

CENTRE D'ÉTUDES SUPÉRIEURES DE LA RENAISSANCE  
*Le savoir de Mantice*

# DESCARTES ET LA RENAISSANCE

Actes du Colloque international de Tours  
des 22-24 mars 1996

Réunis par  
EMMANUEL FAYE



PARIS  
HONORÉ CHAMPION ÉDITEUR  
7, QUAI MALAQUAIS (VI<sup>e</sup>)  
1999

Diffusion hors France: Editions Slatkine, Genève

# APPLICATIO MENTIS. DESCARTES' PHILOSOPHY OF MIND AND RENAISSANCE NOETICS

The possible affinity between Descartes' philosophy of mind and Renaissance psychology invests a garden variety of arguments and authors. In this paper I concentrate on two interconnected notions, namely, that of the «intimate presence» of the mind to the body, and that of the «application» of the mind to the body<sup>1</sup>. These notions play a crucial role in the explanation of acts grounded on the interaction between mind and body, such as sense, imagination and memory<sup>2</sup>. Moreover, they presume a 'unitary' view of the mind: sense and imagination are 'manifestations' of the mind<sup>3</sup>, or «attached to» the mind<sup>4</sup>.

Descartes rejected both Platonic and Peripatetic metaphors for the mind-body relation: the mind is neither comparable to a sailor on a ship nor is it the form of the body<sup>5</sup>. In his philosophy of mind, however, he put forward views which are reminiscent of both afore-named positions, where he argued for a strict distinction between mind and body, and defended the «intimate presence» of the mind to the body, respectively.

---

<sup>1</sup> There are many other issues which invest the possible relationship between Descartes' and Renaissance psychology, such as the physiology of perception, innatism, dualism, the relation between intelligible species and ideas, the objective being of ideas, occasionalism, and the mediating role of the spirit(s).

<sup>2</sup> Crucial passages are in *Meditationes*, in Descartes, *Oeuvres*, eds. Ch. Adam & P. Tannery, 12 vols., Paris 1982-87, vol. VII, 71-72: «nam attentius consideranti quidnam sit imaginatio, nihil esse apparet quàm quaedam applicatio facultatis cognoscitivae ad corpus ipsi intime praesens, ac proinde existens»; and pp. 72-73: «Si vero de pentagono quaestio sit, possum quidem ejus figuram intelligere, sicut figuram chiliogoni, absque ope imaginationis; sed possum etiam eandem imaginari, applicando scilicet aciem mentis ad ejus quinque latera, simulque ad aream iis contentam; & manifeste hic animadverto mihi peculiari quâdam animi contentione opus esse ad imaginandum, quâ non utor ad intelligendum: quae nova animi contentio differentiam inter imaginationem & intellectionem puram clare ostendit.»

<sup>3</sup> *Regulae*, 415 (quoted in note 15).

<sup>4</sup> See *Meditationes*, 78; cf. also *Principia Philosophiae*, I.66.

<sup>5</sup> *Meditationes*, 80-81, 86. See also *Discours de la Méthode*, 59. Thomas ascribed this view to Plato; cf. *Summa contra Gentiles*, II, c. 57, 1327; cf. also Aristotle, *De anima*, 413a8-9: «It is also uncertain whether the soul as an actuality bears the same relation to the body as the sailor to the ship.» The metaphor was also used by Plotinus, *Enneades*, IV.3.21; by Ficino, *In Enneades*, VI.7.5-6, in *Opera omnia*, 2 vols., Basileae 1576 (reprint: Torino 1983), 1788; and by Giordano Bruno in, among others, *De la causa, principio et uno*, ed. G. Aquilecchia, Torino 1973, 71.

At first sight, Descartes seems the legitimate heir of a Platonic-oriented philosophy of mind, since he argued for innatism and a strict distinction between mind and body. However, the similarity between Descartes and Platonic views of the human soul is misleading. Descartes endorsed the intimate presence of the mind to the body, rejecting the Platonic view of the mind as a sailor on a ship. Moreover, Plato distinguished between rational and irrational parts of the soul<sup>6</sup>, while Descartes regarded only the intellect as soul in the strict sense. Finally, Descartes' innatism did not fit the Platonic theory of reminiscence, since it was basically dispositional<sup>7</sup>. And as far as his innatism regards contents, it also shows a remarkable resemblance with the Scholastic account of first principles<sup>8</sup>. Some Platonic sources of Descartes' dualism have been analysed by Rodis-Lewis<sup>9</sup>. For the present purposes I will concentrate on the Platonic notion of the descent of the soul, which is relatively unexplored as a possible background of Descartes' view of the mind-body relation. The affinity between Aristotelian and Cartesian noetics was already suggested by Gassendi<sup>10</sup>, and Gilson has brought to light numerous parallels between Cartesian and Scholastic psychology<sup>11</sup>. However, leaving alone some useful suggestions formulated in Meier's monograph<sup>12</sup> and by Verbeek in a recent essay<sup>13</sup>, there is virtually no research into the question whether Descartes'

<sup>6</sup> *Phaedrus*, 246a-248e; *Republic*, 439d-445c. For discussion, see F.A. Wilford, «The status of reason in Plato's psychology», in *Phronesis* 4(1959), 54-58.

<sup>7</sup> Also perceptual knowledge is generated by the mind; cf. *Meditationes*, 43. Perceptual ideas are innate, in the sense that they are irreducible to the type of reality which triggers them in the mind; cf. *Notae in programma quoddam*, in *AT VIII.2*, 358-59, and *Meditationes*, 189. Cf. D.M. Clarke, *Descartes' Philosophy of Science*, Manchester 1982, 50: «Once Descartes accepted the inexplicable relationship between sensory stimuli and the occurrence of appropriate ideas in the mind, he may wish to clarify the special status of these ideas vis-à-vis their causes; and to do this he called all ideas in the mind innate.»

<sup>8</sup> See, for example, *AT III*, 665, and *Discours de la Méthode*, 64, where Descartes claimed that, respectively, primitive notions and «semences de Veritez» are present in the soul; cf. *AT X*, 373, where he spoke about «semina iacta» in mind. Cf. Thomas Aquinas, *De veritate*, q. 11, a. 1 ad resp.: «praexistunt in nobis quaedam scientiarum semina». These seeds (the first principles) become actual knowledge in virtue of abstracted intelligible species.

<sup>9</sup> Cf. G.L. Rodis-Lewis, «L'arrière-plan platonicien du débat sur les idées: de Descartes à Leibniz», in *Permanence de la philosophie*, Neuchâtel 1977, 221-40; and «Le dualisme platonisant au début du XVIIe siècle et la révolution cartésienne», in *Rivista di storia della filosofia* 43(1988), 677-96.

<sup>10</sup> See below section I.

<sup>11</sup> E. Gilson, *Études sur le rôle de la pensée médiévale dans la formation du système cartésien*, Paris 1984 (first ed. 1930); *Index scolastico-cartésien*, Paris 1979.

<sup>12</sup> M. Meier, *Descartes und die Renaissance*, München 1914.

<sup>13</sup> Th. Verbeek, «*Ens per accidens*: Le origini della Querelle di Utrecht», in *Giornale critico della filosofia italiana* 71(1992), 276-288.

(apparently) a-typical and revolutionary conception of the relation between mind and body has a possible background in Aristotelian noetics. This paper is meant as a contribution to filling this gap.

A discussion of the possible relation between Cartesian and traditional philosophy raises a methodological issue. Descartes was proud of the fact that he read and owned very few books<sup>14</sup>. And indeed, the difficulty to trace the sources of his thought is notorious. My aim in this paper is, in fact, not so much to isolate precise sources for the afore-mentioned psychological issues in Descartes, but rather to elucidate some enigmatic expressions recurring in his philosophy of mind in the light of discussions running in ancient, medieval and Renaissance philosophy. It may not come as a surprise that many authors discussed here are difficult to locate on an intellectual map.

I analyse the «intimate presence» of the mind to the body taking as point of departure a remark of Gassendi on a possible similarity between the Cartesian view of mind and Aristotelian noetics. In the first section, some aspects of the possible Peripatetic background of the Cartesian view of the mind-body relation are analysed, with particular attention for the Averroistic interpretation of Aristotle's noetics. I present a cursory review of the disputes on the Peripatetic noetics in ancient, medieval and Renaissance philosophy. The second section pivots on Descartes' idea of mind as unitary force, applying itself to the body and thus grounding the inferior faculties<sup>15</sup>. The «applicatio mentis» is analyzed in the light of the notion of the soul descending into the body, current among Neoplatonics, and most noticeably among Renaissance authors, such as Cusanus, Marsilio Ficino, Marcantonio Genua and Giordano Bruno.

### 1. – «INTIMÈ PRAESENS»: THE CARTESIAN MIND AS «ASSISTING FORM»

Towards the end of his «Objections» to the *Meditations*, Pierre Gassendi suggests a similarity between Cartesian and Peripatetic views of

<sup>14</sup> Cf. A. Baillet, *La Vie de Monsieur DesCartes*, t. II, Paris 1691, under *Livres* in the *Table des matières*. For Descartes' judgement regarding the importance of books, see also *Discours de la méthode*, pp. 5 and 9; *AT* V, p. 176; and X, 214: «Plerique libri, paucis lineis lectis figurisque inspectis, toti innotescunt; reliqua chartae implendae adiecta sunt.»

<sup>15</sup> *Regulae*, 415: «Atque una & eadem est vis, quae, si applicet se cum imaginatione ad sensum communem, dicitur videre, tangere, &c.; si ad imaginationem solam ut diversis figuris indutam, dicitur reminisci; si ad eandem ut novas fingat, dicitur imaginari vel concipere; si denique sola agat, dicitur intelligere (...) Et eadem etiam idcirco juxta has functiones diversas vocatur vel intellectus purus, vel imaginatio, vel memoria, vel sensus; propriè autem ingenium appellatur, cum modò ideas in phantasiâ novas format, modò jam factis incumbit; consideramusque illam ut diversis istis operationibus aptam, atque horum nimum distinctio erit in sequentibus observanda.»

mind<sup>16</sup>. He mentions the Averroistic interpretation of Aristotle's noetics, but observes that Descartes' concept of the human mind does not fit this interpretation. However, even interpreting the Cartesian mind as a multiplied Aristotelian intellect, this view of mind is to be regarded as untenable according to Gassendi. The afore-mentioned passage has gained little interest in studies on Descartes' philosophy of mind. Surely, Gassendi does not identify Descartes' mind with the Peripatetic intellect. Yet, he suggests a possible affinity which, to my knowledge, has not yet been sufficiently analyzed. In this section I present an overview of both the relevant aspects of Aristotle's noetics and of the subsequent medieval and Renaissance discussions. Then I draw a comparison with Descartes' position.

Traditionally, Aristotelians argued for a strict link between soul and body. The soul is by its essence the act and the form of the body, and depends for its knowledge on sensory representations. However, the position of the intellect in Aristotle's texts was problematic, since Aristotle observed that the intellect was unmixed with the body<sup>17</sup>, that it came from without<sup>18</sup>, and that not the whole soul is object of natural science<sup>19</sup>. In turn, Descartes' neat distinction between mind and body has become proverbial. Descartes rejected the view that the same force directs vegetative, sensible and intellectual processes. The soul as form of the body is replaced by a pure intellect. However, Descartes' departure from Aristotle is not so sharp as it seems at first sight, since he shares with the latter the idea of an (active) mind, distinct from the body, separable, uncontaminated, but nonetheless with a capacity to interact with the body. His dualistic psychology was not meant to exclude the 'contact' between mind and body<sup>20</sup>. On various

<sup>16</sup> *Meditationes*, «*Objectiones Quintae*», p. 336: «*Atqui, ὁ Mens, de hoc corpore non est difficultas. Esset quidem, si objicerem cum plerisque Philosophis te esse εντελεχειαν, perfectionem, actum, formam, speciem, & ut vulgari modo loquar, modum corporis. Quippe illi non magis te ab isto corpore distinctam separabilemque agnoscunt, quàm figuram modumve alium; idque, seu sis anima tota, seu sis praeterea etiam νοος δυναμει, νοος παθητικος, intellectus possibilis, seu passibilis, ut loquuntur. Sed agere placet tecum liberalius, te nimerum considerando ut noun ποιητικον, intellectum agentem, imò & choriston, separabilem, tametsi aliâ, quâ illi, ratione. Cum illi enim istum statuerent omnibus hominibus (nisi potius rebus) communem, praestantemque intellectui possibili, ut intelligant, eâdem prorsus reatione ac necessitate, quâ lux ocilo, ut videat (unde solari lumini comparare soliti erant, spectareque proinde ipsum, ut advenientem extrinsecus), ipse te potius considero (nam & tu quoque id bene vis) ut intellectum quandam specialem, qui domineris in corpore.*»

<sup>17</sup> *De anima*, 429a18.

<sup>18</sup> *De generatione animalium*, 736b5-8.

<sup>19</sup> *De partibus animalium*, 641a32-b10. During the 16th century, Caietanus will argue for a similar position; cf. *Commentaria in De anima Aristotelis*, ed. P.I. Coquelle, vol. I-II, Roma 1938-39, vol. I, pp. 55-57.

<sup>20</sup> For a valuable correction of the standard view of Cartesian dualism, see G.P. Baker and

occasions he stressed the intimate link between mind and body. He subscribed to the view that the images of sensible things may blind the mind<sup>21</sup>. Moreover, sense perception, imagination, and passions presuppose a «unio» or even «permistio» between mind and body<sup>22</sup>. Therefore, a comparison between Descartes' and the Aristotle's noetics, as suggested by Gassendi, is meaningful. Indeed, both the Aristotelians (in particular the Averroists) and Descartes were forced to address a similar issue, although in a fundamentally different conceptual context, namely, that of the relation between a «pure» intellect, on the one hand, and the sensitive faculties and the body, on the other hand. Let us examine more in detail the relevant stages in the development of Aristotelian noetics.

Aristotle argued for psychology as a branch of natural philosophy: soul is the first actuality of an organic, living body<sup>23</sup>. On several occasions he suggested, however, that the intellect was not captured by this definition, since it was not compatible with magnitude, space and motion<sup>24</sup>. Moreover, the intellect is not linked to the body<sup>25</sup>, it transcends the link between soul and body<sup>26</sup>, and it is separable<sup>27</sup>. The agent intellect, introduced in *De anima* III.5, is called divine and it appears to be unique for the whole mankind<sup>28</sup>. However, although not linked to a bodily organ, the intellect

---

K.J. Morris, «Descartes unlocked», in *British Journal for the History of Philosophy* 1(1993), 5-27.

<sup>21</sup> *Meditationes*, 47.

<sup>22</sup> *Meditationes*, 81: «Docet etiam natura, per istos sensus doloris, famis, sitis &c., me non tantum adesse meo corpori ut nauta adest navigio, sed illi arctissime esse conjunctum & quasi permixtum, adeo ut unum quid cum illo componam. Alioqui enim, cum corpus laeditur, ego, qui nihil aliud sum quam res cogitans, non sentirem idcirco dolorem, sed puro intellectu laesionem istam perciperem, ut nauta visu percipit si quid in nave frangatur»; cf. also pp. 75-6, and p. 437: «Secundus continet id omne quod immediate resultat in mente ex eo quod organo corporeo sic affecto unita sit, talesque sunt perceptiones doloris, titillationes, sitis, famis, colorum, soni, saporis, odoris, caloris, frigoris, & similia, quas oriri ex unione ac quasi permistione mentis cum corpore in sexta Meditatione dictum est.» Also the existence of passions reveal the intimate link between body and mind; cf., in particular, *Les passions de l'ame*, book I, in *AT* XI.

<sup>23</sup> *De anima*, 415b9-10. Cf. *De generatione animalium*, 736b29-737a7: all faculties are transmitted via the masculin sperm.

<sup>24</sup> *De anima*, 407a6-b13. Cf. 414b20ff: there is no such thing as soul in general. Cf. Alexander Aphrodisiensis, *De anima liber cum mantissa*, ed. I. Bruns, Berlin 1887, pp. 7, 21-8, 13: there is no general definition of soul; cf. p. 28, and for discussion P. Moraux, *Alexandre d'Aphrodise. Exégète de la noétique d'Aristote*, Liège-Paris 1942, 53-60.

<sup>25</sup> *De anima*, 408b11-29.

<sup>26</sup> *De anima*, 411a26ff.

<sup>27</sup> *De anima*, 429b5-6 and 413b24-27; cf. *Ethica Nicomachea*, 1177a13-16.

<sup>28</sup> Notice that till this chapter, Aristotle speaks about *nous* undifferentiated; cf. P. Huby, «Stages in the development of language about Aristotle's *nous*», in *Aristotle and the Later Tradition*, eds. H. Blumenthal and H. Robinson, London 1991, 129-143, p. 132.

cannot operate without the body<sup>29</sup>. Thus, it does not surprise, that the relation between intellect, soul and body became the object of historical controversies among Peripateticians. Most probably, Aristotle regarded the intellect not as straightforwardly separable, but rather as some sort of dispositional property of a psycho-physical subject<sup>30</sup>. Indeed, the notion of separation in *De anima* III.5 (430a17-23) is surely too weak to support any kind of Cartesian dualism<sup>31</sup>. However, later commentators adopted lines of interpretation, which can be related significantly to Descartes' position.

Theophrastus concluded that the (agent) intellect, although immanent to the body, had in fact a transcendent nature<sup>32</sup>. Alexander of Aphrodisias defined the possible intellect as a material form, but regarded the agent intellect as a separate substance, detached from, but nonetheless operative in human individuals<sup>33</sup>. Themistius, more cautious and also less clear, argued that the agent intellect was supervenient on the possible intellect<sup>34</sup>. Stephanus Alexandrinus, in the *De anima* commentary till recently attributed to Philoponus, argued for the thesis that the human soul was essentially the intellect including the inferior faculties<sup>35</sup>.

Like Alexander, also Avicenna regarded the agent intellect as unique, but, deeply influenced by Neoplatonic views, he regarded the possible intellect or rational soul as an immaterial substance, largely independent of the bodily subject<sup>36</sup>. Avicenna's argument for the spiritual character of the human soul has been interpreted as an anticipation of Descartes' view of

<sup>29</sup> *De anima*, 408b25-29 and 431a17-18. For discussion, see J. van der Meulen, «Die aristotelische Lehre vom *noûs* in ihrer ontologischen Verwurzelung», in *Zeitschrift für philosophische Forschung* 14(1960), 526-535, on p. 535; Ch. Lefèvre, *Sur l'évolution d'Aristote en psychologie*, Louvain 1972, 259-281; D.K.W. Modrak, «The *nous*-body problem in Aristotle», in *Review of Metaphysics* 44(1990-91), 755-774, on p. 759; R. Sorabji, «Body and soul in Aristotle», in *Philosophy* 49(1974), 63-89: no acts are purely mental.

<sup>30</sup> *De anima*, 430a15; cf. J.M. Rist, «Notes on Aristotle *De anima* 3.5», in *Classical Philology* 61(1961), 8-20.

<sup>31</sup> Cf. M.V. Wedin, *Mind and Imagination in Aristotle*, New Haven-London 1988, 182.

<sup>32</sup> Theophrastus, «Fragment XIII», in E. Barbotin, *La théorie aristotélicienne de l'intellect d'après Théophraste*, Louvain-Paris 1954, 208; cf. G. Verbeke, «La théorie aristotélicienne d'intellect d'après Théophraste», in *Revue philosophique de Louvain* 53(1955), 368-382, on p. 376.

<sup>33</sup> *De anima liber cum mantissa*, 11-18, and 90-91.

<sup>34</sup> *In libros Aristotelis De anima paraphrasis*, ed. R. Heinze, Berolini 1899, 107-108.

<sup>35</sup> Iohannes Philoponus, *In Aristotelis De Anima libros commentaria*, ed. M. Hayduck, Berlin 1897, pp. 1-6; for the issue of the attribution, see H. Blumenthal, «John Philoponus and Stephanus of Alexandrinus: Two Neoplatonic Christian commentators on Aristotle?», in *Neoplatonism and Christian Thought*, ed. D.J. O'Meara, Albany 1982, 54-63, 244-46.

<sup>36</sup> In particular, *Liber de anima*, ed. S. van Riet, 2 vols., Louvain-Leiden 1968-1972, V. 2.

the mind<sup>37</sup>. Remarkably, Avicenna regards the rational soul as some sort of angelic substance<sup>38</sup>. And recently, Specht has suggested that the late Scholastic doctrine of angels is to be regarded as a possible source of Descartes' view of mind<sup>39</sup>. During the 13th century, Avicenna's views on the human soul determine the early reception of Aristotle's psychology in the West. On the basis of a detailed analysis of the issue whether the intellect was a «virtus in corpore», Averroes argued that also the possible intellect must be regarded as a separate substance, unique for the whole mankind. He regarded the highest sense-power, the «cogitativa», as the form of the body, and, thus, as the specific human soul. This unique intellect depended, however, on the human body for its knowledge of the sensible world<sup>40</sup>. During the Middle Ages, the Arab commentators enjoyed a great authority, but the uniqueness of the agent or possible intellects was accepted only by a small minority, namely the early 13th-century Augustinian Avicennians, and the representatives of the various streams in medieval Averroism, respectively.

The explanation of how the intellect is joined to man and how it can be considered to be man's soul was a basic problem for all interpreters of Aristotle's psychology, not only among medieval Scholastics but also among Italian philosophers at the turn of the 15th and 16th centuries. Albert the Great, for example, regarded the rational soul as one substance, from which are derived the vegetative, sensitive and intellectual powers, some of which are affixed to the body and some not<sup>41</sup>. Elsewhere he defined the intellect as in se separate, and concluded that it was the form of the body only in a mediated way, namely, insofar as it was formally linked to the sensitive faculties<sup>42</sup>. A similar idea, namely that the intellect communicates with the body through the inner senses, is expressed in a

<sup>37</sup> See the famous thought experiment regarding the «flying man», in *Liber de anima*, I.1, pp. 36-37, and V.7, pp. 161-63; for discussion, see E. Galindo-Aguilas, «L'homme volant d'Avicenna et le Cogito de Descartes», in *Ibla* 21(1958), 279-95; M. Marmur, «Avicenna's flying man in context», in *Monist* 69(1986), 383-395; G. Verbeke, «Introduction», in Avicenna, *Liber de anima*, vol. I, p. 29\*.

<sup>38</sup> *Liber de anima*, IV.2, pp. 28-29.

<sup>39</sup> R. Specht, *Commercium mentis et corporis. Über Kausalvorstellungen im Cartesianismus*, Stuttgart-Bad Cannstatt 1966, p. 3. Notice, that the agent intellect was regarded as some sort of angelic or demonic substance by the later Neoplatonic Marinus; cf. Proclus, *In Platonis Timaeum commentaria*, Lipsiae 1903-1906, vol. III, p. 165, II 14-27; and H.J. Blumenthal, «Neoplatonic interpretations of Aristotle on *Phantasia*», in *Review of Metaphysics* (1977), 247.

<sup>40</sup> *Commentarium magnum in Aristotelis De anima libros*, ed. F.St. Crawford, Cambridge (Ma.) 1953, 387-413.

<sup>41</sup> *De animalibus*, ed. H. Stadler, Münster i. W. 1960, p. 1093.

<sup>42</sup> B. Nardi, «La posizione di Alberto Magno di fronte all'averroismo», in idem, *Studi di filosofia medievale*, Roma 1979 (first edition 1960), 119-150, on p. 140.



later, semi-averroistic *De anima* commentary<sup>43</sup>. Thomas Aquinas defended the view of the intellect as «forma corporis» in his early criticisms of Averroistic psychology. In his *De unitate intellectus*, however, he attributed the definition «forma corporis» to the soul as a whole, while the intellect, although «pars animae», is regarded as not formally connected to the body. Many Franciscan authors, suspicious towards the naturalistic strands of Aristotelian psychology, stressed the independence of the (intellectual) soul with respect to the body.

The conflict on the status of the (human) intellect pivoted on the question whether the intellect was to be regarded as a mere «forma adsistens» detached from the human body, as the Averroists thought, or as a «forma informans & dans esse», as the majority of the Scholastics and also many Renaissance philosophers thought<sup>44</sup>. Remarkably, representatives of the latter position formulated divergent accounts on the precise modalities of the relation between intellectual soul and body. Giles of Rome, for example, accepted that the intellect conveyed the «esse & operari» to the body but rejected the view that the intellect was an 'inhering' form<sup>45</sup>.

Relevant for the topic under scrutiny is the position developed by Siger of Brabant, who in his early works attempted to thread on a middle path between the classical Averroist interpretation and non-averroistic psychology. Siger thought that the unique intellect, though a simple being in itself, was united to the vegetative and sensitive soul, and that it formed with them a composite soul<sup>46</sup>. The intellect is not united directly to the body, but rather accidentally, that is, by its power<sup>47</sup>. In a later work, he argued that the intellect can be called a form in a broad sense, since it is «intrinsic operans ad materiam»<sup>48</sup>. Also other Averroists defended the strictly operational unity between intellect and body<sup>49</sup>.

Discussions running at the University of Padua at the end of the 15th century reveal a remarkable Averroes-revival. By this time, the great majority of professional philosophers accepted Averroes as the most

<sup>43</sup> *Trois commentaires anonymes sur le traité de l'ame d'Aristote*, eds. M. Giele, F. van Steenberghen, and B. Bazán, Louvain-Paris 1971, p. 143.

<sup>44</sup> For the formulation of this dilemma, see Jacopo Zabarella, *De mente*, in *De rebus naturalibus libri XXX*, Venetiis 1607 (first edition 1590, reprint Frankfurt 1966), 917.

<sup>45</sup> B. Nardi, *Saggi sull'aristotelismo padovano dal secolo XIV al XVI*, Firenze 1958, 84-85.

<sup>46</sup> *Quaestiones in tertium de anima*, in Siger de Brabant, *Quaestiones in tertium de anima, De anima intellectiva, De aeternitate mundi*, ed. B. Bazán, Louvain-Paris 1972, q. 1.

<sup>47</sup> *Quaestiones*, q. 7, pp. 22-24.

<sup>48</sup> *De anima intellectiva*, cap. 3, pp. 84-5, 87. For discussion, see Z. Kuksewicz, *De Siger de Brabant à Jacques de Plaisance. La théorie de l'intellect chez les Averroïstes latins des XIIIe et XIVe siècles*, Wrocław-Varsovie-Cracovie 1968, chap. I, 40f.

<sup>49</sup> *Trois commentateurs*, p. 72.

authoritative interpreter of Aristotle's psychology. The Barozzi enactment of 1489 prohibiting the discussion of the immortality of the soul, and the rediscovery of Hellenistic interpreters of Aristotle's psychology, such as Alexander, Themistius and Simplicius, caused violent contrasts within the Aristotelian camp, but did not rule out the discussions on Averroes' interpretation, nor was his authority in many other questions seriously undermined.

Nicoletto Vernia and Agostino Nifo, among the main representatives of the School of Padua, personify the intellectual conflict caused by bishop Barozzi's 1489 edict. Both devote followers of Averroes in their youth, during the 1490's Vernia and Nifo dissociated from their earlier views. After the Barozzi enactment, Vernia abandoned Averroes and attempted with the aid of Simplicius to formulate a noetics in which the unity and multiplication of the intellect could be conciliated. Against Averroes and Jandun, he asserted that Aristotle did maintain that the rational soul is the true form of the human body, giving the body its existence<sup>50</sup>.

Nifo's noetic speculation, in particular before his breaking away from Averroes and also afterwards, in the extensive analyses preceding his often somewhat ambiguous «conclusions»<sup>51</sup>, invests the topic under scrutiny more directly, since it contains elements which permit us to relate Nifo's significantly with the Cartesian position. On strictly philosophical (i.e. Aristotelian and Averroistic) grounds, so Nifo argued, there cannot exist any real union of the intellect with the human body as a truly substantial form, but only an operational unity: body and intellectual soul merely cooperate in the generation of knowledge of sensible reality. However, no change whatever is effected in the separate intellect by reason of its being form or soul of many bodies. Against Jandun, he argued in his comment on Averroes' *Destructio destructionis*, that the intellect is eternally the same. As separate substance the intellect is simply separated from every respect or relation to anything extrinsic. Consequently, the basis for the denominations of «soul» or «form» is not in the separate intellect, but in the

<sup>50</sup> Cf. *Quaestiones de pluritate intellectus contra falsam et ab omni veritate remotam opinionem Averrois*, in Albertus de Saxoni, *Quaestiones super libros de physicu auscultatione*, Venetiis 1504, 82r-92r.

<sup>51</sup> The dismissal of Averroes as authoritative commentator, developing gradually during the 1490's, had far-reaching consequences for other psychological and epistemological issues as well—a fact that was noted by Nifo himself. See *De intellectu*, Venetiis 1554 (first edition: 1503), V, c. 41; see also 24rb, 17vb, 30r-v, and 37ra. Still, Averroes remained an important point of reference in Nifo's psychology: many of the Commentator's followers were attacked with arguments derived from Averroes' own writings, especially Jandun. The number of pages devoted by Nifo to the refutation of the views of others is often many times larger than that used for explaining his own position. And one is often under the impression that Nifo claimed certain positions as his own without wholeheartedly supporting them. Indeed, it is problematic to assume that Nifo rejected all of the Commentator's tenets, even if he expressly said so.

human body<sup>52</sup>. This is the true opinion of Aristotle and Averroes, although according «nos Christianos» it must be seen as «error purus»<sup>53</sup>. Thus, Nifo eliminated the causal dependence of the separate intellect on the phantasms in human beings. The intellect is form of the human race merely by the assistance of its intellection in regard to a phantasm in the human soul<sup>54</sup>.

The early Pomponazzi, still endorsing the Averroistic interpretation, asserted that not Aristotle, but rather Thomas and the Christian faith push to the view of the intellect as «dans esse»<sup>55</sup>. Other authors, such as Achillini, adhered to Siger of Brabant's views<sup>56</sup>. These views were attacked, however, by Marcantonio Zimara as not conform to the true spirit of Averroism: the intellect is «adsistens», not «inhaerens»<sup>57</sup>. Not only Marcantonio Genua, who elaborated a Simplician form of Averroism, endorsed this view<sup>58</sup>, but also Vimercato and Pernumia, though not endorsing the Averroist interpretation, underlined the independence of the intellect, and defended the thesis of the intellect as «forma adsistens»<sup>59</sup>. Towards the end of the 16th century, Francesco Piccolomini argued that the mind is a «forma formans», but not «dans esse», since it is united to an already constituted body<sup>60</sup>. The thesis of the intellect as «forma adsistens» was also endorsed by relatively independent authors, such as Giordano Bruno<sup>61</sup>.

<sup>52</sup> *In librum destructio destructionum Averrois commentarium*, Venetiis 1497, I, dub. 23, f. 23r: «sicut nauta non dicitur esse anima navis nisi quando incipit operari, ita intellectus non dicitur esse anime hominis nisi quando incipit esse principium operationis in eo.»

<sup>53</sup> Also in his later works Nifo continued to use Averroistic arguments in his extensive expositions, and in general merely dissociated from them at the end of each issue analyzed; see *supra*.

<sup>54</sup> Cf. the criticisms advanced by Antonio Trombetta against Nifo's position; see E.H. Mahoney, «Antonio Trombetta and Agostino Nifo on Averroes and intelligible species: A philosophical dispute at the University of Padua», in *Storia e cultura nel Convento del Santo a Padova*, ed. A. Poppi, Vicenza 1976, 289-301, on p. 298.

<sup>55</sup> *Corsi inediti dell'insegnamento padovano*, 2 vols. ed. A. Poppi, Padova 1966-1970, vol. I, 34-5, 81-83.

<sup>56</sup> *Quaestiones quolibeta de intelligentiis*, in *Opera omnia*, Venetiis 1545, 1-22r, on f. 14r. See also B. Nardi, *Sigieri di Brabante nel pensiero del Rinascimento italiano*, Roma 1945, 75.

<sup>57</sup> Marcantonio Zimara, *Tabula dilucidationum in dictis Aristotelis et Averrois*, Venetiis 1543, at «Intellectus utriusque pontificium». See also B. Nardi, *Saggi sull'aristotelismo padovano dal secolo XIV al XVI*, 352.

<sup>58</sup> *In tres libros Aristotelis de Anima exactissimi Commentarij*, Venetijs 1576, 135va.

<sup>59</sup> Nardi, *Saggi sull'aristotelismo padovano*, 403 and 405.

<sup>60</sup> Nardi, *Saggi sull'aristotelismo padovano*, 429-435.

<sup>61</sup> See *De umbris idearum*, ed. R. Sturlese, Firenze 1991, 49: «Quod si possibile est atque verum, intellectualem animam non vere insitam atque infixam, inexistentemque corpori licet apprehendere, sed vere ut adsistentem et gubernantem (...)».

The short history of Aristotelian noetics sketched above suggests the opportunity of a close comparison between Descartes' view of mind and the conceptions of those Aristotelians who stress the spirituality of the intellectual soul. Descartes' position is similar to Theophrastus': the mind is immanent to the body, but has a transcendent nature. With Avicenna and with medieval schoolmen, who were suspicious of the naturalistic strands of Aristotelian psychology<sup>62</sup>, Descartes shared a view of mind as an immaterial substance, largely independent from the body, using the bodily stimuli merely as occasions to develop mental acts<sup>63</sup>. Moreover, also a remarkable similarity with Averroist interpretations of the intellect must be mentioned, conceived as a «forma adsistens» not informing the body, yet depending on the latter for the actual knowledge of the sensible world. For the Averroists explaining how the intellect is joined to men in cognition and how it can be considered to be man's soul was a basic problem. Descartes, in turn, puzzled on how the mind was distinct, but yet intimately present to the body in acts which involved both.

Surely, I do not suggest that Descartes was influenced or even inspired by Averroism. On the contrary, recently, Theo Verbeek has argued that Descartes probably was well aware of the danger of being charged of Averroism<sup>64</sup>. Thus, Descartes would have rejected any affinity between his view of mind and Averroistic psychology. As a matter of fact, Descartes rejected strongly the view of his disciple Regius, who argued for a merely accidental union between mind and body, since each of them can exist without the other<sup>65</sup>. Descartes' fear and Regius' position justify a comparison with Averroistic noetics.

Descartes kept silent on substantial forms, but most probably he rejected them all<sup>66</sup>, with one exception: the human mind. This 'form', however, is not the form which informs the body it is inherent in. Is the mind, instead, to be seen as a form «assisting» the body, similar to the separate intelligence of a celestial sphere or the Averroistic intellect

<sup>62</sup> Examples are the 13th-century Henry of Ghent, Peter Olivi and Godfrey of Fontaines.

<sup>63</sup> For discussion, see my *Species intelligibilis. From Perception to Knowledge*, vol. II, Leiden 1995, ch. XI, § 1.1.

<sup>64</sup> Th. Verbeek, «*Ens per accidens: Le origini della Querelle di Utrecht*», pp. 285-88, points out that one of Voetius' probable motives to attack the psychology of Descartes' disciple Regius was that it had an Averroistic flavor. He also calls our attention to an explicit reference to the 5th Lateran council (1512-17), which condemned the Averroist psychology, just on one of the first of *Meditationes* (p. 3). J.A. van Ruler, *The Crisis of Causality. Voetius and Descartes on God, Nature and Change*, Leiden 1995, p. 189, instead, thinks that Voetius, in his polemics with Regius, did not fear Averroism in particular, but rather felt the need to defend the existence of substantial forms.

<sup>65</sup> AT III, 460-61: the human body possesses «omnes dispositiones requisitas ad animam recipiendam».

<sup>66</sup> See J.A. van Ruler, *The Crisis of Causality*, p. 199; earlier in the 17th century, already David Gorlaeus and Sebastian Basso rejected substantial forms.

connected to the body? Surely, this would be the other horn of the dilemma running in the Peripatetic discussions regarding the intellectual soul. Recall that Scholastic psychology theorises also the possibility of forms which may act from outside, like angels incarnated in human bodies<sup>67</sup>.

What are the most striking similarities between Averroistic noetics and Descartes' view of mind? Like Siger, Descartes seems to aim at a broad use of the concept «form». Moreover, like the early Nifo, Descartes eliminated the causal dependence of the intellect on sensory information. The mind is form, but not form of the body, in the sense that it does not have precise causal functions with respect to the body. In other words, the Cartesian mind is not the inner cause of properties, actions, and developments of the body, considered apart from external objects. Thus, it is not an internal agent responsible for the actions of the body. This is the upshot of Descartes' 'Averroism' in matters psychological.

## 2 – «SE APPLICAT»: THE DESCENT OF THE CARTESIAN MIND

In the first section, we have seen that the Cartesian mind-body relation can be meaningfully related to the noetics of those Peripatetics who stress the immaterial nature of the intellect, no matter whether the latter is seen as relatively independent from the body (as in Avicenna) or as separate although depending on the sensory representations for its knowledge (as in Averroes and his followers). In this section, I attempt to trace in more detail the possible background of Descartes' conception of the mind-body relation with respect to the explanation of mental acts involving both mind and body, that is, grounded essentially on their interaction.

According to Descartes, in mental acts, such as perception, imagination and memory, the mind attends to the body or also applies itself to the latter. This view is grounded on two fundamental assumptions. Firstly, mental acts involving the body are to be attributed to the mind as a unitary force<sup>68</sup>. Sense, imagination and memory are not relatively independent, inferior psychological faculties, but rather manifestations of the mind. Secondly, the mind is able to 'contact' in some way the body. Descartes uses rather allusive terms, such as, «convertere», «applicare»<sup>69</sup>. A comparison with traditional conceptions may elucidate this position. Indeed, for both views there are significant anticipations in the philosophical tradition of the Renaissance. The view of an immaterial mind 'contacting' the body can be seen as a rephrasing of the traditional conception of the intellectual soul

<sup>67</sup> See also van Ruler, *The Crisis of Causality*, p. 187, note 15.

<sup>68</sup> *Regulae*, 415 (quoted above in note 15). See also *Meditationes*, 160-61.

<sup>69</sup> See *AT* III, 361 and *AT* V, 154; cf. *Meditationes*, 71-73, 357, 384-85, 387, and 389.

descending in the body, widely spread among Neoplatonic authors. The view of the mind as «una vis» which in his descent towards the body constitutes the inferior faculties, is endorsed, among others, by ancient and medieval Neoplatonics, and most noticeably by Renaissance authors, such as Cusanus and Giordano Bruno.

In both Plato and Aristotle the unity of the soul was more or less problematic. Plato's doctrine of reminiscence clearly presupposes the unity of the soul. Yet, in *Republic* he endorsed a tripartite soul<sup>70</sup> and elsewhere he distinguished between rational and irrational parts of the soul<sup>71</sup>, as well as between the soul in its original state and in its embodied state<sup>72</sup>. The problematic relation between intellect, soul and body in the Peripatetic tradition has been discussed in the first section. The Stoics espoused a unitary view of the soul, but their materialism in psychology rules out a significant comparison with Descartes<sup>73</sup>. Avicenna, though detaching the agent intellect and developing a fine-grained scale of psychological faculties, nonetheless stressed the unity of the human soul<sup>74</sup>. The medieval and early modern Schoolmen endorsed in general a faculty psychology, developed on the basis of Aristotle and his Arabic commentators. Notice, however, that Thomas Aquinas held that the intellect 'contained' the inferior powers<sup>75</sup>. Moreover, opponents of the Aristotelian naturalism in psychology, such as Peter Olivi, stressed the unity of the soul. Most remarkably, John Buridan eliminated the distinction between the soul and its powers, and adumbrated aspects of a more modern functionalist view when he stated that the human soul is an undivided «potestas» characterized by various operations<sup>76</sup>. In addition to relinquishing the distinction between perceptual and intellective operations, Buridan emphasized the unity of the agent and the possible intellect<sup>77</sup>. Agostino Nifo

<sup>70</sup> *Republic*, 435c-445c; a similar position was endorsed also by Cicero, *Tusculanae Disputationes*, I.20, and by Macrobius, *Commentarii in Somnium Scipionis*, ed. I. Willis, Leipzig 1970, I.6.

<sup>71</sup> See *Phaedrus*, 246a-248e; in *Timaeus*, 69c-70a and in *Republic* 611b-612a, Plato suggests that only the rational part of the soul survives after death.

<sup>72</sup> *Meno*, 81c, and *Phaedo*, 83b.

<sup>73</sup> Cf. *Meditationes*, 26, where Descartes rejects Stoic psychology.

<sup>74</sup> Cf. *Liber de anima*, I.3, p. 51. According to Avicenna, the soul grounds all animal functions; cf. also E. Gilson, «Les sources gréco-arabes de l'augustinisme avicennisant», in *Archives d'histoire doctrinale et littéraire du Moyen Age* 4(1930), 43.

<sup>75</sup> See, for example, *De unitate intellectus*, ed. Leonina, Roma 1976, c. I, ll. 841-44.

<sup>76</sup> Cf. G. Federici Vescovini, *Studi sulla prospettiva medievale*, Torino 1965, 145-154. This conception will influence the psychology of Blasius of Parma; see Biagio Pelacani da Parma, *Quaestiones de anima*, ed. G. Federici Vescovini, Firenze 1974, pp. 86f and Federici Vescovini, *Studi*, 247-48.

<sup>77</sup> See *Expositio de anima & Quaestiones in de anima [De prima lectura]*, in B. Patar, *Le Traité de l'ame de Jean Buridan [De prima lectura]*, Louvain-la-Neuve-Longueuil

expressed lack of interest in whether the agent and potential intellects are distinct from one another, and prefers instead Albert's conception of the soul as a potestative whole<sup>78</sup>. Also many later schoolmen eliminated a neat distinction between the agent and possible intellects<sup>79</sup>.

Descartes' view of mind as «una vis» applying itself to the body is most clearly foreshadowed by the Neoplatonic conception of the descent of the soul. In Neoplatonic metaphysics, in particular as developed after Plotinus, reality was seen as divided into a fine-grained scale of layers. Also psychology was integrated in this conception and every power of the human soul was considered as constituting a proper layer of being<sup>80</sup>. At first sight this construction seems to exclude any possibility for a unitary view of mind or soul. However, often this view was connected to the theory of the descent of the soul. Thus, the soul is conceived as a descending succession of forms, or as a series of reflections of the superior part<sup>81</sup>. This view was interpreted in various ways.

Plotinus, for example, endorsed the conception that a part of the soul does not descend, but remains in the intelligible world<sup>82</sup>. Simplicius, on the contrary, argued that the soul descends completely without losing its own nature<sup>83</sup>. The rational soul may be said to exist at a number of distinct ontological and psychological levels. Simplicius distinguished between an unchanging «intellectus manens» and an «intellectus progressus». The rational soul is a 'progressing' intellect when it projects itself onto the perceptual faculties, the so-called «vitae secundae». At this stage it is a potential intellect: in the downward projection it moves from thought to perception. The rational soul uses the body as an instrument, approaching the sensible things 'from without'<sup>84</sup>. Notice that the connection between

---

(Québec) 1991, 141, and 430-431. Notice that some schoolmen, such as Durandus of Saint-Pourçain, regarded the existence of the agent intellect as completely superfluous.

<sup>78</sup> *De intellectu*, I, c. 24, 45vb; cf. *Expositio subtilissima collectanea commentariaque in III libros Aristotelis De anima*, Venetiis 1522, 12vb, and 16rb.

<sup>79</sup> See the positions developed by Francisco Suarez and Francisco Toletus.

<sup>80</sup> W. Deuse, *Untersuchungen zur mittelplatonischer und neuplatonischer Seelenlehre*, Wiesbaden 1983, pp. 167-173.

<sup>81</sup> *Enneads*, I.1.11, V.9.6, V.5.8; cf. Iohannes Philoponus (=Stephanus Alexandrinus), *In Aristotelis De Anima libros commentaria*, ed. M. Hayduck, Berlin 1897, pp. 195 and 201.

<sup>82</sup> *Enneads* IV.1.9 and 12, IV.2.1, and IV.8.8.

<sup>83</sup> H.J. Blumenthal, «Neoplatonic elements in the *De anima* commentaries», in *Phronesis* 21(1976), 64-87, 78-80.

<sup>84</sup> C. Steel, *The Changing Self. A Study on the Soul in Later Neoplatonism: Iamblichus, Damascius and Priscianus*, Brussels 1978, 134. For the Neoplatonic interpretation of the human soul using the body as organ, see Blumenthal, «The psychology of (?) Simplicius' commentary on the *De anima*», in *Soul and the Structure of Being in Late Neoplatonism*, eds. H.J. Blumenthal and A.C. Lloyd, Liverpool 1982, 73-93, 79; idem, «Neoplatonic elements in the *De anima* commentaries», 83; idem, «Some Platonist readings of Aristotle», in *Proceedings of the Cambridge Philological Society* 207, n.s. 27(1981), 1-16, on pp. 3-4.

rational soul and corporeal reality is not seen as totally negative. It is true that the human body stands in the way of a quiet and balanced contemplation. Yet, the descent of the potential intellect into the lower sensitive soul should not be seen as a 'fall' in every sense: the «second lives» are an integral part of the top-down unfolding of the higher rational forces<sup>85</sup>. The rational soul descends into the senses, and then it perceives the material world. During the Middle Ages, the conception of a descending intellect recurs in Albert<sup>86</sup>, Dietrich of Freiberg<sup>87</sup> and Ramon Lull<sup>88</sup>. However, the most significant anticipations of the Cartesian view of the 'applying' mind are to be found in the writings of Renaissance authors, such as Cusanus, Ficino, Genua, and Bruno.

Cusanus assigned perception and knowledge of the sensible realm to a single cognitive power, which he called 'mind'. He explicitly rejected traditional faculty psychology, which envisaged various faculties for ontologically distinct objects. The human mind is basically a «vis concipiendi», displaying a range of distinct activities such as intellect, reason, imagination and sense<sup>89</sup>. The perceptual faculties, for example, are just modes of a mental activity: they are moments of the unfolding inner powers of a unique «vis», involved in a circular movement of «descensus & ascensus»<sup>90</sup>. Knowledge of the sensible world is realised when the descending mind meets the sensible species in the «spiritus», a subtle fluid which makes up the network of veins, arteries and inner conducts of the sensible organs<sup>91</sup>. Cusanus believed that the spirit cannot be altered by the species, unless the spirit is animated by the mind. When animated by the descending mind, the spirit is capable of creating the similitudes of the mechanically introduced species<sup>92</sup>. Sense perception depends on the

<sup>85</sup> See Steel, *The Changing Self*, 62.

<sup>86</sup> Cf. *De intellectu et intelligibili*, in *Opera*, A. Borgnet, 38 vols., Paris 1890-99, vol. IX, I, c. 5; for discussion, see M.L. Führer, «The theory of intellect in Albert the Great and its influence on Nicholas of Cusa», in *Nicholas of Cusa in Search of God and Wisdom*, eds. G. Christianson & Th.M. Izbicki, Leiden 1991, 45-56.

<sup>87</sup> See *Schriften zur Intellekttheorie*, ed. B. Mojsisch, Hamburg 1977, 102.

<sup>88</sup> Ramon Lull, *Liber de intellectu*, eds. A. Llinarès & A.-J. Gondras, in *Archives d'histoire doctrinale et littéraire du Moyen Age* 38(1971), 193-270, p. 215.

<sup>89</sup> *Idiota de mente*, ed. L. Baur, in *Opera omnia*, vol. V, Lipsiae 1937, c. 11, 100; see also *De coniecturis*, eds. J. Koch & W. Happ, Hamburg 1971, II, c. 2, p. 91.

<sup>90</sup> *De coniecturis*, I, c. 8, p. 36, II, c. 4, p. 106, c. 7, p. 107, and c. 13-14. See also *Compendium*, eds. B. Decker & C. Bormann, Hamburg 1982<sup>2</sup>, c. 13: the sensitive soul is «imago» or «similitudo intelligentiae».

<sup>91</sup> For the role of the «spiritus», see *De mente*, c. 8; see also *De coniecturis*, II, c. 10. The doctrinal background of this notion of spirit probably lay in views derived from Hellenistic and medieval medicine, as well as in Augustine and in then newly discovered Neoplatonic writings.

<sup>92</sup> *De mente*, c. 7, 75.



incoming species and on the intentionality of the soul<sup>93</sup>. Perception occurs when the mind has created the conditions for its generation, that is, when the mind has animated the sense organs, descending into the spirit which pervades these organs. It is only by virtue of the species encountered by the mind in the spirit, however, that the mind's assimilation with the external world can take place. The mind's descent is a necessary condition for its ascent: in view of its ontological bounds<sup>94</sup>, the human mind must descend into the body in order to be able to ascend<sup>95</sup>. Based as it is on the animated spirit assimilating itself to the incoming species, human knowledge of sensible reality is effectively produced by the mind itself. In sensation the mind is not touched by sensible images. On the contrary, it is the mind itself that contacts matter<sup>96</sup>. In this respect, perception is active assimilation rather than passive reception<sup>97</sup>.

Marsilio Ficino holds that vegetative, sensitive and intellectual activities are to be attributed to one soul<sup>98</sup>. The soul is linked to the whole body and communicates with the latter through the spirit<sup>99</sup>. In virtue of an unbroken chain of layers in (mental/psychological) reality<sup>100</sup> the soul may ascend through sense, imagination, phantasy until the intellect<sup>101</sup>. The same metaphysical continuity enables the soul to interact with the body and to develop perceptual knowledge by reflecting itself in the sensible images<sup>102</sup>. Notice that the soul is not directly determined by matter: the body is able to influence the soul, since the latter 'admits' this<sup>103</sup>. The images merely stimulate the soul, they do not produce intelligible forms<sup>104</sup>. The soul generates its science on the basis of forms already latently present in itself<sup>105</sup>. Thus, the soul operates without the body. However, the pulsations

<sup>93</sup> See also *Compendium*, c. 13, 50 and 52: «(...) patet quod visio ex intentione coloris et attentione videntis oritur.» This view is characteristically Augustinian.

<sup>94</sup> I do not discuss here Cusanus' reflections on the bounds of human knowledge, as formulated, for example, in *De docta ignorantia* and *De mente*, c. 7.

<sup>95</sup> *De coniecturis*, II, c. 16, pp. 157-159; cf. N. Henke, *Der Abbildbegriff in der Erkenntnislehre des Nikolaus von Kues*, Münster 1969, p. 57.

<sup>96</sup> *De mente*, c. 7, 73.

<sup>97</sup> See *De mente*, c. 8, 81: the intellection of the sensible world as «motus mentis» is to be understood as «passio» only at its earliest stages.

<sup>98</sup> *Theologia platonica de immortalitate animorum*, in *Opera omnia*, Basileae 1576 (reprint Torino 1983), 78-424, VI.2.

<sup>99</sup> *Theologia platonica*, VII.1 and 6.

<sup>100</sup> *Theologia platonica*, X.2: «supremum inferioris» touches «infimum superioris»; cf. already Thomas Aquinas, *Summa contra Gentiles*, II, c. 68.

<sup>101</sup> *Theologia platonica*, VIII.1.

<sup>102</sup> *Theologia platonica*, XI.2.

<sup>103</sup> *Theologia platonica*, XIII.1: «Ex quibus apparet non per corporales naturas, sed per animae ipsius iudicium passiones corporis in animam penetrare.»

<sup>104</sup> *Theologia platonica*, XV.18; and XVI.1: the soul receives stimuli from the senses.

<sup>105</sup> *Theologia platonica*, XI.3.

of the latter are «not hidden to the soul»<sup>106</sup>. This is the upshot of the Ficinian mind-body interaction.

Using the terminology developed by Simplicius, Marcantonio Genua referred to the active and potential intellect as «intellectus perfectus» or «manens», and «intellectus progressus», respectively<sup>107</sup>. Descending towards the «secundae vitae», the unique intellect undergoes essential change<sup>108</sup>. Following Simplicius, the «intellectus progressus» was said to have two states, one potential, the other in act<sup>109</sup>. Elsewhere, Genua integrated this dynamical view of the intellect with a somewhat more traditional classification of the cognitive faculties<sup>110</sup>.

Like Averroes, Genua believed that the cognitive act depends on the body as its *conditio sine qua non*<sup>111</sup>. The intellectual soul is not the form of the body<sup>112</sup>, however, but the formal principle by virtue of which man has knowledge<sup>113</sup>. In this construction the intellect needs phantasms for its acts<sup>114</sup>. From Simplicius Genua took over the view that the intellect is not completely passive or potential, as appears from the Platonizing definition Genua gave of the Aristotelian «pati»<sup>115</sup>. Intellectual knowledge does not depend on incoming forms or representations. Indeed, the description of the intellectual soul as a «locus formarum» holds only for contents «a se ipsa fluxa», since the idea that intelligibles may penetrate the soul from without involves a contradiction<sup>116</sup>. However, by claiming that the «intellectus progressus» as such is dependent on phantasms, Genua expressly departed from Simplicius, who restricted this dependence to the practical intellect<sup>117</sup>. After a detailed discussion of the concept of

<sup>106</sup> *Theologia platonica*, IX.5: «Sed spiritus, qui est animae currus, a corporibus quibusque pulsatur. Pulsatio huiusmodi non latet animae.»

<sup>107</sup> Marcantonio Genua, *In tres libros Aristotelis de anima*, Venetijs 1576, 146rb, 152vb, and 157vb.

<sup>108</sup> *In de anima*, 127ra: «(...) egreditur ad secundas vitas, & operationes, quibus & speculatur a phantasmatibus accipiens: & etiam activè, & factivè tradit principia & cognoscendi, & agendi: est enim rationalis anima manens, & progressa; ut non sic manens, quin progressus; ut non sic progressus, quin manens.»

<sup>109</sup> *In de anima*, 157vb.

<sup>110</sup> *In de anima*, 167rb.

<sup>111</sup> *In de anima*, 22vab.

<sup>112</sup> This is the «cogitativa»; cf. *In de anima*, 37ra-va.

<sup>113</sup> *In de anima*, 132vb and 138rb.

<sup>114</sup> *In de anima*, 135ra.

<sup>115</sup> *In de anima*, 127vb: «nostra itaque rationalis anima neque pura permanet, neque omnino cedit: nam in lapsu illo haud ita labitur, quia in se ipsam aliquo modo converti queat: unde, ut sensus a sensibilibus; sic & talis anima ab intelligibilibus, atque ab illo intellectu, qui eiusdem ordinis cum illo est, excitatur, atque expletur.»

<sup>116</sup> *In de anima*, 127vb: «(...) at intelligibilia neque foris sunt; sed intus reperiuntur»; cf. 143vb.

<sup>117</sup> *In de anima*, 171ra, 172rb, 173vb, and 174va.

illumination in Latin, Arab and Greek commentators<sup>118</sup>, Genua concluded that an intellectual apprehension of natural reality does not presuppose that the (agent) intellect endows sensory representations with a capacity to move the (possible) intellect; it only means that the intellect projects itself onto the material world<sup>119</sup>.

In Giordano Bruno, the cognitive faculties are functions, rather than parts of the soul, and are governed by a link of participation<sup>120</sup>. The same principle descends and ascends, assuming different names according to various levels. Bruno does not eliminate the hierarchy between sense, imagination and intellect, but excludes the possibility of a real distinction between superior and inferior faculties. Basically, he regarded the cognitive faculties as manifestations of one single force<sup>121</sup>. They have a common nature, namely the intellect, which in turn participates in the first intellect<sup>122</sup>.

Descartes' conception of the mind applying itself to the body echoed aspects of the views pointed out above. This similarity was not caused by any direct influence of these authors on Descartes, however. Its explanation should rather be sought in a common Platonic background. Like his Renaissance 'predecessors', Descartes attributes all mental acts to the same power or «vis». Perception and imagination are manifestations of the mind, which descends in the body without being its form. With the main representatives of Neoplatonism and with Aquinas Descartes shares the view that the inferior powers could not exist without an immaterial mind<sup>123</sup>.

<sup>118</sup> *In de anima*, 154r-55ra.

<sup>119</sup> *In de anima*, 155rb: «Intelligens materialia, circa ipsa operatur; non autem faciens aliquid in eis; neque ab illis patiens aliquid; sed per projectas, quae in eo sunt, causas, cognoscitivum actum illorum proicit.»

<sup>120</sup> *Sigillus sigillorum*, in *Opera latine conscripta*, eds. F. Fiorentino et alii, 3 vols., 8 parts, Neapoli-Florentiae 1879-1891, vol. II.2, p. 175: «Sicut enim nullus color est sine luce, licet alius magis, alius autem minus explicet se se, ita nihil sine intellectus participatione quoquo pacto cognoscit; illam enim pro rerum diversitate et multitudine specierum in omnia quadam analogica progressionem descendere dicimus, (...) ita ut eadem virtus et cognoscendi principium idem, a diversis functionum et mediorum differentiis, diversas recipiat nomenclaturas.» Cf. *Summa terminorum metaphysicorum*, in *Opera*, vol. IV.4, 114.

<sup>121</sup> *Sigillus sigillorum*, 176: «una igitur simplex essentia unius primae totalis et simplicis est efficaciae, quam in subiecto dividi, distingui et multiplicari necessum est, et unum idemque diversas a diversis actibus accipere denominationes, ut dicatur: sensus in se sentit tantum, in imaginatione persentit etiam se sentire; sensus quoque, qui iam quaedam imaginatio est, imaginatur in se, in ratione imaginari se percipit; sensus, qui iam ratio est, in se argumentatur, in intellectu animadvertit se argumentari; sensus, qui iam intellectus, in se intelligit (...).» This passage contains a quote from Ficino, *In Enneades VI.2.22*, in *Opera*, 1776.

<sup>122</sup> *Sigillus sigillorum*, 179. For discussion, see my *Il problema della conoscenza in Giordano Bruno*, Napoli 1988, cap. II, § 2.

<sup>123</sup> *Meditationes*, 78.

The Cartesian application of the mind to the body is foreshadowed by Ficino's reflection of the soul in sensible images, by Genua's «intellectus progressus» and by Bruno's «una vis» which descends and ascends the scale of being. With Cusanus and Ficino, Descartes shared the view that the human mind establishes a contact with the effects of the external world in a physiological meeting-point<sup>124</sup>. He theorizes a mediated interaction between mind and body, substituting animal spirits and the pineal gland for the spirit.

With these Renaissance authors, Descartes also shared a sort of moderate 'occasionalism'. Although excluding any direct determination of the soul by the body, Ficino admits that the pulsations of the body are not hidden to the soul. Similarly, Descartes spoke about the mind attending to the traces on the pineal gland. Cusanus' attention for the physiological aspects of sense perception, as well as his view of the mental act as exclusively spiritual, entailed a form of epistemological dualism similar to that espoused by Descartes. Both philosophers presumed that sense perception is based on motion and 'obstacles', which occur in the spirit or, according to Descartes, in the animal spirits<sup>125</sup>. Moreover, both authors believed that the mind alone is able to judge these stimuli without being touched by them. Finally, both philosophers firmly placed the generation of cognition in the mind itself, being based not so much on innate contents, but rather (or, according to Cusanus, only) on innate dispositions<sup>126</sup>. A similar position was developed by Giordano Bruno. Ficino and Genua, by contrast, endorsed an innatism of latently present contents.

It is remarkable how the views on the soul's ascent and descent develop between Plato and the Neoplatonics. Plato held that the soul, once ascended, does not return<sup>127</sup>. Thus, the descent was seen as a merely negative moment. In Simplicius and the Renaissance authors mentioned above, the descent of the soul is not primarily seen as some sort of fall. Rather, as a necessary condition for the grasp of sensible reality, it constitutes an essential moment in the soul's perfective process. The same holds of the Cartesian mind directing itself towards the body. Indeed, the interaction is essential for passions, perception, imagination and memory<sup>128</sup>.

<sup>124</sup> Bruno theorised the spirit as meeting-point between body and soul mainly in his magical works.

<sup>125</sup> Compare Descartes' metaphor of the blind man and his cane in *Dioptric* with Cusanus' spirit assimilating itself to the 'obstacles' created by the (sensible) species. According to Leibniz, *Philosophische Schriften*, ed. C.I. Gerhardt, Hildesheim 1965, Band IV, 305, Descartes borrowed the stick-metaphor from Simplicius.

<sup>126</sup> Here, I do not discuss the precise nature of Descartes' innatism, but simply observe the presence of the dispositional option in his thought; see *Notae in programma quoddam*, in *AT VIII.2*.

<sup>127</sup> *Phaedrus*, 256d.

<sup>128</sup> For example, memory of purely intellectual facts is impossible, since remembering

### 3 – THE CARTESIAN MIND-BODY INTERACTION IN HISTORICAL PERSPECTIVE

The explanation of the rather enigmatic Cartesian view of mind as intimately present and applying itself to the body is significantly elucidated by a comparative analysis with Aristotelian and Platonic psychological doctrines. A remarkable affinity between (aspects of) the Averroist noetics and the Platonic notion of the descending soul, on the one hand, and the Cartesian view of mind, on the other hand, can be noticed. Like the Cartesian mind, the Averroist intellect and the Platonic soul descending in the body were immaterial substances, not formally linked to the body, yet interacting with the latter. In Descartes this interaction consisted in the mind attending to the brain-traces on the pineal gland. The Averroistic intellect abstracted forms or species from the phantasms, while the Neoplatonic soul, in order to gain perceptual knowledge, must lose its original perfection. The expressions «convertere» and «applicare» used by Descartes to describe the mind-body interaction echo the «assisting» intellect and the descending soul. With the afore-mentioned traditions, Descartes shares a fundamental view: since the body cannot inform the soul, the latter must descend or apply itself to the body in order to gain necessary knowledge about the corporeal world.

How is the similarity between Descartes' and traditional views to be explained? Notice that there exists an evident discrepancy between 'reform of the physical' and the 'reform of the mental' in Descartes. No mathematical or empirical psychology was developed, comparable with the new physics or cosmology. According to Descartes, the physical reality, which was exclusively characterized by geometrically determined matter in motion, could not have a causal role in the generation of mental states. It is just Descartes' notion of mechanism and passivity of matter that lead him to draw a sharp distinction between the mental and the physical, and thus to an internalist psychology<sup>129</sup>. Including perception and imagination among

---

presupposes a link with the body. See *AT III*, 425: «recordatio» depends on «vestigia in cerebro»; cf. *Traité de l'Homme*, 176ff. A similar theory regarding memory is developed by Genua, who rejected the existence of an intellectual memory for intelligible species, because this would imply that the intellect, once it has known an object, would be stuck with it forever. Thus, although the phantasms are only occasional stimuli, their role in acquiring actual intellectual knowledge is nonetheless crucial. Indeed, the forms present in the «intellectus progressus» can be actualized by the agent intellect only when the phantasy offers the corresponding occasion. Cf. *In de anima*, 177vb.

<sup>129</sup> A. Hausman, «Innate ideas», in *Studies in Perception*, eds. P.K. Machamer and R.G. Turnbull, Columbus (Ohio) 1978, 200-30, on p. 227. Cf. M.D. Wilson, «Body and mind from the Cartesian point of view», in *Body and Mind. Past, Present, and Future*, ed. R.W. Rieber, New York-London-Toronto 1980, 35-55, on p. 36: Descartes' dualism is comprehensible in the context of his mechanist world-view. It is not an escape in theology.

the (impure) acts of thinking, Descartes has obliterated the (Aristotelian) line between the capacities of perception and the intellect and in their place he has set the new category of the mental defined by opposition to the physical. Now, the mental cannot be explained in terms of the new (mathematical) methodology, and therefore according to genuine Cartesian principles, there cannot exist a science of the mental. As a consequence, Descartes did not reject and replace traditional psychology as a whole, but absorbed many traditional views, sometimes radically incommensurable with those developed in his physical science. For example, Descartes developed a new account of the physiology of perception, but he was unable to explain how an immaterial mind could 'read' the material traces in the pineal gland. Descartes did not rule out mind-body interaction, but his dualism blocked a scientific explanation. Therefore, when discussing the issue of how the mind directs itself to the body, he rephrases traditional conceptions.

Leen SPRUIT  
University of Rome «La Sapienza»