# III

# THE BACKGROUND OF THE *DISCOURSE*

## § 1

OUR preliminary excursion into literary history has brought us to a definite and important result. Whether we look at the 'external' history of the *Discourse*—the record of its composition and printing—or whether at its account of the inner development of Descartes' mind, we are brought to an account of the order of development of Descartes' philosophical inquiries which is itself of philosophical significance. This order is:

(i) method;
(ii) exercises in method;
(iii) metaphysics;
(iv) philosophy of nature;

and the inquiries embodying this order are assigned by Descartes himself to the years 1619–33. If we compare this order with the sequence of Descartes' actual publications we find it exactly the same: 'method' = *Discourse*; 'exercises' = *Essays*; 'metaphysics' = *Meditations*; 'philosophy of nature' = *Principles of Philosophy* (the *Principles*, as is well known, is only the *Monde* with some significant variations).[1] The difference is one of dates (the published works appearing between 1637 and 1644),

[1] See M. Adam's summary, xi. 706.

not of sequence, and according to both the position of the metaphysics is an intermediate one between the *Discourse* and the *Principles*, that is to say, between the preface to science and the complete philosophy of nature.

The point involved may perhaps be illumined by a reference to the order of inquiry of another summarized life-work, the *Encyclopaedia* of Hegel. There we have the order which has seemed more natural to many students of Descartes too, first logic, then philosophy of nature, then philosophy of mind or metaphysics.

Now it may be that the Hegelian order is due to the Cartesian revolution as it revealed itself in the writings of later thinkers. But whatever may have been the ultimate consequences of the movement of thought initiated by Descartes, this particular consequence is not his. The end of his thinking, both chronologically and logically, is the philosophy of nature. Metaphysics is intermediary, essential, no doubt, as any bridge must be, but not an end in itself.[1]

§ 2

A similar consequence emerges if we follow up Descartes' own hint and investigate the history of his early years. The *Discourse* speaks of Method and Essays, of Meditations and Principles, if belonging

[1] Thus the fourth chapter of the *Discourse*, which Descartes himself says (iii. 297, ll. 3–4) is the *Meditations* in brief, is specifically introductory to the fifth which is the completed physics. See below, pp. 75–7, and cf. *Corresp.* iii. 233, ll. 24–6.

to a period in the author's life long ante-dating their actual publication. One may well ask what is this background the veil of which is so tantalizingly lifted and as tantalizingly dropped.

The opening chapter of the *Discourse* contains the judgement of the author on his education. It commences with a consideration of the programme of studies in which he was brought up at school, and concludes with an account of his experiences after he had left school and set out to enjoy society and travel. He had started with the world of books and gone from the world of books to the 'book of the world'. But he had come to the conclusion finally that truth, if to be found at all, was to be found only by, and in, himself.

The impression given by this simple and engaging narrative is that of a man in full possession of himself from the very first. Descartes' life appears as one aesthetic whole. Dissatisfaction with school was followed by dissatisfaction with society; thrown on himself, he discovered the 'method'. He now offers the method, together with some 'essays' in its practical application, to the judgement of mankind.

There is little doubt that it is this account given by Descartes of himself which has imposed itself on the world. He is notoriously the father of 'intellectualism', the protagonist of 'cool' and 'pure' reason, and the placid narrative of the flowering of his genius carries with it all the conviction of his own 'clear

and distinct' ideas. Yet we know now that the simplicity of the *Discourse* is the simplicity of art. It is a simplification, and an over-simplification, of facts and tendencies which interest because of their very complexity. Descartes' history of his own mind is indeed, as he says, a 'picture', but a picture in which the lights have been emphasized and the shades obscured. He left his books, that is, ceased to be a student under academic control, in 1616, when he received his *baccalauréat* and *licence* in Law at the University of Poitiers. Till the publication of the *Discourse* (1637) there follow two decades, and these two decades, particularly the first, although passed over with so little regard to detail in the narrative of the *Discourse*, are years of intense labour, not only mental but moral. Descartes' clear grasp of himself was won more hardly than he would have us believe.

§ 3

Historians of thought have ever delighted in antitheses, and what more ready antithesis to Descartes than Pascal? Pascal himself condemned Descartes' geometrical method and set the 'reasons of the heart' against, and above, the 'reasons of the head'. It was Pascal who dismissed the Cartesian physics as useless and with it the whole of his 'rationalist' philosophy, and, as his withdrawal to Port Royal showed, dismissed it not in theory only. The opposition is complete: religion as against science,

meditation on the next world as against meditation on this; on the one side we have reason, analysis, the passionlessness of philosophy, on the other the imaginative synthesis and warmth of faith.

A more careful inquiry into both sides of the case would seem, however, to mitigate the opposition, and there is much in M. Milhaud's remark[1] that Descartes' typical production, the *Principles of Philosophy* (1644), is 'the last of those magnificent romances (*romans*)' typified by Parmenides' 'On Nature', by the 'Timaeus', by the 'De Natura Rerum' of Lucretius. But the phrase 'roman de la nature' is Descartes' own,[2] and suggests that the author himself would not have repudiated the affinity it indicates between poetry and science, imagination and reason. There is much of a Pascal in Descartes, just as there is much of a Descartes in Pascal; indeed, the likeness between the two is as instructive as is their opposition. If the parallelism between them be followed out much light may be thrown on both, and we may learn much about the background of the *Discourse*.

## § 4

Descartes and Pascal met twice, on two successive mornings at Paris in 1647, and the outcome was a quarrel which has passed into history. Descartes

[1] *Descartes savant*, p. 246. So already Leibniz (*ap*. Couturat, *Logique de Leibniz*, Paris, Alcan, 1901, p. 512), and (*malo sensu*) Christiaan Huyghens, notes to Baillet (below, p. 109), p. 158.

[2] Baillet, Preface, p. xviii.

was then on the second visit he made to his native land after his retirement to Holland in 1628 (the first was in 1644, the third and last in 1649). He had been interested in the Pascal family for some time. Étienne Pascal, the father of Blaise, was one of the critics of his *Geometry*, and Descartes had received, through Mersenne and Huyghens, Blaise Pascal's *Essay on Conics* (1639). On the occasion of Descartes' earlier visit to Paris the Pascals were in Rouen, and even now the father remained there though the son and daughter had returned to Paris. The initiative for the visit came from Descartes, who seems to have been distinctly friendly (he discussed Pascal's ailment and gave him medical advice), but the talk turned unfortunately to the problems of physics which were occupying the minds of both, and Descartes suggested the experiment which was afterwards to be associated with the name of Pascal. Or so at least Descartes says, and his mordant tongue pronounced a short time later that 'the young man has too much vacuum in his head'.[1] It is a typical fraternal dispute of the kind which rends families for generations, and indeed, the antecedents and characters of the two men were strikingly similar.

We may consider some external points first.

Both Descartes and Pascal were sons of old country families employed in government service. Both displayed a precocious genius for mathematics, particularly in its application to problems of physics,

[1] To Huyghens, 8 December 1647.

and both showed some (in the case of Pascal, considerable) inventiveness in technology. Both were at one time 'men about town', fond of society, even of gaming, and both when in the early thirties, although for different reasons, went into retreat. They would seem too to have been much alike in temperament. Both were endowed with a more than aristocratic self-esteem. It is no secret that Pascal's humility could break down even after his 'second' conversion, and even within the very walls of Port Royal, while Descartes' gloomy jealousy of all men was notorious and recognized both by friend and enemy. Both would seem to have had a proper appreciation of the value of money, and if Descartes, unlike Pascal, was a bad workman himself, he could yet give practical instruction to others and indeed envisaged a school for artisans.[1] It is significant that a passage from a contemporary author[2] could be understood by some historians as a description of Pascal, by others as a description of Descartes.

We may go, however, beyond the similarities of external circumstance and character. The decisive factors in Descartes' life, as well as those in that of Pascal, were connected in some way with the supernormal, and although in Pascal's case this fact has been emphasized to the exclusion of others, in that

[1] Baillet, ii. 434.

[2] De Méré, *Discours de l'Esprit*, Paris, Fernand Roches, 1930, p. 86. For the 'history' of the passage see M. Boudhors' note ad loc. and contrast M. Strowski's edition of the works of Pascal (Paris, Ollendorf), vol. i, p. liv.

of Descartes it has not received emphasis enough. It is these 'spiritual' experiences which form their real bond of similarity, and it is to these that we turn.

§ 5

The Pascal of history was shaped by the experience of the midnight of 23 November 1654. The young man of fashion and society, filled with a disgust for the world, had appealed for grace. The illumination came suddenly; but the intensity of Pascal's feeling was only revealed when the 'memorial' of that ecstatic hour was discovered, sewn in his clothes, after his death (1662).

It is often forgotten that this was not his first, nor indeed his last, conversion. The whole Pascal family had been persuaded to a religious frame of mind some years previously when the father, brought to his bed as the result of an accident to his thigh, had received religious as well as medical attention from some Jansenist bone-setters of the neighbourhood. This was in Rouen, and we find the young Blaise taking an active, if not a leading, part there in what amounted to a heresy hunt. But on removing to Paris Pascal succumbed again to the allurements of society, and the well-known, although possibly legendary,[1] story of his miraculous escape from death on the Pont de Neuilly is valuable principally as indicating that he was remembered to have driven

[1] Strowski, op. cit. i. lviii.

out to take the air in a carriage with 'four or six' horses. Blaise Pascal was of the world with all the force of a strong character, and it is significant that his sister, who knew him well, was always afraid of his backsliding.

The final blow to the 'worldliness' of Pascal was the miracle of the Sacred Thorn of March 1656 by which his niece, Marguerite Périer, was cured of a disease of the eye. Pascal was in the middle of the *Provincial Letters*, the fifth of which dates from the last week in March, and their tone would not seem to have been approved by the severer members of the institution they had been intended to defend. Further, another conversion in high places, that of his 'sister in baptism' Mademoiselle Roannez, had shown Pascal that his was a higher task than the pillorying of Jesuit morality. Pascal now revealed himself—one wonders whether it was not a moment when he himself first realized his own deeper purposes. In an assembly of friends he began to speak on the true method of an apology for religion, and if what we now know as the *Pensées* reproduce, as they are said to do, anything of what was said then, one can well believe that the audience listened for several hours spell-bound. Henceforth Pascal's mission was clear. His own conversion had shown him the meaning of life, had given him the 'vision' by which existence acquired significance. It was now revealed to him that his task in what remained to him of life was to show that vision to others.

## § 6

Pascal, the young man of fashion, was weaned from the world by signs from heaven and revealed himself abruptly, on a specific and auspicious occasion, on the side of religion. Descartes, also a young man of fashion, was also weaned from the world by signs and also revealed himself abruptly, although on the side of science. The Descartes of the *Discourse* was shaped by two events, one in 1619, one in 1628, and each event closed a definite period in his life and gave a decisive turn to the next. The first period, that touched on in the last two paragraphs of *Discourse* 1, sees the young Descartes wholly undecided as to the nature of his genius. At the second he is conscious, perhaps too conscious, of its nature, but has not yet had revealed to him its direction and application. The event of 1619 gave him his *vision*, that of 1628 the realization of his *mission*.

It is here that the narrative of the *Discourse* fails us completely. So far as the *Discourse* is concerned (and the *Discourse* is Descartes' explicit account of himself and the development of his mind), the method as detailed in *Discourse* 2, and as worked out in the *Essays*, had no history apart from the one day's meditation in the *poêle*. On the face of it this is unlikely, and it is perhaps the greatest service of Baillet that he preserved the memory of some authentic remains of the intellectual ferment of those early

years. He tells us that Chanut found at Stockholm, after Descartes' death, a bound book of various fragments going back to those early studies, and whatever we may think about the problems raised by the list of the fragments he gives[1] ('some considerations on the sciences in general; something on Algebra; some thoughts written down under the title *Democritica*; a collection of observations under the title *Experimenta*; the beginnings of a treatise entitled *Praeambula: Initium Sapientiae timor Dei*; another in the form of a discourse called *Olympica*; . . . and a collection of mathematical considerations under the name *Parnassus*') it is obvious that they testify to a wide curiosity and incipient productivity on a large scale. It would thus appear that Descartes' youth was much more complicated and occupied than the narrative of the *Discourse* would have us believe, and this conclusion is reinforced by what is without question the grand discovery in Cartesian studies till recent times, and that is the detail of Descartes' intercourse with the Dutch scholar and scientist, Isaac Beeckman. That the two men knew one another was known, although Baillet's information on the subject is sparse and unreliable. What was not realized was the closeness of the connexion or the nature of the debt owed to Beeckman by the young Descartes.[2]

[1] Baillet, i. 50–1; cf. ii. 403. Baillet quotes also a *Studium Bonae Mentis* and a *Thaumantis Regia*.

[2] Beeckman's own account is given in an excerpt printed in x. 331–2.

Beeckman's Journal, the discovery of which was due to M. Cornelis de Waard and the parts of which relating to Descartes are described and printed in volume x of M. Adam's edition of Descartes' works,[1] contains not only an account of his own life, ideas, and experiments, but also a copy of Descartes' *Compendium of Music*, some physico-mathematical problems, and a set of letters from Descartes to Beeckman, the whole relating to the period 1618–20, the period of the fragments enumerated in the inventory of Chanut.

We may refer first to the letters.

The letters show us a Descartes who solves problems of navigation and military engineering as easily as those of physics, and is prepared to produce a work on mechanics as readily as on the theory of music. Yet for all his universal interest and brilliant powers he is yet devoid of any appreciation of himself. He speaks of himself again and again as 'lazy and undecided'. The books he is to write, he says (the tense is interesting: *scripturus sum*), are written at the behest of Beeckman. He is full of new ideas, but submits them to Beeckman. It is Beeckman who 'stirred him out of his slumber' (*desidiosum excitasti*); Beeckman who recalled the knowledge which had almost slipped from his memory; Beeckman who 'brought back to better things a mind wandering away from serious occupations'. Beeck-

[1] The letters are now printed in their chronological sequence in the *new* edition of Descartes' correspondence by Adam and Milhaud of which the first volume has just appeared (Paris, Alcan, 1936).

man is in fact the 'promoter of his studies and their first parent'.[1]

Taking these phrases at their face value (and they are evidently sincere, although Descartes was very annoyed afterwards when Beeckman claimed the ideas of the *Compendium of Music* as his own),[2] it would seem clear that in Beeckman we have the first inspirer of Descartes. Beeckman's Journal has not yet been adequately investigated and the originality of his own scientific work remains undetermined; but even if his mind was of the second order he may well have been the flint on which the spark of Descartes' genius was struck.[3] Even these few letters show the intimacy of their interchange of ideas; but what is even more remarkable is those ideas' peculiar character.

The first mention of Descartes in Beeckman's Journal is 10 November 1618. Within two months the friends were parted, and the first letter between them, that of Descartes to Beeckman from Breda dated 24 January 1619, is in reply to a question of Beeckman on a point of musical theory. Descartes approves Beeckman's own solution and refers his friend to the *Compendium of Music* where he says he has demonstrated 'all such questions mathematically'.[4] In the second letter, from Breda, 26 March

[1] x. 141, 156, 162; 151, 163; 159, 160, 163, 165; 162–3; 162.
[2] *Corresp.* i. 24, 111, 155, 177; ii. 389.
[3] Cf. Descartes *ap.* Beeckman, x. 332, ll. 5–7.
[4] x. 153, l. 12 (cf. pp. 52 (iv) and 78, l. 23).

1619, he speaks of his hope, 'if only he can overcome his natural laziness', of bringing 'that science' into order, and then explains that what he is thinking of is not the 'art' of Lull but a 'completely new science by which a general solution could be found for all possible questions affecting quantity, whether continuous or discrete' (pp. 156–7). The 'science' is conceived mathematically (as a matter of fact, most of what Descartes has to say here, as M. Adam notes, reappears in the opening pages of the third chapter of his *Geometry*, 1637), and his expectation is that there would be nothing left in Geometry to discover. 'An infinite task', as he says, and 'for more than one man; it is ambitious to an incredible degree. But I have seen some light through the obscure chaos of this science by the help of which I think the densest darkness can be dispersed.' The fifth letter (from Amsterdam, 16 June 1619) recounts the conversation Descartes had had with an 'old man' on the 'art of Lull' (p. 165), and Descartes begs Beeckman to find out something definite about it and to let him know. Beeckman's reply to this letter is extant, though, as M. Adam remarks, we have no proof it reached its destination. In it he discusses the 'art' of Lull and Agrippa, which consisted in dividing and sub-dividing all things into classes, giving each a letter, and then proceeding to fresh discovery by the process of combining the letters.[1] It is only 1619, nearly twenty years before

[1] x. 168 (cf. 65), in connexion with which Descartes' letter to

the publication of the *Discourse*, but already Descartes is thinking about a 'completely new' science which is evidently that of a generalized mathematics, and he is curious about the one famous, howbeit crude, attempt to apply such a generalized mathematics to all problems, whether specifically mathematical or not, the *ars generalis ultima* or *compendiosa* of Lull. The background of his thoughts is manifest, and the moral tension too is apparent. He is 'exhausted', he writes (p. 163), by all these 'new inventions'. But the tension and indecision were soon to clear, and that, as in the case of Pascal, through a vision.

## § 7

'On 10 November 1619, when' Descartes was 'full of enthusiasm and found the foundations of the wonderful science',[1] he went to bed and dreamed three successive dreams. The first two, which were of such a nature as to terrify him, he interpreted as being a rebuke for his past life; the third, which on the contrary was 'very pleasant and agreeable', he interpreted as prophetic of the future. The third dream thus signalizes a definite break with the past and is worth, therefore, describing in some detail.

Mersenne of 20 November 1629 should be read. It is noteworthy that a passage from this letter, on a 'universal language of ideas', caught the attention of Leibniz (Couturat, *Opuscules et fragments inédits de Leibniz*, Paris, Alcan, 1903, p. 27; *Logique de Leibniz*, 1901, pp. 56–7).

[1] From Descartes' *Olympica* (Baillet, i. 51, 81). The dreams are given in Baillet, i. 81 ff., and are discussed by all the later historians.

In this dream 'he found a book on the table. . . . He opened it and, seeing it to be a dictionary, was full of joy, as he hoped it might be of great use to him.' But it turned into a 'corpus' of Latin poetry. He opened this and 'fell on the words: *quid vitae sectabor iter* (what way of life shall I follow?). At the same time he noticed a man he did not know who presented him with a piece of verse beginning: *est et non*, which he praised to him as an excellent piece. . . .'

Descartes himself (while still asleep, reports Baillet) interpreted the dream in the following way. The 'dictionary' meant 'all the sciences collected together';[1] the 'Corpus', 'Philosophy and Wisdom joined together'; the verse on the choice of the mode of life, the 'good advice of a wise man or even moral theology'. All this while he was asleep. When he woke he interpreted the collection of poets in the Corpus as 'Revelation and Enthusiasm by which he did not despair of seeing himself favoured', and 'by the piece of verse: *est et non*, which is the *yes and no* of Pythagoras, he understood truth and error in human knowledge, and the profane sciences'.

The detailed interpretation of the dream has been recently the subject of some interesting essays, but it would appear that even Professor Freud, when consulted in our own day, refused to give an authoritative interpretation. For our purposes it is Descartes' own interpretation which is important. He

[1] Cf. the early passages cited in x. 204 and 255.

saw himself at the parting of the ways. From now on the question 'which way of life he should follow' ceased to trouble him. His path is marked out. It is that of 'truth and error in the sciences'. It is of especial significance that Descartes himself took the whole set of dreams so earnestly as to commit them to writing and to repudiate seriously the obvious suggestion that his 'enthusiasm' was due to a previous jollification. He was indeed 'so bold', adds Baillet, presumably still translating from Descartes' original, 'as to persuade himself that the very Spirit of Truth had through this dream desired to open to him the treasure of all the sciences'.

## § 8

The dream of 10 November 1619 which crystallized Descartes' primary inspiration was followed by years of wandering over Europe, years during which he would seem to have been interested particularly in Optics. In February 1622 he returned to France and concluded some affairs of business. He then set off again (September 1622) on his travels, returning only in July 1625. From this date till October 1628 he stayed in France, for the most part in Paris.

In Paris Descartes seems to have been in the very heart of society. We hear of a veritable 'academy' which formed itself around him composed largely of unwanted friends of his friends; but we hear too of music, of novels, of gaming, even of a duel, and Descartes would seem to have been, through Balzac,

not unconnected with a loose-thinking poetic circle which called upon itself the wrath of constituted authority. Struggling against the social whirlpool, it needed a decisive event to draw him away completely (he once actually fled from his good host, and Baillet [i. 153–4] tells a circumstantial story how he was tracked down and discovered, and for politeness' sake had to return), and it is fortunate that for this event too, as in the case of the vision, we have the best of testimony, that of Descartes himself.

He is writing[1] in 1631 of a meeting which took place some years before (it is known to have taken place in 1628) in the presence of the 'Papal Nuncio, Cardinal Bérulle, Father Mersenne, and all the large and learned company assembled to hear a discourse of a certain M. Chandoux concerning his new philosophy' (as Chandoux was hanged afterwards for counterfeiting money it may be hazarded that his 'philosophy' had to do with the transmutation of metals). 'It was there', he says, 'I made the whole company confess the power exercised by the art of right reasoning on the mind of mediocre thinkers, and the extent to which my principles are better founded, more true and more natural than any of those accepted already among the learned.' Descartes is referring to what he calls his *belle règle* or 'natural method', and adds: 'Like all the others, you (his friend Villebressieu) were convinced by these

[1] *Corresp.* i. 213 (from Baillet, i. 163). Cf. the letter to Mersenne of Oct. 1630 (*Corresp.* i. 157 ff.).

principles and, with them, were kind enough to call upon me to write them down and teach them to the public.'

The incident was evidently a signal one. The audience was notable; the occasion just such as to stimulate an original thinker to declare himself; and it was evidently the first time he did so declare himself, in public at any rate. As in the similar case of Pascal, his interest in the matter discussed was no secret. There were more than whisperings of a new method and new results,[1] but it would seem that, again as in the case of Pascal, even his friends had not known how completely his theories had been thought out, or with what force and eloquence they could be expressed.

Much has been made of the presence at the séance of the Cardinal Bérulle. Bérulle had founded, in the Oratory, a centre of Augustinizing platonism, and the 'platonism' of Descartes has been held to have had its origin in the stimulus derived from this school. Further, according to Baillet (who here seems to have improved upon his source, Borel), it was Bérulle who, seeing that Descartes alone of all the company failed to applaud Chandoux, pressed him to speak, and was so struck by what he said (Baillet here quotes a manuscript memorandum of Clerselier) that he begged Descartes to visit him and

[1] Cornier to Mersenne, March 1626 (*Correspondance de Mersenne*, ed. Tannery–de Waard, Beauchesne, 1932, p. 429, l. 61). Descartes himself (*Discourse* 3, last §) remarks on the common talk.

give him his views on the subject again. The visit was paid a few days later, and on Descartes' explaining his principles again and showing their practical consequences for 'medicine and mechanics', the Cardinal (Baillet is still quoting Clerselier's manuscript) laid a charge upon him to devote his life to this undertaking.

According to Baillet, it was this solemn charge of Bérulle which caused Descartes to retire from the world and devote himself to the working out of his philosophy. This may well be; in any case, we have no evidence against it beyond that of the silence of Descartes himself. But the story itself, possibly referred to in a phrase of the *Discourse*,[1] remains. A trivial incident had given Descartes the occasion to declare himself. The 'spirit of truth' which had revealed itself to him in 1619 now in 1628 claimed him for its apostle. The 'vision' is now a 'mission'. From now on Descartes is dedicated not only to the discovery of truth but to its active dissemination.

## § 9

It remains to observe that the mission demanded sacrifice. The voluntary exile could not gain his soul without giving up the world, and the world he gave up was not only, or principally, the external world of Parisian society but those vital interests and qualities which made him in his early years so

[1] 'Si i'y ai contribué quelque chose par mes discours' (*Disc.* 3 end, p. 30, l. 21).

sought after by that world. The scientific *Essays*, the *Meditations*, the *Principles of Philosophy* were not elaborated without spiritual loss.

For Descartes himself was not always Cartesian, self-confined within bare 'extension' and bare 'thought'. His vision showed him first the 'dictionary', then the 'poets', and only afterwards the *est et non*; and his 'rationalism', like the 'anti-rationalism' of Pascal, was the product of a struggle not always completely successful. What less 'rationalistic' could there be than the early thought preserved by Baillet[1] from the *Olympica* (one may note in passing the poetical names of all these early works):

'There are sentences in the writings of the poets more serious than in those of the philosophers. The reason is that the poets wrote through enthusiasm and power of imagination. There are in us, as in a flint, seeds of knowledge. Philosophers adduce them through the reason; poets strike them out from the imagination, and *these are the brighter*.'

It was the 'rationalist' Voltaire[2] who first called attention to the 'poetic' strain in Descartes, and, indeed, it is constantly witnessed to in the long series of his writings. To the casual reader there is nothing more remarkable than the careless richness of his style. It is full of similes drawn not only from the arts, like architecture, painting, and the stage, but also from the familiar scenes of ordinary and country life; nor did he ever forget the 'tags' which

[1] i. 84, cf. *Cog. Priv.* (x. 217). [2] *Lettres philosophiques* 14.

are the inevitable residue and crowning ornament of a classical education. And this not only in his early writing. It is apparent even in his latest published work, the scientific analysis of the 'passions of the soul', and it was Voltaire again who commented first on the fact that the last thing from his pen was a ballet written for the Queen of Sweden. This is not, in Pascal's phrase, a 'geometer who is only a geometer'. This is a man who slept 'ten hours each night, during which his spirit was conducted by sleep through woods and gardens and enchanted palaces' there to experience 'all the pleasures that are imaged in fable', and who, when awake, was wont to 'mingle insensibly' his 'dreams of the day with those of the night'.[1] One hears much of the gain to science, one wonders what was the loss to art, of Descartes' retreat from the world.

And what holds of Descartes as a man holds of Cartesianism as a philosophy.

Descartes' original vision, as we shall see later in detail, was that of a complete science of nature based on self-evident first principles. This vision, although it may be ultimately unrealizable, has proved the inspiration of much of modern intellectual endeavour, and our debt to it is so great that it would be wrong not to pay it full recognition as a powerful, possibly as the most powerful, stimulus both to the theory and to the practice of some of the sciences. But in order to be this it seemed necessary to elevate

[1] *Corresp.* i. 198, l. 31 ff., to Balzac (1631).

this vision from a scientific ideal to an all-embracing philosophy, and that was only possible by extruding all recalcitrant elements from the world which it was thus made to 'explain'. The point that the success of the explanation thus offered was due to this artificial and forcible limitation has become classic since the publication of Mr. Whitehead's *Science and the Modern World*, but it was apparent to nearer observers as well:

> 'J'ai souvent ouï dire à Despréaux', wrote J.-B. Rousseau[1] to Brossette in 1715, 'que la philosophie de Descartes avait coupé la gorge à la poésie, et il est certain que ce qu'elle emprunte des mathématiques dessèche l'esprit et l'accoutume à une justesse matérielle qui n'a aucune rapport avec la justesse métaphysique, si cela se peut dire, des poètes et des orateurs.'

# IV

# THE NATURE OF THE METHOD

## § 1

THE episodes touched on in the preceding chapter provide the background for the statement of the *Discourse* that the method did not spring fully developed from Descartes' mind in the year 1636. 1636 is the year not of its birth but, as it were, of its

[1] *ap.* Willey, *The Seventeenth Century Background* (London, 1934), p. 89. One may compare Blake's series of comments on Reynold's *Discourses* (ed. Keynes, Nonesuch Press, London, 1927, p. 970 ff.)