

ETHICS AS DRAWN FROM THE METHOD*

Richard B. Carter

Introduction.

In profound agreement with an ancient tradition, Aristotle says (Nic. Eth., 1139a^{ff}) that theoretical investigation determines principles of action, and hence *teloi*, but that practical reasoning investigates ways and means to achieve particular ends. Entirely consonant with this, we find an ancient (presumably Pythagorean) mathematical tradition that distinguished between theoretical analysis - which sought to determine truth and falsity - and *poristic* (problematic) analysis which was useful for discovering how to obtain particular needed constructions.

In Descartes' case, the mathematical foundations of his physics rejects this distinction between the two sorts of analysis. Then, consistently enough, the postulates of Descartes' physics entirely dispense with what the prior tradition claimed could only be discovered by that theoretical analysis - which Descartes refuses to distinguish from problematical analysis. That is, having dispensed with the distinction between theoretical and problematic analysis, Descartes also dispenses with what Aristotle and the mathematical tradition said could only be discovered by pure theoretical analysis: He thereby also dispensed with principles and *teloi*. I argue in this paper that Descartes - still consistent - then substitutes the *quaesitae* of problematic analysis for the *teloi* of theoretical analysis and that his Ethics is characterized by that substitution.

Ethics as drawn from the Method.

I will introduce this paper with a short excursus into the history of ideas concerning analysis. In the tradition of analytic mathematics which Descartes knew - in his Geometry, he quotes a passage concerning it which he found in Pappus' "Treasury of Analysis", (cir. AD 320), - a sharp and clear distinction is made between theoretical analysis, which, Pappus tells us, "seeks the

truth", and problematical ('poristic') analysis, which, Pappus says, investigates the possibility of discovering how to perform some particular geometrical construction. Descartes' algebraic geometry entirely rejects all such distinctions and identifies the grasping of any truth about something with the ability to construct the thing. Or, as Descartes says in "Resp. Obj. II", analysis shows the way an effect depends on its causes. To know the relation between effects and their causes is to know the truth and, in particular, to know it analytically.

I shall argue in this paper that, defining Descartes' Ethics as what establishes canons of permissible behavior performed to obtain humanly desired ends, his Ethics is a consequence of his identification of truth with the ability to perform those operations required to obtain truly desirable goals - that is, goals which are desirable because their attainment is never a matter for subsequent regret. I shall argue further that the normative aspect of Descartes' Ethics derives solely from considerations of practicality - namely, can we obtain it and, if so, will the subsequent cost of success turn out at a later date to outweigh the benefits of possession so that we will subsequently regret pursuing the object of desire? If we subsequently do regret our success in obtaining some object of desire, then that desire was for the undesirable, and was initially based on falsehood. Thus, true Ethics must both provide ways and means to obtain the truly desirable, and it must provide us with a method for determining whether the putative object of desire is truly desirable. Ethics becomes non-subjective and value-free. The only ethical questions are: Can I do it and if I can, was it worth it? As we say, without blushing, "Crime doesn't pay," that is, it is not cost-effective.

"Part II" of The Discourse contains "certain rules of Ethics drawn from the method," where by "method", Descartes means some form of or derivative from his algebraic analysis. "Part VI" of The Discourse ends by saying clearly and unequivocally that the writer's life's work is totally aimed at laying down a physics which would support a superior Medicine of the future. The Discourse was Descartes' first great published work, and appended to it are his own scientific 'assays', "essais", of his own method. (Descartes knows that Montaigne's use of the term 'essais', is a borrowing from the vocabulary of metallurgy, and that his, Montaigne's, book is an assay of Montaigne as the author of his book.) But The Discourse ends with a manifesto concerning the role of Medicine in his life's work, a manifesto which few of the scholars who deal with Descartes have cared to take much notice of. Their neglect of that manifesto becomes

understandable, perhaps, when we find him later identifying the tree of philosophy with the tree of the sciences, and then continuing to claim that Medicine, along with Mechanics, supported Ethics. That is, if Ethics is the highest fruit of the tree of Philosophy, how can the development of foundations for a superior Medicine be Descartes' plan? Medicine is not Ethics.

Descartes' transformation of traditional Ethics begins with his demonstration that our naive, pre-analytic, responses to the world essentially comprise a pro-temp stage of human progress towards a universal science whose highest part is Ethics. To speak in more contemporary terms, Descartes set out to show that his analytical methodology enables us successfully to over-ride those innate responses which result from our psychophysiological "hard-wiring". He aimed to show that our analytically achieved clear and distinct ideas can, in each and every case, help us to grasp the truth of that world around us better than do our confused, "natural", ideas. The Discourse, especially in those 'assays', "The Optics" and "The Geometry," reveals the power of the algebraic expression of analytical thinking. The Meditations, on its part, starts with our naive grasp of the world as given to us both by the teachings of other humans who are not aware of the power of analysis, and by that hard-wiring introduced and described in "The Optics"; it ends with a long disquisition, in Meditation VI, on the particulars of our hard wiring and with the assurance that if we over-ride its naive teachings with analytical verities - requiring the mathematically talented to master "The Geometry of René Descartes", and the non-mathematician to doubt all things - then we can escape human error and sin, (Vid. VII,58 24-25).

The Meditations sets for itself the difficult task of showing how even the non-mathematician can to some degree achieve that analytic clarity so characteristic of the algebraic geometry found in The Discourse. In place of the technical considerations of our hard wiring which we find in "The Optics", the Meditations first presents us with the malicious deceiver and then with its overthrow by an informal analysis of the rank of ideas using the dictum "nor is it possible for anything to come from nothing," (VII,40 26-27). But even in Meditations, Descartes returns to the structure of our body as soon as he is able to - in "Meditation IV" he says that he there understands general nature as God, or even as the order and disposition that God has established in created things, and his, i.e., Descartes', particular nature as his own body's organic unity. That God-given unity is precisely what we today would term our psychophysiology and its neurological 'hard wiring'. He then continues by speaking of those

things Nature has taught him - more or less what we today would call innate, "biological", responses. As he says so clearly in Meditations III & IV and again in *The Passions*, the prime source of human error is the natural, and hence God-given, penchant we have for taking the evidence of the senses as 'gospel' truth, so to speak. But, Descartes continues in Meditation VI, since God is no deceiver, He would not have created us so that we had to err; that would have to be the work of a malicious deceiver. But we do err, with or without any such super-natural power; for deception is primarily the result of human activity in the face of our ignorance, (one is tempted to say, in the face of our "pre-Cartesian ignorance"), of our hard-wiring as scientifically treated of in, say, "The Optics". Knowledge of our neurology permits us to transcend its nervous deceptions and, thus, to avoid the mistakes consequent on those deceptions. This is the first hint we have of the relation between Medicine, Mechanics and Ethics.

The next few pages of Meditation VI are taken up with a short disquisition on Descartes' own neurophysiological theory, and concludes that, "notwithstanding the sovereign goodness of God, human nature can, in so far as it is composed of a body and a soul, sometimes be faulty and deceptive." Descartes illustrates this by instancing the truly wonderful example of the sometimes excruciating pain we "imagine" we feel in a limb that has been amputated; that very pain, as imaginary as it somehow must be, is as real to the victim as any pain he or she will ever experience. But it is a deception originating in our neurology, a pain reminiscent of the malignity of the deceptions of the *mauvé géné* Descartes then immediately returns to such examples to illustrate the nature of man as sometimes faulty and deceptive. He ends the passage with a remark concerning the neurophysiological analysis of the source of human error to the effect that it both helps him to recognize "all (sic!) the errors" to which he is subject but it also helps him to evade and/or correct them more readily. Then, remarking that his senses are, by and large, sufficient when it comes to the day to day uses to which he puts them, Descartes ends both this Meditation and the Meditations as a whole by remarking that we are often so busy and the pressure of affairs so pressing, that we act precipitously and hence mistakenly. Ergo: Human nature is faulty.

In ending his Meditations on such a note, Descartes is not merely saying that the reason why he errs and sins is that he is merely too preoccupied not to err and sin. He is also here preparing to challenge the Pauline foundations of the then-prevailing Christian Ethics with the teachings of his own medi-

cally based Ethics. Although he makes this point only obliquely at the end of the Meditations, he makes it quite directly in Art. 47, of The Passions, where he openly rejects the characteristically Pauline notion of a war between the sinful body and its captive soul as the reason we humans are so often indecisive or errant. His own Ethics, founded as it is on Mechanics and Medicine, is intended to replace St. Paul's Ethics. The passage in Paul which Descartes has in mind is found in Romans 7: 21-24, where Paul says: "I discover this principle then: that when I want to do the right, only the wrong is within my reach. In my inmost self I delight in the law of God, but I perceive that there is in my bodily members a different law, fighting against the law that my reason approves and making me a prisoner under the law that is in my members, the law of sin." [New English Bible]

On his part, Descartes directly contradicts this in Art. 47 of The Passions, whose title is, "WHAT THAT BATTLE REALLY IS WHICH IS COMMONLY IMAGINED TO BE TAKING PLACE BETWEEN THE HIGHER AND LOWER PARTS OF THE SOUL". There he says: "All the battles which are commonly imagined to take place between the lower part of the soul (which is called the sensitive part) - or, as they also sometimes refer to it, between our natural appetites and our will - consist in the opposition between the movements which the body (by means of the volatile, spirituous part of the blood) and the soul (by means of its will) tend to excite simultaneously in the pineal gland." According to Descartes, then, I err and I sin when that motion of the gland which is initiated by the soul is skewed by that motion of the gland which is initiated by the animal spirits.

But Descartes is facing more than a Pauline dualism comprised of distinct laws, one set of which control my 'inmost-being' and the other, leading to sin, which are in the service of 'body'. That is, although he does not address them directly in the Meditations, we cannot soberly suppose that Descartes was unaware of Christian Europe's written accounts of the healing acts of Jesus as recorded in the Gospels. For, whereas Paul speaks of Jesus primarily as an ethical teacher of the way to salvation from spiritual sin, the acts of Jesus as recorded in the Gospels present us with, among other things, Jesus' miracles of healing performed on individuals who had the gift of faith - e.g., "Your faith has healed you." These medical miracles include the healing of blindness, lameness, madness, fluxes and, in several cases, the recall of a human from the bonds of death itself. And, once again, it was the act of faith in Jesus' ability to perform miracles of healing which led to Jesus' act of healing. Descartes was thus faced with a tradition which was based both on St.

Paul's ethical dualism concerning the law of mind (his inmost being), and the contrary law of his body and on the Gospels' accounts of the incarnate creator as a healer of human illnesses. The Meditations are thus to some significant extent concerned with Descartes' attempt to replace Paul's account of human frailty as the result of an unequal battle between the God-given laws of his inmost being and the law of sin in his members with a sort of dualism involving two species of God-given illuminations. That replacement will serve as the foundation for a scientific Ethics involving a rational healing protocol which requires no miracles and which, what is more, is ultimately based on complete doubt rather than faith. It was this program involving a rational healing protocol that was being announced in the manifesto concerning Medicine at the end of "Part VI" of The Discourse.

The Meditations is the first of Descartes' major writings in which he produces arguments relating will to knowledge, on the one hand, and, on the other hand, relating sin and error to when that will is exercised on the foundation of insufficient knowledge. He could, however, only introduce these arguments in the Meditations; it required the cosmogony and the theory of light-production of The Principles and the psychophysiology of The Passions to complete this program - the program of establishing a universally acceptable Ethics which is universally acceptable because its ultimate logical spring is his Universal Mathematics, and its immediate source is his mechanistic Medicine. And what Descartes' Universal Mathematics is to merely extended body in general, so his scientific Ethics is to willing, living human bodies in general. In other words, a truly scientific Ethics would have the same broad, "non-sectarian" appeal as a general science of nature. To establish this was, I am arguing, Descartes' Ethico-Medical intention.

To conclude my argument, I shall consider to what extent Descartes' ethical illumination is coextensive with the teachings of Nature which provide illumination in the realm of sensation. This is a vexing problem since Descartes' scientific illumination provided by the Natural Light of Reason must include every single useful pre-analytic teaching of Nature while also providing illuminations we could never expect from "mere" Nature. Reminding ourselves of our definition of Ethics as what establishes canons of permissible behavior performed to obtain truly desirable ends, we will next compare several articles from Parts I & II of The Passions concerning the mechanical dimension of desire with several articles from Part III of The Principles concerning Descartes' theory of the mechanics of light production. We do this to show two things: first, we wish to exhibit a

particularly striking consequence of confusing theoretical analysis - which Pappus says aims at investigating the truth - with problematic analysis - which Pappus says aims at attaining and constructing something; second, we wish to show how scientific Ethics may be drawn from the method. In short, we will give a typical example of what it means to say that to see clearly is to see whether it is truly desirable and, simultaneously, to see how to obtain it if it does seem desirable.

To begin, Ethics involves the will for Descartes, but the will only realized through that passion of the soul which he calls 'desire'. As we read Articles 86-111 of *The Passions*, it begins to emerge for Descartes that, (to use contemporary terms), desire is the emotion which makes us aware that our bodies are being prepared to set about to accomplish some volition. The mere imagining of something being together with or apart from us is only "fantasy" and has nothing to do with what we can obtain - let alone whether it is truly desirable. To transform 'mere idle fantasy' into a true act contingent upon will, the exact connection between the idea of the thing sought-for, (the 'Quaesitum' in the parlance of the ancient mathematical analysts), and the things at hand and in our power, (the 'Data'), must be established. This transformation activity is of the essence of just that algebraic problem-solving technique whose applied form is Mechanics; without that transformation activity - which, when routinized, is Engineering - the sought-after is merely an adventitious fancy which happens to be present to consciousness. And it is only that particular intellectual activity, (the ancient mathematical analysts called it "poristic"), which begins the transformation of mere fancy into desire which, eo ipso, gives rise to any issues which concern Ethics - as we see in Art. 144, where Descartes says that our passions lead us to no action except through the mediation of the desire they excite and thus it is, "in particular, desire which we should take pains to regulate." (We can only regulate desire because, to regulate the will would be to condition it and hence to strip it of its freedom - surely something which Descartes did not wish to do.) He continues with the crucially important remark that: "...it is this which comprises the principle usefulness of Ethics."

According to the infinitely sober Descartes, the perfect regulation of desire is merely a matter of intellectually determining whether something is attainable and, if so, whether the benefits of achieving it are at least equal to the cost of achieving it. (The incredulous response of novelists such as Balzac, Flaubert or Zola provide a nice counter-poise to Descartes' unlimitedly sober assessment of the power la raison

has to tame the heart. Wagner, that great musical sophisticatespokesman for the European back-lash to Cartesian sobriety, spoke to that incredulity most eloquently - if immoderately.)

Desire, for Descartes, also includes considerations beyond those located in the inner psycho-physiological milieu of the living body. As he tells Elizabeth, that world external to the body experiencing desire includes both the universe in general and the human milieu. He tells Elizabeth: "After having thus recognized the goodness of God, the immortality of our souls and the greatness of the universe, there remains a truth the knowledge of which seems very useful to me: namely, although each of us should be a person separated from others and, as a consequence, someone whose interests are distinct from those of the rest of the world, one should still think that he cannot subsist alone, and that he is, in effect, one of the parts of the universe, and, still more particularly, that he is part of that Earth, of that state, of that society, of that family to which he has been joined by his own habitation, language and by his own birth..But when someone exposes himself to danger because he believes that it is his duty, or even when he suffers some other hurt in order to achieve good from others, then, even though he does not perhaps consider reflectively that he does this because he owes more to the public of which he is a part than to himself in his own particularity, he still does this in virtue of that consideration which is confusedly in his thought." (AT V, 293,ff.). Thus, just as the passion of desire readies the psychophysiological milieu of the body to act to achieve the volition of the body's soul, so the science of Mechanics - together with its sub-branches of Mechanical Engineering and Social Engineering - extends the boundaries of that psychophysiological milieu up to where they include the very object of the initial volition, the sought-after. But then, what is crucial, desire further extends that milieu to include any and all considerations which could render that object undesirable 'de post facto' because of previously unnoticed costs. Descartes' ethical world is Leibniz' best of all possible worlds - where 'best possible' means 'most cost-effective' and we can begin to see why Descartes places Mechanics alongside Medicine as the immediate support of Ethics.

Mechanics begins to emerge as the illuminating, analytic science whose subject-matter extends precisely to the limits of the world in which we must act to achieve our desires. (In light of Descartes' dismissal of final causes - VII, 58 24-25 - Mechanics also seems to emerge as what examines the limits of rational human desire, parallel to the way Theology examined the knowable limits of the Divine plan.) At any rate, Mechanics is

analytic deliberation on how to attain the object of a desire within a milieu which is sufficiently wide that the costs involved in attaining it do not exceed the rewards of possessing the sought-after - something that Nature never teaches us because it cannot teach this to us.

Descartes is by no means the first thinker to associate analytic mathematics with the realization of desire. For, characterizing the science of Mechanics as the formalization of analytic deliberations on how to attain the object of a desire in the face of obstacles, we find mention of a mathematical version of this parallel between desire and deliberation as early as in Aristotle's ETHICS, (III, iii), where Aristotle says that what the professional mathematicians called 'Problematic analysis' (and, once again, Descartes' analysis is a fusion of theoretical and problematic analyses!) was a sort of backwards problem-solving. Aristotle says, (following Rackham's translation): "For, when deliberating, one seems in the procedure described to be pursuing an investigation or analysis that resembles the analysis of a figure in geometry...and the last step in the analysis seems to be the first step in the prosecution of the design under deliberation..." (III2-b20,ff). In other words: If mathematical, (in particular, problematic), analysis shows how any effect depends on its causes, then any action based on the results of that mathematical analysis must begin where that analysis ends. Translating this into the terms of the present development, we are saying that mechanical and social engineers - here considered as analytically trained problem-solvers - start with what is sought-after (the quaesitum) and then consider all the potential obstacles between that sought-after and the things at hand, (the so-called 'data'), which can be used to overcome those obstacles. The grounds for thinking that any clearly and distinctly grasped sought-after is accessible to human engineering techniques are stated simply in Art.40 of Part I of Descartes' PRINCIPLES: "But, because of what we already know of God, we are sure that His power is so great that we would be committing a crime to think that we would ever be able to do anything which had not been previously ordained..." This utterance, almost exactly echoed in Art. 145 of The Passions, alludes to what Descartes terms as "The Laws of Nature".

I shall, by way of closing, draw the bare outlines of a parallel between Descartes' theory of the mechanics of desire and his theory of light-production, first reminding ourselves that for Descartes only human beings perceive light and - by the same token, I think - only human beings have minds.

Descartes' psychophysiology - i.e., the theoretical aspect of

his mechanistic Medicine - starts with the body as prepared by desire to act in external surroundings which contain obstacles. That preparation is strikingly paralleled by his account of light-production in Part III of *The Principles*, Arts. 55, 56 and 63.

In those three central Articles of *The Principles*, Descartes tells us in Art. 55, "What Light Is", that light is an "effort" corpuscles of matter make to move in the face of countervailing forces. Then, in ART. 56, "How One Can Say of an Inanimate Thing that it Tends to Produce Some Effort", Descartes further tells us that those corpuscles of matter "are so situated and disposed to be moved that they in effect do elongate themselves from those centers if there are no other causes which restrain them." And, inally, we find Descartes saying in Art.63 that "it should be known that the force of light does not consist in the duration of any motion. Rather, it consists in the... first preparation for motion - even if, as happens sometimes, the motion itself does not result from that preparation."

In short, we do not see without light and light is the result of a disposition to move: Therefore, merely to see is to be aware of the possible - and Descartes' Optics can thus be read as an essay which, at least in part, aims to replace Aristotle's teachings concerning potential in his Physics. And, finally, if the thing comes to appear unattainable, then any sober man will, of course, cease to desire it. (Perhaps our present epoch is no less an age of reason than an age of incredible sobriety.)

We are now prepared to give the parallel between Descartes' theory of desire and his theory of light. On its part, desire is the way a sentient soul is aware of the fact that its body is being prepared and disposed to act in order to achieve some object of will. The body can be disposed to act even though external obstacles prevent it from immediately achieving its soul's designs. Desire looks to the future - to what is not immediately at hand, not present. Light has that same futurative aspect. It consists in a presently thwarted disposition and preparation to activity. The soul senses a frustrated disposition to activity in simply organized matter as light; that same soul senses its own body's disposition to activity as desire.

Finally, all the desiring in the world will not, of itself, do more than dispose the human's own physical body to act in accord with will. Furthermore, the (pre-analytic) teachings of nature are merely "blind and rash impulses" to the extent that they almost never calculate the cost of pursuing a particular goal. Then, as often as not, the desired thing turns out to be both unattainable as well as undesirable because of its cost.

Whenever volition is not based on the sort of knowledge contained in the "Essays" of Descartes' *The Discourse on Method*, in *The Principles* and in *The Passions*, then desire itself is indifferent and thus not a matter of deliberate action; it becomes what Descartes terms a matter of ethical indifference. Ethics is what establishes canons of permissible behavior performed to obtain desired ends. But, according to Descartes, it is not until we know, analytically, the ultimate desirability of the object of will - namely, its cost as balanced against its benefits - that there even exists a truly ethical dimension to will. In any given case, the question of accessibility is entirely a matter to be decided by applied geometry - that is, by the application of the procedures of geometrical algebra. When that application concerns the human body prepared to act through its desires, we have Medicine. When that analytic science is applied to whatever external obstacles stand in the way of the attainment of desire, then we have Mechanics. Finally, Medicine and Mechanics understood in this way sustain Ethics, for Descartes, because all reasonable desires are desires for what has been providentially guaranteed by the Creator through His Laws of Nature. In short, to be able to achieve the objects of true desire is to be permitted to. This is Descartes' Ethics, and it is both normative and value-free. Consequently, any normative but value-laden pretender to being a truly philosophic Ethics must fail the assay of this Cartesian touch-stone, and thereby be revealed as false Philosophy - as fool's gold.

A closing remark. It is, I think, not unimportant to ask ourselves whether such a normative but emotionally neutral Ethics has anything to do with the willingness of modern governments, guided in their deliberations by the advice of enlightened, objective, experts in Political Science, to view soberly the slaughter of millions of civilians merely as comprising sound public policy: If the answer is yes, then we have perhaps thrown some little light on the lethal efficiency of Stalin's Gulags and Hitler's death camps; on the carefully orchestrated destruction wreaked by Mao's Red Guards; on America's use of atom bombs on civilian populations at Hiroshima and Nagasaki.

Department of Political Science
University of Maryland, Baltimore County
Catonsville, Maryland 21228 USA

* This paper was given at San Jose State College at the Celebration of the 350th anniversary of the *Discourse on Method*, held April 15-17, 1988.