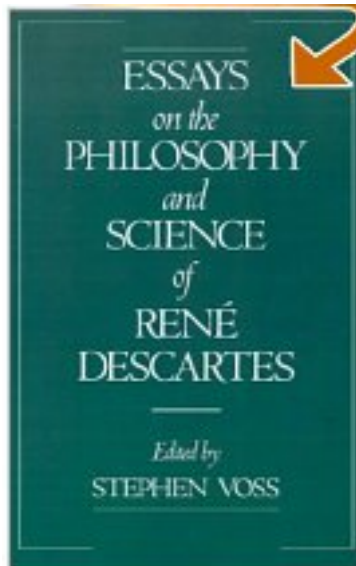


A Little Preface

This essay, written about 1990, was for me a big step in achieving a synthetic view of Descartes' philosophy. I finally had to come to grips with a strange writing, the *Olympica*, which I had avoided because it defeated my effort to understand it. *Olympica* tells the story of Descartes' youthful doubt, to which he gives prominence in the *Discourse on Method*. *Olympica* is the story of a dream, or rather of three dreams, including a dream within a dream! Is it a literary fantasy, perhaps about an adventure with Rosicrucianism? Or should we take literally its pretension to tell of dreams actually dreamed? Why didn't Descartes publish it, or arrange for its publication after his death? Etc.

My preparation included attention to Gregor Sebba's *The Dream of Descartes* (1987) and to Richard Popkin's *The History of Skepticism from Erasmus to Spinoza* (1979). But my solution to the puzzle depended on evidence of psychological disorders informed by neurology and endocrine pharmacology (that means, no psycho-analysis!). *Pascal's Syndrome* (1985) was my first publication to use clinical evidence of psychological disorders to interpret some aspects of intellectual history.

Writing the essay was prompted by my former ANU colleague Stephen Voss, when he invited me to submit a contribution to a volume of essays that he was editing. Since Stephen had devoted attention to Descartes' last publication, *The Passions of the Soul* (which he translated), I was hopeful that he might tolerate my interpretation of Cartesian doubt as an expression of anxiety disorder. But philosophers are wary of the encroachment of psychiatry on the turf of ideas; Stephen shared that wariness and rejected it. The big surprise, however, was that Popkin also rejected it, even though he was a chronic manic-depressive whose experience greatly influences his historical investigations of depressive ideation!



Doubt & Certainty in Psychobiological Perspective

by

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Nietzsche said that every philosophy is a species of unconscious autobiography. He meant that the world views represented in philosophy express a particular will to overcome the world by reshaping it according to wish.

Philosophers resist "psychologizing" because it subverts their *métier*, logical analysis and argument. The psychologist makes short work of the philosopher's labor by substituting unconscious motivation for the finely crafted tapestry of logic.

This antagonism assumes that logic and psychology are in a zero-sum relation—either the one or the other, but not both. Yet we routinely do have it both ways, as the respectability of intellectual biography and autobiography indicate. Biographical information adds nothing, and also subtracts nothing, from the rigor of a philosopher's work. What it provides is insight into the personal motives that propelled the philosopher along his chosen path.

The object of this essay is to use biographical information to elucidate Descartes' impulse to certainty. The procedure in the present instance is particularly warranted because Descartes integrated information about his motives into his philosophy, especially the *Discourse on Method*, which is a sort of intellectual autobiography. The present essay differs from biography as commonly practiced in that it has an explicit resource base for the evaluation of data. That base is a range of fledgling but exciting sciences of human behavior indicated by the term "psychobiology." I will not be concerned to develop the material methodically because that is a complex task requiring separate treatment. The results presented here consequently cannot claim methodological rigor beyond that of ordinary biography, even though its resource base is scientific.

Descartes' crise pyrrhoniennne

The powerful development of the doubt-certainty polarity in Descartes' thought has prompted many attempts to relate it to his biography and his times. One such attempt is the *crise pyrrhoniennne* interpretation, inspired by Paul Hazard, and developed by Richard Popkin and Edwin Curley.

Popkin situated Descartes at the terminus of a skeptical tradition touched off by the Renaissance rediscovery of the writings of Sextus Empiricus. The discovery was timely owing to the breakdown of consensus in religion, science, and politics. The Protestant heresy thrust Europe into a century of bitter religious wars and domestic persecutions. The aggressive certainty of armed dogmatists was itself a sign that the "European conscience," as Hazard called it, was afflicted by doubt about its core beliefs. These doubts were voiced by scholars (Erasmus) and humanists (Montaigne), who used skepticism to temper bigotry and to bring profession of belief into better harmony with what is actually known. Skepticism could be used to this effect because it inculcated the central spiritual experience of the times, the "crisis of the European conscience." The crisis was an acute awareness that the obligatory certainties of theology and monarchy were merely fallible human judgments in royal dress.¹

A subsequent tradition hailed this skepticism as the humane liberator from the fetters of superstition. This reading was possible only for a generation that had acquired confidence that ethics and church regiment could be based on fallible human judgment. The skeptics of the pyrrhonist phase did not enjoy this confidence. Skepticism, says Popkin, did not lead to reliance on proud if fallible reason, but to fideism.²

Descartes, we are told, undertook to terminate skepticism by developing it to an acute condition that would force a decision. This he did by cultivating the extreme doubts of the *malin génie* and the *dieu-trompeur*. In his audacious scheme, extreme skepticism not only disclosed an unshakeable certainty; that certainty contained within itself an ordering principle able to establish the cardinal certainties about God and the world.

¹ Richard Popkin, *The History of Skepticism from Erasmus to Spinoza* (Berkeley: University of California Press, 1979), xvi-xxi, 172-176.

² *Ibid.*, 52-65.

For a moment it seemed that reason, God, the essential truths of religion, and science were all secured. But it was only for a moment. Critics claimed that the resources of the *cogito* are not not sufficient to allay the extreme doubt that Descartes had conjured. Thus, contrary to his intention, Descartes prompted a second wave of skepticism extending from his contemporaries to Kierkegaard.¹

Edwin Curley glosses Popkin by attempting to supply the biographical references that anchor the *crise pyrrhonienne* in life events: the object is to find, if possible, exactly when Descartes discovered the skeptical problem and what shape the skepticism took. The broad contours are as follows. The encounter with skepticism must have occurred after Descartes stopped writing the *Regulae* (traditionally dated 1628), because that work presupposes that clear and distinct ideas are true. The *Meditations* provides a defence of this presupposition by the oblique strategy of allowing pyrrhonian doubts to call it into question. Thus, sometime between 1628 and 1641, Descartes experienced the force of skepticism so far as to realize that it menaced his secure foundations.²

The critical text, Curley states, is the *Discourse* (1637). It contains the first published reference to a doubt of clear and distinct ideas. It also contains sundry intertextual references to the writings of the then fashionable pyrrhonist, Montaigne. The search thus narrows to a browse through Descartes' writings between 1628 and 1637 for evidence that at least one of the pyrrhonian doubts of the *Meditations* may be sourced to Montaigne.

Curley's candidate is the letter to Mersenne of April 15, 1630, where Descartes discussed the metaphysical tract to which he was then attending. He announces a "new project, a little larger than the first," which consists in laying new foundations for philosophy. He boasts that his demonstrations of metaphysical truths are more evident than the demonstrations of geometry. This superior grade of certainty derives from his new principle, the creating God who do anything. Curley undertakes textual comparisons between Montaigne's *dieu trompeur* and Descartes' creating God to establish the plausibility that the latter derives from the former.³

¹ Ibid, 193-213.

² Edwin Curley, *Descartes Against the Skeptics* (Cambridge: Harvard University Press, 1978), vii, ix, 10, 12.

³ Ibid, 38-40, 43f.

I do not find this convincing. There is no trace in the April 15 letter of the element required to establish the *crise pyrrhonienne* thesis--questioning things that seem most evident. To *assume* that the discovery of metaphysical demonstrations more persuasive than mathematics would never have been attempted had there not be a prior doubt begs the question. There is the further difficulty that the Montaigne connection Curley seeks to make is obscure. Supposing that the attributes of the creating God make him resemble Montaigne's *dieu trompeur*, Descartes nonetheless derives from it hyperbolic certitude rather than extreme doubt. Where then is the skeptical crisis? What is the Montaigne connection?

That connection has long been established by a succession of studies of Descartes' early years that Curley omits to mention.¹ The posthumous writings confirm the chronology of the *Discourse*, which dates his encounter with skepticism to the time when he completed his studies at La Flèche (1614). It was the skepticism of Montaigne and his disciple, Charron. Descartes continued in this state until November 11, 1619, when he discovered the rudiments of a "marvellous" new science. Both the documents pertaining to this event, the *Discourse* and the *Olympica*, link the plenitude of attained certainty to a deeply experienced doubt. Both depict the doubt-certainty polarity as a crisis in the literal sense of a life decision: doubt is bound up with the choice of philosophy as a way of life.²

The crux of the *crise pyrrhonienne* interpretation is its supposition that the most acute doubt from the perspective of the logical entailments of Cartesian metaphysics must be the locus of Descartes' deepest biographical encounter with doubt. There is no evidence to this effect. The evidence concerning the date of Descartes' skeptical crisis is ignored by Popkin and Curley probably because it occurred about fifteen years too soon on the supposition that Descartes' turn to metaphysics was occasioned by a doubt of the foundation of Cartesian philosophy at the time of the

¹ On Descartes' early skepticism, see Adrian Baillet, *Vie de M. Descartes*, I, 33ff., 111-116, 131ff; Leon Brunschvicg, *La tradition philosophique et la pensée française* (Paris: Alcan, 1922); J. Sirven, *Les années d'apprentissage de Descartes* (Paris: Vrin, 1930), 260, 271f., 290-294; Alexandre Tillmann, *L'itinéraire de jeune Descartes* (Paris: Champion, 1976).

² This point is emphasized by Wolfgang Röd, *Descartes: Die Genesis des Cartesianischen Rationalismus* (2nd ed., Munich: Beck, 1982), 21, 25-33.

Regulae--that clear and distinct ideas are true.¹ The *only* evidence of a philosophical life crisis is the event of November 11, 1619, when Descartes was twenty-three years old. We shall see that when this evidence is sensitively probed, the occurrence of a trauma of conscience and belief is implicated. The subsequent metaphysical doubt, I suggest, is a reenactment, or recapitulation, of the early formative experience. This is inferred from the fact that the core images indicative of the experience are the same in the two cases. Finally, Descartes' psychological and biographical explications of the doubt-certainty polarity faithfully reflect the same experience.

Doubt as a Life Event

The *Discourse* tells the story of one who resolved to take control of his own thoughts. It is a buoyant story of a double success. The imposition of methodical conduct of thought leads to the bright vistas of certainty in the sciences, where previously there was only confusion. The second success is moral. The application of method to practical judgment enables the seeker to distinguish clearly what is and what is not within his power, so that he does not pursue vain fancies or expend regret on what he cannot obtain by his own means.

The restriction of choice to real possibility nevertheless has the effect of vastly, even perilously expanding the scope of choice. The reason for this becomes clear by attending to the logical entailments and biographical description of *Discourse* II & III. The gist is this. The resolve to make himself master of his own thoughts is equivalent to making himself the "principle" or initiator of philosophy in that nothing

¹ Thus Lüder Gäbe, who made a thorough study of the young Descartes, found no evidence for a skeptical crisis occasioned by the reading of Montaigne circa 1630. The only other source of doubt of mathematics suggested thus far is Descartes' reading of Bacon's *New Organon*, which criticizes mathematics (Gäbe, *Descartes' Selbstkritik*, [Hamburg: Meiner, 1972], 97-111. Unfortunately there is no direct evidence that Descartes was impressed by Bacon's criticism. Gäbe's supposition is recommended only by the implausibility of Descartes' own explanation of why he turned to metaphysics. He states in the *Discourse* that he turned to metaphysics for reasons of reputation (*Discours de la méthode: Texte et commentaire*, edited by E. Gilson [Paris: Vrin, 1962], 30-31. This work is hereafter cited as "DM."). The sketch of an interpretation of the *Meditations* based on the veracity of this testimony is given in my "Analytic History of Philosophy," *Philosophical Forum* 12 (1981), 273-294.

is accepted as true that does not appear to the thinker clearly to be so. The effect is to reject precepts that the thinker has on the authority of others. Not a single deontic rule survives this purgative; Descartes strips himself to the skin of his personal choice and preference. This means, however, that the thinking self is the principle of practical as well as theoretical philosophy.

To accommodate himself to a social milieu that perceived such freedom as subversive, Descartes adopted his maxim of conformism--to obey the laws and customs of his milieu, and to adhere to the religion of his birth. The difference between conforming from habit and conforming from choice becomes clear when Descartes authorizes himself to depart from the conformist strategy whenever it will serve the advantage of his life choice, the pursuit of knowledge ¹

It is also clear from Descartes' description of the psychology of moral judgment. Since choice is grounded only on the will of the chooser, the stability of choice depends on the personal stability of the chooser. Descartes cannot take refuge in the great legitimating certainties of conventional faith or legal authority; he has abandoned the sheet anchor of everyman's stability, habit. And as a thinking being, he is particularly vulnerable to confusions arising from the abundance of alternatives that suggest themselves amidst changeable passions.

The remedy for the yawning chaos of choice is to remain steadfast in the choices that he does make. He forms a rule to be "firm and resolute" in his actions, and "not to follow less faithfully opinions most dubious, when my mind was once made up, than if these had been beyond doubt."² This achieves consistency in action. No less important, it brings about confidence and serenity by delivering him from the "penitence and remorse," or bad conscience, of "weak minds" that "practice as good things which they afterwards judged to be evil." This idea is presented as the core of the moral doctrine stated in the Letter Dedicatory affixed to the French translation of the *Principles of Philosophy*. There choosing well in the sense of steadfastness in choice is called "the sovereign good" and "wisdom" (*sagesse*). This is additional evidence that the crisis of 1619, which was resolved by the choice of philosophy as a way of life, was formative of Cartesian philosophy.

¹ DM, 24.

² Ibid.

Mechanism and Autonomy

In his final publication, *The Passions of the Soul*, Descartes described the "mechanism" of choice. The setting for choice is the predicament that the passions, which offer objects of choice and impel us to them, are manifestations of the body's hidden neurological machinery. The machinery is taken seriously, about half the text being devoted to speculative physiology that displays the precariousness of choice. The reader absorbs the sobering circumstance that perception is harnessed to the passions, and that the passions are in turn effects of the body's machinery (*Passions* §§ 4-8, 11, 17, 21, 26-29, 75). How can choice emerge from this brute necessity?

The opportunity is given by the machinery of the sensory-motor circuit. Animal motion is distinctive in that it consists of differential behavioral responses to sense stimuli. Differential response is possible because the brain mechanism is not locked into real time. Instead, it has stored a wealth of information from past experiences, which is used to compare and assess a present impression to determine what action is to be taken in the present moment. The comparing and assessing process is called imagination. Thanks to it, the animal is endowed with an internal reality that operates in some measure of independence from real time (*Passions* §§ 12, 19-20, 22, 39, 41). Thus, animals can learn, dream, and even shed old habits and acquire new ones (*Passions* § 50). Consciousness can also come into conflict with external reality to make the animal indecisive about its action.¹

The thinking subject constructs the domain of choice by systematically exploiting the moment of indeterminacy in the sensory-motor process. That moment is the adventitious association between a remembered or present image belonging to inner reality and the motor activity in real time. By careful observation of how these associations are formed, the mind can use imagination to inhibit existing associations and institute new ones (*Passions* §§ 45, 47, 49, 50). Descartes was aware that this trick had long since been learned, and that artists and others achieve virtuosity at it. Nevertheless, this was only a knack or skill because the practitioners had no distinct idea of what they were about. Descartes discovered what they and he are about. He seems to have believed that this auto-suggestive, self-conditioning technique is the sole basis of such autonomy from the body machinery as human beings may acquire. "I think" expresses this autonomy.

¹ For a more detailed statement, see my *The Origin of Subjectivity: An Essay on Descartes* (New Haven: Yale University Press, 1973), 95ff., 192-193.

Autonomy is precarious because the passions are linked to the motor responses that often produce behavioural responses will-nilly. Descartes' descriptive language communicates the predicament. He sets up an association between uncertainty (or irresolution)-fear-weakness-bad conscience and another association between certainty (or resolution)-confidence-strength-good conscience (*Passions* §§ 44, 45, 50, 170). The root of both strings of associations is the key neurophysiological hypothesis, just explained, that "firm and determinate judgments" are the "proper arms" of the soul (*Passions* §§ 47, 48, 170). The sovereign good consists in good willing, that is, the directed use of the one thing within the mind's power, thoughts, to achieve consistency of action and good conscience. Bad conscience is the standing moral threat to the chooser because he is liable, by habit or mere inadvertence, to second judge choice by some criterion borrowed from authority or from the opinions of others. When this happens, he will condemn his own actions.

The implication of the sovereign good is that the autonomous chooser escapes the ordinary experience of the cycle of sin and repentance. Should he become adept in the use of his "proper arms," he would achieve perfection in his own eyes. This of course is the doctrine of the *Meditations* in respect to the avoidance of error.¹

But there is a cost. The practice needed to attain autonomy requires perpetual vigilance to exclude heteronomous elements from choice and to exclude the doubtful from judgments of truth and falsity. The *Regulae* exhibits in detail the watchfulness needed by one who would think each thought for himself. In the *Discourse* we see that the rejection of authority and habit as a guide to action entails not only an equal measure of watchfulness in regard to choice, but an extra increment required for maintaining vigilance about the conflicts between the thinking self and ambient mores. The cost of thinking for oneself is the perpetual anxiety incident to error-avoidance. This anxiety is strongly projected in Descartes' self-portrait.

•Solitude. Whoever judges all things according to his own mind has by that very fact set himself apart. In the *Discourse* Descartes depicts the origin of his philosophy, on November 11, 1619, in an image of self-isolation: he shut himself in a heated room. This image recurs transformed in the discussion of the physiology of the sensory-motor system presented subsequently in the *Discourse*. The thinking subject is shut up

¹ See my "Will and Reason in Descartes' Theory of Error," *Journal of Philosophy* 57 (1975), 87-104.

in the brain, whose support system is the heart's spontaneous heat, carried to the brain by the blood: the brain is the mind's *poêle*. Solitude is further underscored by the first person narration. It is the internal monologue of an apparently friendless loner who deserted his native country to reduce social scrutiny of his person. In Holland he lived an attenuated social existence, marked by frequent changes of residence and unusual vigilance to guard his privacy and to prevent acquaintances and strangers alike approaching him unbidden. The marked social shyness exhibited in the *Discourse* is to be sure not total. The private person did direct his monologue outward, and spoke grandly of his strong desire to serve the public interest. But he nevertheless published the *Discourse* anonymously, to "listen," as he told Mersenne, "from behind a screen" at what people would say.¹

•Animals as Machines. The sociability of our species extends to animals, who are often kept for amusement and companionship. This perceived kinship extends to our inner being in that animal analogies have been (and still are) a major vehicle for self-understanding and self-expression in many cultures.² The animal machine hypothesis is accordingly not just another philosophical idea. With it Descartes disowned kinship with the entire animal kingdom, and disowned also affinity with

¹The trait expressed in anonymous publication of the *Discourse*, social shyness, was deeply fixed in his personality. It is expressed in the elaborate precautions he took in publishing the *Meditations* and other writings, in his suppression of *Le Monde*, in his occasional threats to "burn all his papers," and of course in his withdrawn way of life. The sanctions available to offended orthodoxies--and it must be recalled that assassination was among them--do not adequately account for this trait: Hobbes, the self-styled coward, was far bolder in speech than Descartes. So were Galileo, Pascal, Stevin, and Spinoza.

² For an systematic study, see Balaji Mundkur's *The Cult of the Serpent* (Albany: SUNY Press, 1983). Leonora Rosenfield's *From Beast-Machine to Man Machine* (New York: Oxford University Press, 1941) remains the standard work on the significance of the animal-machine thesis to Descartes' contemporaries. Also useful as historical collectiana is Keith Thomas, *Man and the Natural World: Charting Attitudes in England 1500-1800* (London: Allen Lane).

fellow men who take the kinship for granted. This increased his solitude and asociality.¹

•Man a Machine. A critic remarked that if animals are machines, humans must be as well. This seemed obvious to Aristotelians, and Descartes' defense of his behavioral marker of humanity, the language capacity, establishes only a difference of degree from animals.² This thought, we have seen, is made explicit in the *Passions* where the difference between man and machine lies in the construction of a domain of choice upon the fleeting moments of indeterminacy occurring in the sensory-motor circuit. Only those who create themselves as thinking things escape the mechanical fatality. The thinker's isolation is extreme.

The *Olympica*: A Record of Anxiety Dreams

The starting point for an understanding of the *Olympica* is Gregor Sebba's study, *The Dream of Descartes*.³ I share his view, which he formed after decades of reflection, that the *Olympica* is a veracious report of dreams that actually occurred. I agree that the central "philosophical experiences" of Descartes' philosophy are figured in the images and symbols of this early writing (7-8).

Our point of disagreement is about how the images and symbols are to be interpreted. Sebba rightly emphasizes the prominence of physical experiences in the dreams. Descartes is blown by an ill wind, is weak on his right side, has difficulty walking, is startled by a thunder clap, sees sparks before his eyes, has difficulty communicating with acquaintances, and so on. Sebba interprets the symbols and images inter-textually, meaning in this case the "pursuit of the patent and hidden

¹ Richard A. Watson reminds me that Descartes was fond of his dog, Monsieur Grat (personal communication). This shows that Descartes was not always philosophical in his choice of attachments.

² For a discussion of Descartes' language marker in the context of a philosophical reflection on the animal in man, see Mary Midgley's *Beast and Man: The Roots of Human Nature* (Ithaca: Cornell University Press, 1978), 203-251.

³ Gregor Sebba, *The Dream of Descartes*. Edited by Richard A. Watson. Carbondale: Southern Illinois University Press, 1987.

interconnections that reveal the manifest unity of the phenomenon of man" (xiv; also 30). I prefer the more empirical route of consulting what psychobiologists have learned about the meaning of dreamed physical experiences.

Sebba observed that the mood of the first dream is "uncertainty, fear, and a sense of guilt" (51). He labelled this mood "Angst" (56), but he used the word in an existential rather than a technical sense, even though he cites an astute student of anxiety, Sigmund Freud. Consulting contemporary studies of anxiety, one readily recognizes Descartes' dream predicaments as anxiety symptoms.¹ Items:

The ill wind. It is said to be a *tourbillon*--a whirlwind or vortex that spins him around. Associated with this experience is weakness on his right side, difficulty of standing and walking, and fear of falling. Ordinary anxiety is an adaptive condition of hypervigilance or arousal of the sympathetic nervous system that activates the fight-flight-freeze responses in the face of perceived danger. When the freeze response is activated, the person affected may experience dizziness, faintness, and weak-knees. These effects are indicated in the dream by the multiple difficulties of locomotion. The weakness on the right side underscores the falling tendency since for right-handers the right side is the strong side.

Thunder and the vision of sparks. Thunder is among the potentially phobic stimuli; our species (and others as well) respond to it with a startle. Like snakes, spiders, heights and other naturally dangerous things, these stimuli evoke anxiety. The sparks (*éticelles de feu*), though seen in the room, occur directly after the thunder clap and therefore associate them with lightning, which is also frightening. (In the *Passions*, thunder and lightning are cited as examples of naturally frightening stimuli).

Difficulty of communicating. While experiencing these frights, Descartes recognizes acquaintances. They are immune to the effects of the wind. They speak to him and offer him the comfort of a succulent fruit (the melon); but the wind prevents him from approaching them and he cannot return their greetings. Here again we find a

¹ On the symptomology and course of anxiety, see Aaron T. Beck and Gary Emery, *Anxiety Disorders and Phobias: A Cognitive Perspective*, (New York: Basic Books, 1985); Graham D. Burrows and Brian Davies, eds., *Handbook of Studies on Anxiety*, (Amsterdam: Elsevier, 1980); *Physiological Basis of Anxiety*. Supplement of *Psychopathology*, v. 17, 1984; Peter Tyrer, *The Role of Bodily Feelings in Anxiety*, (Oxford: Oxford University Press, 1976).

likely anxiety symptom. The constriction of his movements by the wind, coupled with the inability to speak or to eat, indicates the constriction of the esophagus characteristic of anxiety attacks. His inability to approach friends expresses his extraordinary shyness, which is a marked anxiety symptom.

Memory loss. In the third dream Descartes, though clear of frightful events of the first dream, nevertheless fumbles awkwardly in his recollection of the contents of a book; or alternately, he is unable to find passages in the book that he knows quite well. Memory loss of this description is a common anxiety symptom. In acute episodes, such as public speaking or an examination, the affected person may be unable to recall what is deeply impressed on the memory. The setting of the memory loss is a pupil-teacher exchange between Descartes and an unidentified man. I concur with Sebba that the man is the young Descartes' mentor, Isaac Beeckman, to whom Descartes wrote on April 23, 1619: "I embrace you as the promoter and instigator of my studies." The memory loss indicates intimidation by the superior learning of the master. The experience will be familiar to most.

Soothing images. Further confirmation of the anxiety state is a succession of images indicative of becalming influence. The first in the order of occurrence is the church in which Descartes sought to take refuge from the ill wind. Another is the group of acquaintances, one of whom offered him food. Another is the two books signifying wisdom. Finally, the waking Descartes completed his meditation by vowing to undertake a pilgrimage to Loretto, a shrine of the Holy Virgin. In medieval Europe, the Marian cult signified grace, comfort, and succor in contrast to the masculine hardness of the jealous God. Descartes never again mentioned the Virgin, and his biographer Adrian Baillet could not confirm that Descartes fulfilled his vow. Nevertheless, Descartes was not done with woman as comforter, for Princess Elizabeth later occupied a similar place in his affections. In the Dedication of the *Principles*, he endowed her with virtues to a degree extravagant even for the encomium genre. Not only is she said to understand Cartesian philosophy perfectly, but she is made to personify wisdom (*sagesse*). Wisdom meant that tranquility of mind in which anxiety was extinguished. Delicately adverting to the vicissitudes that afflicted her house (which was in exile), Descartes marvelled that notwithstanding she had maintained composure (*générosité*) and gentleness (*douceur*). Her "perfect wisdom" attracted his "veneration" and the dedication of his chief work.¹ Clearly the Elizabeth of the Dedication has been transfigured into a symbol of serenity.²

Sebba commended the "iron logic" of the *Olympica*. This phrase suggests that the dreams are artifacts of a waking craftsman, whereas Sebba states that the *Olympica* is a truthful report of dreams actually dreamt. We should remark then not the iron logic but the consistency. It is not a consistency that the waking craftsman could have imposed because anxiety symptoms were not described with tolerable accuracy until recently. A significant index of consistency is the absence, in all Cartesian writings, of depressive ideation. Depression sometimes occurs as a secondary effect of anxiety; and when it does, the patient presents two sets of symptoms indicative of two distinct illnesses, despite the biographical and etiological relatedness.³ But the absence of indications of depression in Descartes' writings cannot be fully appreciated without noticing that no small number of thinkers, beginning with Pascal, have experienced the mechanistic universe as exceedingly depressive.⁴ To develop this notion, we must look a little further.

¹ Descartes, *Œuvres philosophiques*, edited by Ferdinand Alquié (Paris: Garnier, 1967), 90.

² Elizabeth suffered numerous ailments which she and Descartes diagnosed as consequences of her melancholia. Much of their correspondence is taken up with finding Cartesian auto-suggestive remedies for this distress. She was not therefore a model of serenity. Nevertheless, Descartes appears to have derived considerable gratification from the care and concern he devoted to her. She is one of the few persons to whom Descartes expressed his affection. See J.R. Vrooman, *René Descartes: A Biography* (New York: Putnam, 1970), 170, 173-180.

³D.C. Fowles and F.S. Gersh, "Neurotic Depression: The Concept of Anxious Depression," in *The Psychobiology of the Depressive Disorders: Implications for the Effects of Stress*, ed. R.A. Depue, (New York: Academic Press, 1979). Descartes' freedom from depression is established by his extensive correspondence about remedies for her melancholia or depression. His constant prescription for this condition was his remedy for anxiety--firm and determinate judgments. Unsurprisingly, it did not have the desired effect. Had Descartes suffered from depression, experience would have taught him the uselessness of his prescription.

⁴ For a systematic examination of this topic, see my "Pascal's Syndrome: Positivism as a Symptom of Depression and Mania," *Zygon* 20 (1986), 203-248.

The Ideas of the *Olympica*

The dreams occurred to a young man at a peak of creative power, "full of enthusiasm," as he said, or in a manic state, to use contemporary terminology. He expected a global insight and was primed for a momentous choice of way of life, but was startled that it commenced with a nightmare. On the present interpretation, the nightmare (anxiety) is ingredient to the emotional center of Cartesian philosophy. This experience was assimilated as the *characteristic* life experience, which Descartes reenacted repeatedly in his writings. Such indeed is the meaning of the centrality of choice in the dreams, particularly the choice of philosophy as a way of life.

This we see in the dream narrative, where "reasons taken from philosophy" are the auto-suggestive therapy that Descartes applies to calm himself. The therapy works because, as he would later explain in the *Passions* and other writings, fear can in some measure be subdued by knowledge of the fearful and knowledge of the actions that may be taken in respect to it. The most significant action for a philosopher is to take control of fear by comprehending it. The Eureka insight of the dreams, styled the "foundations of a marvellous science," consisted of just this action.

Observe that the wind when experienced in the dream was perceived to be an evil spirit. On his first waking reflection he interpreted it to be a sign of bad conscience; and the thunder was a reminder of the punishments of sinners. How do these philosophical reasons restore tranquility? They operate in just the way that any comprehension of an imagined danger dispels fear. A religious comprehension would be equally effective, and indeed Descartes' initial reasons might have been given by, or at least acceptable to, his confessor. But he did not stop there. In the *Olympica* he performed a little experiment to test whether the sparks he saw were real or imagined. Subsequently he would take this testing much further. In the *Dioptric* and *Meteors*, he used philosophical reasons to demystify all visionary and celestial events; and in the *Discourse*, as we have seen, he demystified bad conscience with his doctrine of fatalistic autonomy.

From this perspective we may understand the puzzling final interpretation of the ill wind as the "spirit of truth." This identification, it will be noticed, vindicates the pre-dream anticipation of global insight: the evil spirit or bad conscience was *after all* the expected illumination. What is the sense of this metamorphosis? Bad conscience is the moral counterpart of doubt. Just as doubt contains a "seed of wisdom"

that can be used methodically to attain felicitous certainty, so bad conscience is the sign-post to felicitous tranquility. It is essential that bad conscience is an anxiety state rather than a depressive one.¹ Descartes subsequently construed it as "irresolution," a kind of doubt; it signifies anxiety rather than guilt because philosophical reasons demystify guilt by indexing it as the consequence of a poor choice or as the wrong attitude toward the right choice.²

This ideational complex is repeated in Descartes' natural philosophy. The *tourbillon* of the *Olympica* recurs as the cosmological motion that reconciles the displacement of bodies in motion with the concept of the plenum. As such it is a key element of the logical entailments of the mechanistic universe. That universe, as a glance at Pascal or Kierkegaard shows, can be perceived to be depressing in the highest degree: it certifies our utter finitude, and also the utter absence of redemption.³ But for Descartes the world mechanism had a tonic effect because its nature and course were "certain." That certainty was not purely intellectual, perhaps not even mainly intellectual, since Descartes styled his natural philosophy a "fable of the world." The relevant certainty is that it meets and conquers what is typically the most acute anxiety, fear of death (*Passions* §§ 89, 94). Like the Stoics (not to mention Lucretius), Descartes conquered the fear of death by building consciousness of mortality into the fabric of the universe.⁴ In terms of his self-conditioning technique for mastering the passions, the world mechanism is his "proper arms" enabling him to recite again and again the mantra of mortality. In this sense the indifferent cosmic mechanism, which may inspire terror, becomes a soothing thought made by the thinker for the thinker.

1 The possibility must be entertained because guilt is a prominent depressive symptom.

2 The first dream is the very picture of irresolution, containing as it does six inhibited intentions to act.

3 See Caton, "Pascal's Syndrome," 322f., 329f., 335ff.

4 Various commentators, e.g., Anthony Kenny, have observed that Descartes' consolations to friends who lost a loved one are peculiar utterances for a Christian since they imply mortalism as finality. I would add that his consolation is the same regardless of the person addressed. It consists of the auto-suggestive remedy that he applied to his anxiety, which is of course to little effect in coping with bereavement or grief.

I began this essay with a plea for biography, saying that it does not compete with, but merely illuminates, the philosopher's concern with the logic of system. That generalization must now be modified insofar as Cartesian philosophy is a choice of a way of life. It is not a trivial modification since the boundaries of this choice are more or less co-extensive with the doubt-certainty problematic. In this domain there is a material logic whose inference patterns mingle formalism with a particular individual's strategy for coping with anxiety. The material logic has been identified as the dynamics of anxiety. The individual variables of anxiety dynamics are the biographical data from which the etiology and course of Descartes' anxiety are established.

I would caution that the present study does not fully elucidate all the objects of Descartes' anxiety nor the course of his neurosis. That discussion would revolve about the implications of the choice of philosophy upon religious belief, and what Descartes did, as a philosopher, about the discrepancy between them. It would show, I believe, the relationship between Descartes' shyness, his caution and aggression in relation to the Jesuits, and the enlightenment propaganda in which he packaged the mechanistic universe. Portions of this have been presented elsewhere,¹ but a full treatment must be the object of a separate study.

Afterword

A remarkable and pertinent illustration of the impact of affective disorder on philosophical thought is given by Richard Popkin in his *Intellectual Autobiography*.²

Popkin suffers from a common affective disorder, manic-depression. At the age of 35, he experienced the first breakdown. In the midst of it, he "had an overpowering religious experience" (117). This experience became formative for his subsequent intellectual development, as was soon to show in his discovery of the Marranos culture

¹ Caton, "Analytic History of Philosophy," *Philosophical Forum* 12 (1981), 273-294, and *The Politics of Progress: Origins and Development of the Commercial Republic, 1600-1835* (Gainesville: University of Florida Press, 1988), 56-65.

² "Intellectual Autobiography," in Richard A. Watson and James E. Force, eds., *The Skeptical Mode in Modern Philosophy: Essays in Honor of Richard H. Popkin* (Hague: Nijhoff, 1988), 103-150.

of the Spanish Jews. He formed the opinion that the Marranos are the major source of skepticism, messianism, and millenarianism in 16th and 17th century Europe, so much so that he could "explain the modern world in terms of the developments of Jewish Messianism from 1492 onward, and Christian Millenarianism" (136). Popkin identified with the Marranos culture because like them "I feel perpetually an outsider and an outcast, ready to smash intellectual idols at any time." The reason is that "our common human bonds would be revealed if our intellectual chains were broken, and our deceptive glasses removed. Theories would be seen as myths with no supra-human dimension. Only the supra-human experience, found in religious experience and aesthetic experience, transcends this" (147).

The Marranos' ghetto experience with which Popkin identified is one expression of a depressive symptom--the feeling of entrapment in a closed world--an "iron cage," to use Weber's metaphor. Skepticism is closely linked with the messianic vision of release and revitalization since it is conceived as the battering ram to demolish the ghetto walls.¹

Popkin's ascription of a *crise pyrrhoniennne* to Descartes should be evaluated in light of this information. His assumption that the metaphysical doubt must indicate a life crisis expresses Popkin's own experience. While for both Popkin and Descartes skepticism is instrumental, in Descartes it mediates the certainty of a dogmatic world system, which Popkin shrinks from as the emotional-conceptual ghetto. As an interpreter of Descartes, Popkin thus has, as it were, a "hidden agenda" in opposition his dogmatism. These two writers thus show, with an unhopd for degree of clarity, how the presence of different affective disorders influence the evaluation of philosophic system.

¹ The reader is referred to my "Pascal's Syndrome." The analysis of the depressive philosophic ideation of Pascal, Comte, and Weber covers I believe also the present case.