

## Early Cartesianism and the *Journal des Sçavans*, 1665–1671

MIHNEA DOBRE

University of Bucharest, Faculty of Philosophy, Splaiul Independentei 204, Sector 6,  
060024 Bucharest (Romania)

### ABSTRACT

The appearance of scientific journals in the second half of the seventeenth century not only presented new opportunities for the dissemination of knowledge, but also offers the historian a privileged view of the shared knowledge within the scientific community. The *Journal des Sçavans*, founded in 1665, proclaimed its ambition to disseminate news about books and people concerning the République des lettres. Given the reportedly high interest in and opposition to the rise of Cartesianism among contemporary philosophers, this paper explores the discussion of Cartesianism within the pages of the Journal. It is shown that debates on Cartesianism formed only a small portion of the articles in the *Journal*. Although the majority of commentaries referred to the metaphysical foundations of Cartesian philosophy, a considerable number of instances were found referring to empirical tests of the theory. Finally, as the *Journal* does not mention the condemnations or censorship of Cartesianism, we cannot speak of a general feeling of hostility against Cartesian philosophers among the editors or intended audience of the *Journal*.

*Keywords:* cartesian philosophy; journals

### *Cartesian philosophy in seventeenth century France*

The history of Cartesian philosophy is not an easy one, especially if we look at its reception in the seventeenth century. By many, it was perceived as the long waited system to replace the traditional Aristotelian philosophy. At the same time, others were very critical to most of Descartes' views. Two anagrams of Descartes' name circulating in the second half of the seventeenth century testify to this double reception. Whereas Leibniz used the famous anagram *Cartesius=Sectarius*, in 1692, Étienne Chauvin presented in his *Lexicon rationale; sive Thesaurus philosophicus* another anagram: *Renatus Cartesius=tu scis res naturae*.<sup>1</sup> Even nowadays, the spread of Cartesianism in the second half of the seventeenth century is still a matter of debate in the scholarly literature. Thus, in one of the most influential books about

Descartes' role in the history of philosophy, *Histoire de la philosophie cartésienne*, Francisque Bouillier commented upon the French reception of Descartes' thought:

Rejected by the schools, French Cartesianism spread quickly to all classes of the learned, literate and civilized society of the seventeenth century. As Baillet states, from the publication of the *Méditations métaphysiques*, Descartes became the subject-matter of all erudite conversations in Paris and the provinces. For more than half a century, there was not a single book published in France, there was not a single philosophical discussion which did not have Descartes as its object, which was either in favor of or against his system. In the clergy, in the religious congregations, in the academies, in the barreau, in the magistrature, in the world, in the castles, in the salons, and even in the court, everywhere we meet enthusiastic disciples of the new philosophy, excessively admiring it and working hard to spread it.<sup>2</sup>

This passage from Bouillier leaves the impression that Cartesianism was universally accepted in late seventeenth century France or at least that it was widely disseminated. According to this picture, both the followers of his philosophy as well as its critics share a common ground in discussing Cartesian themes in philosophy.

However, one comment belonging to Trevor McClaughlin should make us cautious in accepting Bouillier's statement about the reception of Cartesianism. McClaughlin's study of early French Cartesianism revealed that Descartes' philosophy became the subject of a number of public rejections or censorship during the 1660s: 'no matter how discordant the responses of first-generation Cartesians, they were unable to escape the pervasive influence of censorship, a bogeyman sufficiently powerful to frighten the most disinterested of scholars'.<sup>3</sup> In what follows, I shall address the problem of this reception within the first-generation of Cartesians, by studying how Descartes' philosophy and the various philosophies developed by his followers were discussed in the first scientific journal, the *Journal des Sçavans*. Hence, 'Cartesianism' will be taken generally as expressing both Descartes' philosophy and the various theories developed by his philosophical heirs.

#### *The 'Journal des Sçavans': 1665–1671*

The first published scientific journal was the *Journal des Sçavans*, with its first issue printed on 5 January 1665. Quickly followed by the *Philosophical Transactions* on 6 March 1665, the

1 É. Chauvin, *Lexicon rationale; sive Thesaurus philosophicus: ordine alphabetico digestus, in quo vocabula omnia philosophica explicare, et universe quae lumine naturali sciri possunt, non tam concludere* (Rotterdam 1692) 83 (unpaginated). Both anagrams are presented in G. Rodis-Lewis, *Descartes. His life and thought* (Ithaca 1999) 223. For the general reception of Descartes' philosophy in the second part of the seventeenth century, see D. Des Chene, 'Cartesiomania: Early Receptions of Descartes (Review Essay)', *Perspectives on Science*, 3/4 (1995) 534–581.

2 F. Bouillier, *Histoire de la philosophie cartésienne*, 1 (Paris 1868) 430: 'Repoussé des écoles, le cartésianisme français se répandit rapidement dans toutes les classes de la société savante, lettrée et polie du dix-septième siècle. Dès la publication des *Méditations métaphysiques*, Descartes, comme le dit Baillet, fit la matière de toutes les conversations savantes dans Paris et dans les provinces. Pendant plus d'un demi-siècle, il n'a pas paru en France un seul livre de philosophie, il n'y a pas eu une seule discussion philosophique, qui n'eût Descartes pour objet, qui ne fut pour ou contre son système. Dans le clergé, dans les congrégations religieuses, dans les académies, dans le barreau, dans la magistrature, dans le monde, dans les châteaux, dans les salons, et même à la cour, partout, nous rencontrons des disciples fervents de la nouvelle philosophie, qui la portent par-dessus les nues, qui travaillent ardemment à la répandre'.

3 T. McClaughlin, 'Censorship and Defenders of the Cartesian Faith in Mid-Seventeenth Century France', *Journal of the History of Ideas*, 40/4 (1979) 581. For a list of these condemnations, see below, footnote 12.

French journal imposed a new style of writing and new means for disseminating scientific knowledge.<sup>4</sup> The reader was informed from the very beginning about the purpose of the *Journal des Sçavans*: ‘the design of this journal is to make known all that is new in the Republic of Letters’.<sup>5</sup> This ambitious goal is detailed in five points. First, the editor announces that he will keep the reader informed about new books published in Europe. This feature will not consist in lists of writings, but every report is expected to include a short description of the content of the book and its subject-area. Second, the journal aims to keep track of the deaths of famous people, which are expected of being announced together with a homage listing their most important books. Third, new observations, experiments, and discoveries will be mentioned:

We shall make known the experiments in Physics and Chemistry; which may serve to explain the effects of Nature, the new discoveries made in Arts & Sciences, such as the machines and the useful or curious inventions that can help Mathematics: observations of the Sky, of the Meteors, & what new things Anatomy may find in animals.<sup>6</sup>

Fourth – and very important for this study – the editor announces that the journal will take notice and will disseminate decisions made by the religious and secular courts, as well as censorship pronouncements. And finally, in the fifth place, a very general announcement: ‘there won’t be anything happening in Europe that is worth of the curiosity of the men of letters, which cannot be learned from this Journal’.<sup>7</sup>

It follows that the editor’s goal to keep ‘les Gens de lettres’ informed with ‘ce qui se passe de nouveau dans la République des lettres’, is too broad to represent a philosophical program. It is not at all surprising in this context that the main source of information is the book review, while reports about observations and experiments come in second place. This creates an interest for everything going on in the Republic of Letters, without a disciplinary or a methodological focus. The books presented in the *Journal des Sçavans* cover a large range of topics, providing a strict description of their content without attempts to debate or promote a particular type of philosophy. In Jean-Pierre Vittu’s words, with the journal ‘apparaît la silhouette d’un professionnel de la lecture auquel la revue offre de commodes résumés’.<sup>8</sup>

With these general remarks on the style and the aims of the *Journal des Sçavans* to keep its readers informed about the novelties in the Republic of Letters, we have to

4 For a comparison between the *Journal des Sçavans* and the *Philosophical Transactions*, see M. Dobre, ‘The Scientific Journals of the Seventeenth-Century: Cartesianism in *Journal des Sçavans* and *Philosophical Transactions*, 1665–1670’, in: V. Alexandrescu ed., *Branching Off. The Early Moderns in Quest for the Unity of Knowledge* (Bucharest 2009) 333–358.

5 *Journal des Sçavans* (5 January 1665), ‘L’Imprimeur au lecteur’ i (unpaginated): ‘le dessein de ce Journal estant de faire sçavoir ce qui se passe de nouveau dans la République des lettres’.

6 *Ibidem* i (unpaginated): ‘En troisieme lieu on fera sçavoir les experiences de Physique & de Chymie; qui peuvent servir à expliquer les effets de la Nature les nouvelles decouvertes qui se font dans les Arts & dans les Sciences, come les machines & les inventions utiles ou curieuses que peuvent fournir les Mathematiques: les observations du Ciel, celles des Meteores, & ce que l’Anatomie pourra trouver de nouveau dans les animaux’.

7 *Ibidem* i (unpaginated): ‘qu’il ne se passé rien dans l’Europe digne de la curiosité de Gens de lettres, qu’on ne puisse apprendre par ce Journal’.

8 See J.P. Vittu, ‘Diffusion et reception du *Journal des Savants* de 1665 à 1714’, in: H. Bots (ed.), *La Diffusion et la lecture des journaux de langue française sous l’ancien regime* (Amsterdam 1988) 175.

restate now our starting problem: what was the reception of Cartesianism in France in the time frame between 1665 and 1671? Was it forced to the background in face of censure, as McCloughlin states, or was it all over present and discussed in every learned circle, as Bouillier believes?

*The publication of Descartes' work between 1660 and 1671*

It should be noted that after Descartes' death in 1650, his philosophical corpus was completed with the publication of Descartes' unfinished manuscripts *Le Monde* and *L'Homme*, and of three volumes of letters. At the same time, new editions of his already printed treatises were made available all over Europe. The *Meditationes*, the *Discours*, and the *Principia*, became more accessible to a wider public due to a large number of translations. In France, Claude Clerselier was taking care of the publication of Descartes' manuscripts. He prepared some of the most important editions in this period.<sup>9</sup>

Clerselier is a central figure in our story as he plays a double role. Besides being the editor in charge of Descartes' manuscripts, he was promoting promising young Cartesians, such as Jacques Rohault, Gerould de Cordemoy, and Louis de La Forge. At the same time, just as his prefaces to the 1664 edition of *L'Homme* and to the third volume of Descartes' letters indicate, Clerselier was deeply concerned with the reception of Descartes' philosophy. He was trying to influence the reader in having a higher opinion of Descartes' views. And for this, he even added some 'new' letters to one of Descartes' editions, just as Adrian Baillet observes: 'M. Clerselier (...) had to supplement [Descartes'] words in some occasions & to fill in some gaps, as much as his loyalty to his Author allowed'.<sup>10</sup>

Clerselier's effort was not entirely unproblematic. McCloughlin connected it with the raising censorship in the mid-1660s and primarily with the increased discussions about the Eucharist.<sup>11</sup> However, Descartes' philosophical heritage in this period was not represented only by such theological discussions. A first generation of his followers started to publish books that took forward Descartes' conclusions in many subject-areas, expanding his philosophy. Cordemoy, La Forge, Rohault, Desgabets, Regis, Poisson are just a few names of the early French Cartesians involved in discussing a variety of topics, including metaphysical, physical, medical, and even moral problems. This it is not the place to discuss the controversies about Descartes' philosophy in the second half of the seventeenth century: we shall have a more focused goal, namely to discuss the reception of Cartesianism in the *Journal*

9 These publications were among others: *Lettres de M. Descartes où sont traitées les plus belles questions de la Morale, Physique, Médecine et des Mathématiques* (Paris 1657; 2nd edition 1663); *Lettres de M. Descartes où sont expliquées plusieurs belles difficultés touchant ses autres Ouvrages* (Paris 1659; 2nd edition 1666); *L'Homme de René Descartes, et un Traité de la Formation du Fœtus du même Auteur*. [...] (Paris 1664); *Le monde de Mr. Descartes, ou le traité de la lumière & des autres principaux objets des sens*. [...] (Paris 1664) and *Lettres de M. Descartes, où il répond à plusieurs difficultés qui lui ont été proposées sur la Dioptrique, la Géométrie, et sur plusieurs autres sujets* (Paris 1667). For a more detailed discussion of Descartes' printed editions in the seventeenth-century, see M. van Otegem, *A Bibliography of the Works of Descartes* (1637-1704), 2 vols. (Utrecht 2002).

10 A. Baillet, *La Vie de Monsieur Descartes*, 2 (Paris 1691) 402: 'M. Clerselier réduit à deviner, s'est vu quelquefois obliger de suppléer des mots, & de remplir quelques vuides, autant que la fidélité qu'il devoit à son Auteur le luy permettoit'.

11 For a detailed account of the role played by Clerselier in getting support for Descartes' interpretation of the Eucharist, see McCloughlin, 'Censorship and Defenders of the Cartesian Faith in Mid-Seventeenth Century France', (n. 3) 571–573.

*des Sçavans* in close connection with censorship and official pronouncements against this philosophy.<sup>12</sup> Therefore, how was censorship affecting Cartesian philosophy between 1665 and 1671?

### *Cartesianism in the Journal*

The subsequent analysis will attempt to provide an answer to the following question: was Cartesianism quickly accepted by the learned community and therefore discussed and presented in the *Journal des Sçavans*, as Bouillier's statement would seem to suggest, or did the pervasive censorship succeed in stopping its expansion, as McClaughlin insisted?

The very first issue of the *Journal des Sçavans* presents a book review for the new edition of Descartes' *L'Homme*.<sup>13</sup> The review opens with a general description of the book, claiming that 'the plan advanced by M. Descartes in this treatise on man is to discriminate between the functions belonging to the body and those belonging to the soul'.<sup>14</sup> This straightforward characterization is followed by an overview of the first part of the treatise – where human body is presented as a machine and the functions of the soul are generally described. The second treatise contained in the volume is briefly summarized, with the only point being made that during the formation of the foetus, the heart is formed first.

This report ends with a notice about the edition and the important role of the editor: 'M. Descartes has left this treatise in such a big mess that it could have not been understandable if M. Clercelier had not set it in order, & if Mr. de la Forge and Mr. Van Gutschoven had not illuminated it with illustrations'.<sup>15</sup>

Already in the book preface, Clercelier argued that Schuyt's Latin edition of 1662 contained numerous mistakes: the fragments were not properly ordered and the illustrations were not totally coherent with the text of the treatise.<sup>16</sup> For instance, he agrees that Schuyt's illustrations are 'without any doubt more beautiful than those I am using here, if only with respect to the engraving quality and the imprint, but I believe that for the most part they

12 For more about the controversies raised in Utrecht (1641–1643) and Leiden (1647), see T. Verbeek, *Descartes and the Dutch: Early Receptions to Cartesian Philosophy, 1637–1650* (1992). There are other condemnations of Cartesianism in this period. For example, the University of Paris issued two edicts, in 1664 and 1666, stating that the faculties of Arts will teach only Aristotle's philosophy. The theological faculty of Leuven University condemned Descartes' philosophy in 1662 and in 1663, the Sacred Congregation of the Index condemned it in the name of the Catholic Church. For more about various condemnations of Cartesianism before 1671, see McClaughlin, 'Censorship and Defenders of the Cartesian Faith in Mid-Seventeenth Century France' (n. 3) 577–578. For a general discussion of the reception of Cartesianism in the seventeenth century, see Bouillier, *Histoire de la philosophie cartésienne*, 1 (n. 2) 447–485; T. Schmaltz, *Radical Cartesianism. The French Reception of Descartes* (Cambridge 2002); D. Clarke, *Occult Powers and Hypotheses* (Oxford 1989); R. Ariew, 'Les Principia en France et les condamnations du Cartésianisme', in: J.R. Armogathe e.a. ed., *Descartes: Principia Philosophiae (1644–1994)* (Naples 1996), 625–639; and R. Ariew, *Descartes and the last Scholastics* (Ithaca 1999) Chs. 8–9.

13 A previous edition of Descartes' manuscript was published in 1662, in Amsterdam, in Latin, by Florentius Schuyt, with the title of *Renatus Des Cartes de homine*.

14 *Journal des Sçavans* (5 January 1665) 9: 'Le dessein que M. des Cartes se propose dans ce traité de l'homme, est de distinguer les fonctions qui appartiennent au corps, de celles qui appartiennent à l'ame'.

15 *Ibidem* 11: 'M. Des Cartes avoit laissé ce traité dans une si grande confusion, qu'il ne seroit pas intelligible si M. Clercelier ne l'avoit mis en ordre, & si Mess. de la Forge & Guscoven ne l'avoient esclarcy pas des figures'.

16 See Clercelier's preface in R. Descartes, *L'homme de René Descartes et la formation du fœtus avec les remarques de Louis de La Forge* (Paris 1664).

are less intelligible than these & less fit to understand the text.’<sup>17</sup> At the same time, he praises Van Gutschoven’s figures as they ‘serve at illuminating some difficulties one might have in reading the text, which is very compact & says many things in a few words.’<sup>18</sup>

Clerselier’s important contribution to the reception of Cartesian philosophy is also noticed in the review written for the third volume of *Lettres de Mr. Descartes*. The book report announces that in comparison with the first two volumes of Descartes’ correspondence, which were about morals and physics, ‘this third volume is about the controversies he [Descartes] had on different topics with the most erudite scholars of his time & contains the objections advanced to him & his answers to them.’<sup>19</sup> Clerselier enters himself into the polemic, as the reviewer observes that he introduced a new letter:

Even if the letter where this last question is discussed was previously attributed to M. Descartes, M. Clerselier admits that he is its real Author & that he would not have produced it under Descartes’ name, if not to answer with more authority to the objection of his Opponent.<sup>20</sup>

As already stated, not only was Clerselier trying to promote Cartesian philosophy by providing answers in Descartes’ name, he was also trying to support the first generation of Cartesians to publish their philosophy books. De La Forge, Cordemoy, and Rohault printed their first writings in Clerselier’s editions of Descartes’ manuscripts.

Viewed by many of his contemporaries as developing Descartes’ philosophy on the problem of mind–body interaction, Louis de La Forge published in 1666 his *Traite de l’esprit de l’homme*. The reviewer acknowledges this from the very beginning, pointing out that: ‘Death has impeded M. Descartes to finish the treatise on Man, of which he had left us with a first part dealing only with the Body; M. de la Forge wrote this book to supplement the second [part], where he explains by the same principles what Spirit is.’<sup>21</sup>

Cordemoy’s first printed book, *Le Discernement du corps et de l’âme en six discours pour servir à l’éclaircissement de la physique*, deals with the same problem of the relation between soul and body. Moreover, it contains a highly controversial theory of matter, where ‘body’ is viewed as atom, hence independent from ‘matter’, which is a mere ‘assemblage’ (or collection) of bodies.<sup>22</sup> Particularly interesting is that the reviewer makes a good presentation

17 *Ibidem* ii: ‘sans doute de beaucoup sur celles que j’ay fait mettre icy, si l’on a simplement égard à la graveure & à l’impression, mais que je croy pour la pluspart estre moins intelligibles que celles-là, & moins propres à l’intelligence du texte’. For a comparison between the two editions of *L’homme*, see R.M. Wilkin, ‘Figuring the Dead Descartes: Claude Clerselier’s *L’Homme de René Descartes*’ (1664), *Representations* 83 (2003) 38–66.

18 *Ibidem* xiv: ‘serviront à éclaircir quelques difficultez que l’on pouroit avoir en lisant le texte, qui est serré, & qui dit beaucoup de choses en peu de paroles’.

19 *Journal des Sçavans* (31 January 1667) 25: ‘Ce troisième Tome traite des contestations qu’il a eues sur differents sujets avec les plus sçavans Hommes de son temps, & comprend les obiections qu’on luy a faites, & les responses qu’il y a données’.

20 *Ibidem* 28: ‘Mais quoy qu’on ait autrefois attribué à M. Descartes la lettre où cette dernière question est traitée, M. Clerselier avoue que c’est luy-mesme qui en est le véritable Autheur, & qu’il ne l’a produite sous le nom de M. Descartes, que pour répondre avec plus d’autorité aux obiections de son Adversaire’.

21 *Journal des Sçavans* (3 May 1666) 214: ‘La mort ayant empesché M. Descartes d’achever le traité de l’Homme, dont il ne nous a laissé que la première partie qui considère seulement le Corps; M. de la Forge pour suppléer à la seconde a composé ce livre, dans lequel il explique suivant les memes principes ce que c’est que l’Esprit’.

22 See Cordemoy’s first discourse in G. de Cordemoy, *Le discernement du corps et de l’âme en six discours: pour servir à l’éclaircissement de la physique* (Paris 1666).

of the content of the book, where ‘l’Auteur y suit ordinairement les principes de M. Descartes.’<sup>23</sup> Still, this does not mean that Cordemoy follows Descartes blindly. On the contrary, the first part of the book shows us an independent thinker deviating from Descartes. In the review published by the *Journal des Sçavans*, this is characterized as follows:

In the first, he discusses matter, & he examines whether it is infinitely divisible or not. To answer this famous problem, he says that one must think differently about matter than about the small bodies composing it. Because matter, being a collection of several different substances of which each can subsist apart, can be divided in so many parts as there are small bodies composing it. However, these small bodies are not divisible, because all of their parts are a self-same substance; & although each of them is extended and has different extremities, one should not conclude from here that they can be divided, but rather that these various extremities representing the parts of the same substance are necessarily inseparable.<sup>24</sup>

This is a good summary of Cordemoy’s atomist theory, which is founded precisely on the unity of substance, and on the difference between ‘matter’ and ‘body’. The rest of the treatise represents a fairly traditional Cartesian discussion of the problem of the interaction between physical bodies and the problem of the union of soul and body in man. The reviewer rightly notices Cordemoy’s explanation: ‘the belief of this author is that their union consists in nothing more than that certain movements of the body are followed by certain thoughts of the soul, & the other way around, certain thoughts of the soul are followed by certain movements of the body’.<sup>25</sup> However Cartesian this may look, it leads to a different direction, as Cordemoy’s views are further developed: ‘every single motion in the world is produced only by God & all other agents that we consider of being the cause of some particular movement are nothing more than their mere *occasion*’.<sup>26</sup> Thus, the entire explanation of the interactions between insensible inner parts of the anatomical body, as well as of any physical change produced at the visible level, falls under this Occasionalist conclusion.

In 1668, Cordemoy published his second book, *Discours physique de la parole*. Devoted to another important Cartesian theme and taking one step further Descartes’ explanation of the differences between humans and beasts in terms of speech, Cordemoy’s treatise provides an ample analysis for the production of sounds. For him, this analysis is crucial in shedding light upon ‘ce qui se passe dans les autres Hommes’, not to mention that it should solve the

<sup>23</sup> See *Journal des Sçavans* (7 July 1666) 263–267.

<sup>24</sup> *Ibidem* 263–264: ‘Dans le premier il traite de la matiere, & il examine si elle est divisible jusqu’ à l’infiny. Pour resoudre cette celebre question, il dit qu’il faut raisonner autrement de la matiere que des petits corps dont elle est composée. Car la matiere estant un assemblage de plusieurs substances differentes dont chacune peut subsister à part, elle peut estre divisée en autant de parties qu’il y a de petits corps qui la composent: Mais ces petits corps ne sont pas divisibles, parce que toutes leurs parties ne sont qu’une mesme substance; & bien que chacun d’eux soit estendu & ait des extremités differentes, on ne doit pas de-l à conclure qu’on les puisse diviser, mais plustost que ces extremités differentes estant les parties d’une mesme substance sont necessairement inseparables’.

<sup>25</sup> *Ibidem* 266: ‘le sentiment de cét Autheur est que leur union ne consiste qu’en ce que certaines mouvemens du corps sont suivis de certaines pensée de l’ame, & qu’au contraire certaines pensées de l’ame sont suivies de certains mouvemens du corps’.

<sup>26</sup> *Ibidem* 266 (emphasis added): ‘il n’y a que Dieu qui puisse produire aucun mouvement dans le monde, & que tous les autres agens que nous croyons estre la cause de quelque mouvement, n’en sont simplement que l’*occasion*’.

problem of the existence of souls in animals.<sup>27</sup> He links this discussion to the problem of the relation between soul and body, something which is well reflected in the book: ‘after proving that Speech is an effect of the Soul as much as it is of the Body, he examines separately what it takes from the Body & what from the Soul.’<sup>28</sup> Not surprisingly, Cordemoy finds this difference in the presence or absence of the soul in the body from which a particular sound originated. Thus, his conclusion does not depart from Descartes’ views, but Cordemoy’s detailed explanation of the way in which a sound is formed in the body and of the role played by the human soul in the production of speech is nevertheless a needed addition to Cartesian theory. However, this time, the reviewer does not seem to connect Cordemoy to Descartes, and the famous French philosopher is not at all mentioned in this book report.

Another two names should be taken into account in this list of Cartesian authors reviewed by the *Journal des Sçavans* in the discussed period. One is the French cleric Nicholas Poisson who published in 1668 a compilation of Descartes’ works on mechanical subjects. Under the title *Traité de mecanique* he collected various letters by Descartes about the traditional mechanical machines, to which he added a commented compendium of music. The book review published in the *Journal des Sçavans* states that Poisson’s contribution to this treatise consists in explanations that give a better understanding of Descartes’ philosophy.<sup>29</sup>

In 1671, one of the most famous Cartesians of his time, Jacques Rohault published his *Traité de Physique*, which was quickly reviewed by the journal.<sup>30</sup> One can find in the review a positive remark about the empirical investigation of nature, which comes in the form of a general comment on the methodological aims of the treatise.<sup>31</sup> In spite of the strong empirical link and of the detailed discussion of some experiments proposed by Rohault – which are clear departures from Descartes’ philosophy – the reviewer correctly identifies the connection between Descartes and Rohault. However, he adds:

Although he [Rohault] appears to be particularly attached to Descartes’ doctrine, he pretends that he has advanced nothing here which is not in accordance with the principles of Aristotle, & that in most cases he has only added particularities to the things discussed by Aristotle in general terms; such that he has confirmed the doctrine of this Philosopher, rather than reject it.<sup>32</sup>

In fact, in the author’s preface to the treatise, Rohault himself had made the claim that his philosophy is a mixture between the natural philosophies of Aristotle and Descartes.<sup>33</sup>

There is no doubt that inherent traces of Cartesianism are to be found in other books of this period. Some of them made explicit in the title or the subtitle of the books, as in the case of the anonymous treatise on morals, *L’Art de Vivre Heureux formé sur les*

<sup>27</sup> See *Journal des Sçavans* (17 December 1668) 145–149.

<sup>28</sup> *Ibidem* 147: ‘après avoir montré que la Parole est un effet de l’Ame aussi bien que du Corps, il examine à part ce qu’elle emprunte du Corps, & ce qu’elle tient de l’Ame’.

<sup>29</sup> See *Journal des Sçavans* (26 November 1668) 128–131.

<sup>30</sup> *Journal des Sçavans* (22 June 1671) 25–30.

<sup>31</sup> *Ibidem* 25: The reviewer writes about the treatise that it ‘peuvent donner quelque lumiere dans la Physique’. To this, it is added that ‘de maniere que tout ce Livre n’est qu’une suite d’experiences raisonnées & arrangées methodiquement’ (*ibidem* 26).

<sup>32</sup> *Ibidem* 26–27: ‘Quoy-qu’il semble s’attacher particulièrement à la doctrine de Descartes, il pretend n’avoir rien avancé qui ne soit conforme aux principes d’Aristote, & le plus souvent n’avoir fait que particulariser des choses qu’Aristote a dites en termes tres-generaux; en quoy il a plustost confirmé la doctrine de ce Philosphate, qu’il ne l’a combatuë’.

<sup>33</sup> See J. Rohault, *Traité de physique* (Paris 1671), unpaginated preface.



*Maximes de M. Descartes*.<sup>34</sup> The French philosopher had written little about this topic, limiting himself only to a discussion of a provisional code of morals, but reserving a place for the science of morals in his philosophical system, as one can observe in his famous metaphor of the philosophy-tree.<sup>35</sup> In fact, many of the discussed Cartesian themes in the reviewed books from the *Journal des Sçavans* are either new developments of the consequences of Descartes' philosophy, or attempts to investigate the empirical value of his natural philosophy.

Regarding the quest for empirical confirmation, in medicine, we can find a number of treatises which are either identified as Cartesian by the *Journal des Sçavans*, or are presented as founded upon some principles inspired by Descartes' philosophy. In 1665, a treatise on medicine published in Paris, with parts both in Latin and French – *La Physique d'usage* – is presented as a collection of theses from the University of Louvain 'in which illnesses and their remedies are discussed in accordance with the philosophical principles of M. Descartes'.<sup>36</sup> Later on, we can find the reason why the reviewer labels this treatise as 'Cartesian': it employs explanations in terms of small bodies in motion. Thus, the book report ends with a quote from the treatise, describing the plague:

The plague, it is said, is formed in the human body by means of subtle matter, solid, rigid, sharp & with a cutting edge, which enters & mixes up with the blood, of which it reduces and cuts the small parts, perforates & broaches the other more rough & more sticky [parts], joining them together in the same way as small pieces of cloth or fabric are attached to each other by needles, from which results the coagulation of blood, which is the main cause of all the symptoms produced by the plague.<sup>37</sup>

In the next issue of the journal, another report of a medical treatise brings Descartes' name into discussion.<sup>38</sup> Devoted to a compendium of medicine, *Analecta Inauguralia, seu disceptationes Medicæ Doctoris Ioannis Rogersii*, the review praises the book for 'le grand nombre d'opinions nouvelles qui y sont traitées'. Descartes' name pops up in this context: 'he [the author] agrees with M. Descartes, on the existence of valves in the nerves, & with M. Regius that the motion of humors is caused by impulse, without any attraction in the [bodily] parts'.<sup>39</sup>

A year later, we can find two other book reports on medicine where Descartes' philosophy is mentioned. On 25 January 1666, Thomas Warthon's *Adenografia, seu glandularum*

34 See the *Journal des Sçavans* (13 June 1667) 112–113.

35 See Descartes' preface to the French edition of the *Principia philosophiæ*, where he claims that: 'Thus the whole philosophy is like a tree. The roots are metaphysics, the trunk is physics, and the branches emerging from the trunk are all the other sciences, which may be reduced to the three principal ones, namely medicine, mechanics and morals'. (AT IXb 15; CSM I 186).

36 *Journal des Sçavans* (2 February 1665) 56: 'dans lesquelles il est discouru des maladies & de leurs remedes, conformément aux principes de la Philosophie de M. des Cartes'.

37 *Ibidem* 56–57: 'La peste, dit-on, se forme dans le corps de l'homme par le moyen d'une matiere subtile, dure, roide, pointuë & tranchante qui y entre & se mesle avec le sang, dont elle attenüe & coupe les menuës parties, perce & broche les autres plus grossieres & plus gluantes, les joignant ensemble en façon de petites pieces de drap ou de toile, attachées les unes avecles autres par des aiguilles, d'où arrive la coagulation du sang, qui est la principale cause de tous les symptômes qui surviennent dans la peste'.

38 See *Journal des Sçavans* (9 February 1665) 65–67.

39 *Ibidem* 65: 'il admet avec Monsieur des Cartes, des valvules dans les nerfs; & avec Monsieur Regius, que le mouvement des humeurs est fait par impulsion, sans aucune attraction des parties'.

*humani corporis descriptio* is presented.<sup>40</sup> A fairly long discussion of the book is made and the reviewer does not forget to add that ‘cet Autheur oste tous les avantages que luy donne Monsieur Descartes’ in matters concerning the structure and functions of the glands.<sup>41</sup>

The other book belongs to Vopiscus Fortunatus Plemp and its connection with Descartes’ anatomical views is perhaps more important, as it is written by someone with whom the French philosopher engaged into correspondence. The book review takes into account the fourth edition of the *Fundamenta Medicinae*, published in 1665 in Louvain.<sup>42</sup> Plemp (or Plempius) was a friend of Descartes from the time when the French philosopher was living in Amsterdam (1629–1632). For a while they had an epistolary exchange, which was included in the 1644 edition of the *Fundamenta*. Apparently Plempius’ decision to add these letters to his book irritated Descartes, because it was made without his consent and the two stopped exchanging letters. In medicine, Plempius was a supporter of Harvey’s theory of the motion of the blood, something we can see also from this book report, as its author refers to this problem and concludes together with Plempius that Descartes’ explanation lacks a strong empirical basis. Moreover, in the *Journal des Sçavans*, one finds that:

This Author says his thought boldly about all things, without sparing nor ancients nor moderns. Among others, he treats M. Descartes badly, as he had specially written a long Preface to describe his [Descartes’] doctrine, which he does not only present as false, but moreover portrays it as contrary to Religion. He says that several articles of this doctrine have been censored by the Faculty of Theology from Louvain, & his books were condemned in Rome by the Inquisition, referring then to the decree.<sup>43</sup>

Surprisingly for a journal that defines as one of its main goals to inform about censorship, pronouncements and condemnations, this is the only reference to a sentence against Cartesian philosophy that we can find in the *Journal des Sçavans* in the period under investigation.

Another medical treatise reviewed by the French journal prior to 1671, with references to Descartes, is Nicolaus Steno’s *Discours de M. Stenon sur l’Anatomie du Cerveau*. The reviewer points out that, according to Steno, ‘what Descartes wrote [on the brain] in the *Treatise on Man* is much more clever, but not more true.’<sup>44</sup> Yet, while Steno argues for a different position of the pineal gland in the brain, claiming – mostly based on new empirical observations – that Descartes’ anatomy of the brain contains some errors, the author is still presenting Descartes in a favourable manner: ‘but the beauty of invention hides the errors of the hypothesis, & these errors are so ingenious that it is M. Descartes’ glory for making them.’<sup>45</sup>

40 See *Journal des Sçavans* (25 January 1666) 47–50.

41 *Ibidem* 48.

42 This book was published a few times before, with a first edition in 1638 and a second on 1644.

43 *Journal des Sçavans* (1 February 1666) 61: ‘Cét Autheur dit hardiment sa pensée de toutes choses, sans espargner ny les anciens ny les modernes. Entr’autres il traite fort mal M. Descartes: car il a fait exprés une longue Preface pour décrier sa doctrine, qu’il veut faire passer non seulement pour fausse, mais encore pour contraire à la Religion. Il dit que plusieurs articles de cette doctrine ont esté censurez par la Faculté de Theologie de Louvain, & que ses livres ont esté condamnez à Rome par l’Inquisition, dont il rapporte le decret’.

44 *Journal des Sçavans* (10 February 1670) 8: ‘ce qu’en a écrit M. Descartes dans le Traitté qu’il a fait de l’*Homme*, est beaucoup plus ingenieux; mais il n’est pas plus veritable’.

45 *Ibidem* 9: ‘mais la beauté de l’invention cache les erreurs de l’hypothese, & ces fautes sont si ingenieuses qu’il est glorieux à M. Descartes de les avoir faites’.

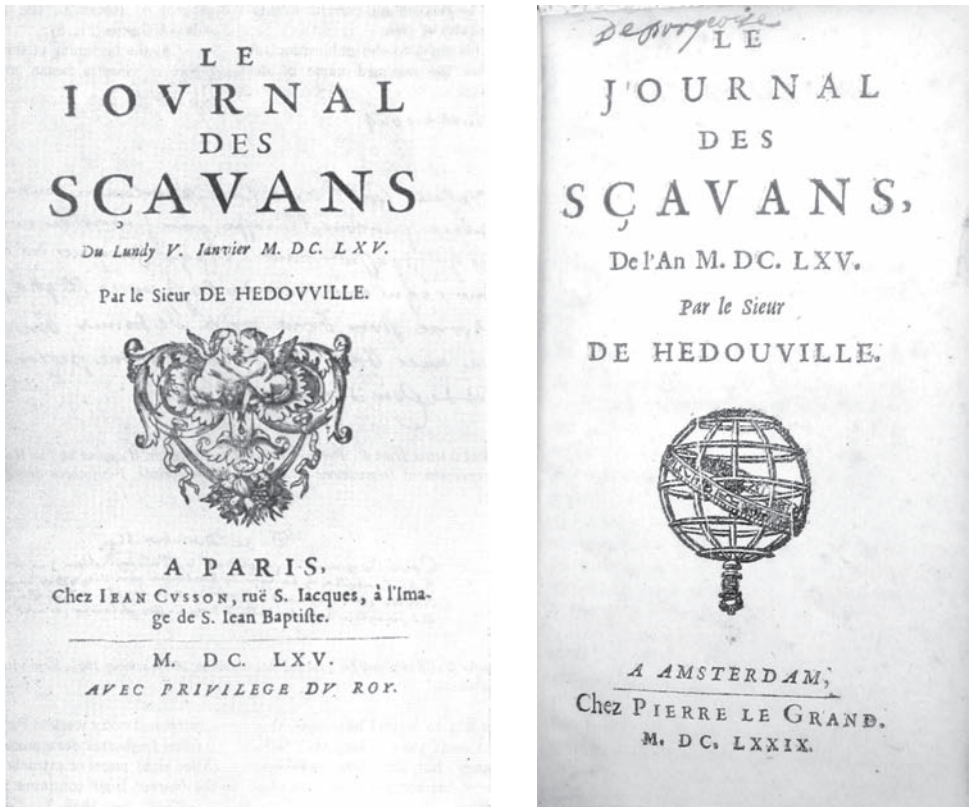


Fig. 1. Left: First edition of the *Journal des Scavans* (Paris 1665); Right: The Amsterdam reprint of the first issue of the *Journal des Scavans* (1679).

Empirical confirmation was also searched in meteorology. For instance, in his examination of the rainbow, Ignace Gaston Pardies confirms the theory of Descartes and Grimaldi concerning the angle of the reflection of light, to which he adds another reversed reflexion.<sup>46</sup> Thus, Pardies argues that his new explanation is ‘bien plus naturelle & plus faisable’.<sup>47</sup>

On 28 August 1667, the journal presented a *Relation d’une observation faite a la Bibliotheque du Roy à Paris le 12 May, d’un Halo ou Couronne à l’entour du Soleil; avec un discours de la cause de ces Meteores & de celle des Parelies*.<sup>48</sup> The observations are presented as revealing that Descartes’ hypothesis concerning the halo is misleading. According to this report, the air in the interior of the halo is not clearer than the exterior air – as Descartes claimed – but differs with respect to colour. The report of this observation is followed by a brief discussion of the new theoretical account given by Christiaan Huygens on the nature of halos.<sup>49</sup>

46 See the *Journal des Scavans* (7 February 1667) 45–48. This is not a book review, but a letter sent by Pardies to the editor of the journal.

47 *Ibidem* 46.

48 *Journal des Scavans* (28 August 1667) 150.

49 Also connected to optics, there is another reference to Descartes in the report on Honore Fabri’s *Synopsis Optica*. The book is reviewed in the *Journal des Scavans* on 5 December 1667. There, we can find that the author recognises the importance of Descartes’ work in optics, despite having divergent views in many particular cases.

Huygens was one of the most important natural philosophers of the period, active in both French and English academies of the time and offering his contributions to the *Journal des Sçavans* and the *Philosophical Transactions*. Of a particular interest is his involvement in the debates on the laws of impact. While Descartes' claim from the *Principia philosophiae* about the role of experience in finding the rules of collision, leaves no possibility for empirical testing, his contemporaries attempted to make the connection between theory and practice.<sup>50</sup> Thus, when Huygens presents his theory in a letter published by the *Journal des Sçavans*, he claimed contrary to Descartes that 'I only tell you one thing, that my Theory is in perfect agreement with experience & that I think I've established it on a good demonstration, as I soon hope to show when I present it to the public'.<sup>51</sup>

### Concluding remarks

Time and again it was highlighted that Descartes' philosophical project was to build up a system of natural philosophy grounded on metaphysics. In his preface to the French edition of the *Principia philosophiae*, Descartes notoriously stated that philosophy 'encompasses everything which the human mind is capable of knowing'.<sup>52</sup> The order advanced by him is well-known, as it parallels the structure of the *Principia*:

The first part of philosophy is metaphysics, which contains the principles of knowledge, including the explanation of the principal attributes of God, the non-material nature of our souls and all the clear and distinct notions which are in us. The second part is physics, where, after discovering the true principles of material things, we examine the general composition of the entire universe and then, in particular, the nature of this earth and all the bodies which are most commonly found upon it, such as air, water, fire, magnetic ore and other minerals. Next we need to examine individually the nature of plants, of animals and, above all, of man, so that we may be capable later on of discovering the other sciences which are beneficial to man.<sup>53</sup>

But this very ambitious claim does not limit the subject area for Descartes' followers. During the previous discussion of the presence of Cartesian philosophical themes in the *Journal des Sçavans* we found an increased interest with his followers in some less developed areas of Descartes' philosophy. This happens with his theory of the *bête machine*; the extension of mechanical explanations to all organic interactions, including speech; the debates about the rules of collision; the emendations of various physical phenomena, such as the motion of heavenly bodies; the role of the small bodily parts in physical explanations; the occasionalist theory of action, etc.

50 For Descartes' passage rejecting the empirical testing of the rules, see AT IXb 93, CSM I 245: '[The experience] May appear to conflict with the rules [of collision] I have just explained, but the reason for this is evident. Since no bodies in the universe can be so isolated from all others, and no bodies in our vicinity are normally perfectly hard, the calculation for determining how much the motion of a given body is altered by collision with another body is much more difficult than those given above. So in order to judge whether the above rules are observed here or not, it is not sufficient to know how two bodies can act against one another on impact. We have to take into account all the other bodies which are touching them on every side, and these have very different effects depending on whether they are hard or fluid.'

51 *Journal des Sçavans* (18 March 1669) 22: 'Mais je vous diray seulement que ma Theorie s'accorde parfaitement avec l'experience, & que je la crois fondée en bonne demonstration, comme j'espere de faire voir bientost en la donnant au public'.

52 AT IXb 3, CSM I 180.

53 See Descartes' preface to the French edition of the *Principia*, AT IXb 13–15; CSM I 185–186.

Moreover, these reports attest that Descartes' natural philosophy is put to the empirical test. In our analysis of the *Journal des Sçavans* we found an emphasis on observations and practical results derived from his views. This is the case of the debate about comets (1665), the discussion of the observations concerning halos (1667), the letter sent by Huygens (1669), as well as in reports of the books published by Plempius (1666), Steno (1670), and Rohault (1671). Cartesianism does not remain in the methodological framework created by Descartes. It is flexible enough to open a dialogue with other theories (e.g. Rohault), but does it become the subject of every philosophical discussion as Bouillier had suggested?

While our analysis of the journal showed the presence of an important number of reports connected to Cartesianism, it also revealed that Cartesian themes represent just a small part of the content published by the *Journal des Sçavans*.<sup>54</sup> Thus, we can conclude that – at least in the case of the *Journal des Sçavans* in its early years, between 1665 and 1671 – Bouillier was wrong in his claim that Descartes' philosophy spread so quickly and was almost universally accepted that it rapidly became the subject of any published book or that 'there was no single philosophical discussion to have Descartes as its object, which was either in favor or against his system'.<sup>55</sup> But this does not mean either that McClaughlin's claim that 'first-generation Cartesians were unable to escape the pervasive influence of censorship' is true. As we have seen, the various condemnations of Cartesian philosophy were inefficient as they were not announced in the pages of the journal, despite the fact that the very first issue of the *Journal des Sçavans* proclaimed as one of its aims to present the decisions of various universities and ecclesiastical orders. Our analysis revealed that in the discussed period, only the review of Plempius' book contained a reference to such condemnations of Descartes' philosophy, and this was only a paraphrase of Plempius, not the editor's attempt to satisfy the aims announced in the very first issue of the journal. In addition, new editions of Descartes' books were quickly reviewed in the journal and some important Cartesians of the period, such as Rohault, Cordemoy, and La Forge – all connected to the new editions of Descartes' writings printed by Clerselier – published in this time frame, such that we cannot speak about direct hostility against Cartesianism.

However, the reader of the Journal is informed about everything that was going on in the savant community, and these reports are not exclusively about Cartesianism, which means that the philosophies of Descartes and of his followers are just a small part of the ongoing discussions. The larger philosophical picture of the period is complex enough to take Cartesianism as one of its ingredients but not to subsume all discourse (philosophical as well as scientific) to this philosophy.

54 For more about this, see Dobre, 'The Scientific Journals of the Seventeenth-Century: Cartesianism in *Journal des Sçavans* and *Philosophical Transactions*, 1665–1670' (n. 4). There, I have discussed the reception of Cartesian philosophy in both the *Journal des Sçavans* and the *Philosophical Transactions*.

55 Bouillier, *Histoire de la philosophie cartésienne*, 1 (n. 2) 430: 'il n'y a pas eu une seule discussion philosophique, qui n'eût Descartes pour objet, qui ne fût pour ou contre son système'.