to it. Quine's point is that there is a relevant interaction between science and epistemology, and that it is methodologically correct, and even necessary, to make use of scientific knowledge in order to deal with questions which arise within science itself: "It <sc. naturalized epistemology> is enlightened in recognizing that the skeptical challenge springs from science itself, and that in coping with it we are free to use scientific knowledge" (Quine 1974, 3).

My intention here is to endorse the second thesis, but dispute the first one: it is correct to suppose that epistemology and science are interconnected, i.e. that we cannot consider epistemology as entirely independent of what goes on in the domain of empirical sciences. Yet, as I intend to show, it is false to suppose that Descartes advocated a fundamental distinction between his own theory of knowledge, on the one hand, and sciences such as mathematics and physics, on the other. Charles Lamore makes a similar point in affirming that:

> […] the origin of the idea that epistemology, as a philosophical discipline, must proceed independently of the science belongs to a later time. It arises both with Kantian transcendentalism and with the more recent wish to analyze "the meaning of the concept of knowledge". […] Descartes conceived the theory of nature and the theory of knowledge as lying on an continuum, instead of being wholly different enterprises (Larmore 1980, 7, see also p. 12).

I intend to present some arguments for "Descartes' naturalized epistemology" in the third, fourth, and fifth sections of the present text. But firstly I would like to show, in the next section, that Quine envisaged Descartes as the target of his criticism because of an alleged antagonism between *empiricism* and *rationalism*. According to a common historical understanding of modern philosophy, Descartes would be on the rationalist side of the divide and would have attributed a minor role to the concept of experience in his theory of knowledge.

2. Descartes as an Empiricist

The opposition between rationalism and empiricism, sometimes used in order to describe the history of philosophy in the seventeenth and early eighteenth centuries, has been the object of much criticism over the last decades (Engfer 1996). Thomas Hobbes, for instance, is usually classified as a typical empiricist, but his philosophy has also clear elements of rationalism. By the same token, Descartes' philosophy, usually seen as a paradigmatic instance of rationalism, has important empirical aspects. Indeed, as early as 1945 Jean Laporte argued that "if we want to fully characterise Descartes' philosophy by means of a name, the name that would best befit it is, in spite of an apparent paradox, that of empiricism – a radical and comprehensive empiricism" (Laporte 1945, 477).[2] Some more recent attempts to highlight the empirical aspects of Descartes' philosophy include the following accounts which I would like to quote in full-length here:

> (i) Desmond Clarke:
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> Thus despite the apparent obviousness of the thesis that Descartes' project in science is essentially a mistaken attempt to establish physics deductively on an a priori foundation, and despite the fact that Descartes consistently describes his project as an a priori, deductive account of nature, I wish to argue that these words do not mean what they seem to mean and that Cartesian method is significantly a posteriori both in theory and in practice.
>
> I approach this thesis by directly confronting the assumption that Descartes is fundamentally a rationalist in science and that he prefers not to rely on experimental evidence whenever he can avoid it, even in the study of physical nature (Clarke 1982, 12).
>
> (ii) Keith Lehrer:
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> […] it is doubtful that Descartes was a strict rationalist. He seems to have agreed that at least on some occasions justification is derived from sense experience (Lehrer 1990, 189).
>
> (iii) Margaret Osler:
>
> Stimulated by both tremendous growth of genuinely historical studies of sciences and increasing historicization of the major philosophers, scholars have turned increasing attention to Cartesian science and its connection to this philosophy more generally (Osler 1992, 511-12).
>
> (iv) J. L. Bermudez:
>
> Recent work on Descartes has drastically revised the traditional conception of Descartes as paradigmatic rationalist and foundationalist. The traditional picture, familiar of histories of philosophy and introductory lectures, is of a solitary meditator dedicated to the pursuit of certainty in a unified science via a rigorous process of

> logical deduction from indubitable first principles. But the Descartes that has emerged from recent studies strikes a more subtle balance between metaphysics, physics, epistemology and philosophy of science.
>
> […] the principal motivation for moving away from the traditional view has been a closer attention to the actual practice of Descartes science. Particularly significant has been the recognition of the role played by crucial experiments (Bermudez 1997, 743; 749).[3]

These accounts of Descartes' philosophy, as we can see, call into question the picture of Descartes as a paradigmatic rationalist. However, in spite of the growing tendency in Descartes' scholarship to emphasize the empirical aspects of his philosophy, there is no systematic attempt to assess how exactly Descartes' scientific program fits into the theory of knowledge presented in *Meditations*. Some of the passages quoted above show that, in the context of his physics, Descartes was not so strict a rationalist as one might suppose. But how should we assess the suggestion that Descartes was not a strict rationalist if we consider, not his scientific and methodological works, but the epistemology proposed in the *Meditations*?

If we accept Quine's epistemological project as a refutation of Cartesian epistemology, then we would also have to admit that it comes as no surprise that there are not many attempts to disclose the scientific assumptions underlying the text of the *Meditations*: there would be none to be unveiled, because Descartes, according to Quine, would have understood the investigation into the nature of human knowledge as a philosophical enterprise wholly independent of scientific research. But it seems to me that when Quine refers to Descartes, he has in mind the way Descartes came to be interpreted later. The traditional interpretation may be reinforced if we take for granted the validity of an alleged antagonism between rationalism and empiricism. But the appropriateness of this distinction, as I have stressed above, has been disputed over the last decades. As Ernest Sosa aptly suggests, "On these basic issues of epistemology, Descartes is in no Cartesian" (Sosa 1997, 229). Indeed, in a letter to Mersenne, Descartes affirms that the *Meditations* contain all principles of his physics: "[…] I must tell you that the little book on metaphysics which I sent you contains all the principles of my physics" (Descartes CSMK III, 157; AT III, 233). And although Descartes did not develop any systematic ethical theory, he also declares in a letter to Chanut that even his ideas about morals are supposed to contain the principles of his physics: "these truths of physics are part of the foundations of the highest and most perfect morality" (Descartes CSMK III, 368; AT V, 290-291).

It is, therefore, misleading to assume that Descartes admitted such a clear-cut distinction between his physics and his theories of knowledge. But how exactly are we to comprehend the thesis that the principles of physics are "contained" in the *Meditations*? I think one important aspect of Quine's thesis that epistemology must be on a par with the natural sciences is that it allows us now to see Descartes' epistemological project in a new light, even though Quine himself regarded "naturalized epistemology" as a criticism of Descartes. Hiram Caton also calls attention to the importance of reassessing the main philosophical ideas of major philosophers of the past from the perspective of some philosophical theories of our own time: "What does it matter that Descartes never expressed his intention in the contemporary style? A reconstruction philosophically interesting can read this objective from his arguments, and that's what counts" (Caton 1981, 275). My intention here, then, is to provide a "reconstruction philosophically interes-

ting" of the relationship between Descartes' epistemology and the contemporary project of "epistemology naturalized".

In the next sections I will discuss three questions which Descartes had to address in his epistemology: the characterization of method; the problem of the circle; and the use of hypotheses in epistemology. My aim is to show that Descartes understood his own philosophical project in a way that is not incompatible with Quine's "epistemology naturalized".

3. The Problem of the Method

I intend to show by means of two arguments that Descartes' methodical doubt in the first *Meditation* consists, in fact, in the application of a method which he had already proposed in the *Discours de Méthode* (henceforth simply *Discours*) and in the *Regulae ad Directionem Inginii* (henceforth simply *Regulae*). It means that Descartes employs in his epistemology the same method he had adopted, for instance, in the three scientific treatises originally published along with the *Discours* (*Dioptrique*, *Météores* and *Géométrie*). With the publication of these treatises Descartes intended to show how the method had already been effectively put into practice in the context of the optics, astronomy, geometry.

First argument: the rules of the *Discours* and of the *Regulae*

In *Evidence* Quine affirms: "I am of that large minority or small majority who repudiate the Cartesian dream of a foundation for scientific certainty firmer than scientific method itself" (Quine 1990, 19). Quine's thesis is that Cartesianism, in order to avoid a circular argument in the attempt to provide the foundations of scientific knowledge, presupposes a method other than the scientific method itself. And according to Foley, the Cartesian methodological procedure in order to ground science was the method of doubt. It is true that Descartes himself states at the outset of the *Meditations* that, in order to "establish anything at all in the sciences that was stable and likely to last" we have initially to doubt everything (Descartes CSM II, 12; AT VII 17). But does it also mean that Descartes' methodical doubt may not be comprehended as an instance of the application of a scientific method of investigation?

In the *Discours* Descartes proposes four general rules in order to "search truth in the sciences."[4] These rules are presented on the assumption that mathematical knowledge is reliable. The second rule states the following: "to divide each of the difficulties I examined into as many parts as possible and as may be required in order to resolve them better" (Descartes CSM, I, 120; AT VI 18). This rule had already been presented in the text of the fifth *Regula*:

> The whole method consists entirely in the ordering and arranging of the objects on which we must concentrate our mind's eye if we are to discover some truth. We shall be following this method exactly if we first reduce complicated and obscure propositions step by step to simpler ones, and then, starting with the intuitions of the simplest ones of all, try to ascend through the same steps to a knowledge of all the rest (Descartes CSM I, 20; AT X, 379).

The thrust of this rule is that, in the pursuit of scientific knowledge, we have to "reduce" (*diviser* in the *Discours*, and *reducam* in the *Regulae*) any problem down to its constitu-

tive elements. Now, if we follow closely Descartes' argument in the *First Meditation*, we see that the methodical doubt consists, in fact, in the application of this rule.

It is possible to recognize a sequence of steps in the methodical doubt of the *First Meditation*. At every step the doubt becomes increasingly more general. In the first two steps Descartes calls into question the validity of all empirical knowledge. His argument is that in certain situations, when we are, for instance, very distant from an object, or if we put ourselves in the perspective of a madman, we cannot be sure whether or not our thoughts do actually correspond to the things they seem to represent. The application of the method becomes clearer, then, when we turn to the next step of the methodical doubt. Descartes introduces the dream argument, and then affirms that even if none of our thoughts corresponded to the things they seem to represent, we could not deny that the constitutive elements of these thoughts must indeed have a counterpart in the external world. Descartes compares our thoughts to a painting on a canvas. Even if the painting does not depict something real, as for instance a winged horse, its constitutive elements, the image of the wings and the image of the horse, do have a counterpart in the real world (Descartes CSM II, 13; AT VII, 19). Thus, the complexity of our ideas, for the sake of a methodological requirement, must be reduced to its constitutive elements. Our thoughts of "eyes", "heads", "hands", "wings", etc. seem to correspond to something real. The existence of these objects is taken as indubitable in this step of Descartes' argument, for even in dreams or hallucinations our thoughts appear to us as though they were "composed" of the mental image of these "general things".

But could we not make a step further and ask now, in conformity with the rules of the method, whether these thoughts – the idea we have of eyes, heads, hands, wings, etc – may not be decomposed into something more elementary? In the *First Meditation* Descartes argues that even these apparently most general things are amenable to further reduction:

> […] Or if perhaps they manage to think up something so new that nothing remotely similar has ever been seen before – something which is therefore completely fictitious and unreal – at least the colours used in the composition must be real (Descartes CSM II, 13; AT VII 20).

Colours, then, seem to be so simple that they cannot be reduced into more simple elements. But it is not colours in general that are analyzed in the next step of Descartes' argument. For we can conceive of an extended object without having any clear representation of its colour. But we cannot, on the other hand, conceive of a coloured object without thinking of its colour being extended in space. In the next step of the methodical doubt, then, Descartes examines whether extension in general is not something the existence of which we can be certain of (Descartes CSM II; AT VII 20). The epistemological priority of extension over colour had already been considered in the twelfth *Regula*:

> This is demonstrated by the fact that the concept of shape is so simple and common that it is involved in everything perceivable by the senses. Take colour, for example: whatever you may suppose colour to be, you will not deny that it is extended and consequently has shape (Descartes CSM I, 40-41; AT X, 413).

Extension is the object of geometry and arithmetic. But the next step of the methodical doubt puts into question, by means of the evil god hypothesis, even mathematical knowledge, which thus far had seemed indubitable.

I will not discuss here this stage of Descartes' argument in detail. My intention is simply to draw attention to Descartes' methodological procedure in the *First Meditation* so as to make it clear that the methodical doubt is, in fact, an application of methodological rules which he had formulated in the *Discours* and in the *Regulae*. These rules are the same ones he had already adopted in his scientific treatises. Thus, contrary to Quine's thesis, Descartes indeed makes free use of the scientific method of his time in the *Meditations*. The *First Meditation* contains the methodical doubt. But, contrary Foley's suggestion, the methodical doubt is itself an application of the scientific method. I would like now to present a further reason to assume that the Meditations require the use of a scientific method of investigation.

Second argument: method and mathematics in the *Meditations*

Both in *Regulae* and the *Discours* Descartes affirms that his method reproduces the structure of mathematical operations. And in the summary to the *Meditations* Descartes, again, affirms that he employs in his investigation a method of exposition similar to the method used in geometry. The next step of the methodical doubt, as we saw above, puts into question the validity of mathematics. But it was the very application of method, i.e. of the principle according to which we must reduce every difficulty to its constituting elements, in order to "search the truth in the sciences", that led Descartes to put mathematical knowledge into question. Quine is, therefore, right in stating that "skepticism is an offshoot of science" (Quine 1975, 67), or that "the skeptical challenge springs from science itself" (Quine 1974, 3).[5] It is, however, misleading to assume that Descartes tried to advance a theory of knowledge in the *Meditations* without being "free to use scientific knowledge." (Quine 1974, 3). According to Quine, "the old epistemologist failed to recognize the strength of his position" (Quine 1974, 3), i.e. that in confronting the skeptical challenge, it is correct to resort to scientific method. But Descartes himself recognises that the only way to provide demonstrations in the *Meditations* consists in adopting the same method applied in geometry, although the very validity of geometry turns out to become questionable at the end of the *First Meditation*.

To the extent that the method in the *Meditations* assumes the validity of something which, for the sake of the method itself, proves to be questionable, does not this assumption, therefore, render Descartes' argument unacceptably question-begging? In other words, to use the mathematical method and, by means of the method itself, cast doubt upon the validity of mathematics would not be a kind of circular reasoning? It is important to notice now that it is not only the method of mathematics that Descartes has in mind in the context of the *Meditations*. In consonance with Quine's idea that "the epistemologist may make free use of all scientific theory" (Quine 1974, 3), Descartes also uses in the *Meditations* the methodological procedures of physics. It is by recourse to the notion of hypothesis and experience, originally employed in the context of physics, that Descartes seeks to avoid the charge of circularity in the *First Meditations*. I would like to examine this point in the next section.

4. The problem of the circle: method and hypothesis

Descartes assumes the validity of the method in the *Meditations* only on hypothetical grounds. The question that Descartes tries to answer in the *Meditations* is the following: given the best method available to "search the truth in the sciences", what happens if we

systematically apply it in order to inquire into the reliability of our cognitive faculties? The answer that Descartes offers is that if we use the best method we have, we recognize that we are not entrapped in contradictions. In other words, the knowledge we obtain by means of the method is coherent, and that is all that is necessary in order to ground "certitude" in the sciences. This understanding of the main question of the *Meditations* is not new. Harry Frankfurt seems to have been the first to put forth the thesis in his book *Demons, Dreamers and Madmen: the defense of Reason in Descartes Meditations*:

> Descartes's assumption that reason is entitled to authority has the status of a working hypothesis whose tenability is itself to be tested by the investigation he undertakes. Viewed in this light, it begs no questions; it does not contravene his resolution to empty his mind. Just as he examines in the First Meditation the assumption that the senses are trustworthy, he considers later in the *Meditations* the assumption that reason is reliable. Since his aim is to discover how (and whether) a reasonable person can find a secure foundation for the sciences, it would be irrelevant for him to begin his inquiry except by adopting a rational norm. But since his adoption of it is provisional and does not prejudge the question of whether using this norm is a viable procedure, he does not arbitrarily settle a question that he is obliged to leave open.(Frankfurt 1970, 29).[6]

Frankfurt also argues that, for Descartes, the validity of the best rules we have to find out the truth in the sciences is acknowledged only on hypothetical grounds. However, Frankfurt did not to try to show that when Descartes hypothetically assumed the validity of the method in the *Meditations*, Descartes was in fact resorting to a methodological procedure which he had already employed in his physics. Thus, it is in virtue of the free use Descartes makes of scientific knowledge − both from the mathematics and from the physics of his time − that it is reasonable to regard the theory of knowledge contained in the *Meditations* as a version of what Quine has called "naturalized epistemology". I would like to expose succinctly now how Descartes employs the notions of hypothesis and experience in some of his methodological and scientific texts.

5. Hypotheses and experiences in Descartes' physics

In a number of texts Descartes argues that his argument must be taken only on hypothetical grounds. In the *Principes de la Philosophie* (henceforth only Principles), Descartes makes the following statement about the method of investigation in the context of astronomy: "And if it is thought that the hypothesis is false, I shall think I have achieved something sufficiently worthwhile if everything deduced from it agrees with our observations […]"(Descartes CSM I, 255; AT VIII A, 99). And in a letter to Mesland, after suggesting that the second and fourth parts of the *Principles* should be understood as an hypothesis or supposition, Descartes affirms:

> I wish you had enough leisure to make a more detailed examination of my *Principles*. I dare to think you would find in it at least something logically coherent, so that one must either reject everything contained in the last two parts and simply take it as a pure hypothesis or even a fable, or else accept the whole of it. And even if one takes it as merely a hypothesis, as I presented it, I think none the less that one should not reject it until one has found some other, better explanation of all the phenomena of nature. (Descartes CSMK III, 249; AT IV, 216).

In the *Dioptrique*, one of the treatises published along with the *Discours*, explanations are provided by means hypotheses because this procedure is the best way "for explaining all those of its properties <sc. the properties of light> that we know through experience and then for deducing all the others that we cannot observe so easily" (Descartes CSM I, 152; AT VI, 83). Shortly afterwards, on the same page, Descartes also affirms that he uses hypotheses and experiences in the *Dioptrique* in the same way astronomers do:

> […] In this I am imitating the astronomers, whose assumptions are almost all false or uncertain, but who nevertheless draw many very true and certain consequences from them because they are related to various observations they have made.

And in a letter to Vatier, Descartes comments again his methodological procedure in the *Dioptrique*: "As for light, if you look at the third page of the *Optics*,you will see that I said there expressly that I was going to speak about it only hypothetically" (Descartes CSM III, 87; AT I, 562). In all these texts Descartes emphasizes that the demonstrations he offers are accepted only on hypothetical grounds. The hypotheses or suppositions he puts forward may even be false or uncertain. However, to the extent that they prove coherent they can be considered true, unless we have some better hypotheses to account for the same phenomena they explain. It is exactly this kind of methodological approach that Descartes also employed in his investigation into the foundation of human knowledge in the *Meditations*.

Conclusion

As we can see, Descartes was not a "Cartesian" in Quine's sense of this word, even though he may have exerted great influence upon a tradition of epistemological thought that considered that the investigation into the nature of human knowledge should be pursued with a method other than method of physics and mathematics. Descartes himself considered his investigation into the nature of human knowledge as an intellectual project coherent with the method of the sciences of his own time.

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[1] See also Quine 1974, p. 2: "…the epistemologist may make free use of all scientific theory."

[2] My translation. The original text reads as follow: "[…] si nous voulons à toute force caractériser la philosophie de Descartes par un nom, le nom qui lui siérait le mieux serait, tout paradoxe à part, celui d'empirisme – empirisme radical et intégral."

[3] See also Freudige and Petrus 1996, 32: "Gerade die Untersuchung verschiedener Begriffe der Erfarhrung macht deutlich, daβ Descartes dem Empirischen durchaus einen wichtigen Stellenwert beimiβt. Nun mag dieser Befund vis-à-vis der verbreiteten Einschätzung Descartes als Prototyp eines Rationalisten vielleicht überraschen; und vielleicht mag er manch einem gar die Gretchen-Frage entlocken, ob Descartes wirkilch Empirist sei oder nicht. [...] Es scheint, daβ die Antwort auf die Gretchen-Frage weniger zum Verständnis Descartes beiträgt als vielmehr in eine Diskussion darüber mündet, wie sinnvoll die Bezeichnugen 'Rationalismus' und 'Empirismus' letzlich sind." Perler 1998, 85: "[...] ich glaube allerdings nicht, daβ man Descartes eine derartige Schizophrenie unterstellen darf. Betrachet man seine Methodologie näher, stellt sich heraus, daβ

sie dem Empirischen durchaus einen Platz einräumt. Es handelt sich um eine Methodologie, die rationalistische und empiristische Elemente miteinander verbindet."

[4] The subtitle of the Discours is "pour bien conduire la raison et chercher la vérité dans les sciences".

[5] See also Quine 1975, 68: "I am only making the point that skeptical doubts are scientific doubts."

[6] See also Frankfurt 1970, 170: "Given that Descartes is indeed trying to validate reason by showing that what is perceived clearly and distinctly is true, it is still necessary to consider more closely just what is at stake in his metaphysical doubt. Following the realistic bias of common sense, it is rather natural to assume that when he asks whether what is clear and distinct is true, Descartes is asking whether it corresponds with reality. This assumption is not correct. In fact, as I will show, Descartes says explicitly that he is not interested in this correspondence. […] The conception of truth involved in his question about the truth of what is clearly and distinctly perceived is, in other words, a conception of coherence rather than of correspondence.." See also Flage and Bonne 1999, 15, 18, 39; Araujo 2006.

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