**Discourse on Method** – Rene Descartes

Part One

*…in which Descartes outlines his principle concern, i.e. to ensure that the knowledge he has is certain, and asserts his disappointment with all subjects except mathematics*

Descartes asserts that everyone thinks he is eminently rational and from this fact concludes that each man possesses a similar amount of good sense (capacity for reason) and the reason we disagree about things is because we “conduct our thoughts along different ways, and do not fix our attention on the same objects.”

He modestly claims that he has never thought himself to be superior to any of his contemporaries but does believe that he has “formed a method that gives me the means… of gradually augmenting my knowledge”.

His search for such a method begins from his dismay at the fact that after studying in “one of the most celebrated schools in Europe” (probably referring to the Jesuit College at La Fleche) he found himself still full of doubts and errors. He discusses the following subjects:

* Languages and the writings of the ancients. This is useful because it allows us to know our own culture better and prevents us from dismissing other cultures as irrational or ridiculous. However, there are three problems; 1) being over curious of the past can lead to being ignorant of the present, 2) fictitious accounts can make us believe in the impossible, and 3) since even faithful historical accounts are seldom without exaggeration or misrepresentation, modelling ourselves on the examples contained within will be counter-productive.
* Eloquence (presumably rhetoric) and poetry. These are usually skills that people are naturally gifted with and can’t be acquired through study.
* Mathematics. Descartes was struck by the “certitude and evidence of their reasonings” but surprised they hadn’t provided a foundation for anything other than the mechanical arts.
* Ethics. Descartes was singularly unimpressed with ethics saying it had yielded “towering and magnificent palaces with no better foundation than sand and mud”.
* Theology. This is important as a means of reaching heaven but since this way is open to the ignorant as much as the learned, it is not fitting for the application of reason.
* Philosophy. Since nothing has been resolved in this subject and everything discussed by philosophers is still in doubt, he has little to say about this.
* “Other sciences” (physics, biology, etc.). Inasmuch as the foundations of these are built on the principles of philosophy (which are wholly uncertain), Descartes judges that they must be just as uncertain.
* “False sciences”. These he discounts immediately and includes under this title things like alchemy, astrology, magic, etc.

As a result, Descartes eschewed what we might call academic study and proceeded to travel and learn from talking directly to the people he met. However, this didn’t help much for he found just as much contradiction and lack of certainty as he did in philosophy. His travels did teach him one thing though, namely, not to be too quick to pronounce a belief, truth. From this point he resolved to “make myself an object of study” and let his own reason determine how he should proceed in his quest for certain knowledge.

Part Two

*…in which Descartes outlines his method for ascertaining true and certain knowledge*

Descartes recounts how he found himself trapped somewhere in the middle of winter with a whole day to himself in which he could devote his energies to his problem.

His first realisation was that a work completed by a single individual was always better than one in which many people had participated. His supporting examples include architecture, the laws of a nation, a religion which gets its ordinances from God, Sparta, and the way the sciences he had studied at university (being made up of the opinions of different men) are full of uncertainties. By extension humans too, having been governed by a multitude of desires for most of their lives rather than living by reason alone, also suffered from this same flaw.

So, while it would be impractical to demolish an entire city just to rebuild it anew under a single person’s vision, it is possible for a single person to sweep away all of his or her opinions and replace them only with those that have survived the scrutiny of his single master, reason.

Descartes doesn’t recommend this for all men however. There are two classes of men who shouldn’t do this; 1) those who have too much confidence in their abilities, for they lack the patience to rebuild what they destroy and 2) those who know that others are better at “discriminating between truth and error” than they.

Next, Descartes notes three things he has learned thus far; 1) all “repugnant” opinions do not necessarily belong to “barbarians and savages” and other countries/cultures sometimes make better use of reason than his own, 2) custom and example rather than certain knowledge, form the basis of most of our opinions (e.g. the country we grow up in largely determines what we believe), and 3) the fact that many people have reached the same opinion after much deliberation is no guarantee the opinion is true.

Descartes thinks logic, geometry, and algebra are all flawed in different ways. Logic can only be used to communicate and organise what we already know. Geometry and algebra are both too abstract and the former deals only with figures while the latter is concerned only with rules and formulae. He wants his method to combine the strengths of all three. To this end he elects four principles which will comprise his method:

1. Only accept as true what is presented to the mind so clearly and distinctly that it can no longer be doubted
2. Divide the problem into as many parts as possible
3. Begin with the simple and progress little by little to the more complex
4. Be thorough, omitting nothing from scrutiny

He reports that using this method, he was able to understand and solve all of the questions that he had previously found difficult in geometry and algebra with ease and was particularly pleased that he was in effect, training his mind to perceive clearer and more distinctly than ever before. Before he could proceed to the other sciences though, he needed to establish the principles of philosophy first because all scientific knowledge is built on philosophy. Because he felt that at that time he was too young and inexperienced to embark on such a task (he was 23 years old) he deferred this until a later date.

Part Three

*…in which Descartes lists the three or four maxims he will live by while carrying out his investigations according to his method*

So that he may not flounder without any guidelines at all while pursuing his aim of certain knowledge using his method, Descartes decides to live by a “provisory code of morals”:

1. Obey the laws and customs of his country, believe in the faith in which he was raised (Christianity) and act according to the most moderate opinions, eschewing the extremes (since “excess is usually vicious” and if it should turn out he was wrong, he will be closer to the truth if he adopts a middle position than if he chooses the opposite extreme)
2. Be “firm and resolute” in his actions, even if the opinions they are based on are doubtful
3. To “endeavour always to conquer myself rather than fortune, and change my desires rather than the order of the world”. By this, Descartes meant recognising that the only things he can control are his thoughts. All external situations, including his success or failure, are to a certain extent outside of his control. Acknowledging this would mean “we shall no more desire health in disease, or freedom in imprisonment, than we now do bodies incorruptible as diamonds or the wings of birds to fly with” and thereby “render me contented”. He does confess however that achieving this will require “prolonged discipline and frequently repeated meditation”
4. To review all the different occupations open to him so that he may choose the best. He concludes that none are better than his chosen course, i.e. “in devoting my whole life to the culture of my reason, and in making the greatest progress I was able in the knowledge of truth, on the principles of [my] method”. In support of this, Descartes claims the fruits of his method have been a source of satisfaction “more perfect or more innocent [than which] could not be enjoyed in this life.” In this section, he also claims that since we have all been given, by God, “some light of reason by which to distinguish truth from error” no one ought to merely accept the opinions of others without subjecting them to their own judgement.

 For the next nine years, Descartes travelled and talked to the people he met, with the sole aim of employing his method to rid himself of all errors that had crept into his mind. At this point he distinguishes himself from the sceptics “who doubt only that they may doubt, and seek nothing beyond uncertainty itself”.

Even after nine years though, he still hadn’t resolved any of the more intractable problems occupying the best minds of his time or made any headway on the “principles of philosophy”. He confesses that, given the difficulty of the task he had selected for himself, he probably wouldn’t have even begun unless he had heard a rumour about himself saying that he had already completed his enquiry. So, not wanting to “be esteemed different from what I really am” he felt he had to make himself worthy of his reputation.

Part Four

*…in which Descartes affirms the truth of his own existence (as soul) and the existence of God*

Descartes discards all of his opinions as false and proceeds to build up from nothing. Since our senses deceive us and we can be deceived even more totally in our dreams it seems we can be sure of nothing. But then he realises that even if he was to doubt the truth of everything, it must still be true that he exists; “I think, therefore I am”. This is his first principle of philosophy.

Next, Descartes theorises that even though he can imagine there are no bodies or things in the world, just the act of imagining guarantees that he exists, and if he were to stop thinking then even though all manner of objects actually exist in the world there would no longer be any reason to suppose he exists. On the basis of these two propositions he concludes that “I [am] a substance whose whole essence or nature consists only in thinking… so that… the mind by which I am what I am, is wholly distinct from the body, and is even more easily known than the latter”.

Having discovered an absolutely certain truth (I exist), Descartes then looks for a general principle, “the ground of this certitude”, and since nothing beyond the fact that he clearly sees this statement to be true confirms its certitude he concludes, “I might take, as a general rule, the principle, that all things which we very clearly and distinctly conceive are true”.

Next Descartes gives two ‘proofs’ for the existence of God. The first turns on an old Scholastic notion that the cause must be greater than the effect it produces. Since Descartes can conceive of many things more perfect than himself, he concludes that these notions must have come from something “which even possessed within itself all the perfections of which I could form any idea; that is to say… God.”

The second proof is the ontological argument and simply states that the idea of existence is implicitly contained in the idea of a Perfect Being in the same way that the sum of the interior angles adding to 180 degrees is implicitly contained within the idea of a triangle.

Descartes goes a step further and enquires into the nature of God stating that since he “was assured that no one [property] which indicated any imperfection was in him [God]”, properties like doubt, sadness, and so on, cannot be a part of God. Since he also recognised in himself “that the intelligent nature [mind] is distinct from the corporeal [body]” and that “all composition is an evidence of dependency, and that a state of dependency is manifestly a state of imperfection”, God cannot be composed of two natures, i.e. mind and body, but rather must be mind alone.

Those who disbelieve that God exists have never raised their thoughts above sensible objects, e.g. the empirical philosophers who claim that all our ideas are derived from sensory data. This appears false to Descartes because it fails to account for how we can have ideas of God and of the soul.

Descartes also claims that those thinkers who don’t admit the ‘proofs’ offered above must presuppose the existence of God anyway because without admitting that God exists, he is Perfect, and all their knowledge derives from him, they can never be certain that their clear and distinct ideas are actually true.

He finishes this section by asking how we can know that thoughts in dreams are false and waking thoughts are true. This is so because we ought never to automatically believe our senses, but rather should subject everything to the higher authority of reason. And since “our reasonings are never so clear or so complete during sleep as when we are awake” it is our waking thoughts that will infallibly carry us to the truth.

Part Five

*… in which Descartes offers a summary of his book Le Monde (never published in his lifetime) which attempts to explain everything in our physical universe without recourse to God*

Descartes announces that he will summarise the discoveries he has made and written about in *Le Monde* (The World) using his method but “which certain considerations prevent me from publishing”. These discoveries take in light, the sun and stars, the “heavens”, the planets, comets and earth, all the bodies on earth, and finally man.

Rather than the actual content of Descartes’ theories here, the important thing to note is that he was attempting to provide an explanation of everything in our physical universe *without recourse to God*. His cosmology does include a creation event but he limits God to giving this primordial matter “no other form than that of chaos… [and establishing] certain laws of nature” which have gradually, through purely mechanistic processes, become what we see today. The only thing he admits that he couldn’t (yet) understand in purely mechanistic terms was humanity so he concedes that God created us physically complete at the outset and “annexed [the rational soul] to this body”.

He next asserts that even though God made humans, our physical bodies are nothing more than complex machines which operate on purely physical principles. In demonstration of this he goes on to give a detailed account of how the heart works, without reference to anything non-physical or mysterious. In fact, if there were machines resembling organs which were arranged to look like us, there would only be two ways to tell they weren’t human. First, language. Descartes thought no machine could ever communicate intelligently like we do. Second, reason. A machine will always act, not from true knowledge but from the disposition of its organs, and in certain cases this will betray it as an automaton.

In an extension of this discussion, he notes that these two tests also let us distinguish between animals and humans. Even the stupidest of humans can still learn the fundamentals of a language and make their thoughts understood but the most intelligent animals cannot. Not only this, but even the most perfect animal of its species is just as incapable of being instructed in language or rational thought as the most stupid infant of its kind, and this couldn’t be the case unless “the soul of brutes were of a nature wholly different from ours.” All of this demonstrates “not only that the brutes have less reason than man, but that they have none at all”.

The final topic Descartes discusses in *Le Monde* is the “reasonable soul”, which he feels could not have arisen naturally but must have been expressly created. He interestingly also asserts that “it is not sufficient that it be lodged in the human body exactly like a pilot in a ship… but that it is necessary for it to be joined and united more closely to the body”.

Part Six

*…in which Descartes discusses the importance of scientific progress and reasons for and against publishing his ideas*

In this final section, Descartes reveals himself to be a scientist through and through. He values his method because it makes it “possible to arrive at knowledge highly useful in life… [so we might] thus render ourselves the lords and possessors of nature.” He also recommends this course of action because it will advance medicine and assist the “preservation of health, which is without doubt, of all the blessings of this life, the first and fundamental one”. Advancing medicine is extremely important to Descartes because he hoped we could “free ourselves from an infinity of maladies of body as well as of mind, and perhaps also even from the debility of age”.

Like any good scientist, Descartes realises the value of experiment saying that “according as henceforward I shall have the means of making more or fewer experiments, I shall in the same proportion make greater or less progress in the knowledge of nature.”

Descartes also goes into a little more detail here about why he won’t publish *Le Monde*. First and foremost, he is wary of clashing with the Church. He makes particular mention of the fact that the Church has recently “condemned a certain doctrine in physics” (the heliocentric hypothesis) and that he finds himself in agreement with Galileo.

Second, he bemoans “the shortness of life” and feels that publishing his theories will rob him of time, as he becomes embroiled in disputes and required to spend time demonstrating his theories.

He considers the objections that offering his theories up for criticism would help spot errors that he may have overlooked and bring useful contributions to his ideas, but rejects these because; 1) in his experience no one had ever made a salient criticism he hadn’t already thought of, 2) he judged that none of his critics had ever been more rigorous or more equitable than he himself, 3) the advantages to others (in terms of improving their understanding) would be small because he still had a lot more work to do “before they [his ideas] can be applied to practice”, and 4) no one who has to learn a method from someone else can make more progress using that method than the person who has discovered it.

He does acknowledge three reasons for giving “the public some account of my doings and designs” though; 1) since he has already earned a certain amount of fame, it would prevent him “from being ill-spoken of” as if he hasn’t made any progress at all, 2) he realises the “infinity of experiments I require, and which it is impossible for me to make without the assistance of others”, and 3) it is the only way he can overcome the problem of time, i.e. by letting others know of his discoveries thereby inciting “men of superior genius to strive to proceed further” even if they do so after his own death.