





DISCOURSE ON METHOD AND THE MEDITATIONS

RENÉ DESCARTES was born in 1596 at La Haye near Tours, and educated at the Jesuit College at La Flèche. Like many of his generation he contested the value of an education based on Aristotelianism and, after leaving college, he attempted to resolve the sceptical crisis of his age by inventing a method of reasoning based on mathematics. After serving as a soldier in Holland, Bohemia and Hungary, he left the army in 1621 and devoted himself to science and philosophy. In 1629 he retired to Holland where he lived and worked in great seclusion for twenty years. However, his doctrines involved him in some bitter arguments with Dutch theologians, and in 1648 he accepted an invitation from Queen Christina of Sweden to instruct her in philosophy. He died in Stockholm in 1650.

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Descartes

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AND THE

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Translated with an Introduction

by F. E. Sutcliffe

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INTRODUCTION

BORN on 31 March 1596 at La Haye in Touraine, Descartes was the third son of a country gentleman who, after seeing service in the army, had become councillor of the *Parlement* of Brittany. At the age of ten he entered the Jesuit college of La Flèche where he stayed for eight years. The University, which had been so brilliant in the sixteenth century, had fallen to a low level as a consequence of the wars of religion and the successive purges which had led to an atmosphere of suspicion not conducive to creative activity. The Jesuits put their hands on the colleges with remarkable speed and within a very short time had a virtual monopoly of the education of the ruling classes. The Jesuit order was young and essentially modern, not limiting itself to theology, but devoting part of its time to literary studies and to profane sciences. In borrowing thus the arms of humanism, it set out to be a militant order with a high degree of culture whose members could mingle in society and discuss on a footing of equality with the lay intelligentsia.

In its colleges the order laid the greatest emphasis on pedagogical training, unlike the university of the Renaissance where erudition had had pride of place. In other words the idea of *method* was at the centre of its educational practice. Everything was done according to rules: the way of placing one's feet, of deporting oneself, of speaking, and so on; but it is important to remember that this preoccupation with method did not denote a spirit of routine and idleness. On the contrary, it arose from a desire to achieve the efficacious, from a will to succeed. In spite of his criticism of an education of which the basis was constituted by the classical humanities (the sciences, although not excluded, were envisaged from a purely practical angle and were directed towards training in the art of fortification), Descartes had nothing but respect for the actual methods of the Jesuits and throughout his life he sought their approval of his work. It is, moreover, indicative of the influence exercised upon him by these methods that his first writing, which we no longer have, was a treatise on the rules of fencing and his second an examination of the mathematical basis of harmony.

In 1617, like many compatriots of his class, he went to learn the art of war in the army of Prince Maurice of Nassau at Breda. After two years of service, disappointed by the lack of opportunities to fight, he moved to Germany and to the army of the Duke of Bavaria, Maximilian, but here too inactivity was all that he found and he finally left the army in 1620. These, however, were determining years for his philosophical development. It was Beeckman, the Dutch mathematician, who, impressed by the vigour of the young Descartes'

intelligence, advised him to concentrate his attention on the problems of mathematical physics. Descartes seized upon the idea with enthusiasm and, as early as 1619, was writing to Beeckman: 'What I wish to finish is... an absolutely new science enabling one to resolve all questions proposed on any order of continuous or discontinuous quantities.' The whole of Cartesian philosophy is contained in embryo in this phrase. However, he continued, during the succeeding nine years, to disperse his efforts, interesting himself in medicine, chemistry and optics, and to travel widely. It was only after his conversation with the founder of the Oratory, Cardinal de Bérulle in 1627, that he finally set to work. During a meeting of philosophers and theologians, Descartes had spoken of the ideas which he had nurtured in 1619. Bérulle encouraged him to pursue his meditations, to use them to serve the faith and to communicate them to others. Shortly after this, Descartes decided to settle in Holland, away from the distractions of Parisian society, and to devote himself, undisturbed, to the task indicated to him by Bérulle. The first exposition of his philosophy, *Rules for the Direction of the Mind*, published only after his death, was composed in 1628. Then, with frequent interruptions, hesitations and dispersions, for the next five years he worked on what was to become a veritable scientific *summa*, entitled *De Mundo*, and described in [Chapter 5](#) of the *Discourse*, a *summa* which in his mind was to serve as an infrastructure to modern Christian thought, in the same way as the philosophy of Aristotle had served medieval Christian thought through the synthesis of St Thomas Aquinas. The *De Mundo* was ready for publication when, in November 1633, Descartes heard belatedly of the condemnation of Galileo. Now at the basis of Descartes' system was the Copernican theory of the rotation of the earth: to publish, in face of the attitude of the Church, would be to incur, not any real danger in a relatively liberal France, but the risk of failure in the pursuit of the aim which he had set himself, namely to see his philosophy accepted and taught by those best placed to disseminate it, the Jesuits. His disappointment was intense. Six months later, however, he wrote to his friend Mersenne that all hope was not lost, that what then appeared heretical would one day cease to do so, and that his *De Mundo* would, in time, be publishable. It was then that he conceived the project of testing, as it were, the defences of the enemy by publishing a few samples of the *De Mundo*. At the same time he hoped that by addressing himself to the generality of the educated but not specialized public, he would create a favourable current of opinion and find himself solicited to reveal more of his work. He first decided to publish the *Dioptric*, the chapter in which he studies the nature of light and of

refraction; he next took the decision to add to this the treatise on *Meteors*, in which he exposes his theory of matter, and to present these two with a preface to the public. Finally, he added the essay in which he explains his new analytic geometry. The whole work preceded by a preface – the *Discourse on Method* – appeared in 1637. Four years later he gave in Latin a full exposition of his metaphysics, a brief account of which had been given in [Chapter 4](#) of the *Discourse*. This time he was addressing himself to the theologians in their own language: the work, entitled *Meditationes de Prima Philosophia*, was dedicated to the Deans and Doctors of the Sacred Faculty of Theology of Paris and was intended to demonstrate that Descartes' philosophy was superior to the scholastic in so far that it not only dispensed with the probabilities and verisimilitudes of scholasticism, replacing them with arguments which presented the same degree of certainty as a mathematical proof, but also led to perfectly orthodox conclusions. The *Meditations* gave rise to a multiplicity of attacks: Arnauld, Gassendi and Hobbes in particular raised objections and to these Descartes replied in the second edition of his work. His last two publications were the *Principles of Philosophy* and *The Passion of the Soul*. The *Principles*, published in 1644, restated in the first part the metaphysics of the *Meditations*, while the remainder, addressed to the scientific world, contained a description of the structure of the universe and an account of the relation between body and soul. Three years later the *Principles* were translated into French and published with a preface in the form of a letter addressed to the translator in which Descartes, with bold assurance, states what he considers to be the true role of philosophy, and recalls the extent of his own success in the application of his system. His metaphysical and scientific work was completed. The time which remained to him was directed to an attempt to apply his method to medicine and ethics. That human happiness is conditioned by the progress of medicine, Descartes never doubted, and he never ceased to preoccupy himself with the problem. But the constitution of medicine as a deductive science revealed itself as more difficult than that of ethics and it was to this subject in particular that he turned. He corresponded on the subject with Princess Elisabeth of Bohemia, and composed for Queen Christine of Sweden his *Passions of the Soul* which contains an exposition of his ethics conceived as science.

In 1649 he accepted an invitation from the Queen to go to the Swedish Court in Stockholm to instruct her in his philosophy. The unaccustomed cold and the necessity, imposed by the queen, of giving her lessons at five in the morning proved too much for the philosopher's health. He contracted inflammation of the lungs and died on 11 February 1650.

The *Discourse on Method*, one of the most famous texts in the French language, presents something of a paradox. The work of a thinker, who whatever else is known of him, has for three centuries been considered as the prototype of clarity, it is curiously obscure, its plan a caricature of logical composition. The first section of this preface to three scientific treatises contains a biography; the second a methodological exposition which, instead of being continued by details of its application to the sciences, is followed by a chapter on ethics and another on metaphysics. The thread is renewed in the fifth chapter, after which the sixth and last forms a sort of new introduction taking up themes already treated.

Gadoffre* has established beyond all doubt the various stages of the composition of this text. According to him the sixth chapter constitutes the original preface, being composed before the *Geometry* of which it contains no mention. A further proof of this assertion is that the methodology of [Chapter 2](#) is not mentioned and the stoic maxims of the third chapter are frankly contradicted. As for [Chapter 1](#), it is almost certainly a final draft of a work which, according to Guez de Balzac, Descartes had sent to him in 1628, and entitled a *History of My Mind*. [Chapter 2](#) was composed after the *Geometry* which it illuminates. Finally, [Chapter 3](#) was composed last of all as an afterthought. The Chancellor, Séguier, having refused to grant the privilege necessary for publication until the full text of the *Discourse* was submitted to him, Descartes, in order to forestall any possible objections, hastily added the third chapter, manifesto of political orthodoxy and an antidote to the revolutionary virulence which some might have discerned in the maxim according to which one should, once in one's life, rid oneself of all the opinions which one had hitherto harboured in one's mind. Not indeed that Descartes was not sincerely conservative in matters of politics. He most certainly was, in common with the majority of the most advanced thinkers of his time, but the circumstance of the composition of this chapter must of necessity lead one to hesitate to take any account of it in a study of Descartes' thinking on ethics.

The *Discourse* then presents a heterogeneous character, for various historical and psychological reasons, and yet, there is another and not less important reason for this phenomenon. Descartes had a very clear idea of the type of audience which he was trying to reach: that of the cultured public of society, the ladies of the 'salons' rather than the pedants of the University. In other words, the public which had made the extraordinary success of his friend Guez de Balzac, whose letters and essays had brought within the reach of the public o

the salons matters which, up to then, had been confined to the attention of specialists and whose art consisted in dealing with serious subjects in an agreeable and worldly tone far removed from that of strictly erudite circles. Balzac spoke, when treating the question of literary practice, of the necessity of 'gilding and perfuming', of winning over the minds of his readers by appealing to their senses. Descartes, who had great admiration for Balzac, consciously set out to imitate his example.

Further, by addressing his reader as one individual to another, Descartes was accomplishing three important functions. First he was satisfying one of the principle interests of man in the post-medieval period: interest in human psychology, in the relations which exist between the individual and the world outside him. The *Essays* of Montaigne, the innumerable volumes of *Mémoires* of soldiers and diplomats, the descriptions of the inhabitants of foreign lands written both by missionaries and political theorists, the emphasis placed on the study of history as being an introduction to the understanding of practical living, all bear witness to a passionate interest in the individual and in his relations with his surroundings. Descartes could be assured of striking a deep note of sympathy in his reader by his account of his reactions to his school-days: they were indeed those of many of his contemporaries dissatisfied no less than he with the promises of masters attached to the out-dated values of the Greco-Latin humanities. Right from the outset of his *Discourse*, therefore, Descartes places his reader, the reader of 1637, in a situation with which he is familiar and confronts him with problems which are also his problems. What could stimulate curiosity more than to know how Descartes had resolved them? Secondly, the ultimate aim of Descartes was to persuade men that, in their task of reconstructing the world, a method, his method, was alone effective. That is to say that his method was essentially an instrument for action. Those civilizations which applied it would progress more quickly than those which did not. Since, therefore, Descartes' thought tends constantly towards that which is useful for life, for individual and collective well-being, it is evident that he should have every reason to present his method as having been created in contact with concrete reality. Born of reflection on living experience, it is intended to authorize a return to experience at a higher level of awareness and ultimately to a complete domination of the real. Lastly, from a purely tactical point of view, this method has the advantage of attenuating the universalizing tendencies contained in the Cartesian system. By emphasizing its personal origins and character, Descartes is taking a necessary precaution. Hence the peculiar character of the treatise, its

unique tone: a tone of enthusiasm, of joy in struggle and triumph. Descartes presents his spiritual itinerary as an adventure during which a series of obstacles are encountered, each to be overcome in its turn until total victory is obtained. One is struck by the number of military images which come from his pen and one rightly guesses that we are here in the presence not of a professional philosopher but of a soldier who, with a remarkable audacity and a great nobility of spirit, sets out upon the path of intellectual conquest.

While bringing notoriety to Descartes the *Discourse* did not have the type of success which he had hoped for. Five hundred copies were printed, of which two hundred were reserved to the author. These he distributed among the Jesuits, diplomats and leading members of Parisian society. And yet, at his death in 1650, the three hundred remaining copies were still not exhausted. In 1647 Descartes had to agree to give a Latin version in order to reach the specialized reader. Those of his works which had the greatest success were the *Principles*, addressed to the scientists, and *The Passions of the Soul*, written for Christina of Sweden and not intended for publication.

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The essential elements of Cartesianism are contained in [Chapters 1, 2, 4 and 5](#).

[Chapter 1](#) contains a vigorous attack on an education based on the humanities and in particular on the official Aristotelian philosophy which, says Descartes, provides one with the means of talking about all and everything in terms of probabilities, of verisimilitudes. A multitude of opinions, each equally probable, are admitted on any given subject, and since the sciences borrow their principles from philosophy, they too present no firm basis of truth. In belief, Descartes is seeking for certainties, and amongst all the matters which he reviews: ethics, history, medicine, philosophy, he finds only two which provide such certainties: theology and mathematics. But the truths of religion are revealed truths, inaccessible to our intelligence; there remain therefore only the truths of mathematics which, he states, have up to now been used only for the mechanical arts, whereas they could serve as the basis of something more noble.

[Chapter 2](#) contains the development of this idea. With infinite precaution Descartes leads his reader towards acceptance of the notion that the unity of the sciences can be achieved, and achieved only by Descartes. A building constructed by one architect, a fortification by one engineer, a legal system by one legislator are more perfect than those constructed by

many. Similarly the scholastic philosophy suffers from the glosses of innumerable persons, and human opinions offer no certain truth from the mere fact that they are multiple and diverse: the philosophers disagree with each other, opinions vary from country to country and from time to time, according to the whim of fashion. But he, Descartes, thanks to his study of mathematics, has found a method which, if properly used, is capable of leading to certainty. At the basis of his thought is the notion of the unity of mathematics, and by extension, the unity of all the sciences. By his coordinate geometry, Descartes could demonstrate how geometry and algebra dovetail each other, how an interchange of ideas is possible by the identification of algebraic correlation with geometrical locus. Numerical relationship can be expressed as a spatial one, lines are changed into numbers and numbers into lines. Similarly, the notion of order in mathematical progression is essential. Order exists where the knowledge of the term follows of necessity from knowledge of another. This is not the order of the Scholastics which is merely classificatory – serving, as Descartes says, merely to explain to others what one already knows – but a dynamic order leading to the discovery of the unknown terms. By extrapolating his practice in the field of mathematics, Descartes establishes four rules of method which he presents as valid for the study of all sciences, since what is important is not the objects of the individual sciences, but the operations of the inquiring mind which are everywhere the same.

The four famous rules require some explanation. The first implies the operation which Descartes knows as ‘intuition’, that is to say the use of the pure light of the mind as opposed to the evidence of the senses or of the imagination. It is by ‘intuition’ that each man knows that he is, that he thinks, that a triangle has three sides. This first rule therefore may be paraphrased thus: in the study of any problem, start by embracing ‘intuitively’ the fundamental truths of which there can be no doubt. The second, often known as the rule of analysis, enjoins to decompose complex problems into problems as simple as possible. The third, known as the rule of synthesis, applies to the truths reached by the two preceding rules. Put them in order, says Descartes, starting with the simplest, those reached by application of the first rule, followed by the truths deduced from them, going from the simpler to the more complex. It is obvious that there is here a direct application of the principle of the formation of equations, of the movement from equations of the first degree to those of a higher degree. Lastly, the fourth rule takes account of the fact that deduction, unlike intuition, depends to some extent on memory. In order to guarantee oneself against

any defect of memory, one should, says Descartes in this rule, attempt to give to deduction the character of intuition by exercising oneself to see immediately, in a deductive reasoning, the link between the first principles and their ultimate consequences.

This method will allow one to operate with the same success when dealing with the external world as it does when dealing with mathematical objects, for mathematical relations are of the same order as those of the understanding, and the external world is also mathematical in its structure. Now the hypothesis of the mathematism of nature is by no means peculiar to Descartes; the leading scientists of his day were no less than he convinced of its validity. But, for Descartes, this is merely the premise of a deductive science: from the notion of space and movement, he wishes to reconstruct the whole universe. His physics being consequently a physics of ideas, he needs to give to it a metaphysical basis in order to acquire the assurance that to the idea there corresponds an external reality, hence the important fourth chapter.

Here he enters upon the second phase of his quest for truth. He has found clear and distinct ideas, he has the clear and distinct idea of a triangle, for example, but he has as yet no guarantee of the real existence of the triangle. Aristotle had started from the given, outside world, in all its complexity and full of all the qualities which sense perception discerns in it. Descartes, on the other hand, had rejected the validity of the evidence of the senses: we cannot say of a material object that it has the property of heat or of cold, for these are not clear and distinct ideas. The only clear idea one can have of objects is that they are extended in height, depth and breadth, that is to say the idea of them which can be expressed mathematically. Matter is identified with geometrical extension. So far, therefore, from proceeding as did Aristotle from complex reality to unifying principles, Descartes proceeds in the opposite direction, from the idea to the thing. But the clarity of an idea does not entail, of necessity, the existence of its object. Descartes has as yet no assurance that the real is not, in fact, irrational and obscure. In asserting the primacy of clear and distinct ideas, in reducing the material world to nothing but extension and movement, he has expressed an act of faith. Is he justified in doing so? To this question [Chapter 4](#) provides an attempt at an answer.

How is he to proceed? By rejecting, he says, as being absolutely false everything of which he should have the slightest cause to doubt, and then to see if there remained anything which was entirely indubitable. He uses the same arguments of the Sceptics as Montaigne had used in his criticism of the senses, criticism of reason. Our senses often deceive us; we often make

mistakes in reasoning even on the simplest matters of geometry. But whereas Montaigne had concluded that the Sceptics had been right in asserting that the human mind is incapable of reaching any certainty, Descartes, at the moment when all issue appears closed, brings forward dramatically his proposition 'I think therefore I am' (*cogito ergo sum*). The great originality of Descartes, and that which enables him to avoid the conclusion of Montaigne and the Sceptics is that, instead of considering the objects of doubt, he detaches the act of doubting from reference to anything external to itself, and in that way cuts the ground from beneath the feet of scepticism. For doubting is dunking and is therefore linked to his existence. He cannot perceive that he dunks without at the same time being certain that he is. 'I am' is the inevitable concomitant of 'I think'. Thus it is that Descartes can formulate a judgement of existence: I exist as a thinking being.

The Cogito is a first principle from which Descartes will now deduce all that follows. He has a clear and distinct conception of the fact that he exists; he can therefore believe that whatever else he perceives with the same clarity and distinction is equally true. Moreover, knowing himself only as a dunking being, he is therefore assured that the soul and the body are entirely distinct. Since he has been able to understand his own being and essence without yet knowing anything about the world outside him, it follows that his self – or soul – is completely independent of the outside world, mind is distinct from and superior to matter. Next, by reflecting on the notion of doubt itself, Descartes perceives that, as to know is a greater perfection than to doubt, he must be an imperfect being. But an imperfect being cannot produce the idea of perfection which he nevertheless possesses. No other being, imperfect like himself, could have given it to him; only a perfect being could have done so, therefore a perfect being, God, exists. Two other proofs of the existence of God follow. Descartes exists, possesses the idea of perfection, and is himself, imperfect. If he had created himself, he would have created himself perfect. He has therefore been created by another who must of necessity be perfect since Descartes has the idea of perfection. Lastly the famous ontological proof, the most important. Absolute perfection is the sum total of all possible perfections. God, being absolute perfection, must necessarily exist since existence is one of the perfections. To imagine that God does not exist is as absurd as to imagine a triangle which has not three angles. Descartes was very pleased with this proof and wrote to Mersenne: 'I dare to boast that I have found a proof of the existence of God which I find fully satisfactory and by which I know that God exists more certainly than I know the truth of any geometrical

proposition.' And indeed this proof has, inside the framework of Cartesianism, a notable advantage, in so far that it is apprehended by the intuition rather than by deductive reasoning, and therefore presents a greater degree of evidence. Once the existence of God has been established, it is easy to show that, as a perfect being, he cannot deceive us and that consequently we can place our confidence in the veracity of our clear and distinct ideas.

Little need be said of Cartesian physics; its deductive character often led Descartes to over-hasty generalizations. Its influence was limited and it was rapidly superseded by the physics of Newton. It is, however, important to note that it marks, at its date, the most complete break with the Aristotelian and medieval conception of the cosmos. Aristotelian physics had been based on sense perception. Nature actually possessed the forces and qualities which we seem to discern in it. Moreover, everything in the cosmos was characterized by a greater or lesser degree of value or perfection according to a hierarchical scheme, going from matter at the foot to God, the first mover and ultimate end, at the summit. At the centre was the earth and centred upon earth was man, all the other contents of the universe being ordered around him and for him. By excluding all forms, qualities and forces, and by reducing matter to its mathematical expression, Descartes, at the same time, ruins the very notion of the ancient cosmos. Henceforward, the only spectacle which presents itself to the inquiring eye of man is that of matter agitated by movements according to mathematical laws. God is no longer present in the world and neither is man in the sense that he no longer has an assigned place there. As mind, infinitely separated from a world which is matter, the role of man can only be that of dominating his surroundings, of becoming 'master and possessor of Nature'. However much the Cartesian dualism of mind and matter has bedevilled philosophy, it opened the doors to the development of modern science.

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The system of Descartes is a reply, not only to the system of Aristotle, but also, and perhaps even primarily, to the naturalism of the preceding century, that of Pomponazzi, of Bruno and Vanini, that of the astrologers and alchemists for whom nature was animated by a soul. Lenoble* has shown into what error one falls in considering that the naturalists, simply because they lay emphasis on experience and deny the medieval notion of the miraculous, are the forerunners of modern scientific thought. On the contrary, they represent a step backwards in relation to Aristotle in so far that they intensify and generalize the action of the occult. What characterizes the men of the generation of Descartes is above all the will to

dominate, to control events, to eliminate chance and the irrational. This attitude is present in every field: the political, the military, the scientific. But how can one control phenomena if one cannot foresee the way in which phenomena will behave? For Machiavelli chance still controlled over half of events, leaving us the control of the remainder. The elimination of chance becomes an indispensable condition of man's supremacy. So in the domain of physics. By identifying matter with spatial extension and by explaining the difference between one thing and another by recourse to the idea of movement communicated once and for all by God in a quantity which is constant, Descartes creates the conditions in which man will be able to foresee. All things are reduced to identity by denning them by the one characteristic attribute which they have in common, namely, extension; strict causality becomes assured by the immutability of God's action in a homogeneous world. In this way modern scientific experiment becomes a possibility: the laws which govern the physical world and which will continue to govern it to the end of all time may be discovered and used by man for his own ends. There is something paradoxical in the fact that, whereas scientific experiment plays only an ancillary role in Descartes' own practice - it exists merely to permit us to verify which of a number of equally probable conclusions arrived at deductively actually coincides with the facts; it intervenes at the end and not at the beginning of our inquiry - the profound significance of Cartesianism is precisely to give such a definition of the object of physics as to find the possibility of a science of laws reached through experiment.

Although today we are particularly sensitive to the anti-Aristotelian aspect of Cartesianism, contemporaries of Descartes had another opinion. Whilst recognizing in him a fellow mechanist, Roberval, Gassendi, Pascal and, as Lenoble has so well shown, Mersenne, were sensitive above all to the similarities between Descartes' approach to science and that of Aristotle. In other words, what Descartes had done was to adopt Aristotle's conception of physics as a demonstrative science based on necessary principles, whilst at the same time replacing the principles of Aristotle by those of his own finding. The objections raised against the *Meditations* stemmed largely from the fact that whereas Descartes, while rejecting the Aristotelian physics of quality, had not abandoned his logic, his contradictors had done both, and saw no necessity for the creation of a new form of dogmatism.

Descartes' great ambition, that of being the Aristotle of the modern age, was then never realized. He came too late, into a world which no longer had a place to offer for such enterprises, but the philosophic problems which he treated are still with us and the spirit in

which he pursued his scientific quest still informs modern scientific thought. If the system of Descartes was a failure, Cartesianism as an attitude of mind was both fruitful and enduring.

DISCOURSE ON THE METHOD OF PROPERLY CONDUCTING ONE'S REASON AND OF SEEKING THE TRUTH IN THE SCIENCES

If this discourse appears too long to be read at one sitting, it may be split into six parts. In the first will be found various propositions concerning the sciences; in the second, the principal rules of the method which the author has sought out; in the third, some rules of moral conduct which he has derived from this method; in the fourth, the reasons by which he proves the existence of God and of the human soul, which are the basis of his metaphysics; in the fifth, the order of the questions in physics which he has sought to answer, and particularly the explanation of the movement of the heart and of some other difficulties peculiar to medicine, as also the difference between our soul and that of animals; and in the last section, the requirements he believes necessary in order to make further progress in research into natural phenomena and the reasons which have prompted him to write.

GOOD sense is the most evenly shared thing in the world, for each of us thinks he is so well endowed with it that even those who are the hardest to please in all other respects are not in the habit of wanting more than they have. It is unlikely that everyone is mistaken in this. It indicates rather that the capacity to judge correctly and to distinguish the true from the false which is properly what one calls common sense or reason, is naturally equal in all men, and consequently that the diversity of our opinions does not spring from some of us being more able to reason than others, but only from our conducting our thoughts along different lines and not examining the same things. For it is not enough to have a good mind, rather the main thing is to apply it well. The greatest souls are capable of the greatest vices as well as of the greatest virtues, and those who go forward only very slowly can progress much further if they always keep to the right path, than those who run and wander off it.

For myself, I have never supposed that my mind was in any way out of the ordinary; indeed, I have often wished I could think as quickly and easily, have the same capacity for forming sharp and clear images, or a memory as rich and as ready to command as some. And I know of no other qualities than these which contribute to the perfection of the mind for, as far as reason or good sense is concerned, inasmuch as it is the only thing which makes us men and distinguishes us from the animals, I am ready to believe that it is complete and entire in each one of us, following in this the commonly held opinion of the philosophers who say that there are degrees only between *accidents* and not between *the forms* or *natures* of the *individuals* of a given *specie*.

But I shall not hesitate to say that I consider myself very fortunate to have found myself, from my early youth, on certain paths which led me to considerations and maxims out of which I have constructed a method which, I think, enables me gradually to increase my knowledge and to raise it little by little to the highest point which the mediocrity of my mind and the short span of my life will allow it to reach. For I have already reaped such a harvest from this method that, although in the assessment I make of myself, I try always to lean towards caution rather than to presumption, and although, looking at the various activities and enterprises of mankind with the eye of a philosopher, there is hardly one which does not seem to me vain and useless, I nevertheless feel extreme satisfaction at the progress which I think I have already made in the search for truth, and conceive such hopes for the future that if, among the activities of men as mere men, there is one which is thoroughly good and

important, I dare to believe that it is the activity I have chosen.

However, I may be wrong, and perhaps I am mistaking a little copper and glass for gold and diamonds. I know how easily we can be mistaken in matters which concern us closely; and how much also the judgements of our friends must be suspect when they are in our favour. But I shall be very happy to reveal in this discourse the paths I have taken, and to present my life as in a picture, so that each may judge it, and so learning from what the public thinks of it, I may have a new means of instruction which I shall add to those which I am in the habit of using.

So my intention is not to teach here the method which everyone must follow if he is to conduct his reason correctly, but only to demonstrate how I have tried to conduct my own. Those who take the responsibility of giving precepts must think themselves more knowledgeable than those to whom they give them, and, if they make the slightest mistake, they are blameworthy. But, putting forward this essay as nothing more than an historical account, or, if you prefer, a fable in which, among certain examples one may follow, one will find also many others which it would be right not to copy, I hope it will be useful for some without being harmful to any, and that my frankness will be well received by all.

I was brought up from childhood on letters, and, because I had been led to believe that by this means one could acquire clear and positive knowledge of everything useful in life, I was extremely anxious to learn them. But, as soon as I had completed this whole course of study at the end of which it is usual to be received into the ranks of the learned, I completely changed my opinion. For I was assailed by so many doubts and errors that the only profit I appeared to have drawn from trying to become educated, was progressively to have discovered my ignorance. And yet I was at one of the most famous schools in Europe, where I thought there must be learned men, if there were any such anywhere on earth. I had learnt there everything the others learned; and further, not contenting myself merely with the subjects taught, I had gone through all the books I could lay my hands on dealing with the occult and rare sciences. Moreover, I knew the assessments made of me by others, and it was obvious that they rated me no less than my fellow students, even though there were some among these who were already earmarked to succeed our teachers. And, finally, our century seemed just as flourishing and fertile in good minds as any earlier century. Consequently I took the liberty of judging all others by myself and of thinking that there was no body of knowledge in the world such as I had been led previously to believe existed.

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