

Session II: Jan. 31, 2013

Descartes' Discourse on the Method...

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## Background

- Biographical sketch.
  - René Descartes was born in La Haye (now La Haye Descartes) in 1596 and died in Stockholm, Sweden, 1650.
  - He was the son of a minor official of moderate wealth.
  - At age 10 he was enrolled in the Jesuit college of La Flèche, Anjou, where he remained for 8 years, receiving special treatment because of his brilliance.
  - He took a law degree at Poitiers in 1618.
  - He then joined the army of Prince Maurice of Nassau, which was engaged in one of the endless religious wars of the time. We do not know what his capacity was.
  - While in the service of the Prince he became acquainted with Isaac Beeckman, a scholar and scientific researcher, who encouraged Descartes to pursue his mathematical and scientific interests, the first result being a short work on music.
  - There followed a period of about 10 years for which we have little record, but in which Descartes reached important results in mathematics, science, and, most notably, heuristic.
  - He then moved to Holland where he remained for most of the rest of his life, engaged in research and writing, supported by his inheritance.
    - He moved often, revealing his addresses only to his friend and unofficial agent, the priest Pierre Mersenne.
    - He likely met Hugo Grotius during this period.

## Biographical sketch (cont.)

- Descartes fathered a daughter, Francine, born 1635. The girl's death in 1640 was the most severe blow of his life, Descartes said.
- In 1649 Descartes was asked to come to Sweden to instruct the queen, Christina, with whom he had begun a correspondence. Having "… no wish to go to the land of bears," he said, he went anyway.
  - He died there, perhaps of pneumonia contracted as a consequence of the cold and the early hours at which Christina required him to rise and provide her instruction.

## · Works.

- Descartes had completed some important texts when Galileo was condemned by the Church in 1633, causing him to withhold publication.
- Discourse on the Method... published as preface to three major scientific works, Optics, Meteorology, Geometry—1637.
  - The Discourse, very much contrary to the accepted standards of scholarly publication, was written in French.
    - The book was widely circulated and became a model of French prose.
  - Meditations on First Philosophy—1641, in Latin, with objections from prominent scholars together with Descartes' replies. Descartes' most important single philosophical work.
  - Principles of Philosophy—1644, in Latin. Intended as a philosophical and theological handbook for priests.
  - Several lesser works were published in the years before his death, and one very important unfinished work from the period 1628-30, the Rules for the Direction of the Mind, discovered long after Descartes' death and published only in 1701. It gives a more detailed and complete account of the method set out so briefly in the Discourse.

- The Discourse on the Method of Rightly Conducting the Reason and Seeking Truth in the Sciences.
  - Structure of the text.
    - Descartes offers his own division of the text in an opening paragraph in which he says the text falls into six parts.
      - I: an autobiography setting out the motivation for the work.
      - II: a heuristic, or logic, briefly expounded.
      - III: a preliminary ethics.
      - IV: a metaphysics, illustrating the application of the heuristic.
      - V: further illustrations from natural science.
      - VI: a retrospective with thoughts on the conditions for further progress.
    - The Editors and Translators of the *Discourse* have generally adopted these divisions, as have scholars referring to the text. Some translators add subtitles of their own invention to the divisions.
    - We will be interested primarily in Part I.
    - Note that the proper short form of the title is Discourse on <u>the Method</u>, not the common Discourse on Method.
      - Descartes takes himself to be expounding the only proper method.
      - 'Science' in the title means an intellectual discipline; it does not have the narrow sense that it does in the U.S. today.

- The subject of the work in general terms.
  - The subject of the *Discourse* is the acquisition of knowledge, i.e., creative, original learning.
    - Descartes was a very great mathematician and an important scientist.
      - The Geometry published with the Discourse is a highly original work.
      - The Optics included an exposition of what is now generally known as Snell's Law.
    - But Descartes was also a gifted observer of his own thinking. In making his discoveries we may say that he watched himself learn, and from that great and lengthy experiment in discovery (learning) he developed his method.
    - Thus, Part I is a peculiar autobiography. It is the story of his *mis*-education, the failure of the best education that Europe could offer a brilliant young man to provide him with the knowledge necessary "to walk with confidence in this life."
    - Consequently, he sets out on a journey of self-education, studying first "the great book of the world," and then himself.
    - The Method is the result of that self-study, as are the results of its application.
  - Discourse, Pt. I.
    - In most translations Pt. I consists of about 16 paragraphs, not counting the paragraph in which Descartes tell the reader about the six parts of the work.

- Discourse, Pt. I (cont.).
  - The first 5 paragraphs (through that beginning, "So it is not my intention to present a method which everyone ought to follow...") serve as a kind of introduction to the heart of the argument.
    - The opening words are justifiably famous: "Good sense is mankind's most equitably divided endowment..."
    - But the argument for this proposition is not very convincing, even in light of its Aristotelian character.
      - · No one wants more good sense than he has.
      - It is unlikely that everyone is mistaken in so being satisfied.
      - Therefore, good sense, reason, the ability to distinguish truth from falsehood, is fundamentally the same in all persons.
    - At this point he calls upon the Scholastic philosophers for assistance. They, building upon Aristotle, assert that reason is the distinguishing characteristic of human beings, what makes us different from all other animals.
      - Here there is a remarkable hidden step in the argument, as follows:
        - If there were degrees of reason, there would be degrees of humanity;
        - But there are no degrees of humanity;
        - Therefore, the conclusion stated above.
      - The proposition represents a blend of Scholastic doctrine and a major point from the recently discovered ancient Stoics; viz. that all human beings are brothers.
        - It will ultimately lead to the end of slavery, Beethoven's Ninth Symphony's Choral Fourth Movement, and its present day varieties of misconstruction.
        - More importantly for our purposes, coupled with the rise of Protestantism it results in the democratic revolution in the politics of the West, of which our D.I. is the first step.

- Discourse, Pt. I (cont.).
  - The modesty which Descartes expresses in the second and third paragraphs is entirely false.
    - He was a proud man, keenly aware of the superiority of his own intellect. In these days
      before the formation of research societies scholars carried on correspondence, as on a
      listserv today. Descartes delighted in posing mathematical problems for other leading
      mathematicians that only he could solve.
      - Note the concluding sentence of par. 3: "And although from the philosophers' viewpoint..."
      - He has found the most important human occupation, the one which promises the most for the future.
        - · This emphasis on the future is a fundamental characteristic of modern thought.
      - The translation of the last sentence of paragraph 4 usually hides an important point: He does not say "methods of progress," or something equivalent, but "means of self-instruction"; i.e., reports of the judgment of others may aid him in teaching himself.
      - Par. 5 gives us the introduction to the autobiography: "I only propose this writing as an autobiography, or,..."
        - In part, this cautionary note derives from the insincerity of the modesty in paragraphs 2 and 3, but is more probably a recognition of the radical implications of his arguments, likely to be upsetting to both Crown and Church.
        - His work was eventually formally condemned by the Church despite his own belief that it strongly supported the most fundamental of the Christian doctrines.

- The autobiography proper, pars. 6-16.
  - "From my childhood I lived in a world of books,..."
    - These opening words are echoed by Sartre in his own biography, Les Mots, "The Words."
    - The sentiment of the paragraph as a whole is seen again in Henry Adams' famous autobiography, The Education of Henry Adams, 1918.
      - "...[O]n looking back, fifty years later, at his own figure in 1854, and pondering on the needs of the twentieth century, he wondered whether... the boy of 1854 stood nearer to the thought of 1904, or to that of the year 1... The calculation was clouded by the undetermined values of twentieth-century thought, but the story will show his reasons for thinking that, in essentials like religion, ethics, philosophy; in history, literature, art; in the concepts of all science, except perhaps mathematics, the American boy of 1854 stood nearer the year 1 than to the year 1900. The education he had received bore little relation to the education he needed. Speaking as an American of 1900, he had as yet no education at all."
    - There follows a catalog of the disciplines he had studied at La Flèche, with the faults of each enumerated.
    - The most important of these disciplinary accounts occurs in paragraph 11, "I was especially pleased with mathematics..." Here he contrasts the certainty of mathematics, whose propositions are erected on solid foundations, with ethics, whose magnificent assertions rest on "mud and sand."
      - Mathematics is relatively vacuous because it offers nothing like that allegedly offered by ethics, viz., knowledge necessary for walking with confidence in this life.
      - The implication is that we must have an amalgamation of the two disciplines.

- The autobiography proper, pars. 6-16 (cont.).
  - Two important dubious translations:
    - Par. 15 "the great book of nature" is "the great book of the world." He does not mean that he studied only the natural world, but the human world, too. The phrase recurs in par. 16.
    - Par. 15, concluding words, "act with greater confidence" is "walk with confidence in this life." The lack that he felt is spiritual, and what he seeks is knowledge which will be the source of spiritual guidance, giving meaning to his life, as well as providing material guidance.
  - Par. 16: "Also, I gradually freed myself from many errors which could obscure the light of nature and make us less capable of correct reasoning."
    - "the light of nature," or "the natural light" is a crucial concept for Descartes. It
      designates the power of the mind to apprehend the truth; it is the capacity of
      reason in its purest form. It is "obscured" by false beliefs, confusion, and other
      mental disabilities. He has been struggling to free this power and believes he has
      succeeded.
  - Now he turns inward to study himself, and here he will find, implanted by nature in his own mind, the seeds of true knowledge.
    - That leads us to a discussion of Descartes' distinctive and highly influential epistemology.

- Major themes in Discourse I.
  - Descartes is generally regarded as the father of modern philosophy, but he
    is also rightly regarded as more responsible than any other single thinker
    for the climate of ideas that constitutes what has been called the modern
    mind.
  - The Discourse was the primary work through which Descartes became known, and Part I is perhaps the most appreciable section of the book.
  - In it we find a several major modern themes.
    - Egalitarianism.
    - The instrumental concept of knowledge.
    - · Alienation.
    - The repudiation of the past as mere prolog to the future, characterized by ignorance and error.
    - The ideal of progress, however ill-defined the general goal.
    - The repudiation of authority.
    - The primacy of technique over inspiration, creativity, genius.
    - Individualism.

- Descartes' epistemology.
  - The most obvious characteristic of those propositions which we regard as belonging properly to the body of human knowledge is that they are certain, i.e., beyond reasonable doubt.
    - For example, no one with even an elementary understanding of mathematics would doubt that 2+3=5, or that the sum of the interior angles of a plane triangle is 180 degrees.
    - Nor would we doubt that, within certain limits, f=ma; i.e., force equals mass times acceleration, among the better known of Newton's equations.
  - Thus, if one wanted to determine what he, or she, really knew, a good experiment would be to cast aside all propositions believed which were in the least doubtful.
  - This is the strategy that Descartes employs. He describes it too briefly in Part IV's first paragraphs, and in much greater detail in the *Meditations*.
    - The technique is called by scholars "the method of radical doubt."
    - It may be compared to panning for gold. The miner scoops up a pan of gravel and water, sloshes it back and forth so the heaviest particles eventually sink to the bottom, and pours off the lighter particles. What remains in the bottom of the pan is gold.
    - Those of his beliefs that survive the fire of radical doubt constitute his most elemental knowledge.
      - From these "germs of truth" the remainder of his knowledge will be built.

- Descartes' epistemology (cont.).
  - The first elemental truth that Descartes reveals to himself is that he is a thinking thing.
    - This results from the famous cogito argument: cogito, ergo sum; I think, therefore, I am.
    - He then investigates by means of introspection what it means to be a thinking thing and discovers a definitive psychological mark of true propositions.
      - They are "perceived" clearly and distinctly.
      - Perceived means apprehended internally by the light of reason, not externally by the eyes.
      - Clearly means they strike the mind with an immediacy like that of a pain. You cannot deny that you are in pain if, in fact, you are.
      - Distinctly means that the thing so perceived is placed in a relation to those things to which it is intrinsically related, but as distinct from them.
      - In short, Descartes believes himself to have discovered the psychological characteristics of the cognitive state of mind.
    - Further review of his thoughts reveals to him elemental concepts from which he
      is then able to deduce further truths: thus, new knowledge is derived by
      deduction from certainties already known.
    - Thus, he arrives at the universal mathematics he described so cryptically in Discourse, Pt. II.

- Descartes' epistemology (cont.).
  - Descartes' epistemology therefore belongs to the branch of that theory called "rationalism."
    - For the rationalist knowledge is constructed by deduction from given truths.
    - The paradigm case of knowledge is mathematics.
    - The other main branch of theory is called "empiricism"; it's basic premise is that knowledge comes from sense experience.
      - Plato and Saint Augustine were rationalists.
      - Aristotle and Saint Thomas were empiricists.
      - We will encounter empiricism in Locke and Hume.
      - Recall that the D.I. is a rationalist document.
    - Finally, we note that Descartes is the father of the modern concept of the mind in a more concrete sense than the one we've been discussing.
    - The familiar conception of the mind as a space wherein quasi-images called "ideas" are found derives from Descartes.
      - The word 'idea' comes from Plato, in whose works it designates the transcendental archetypes of the things of experience, not a thought in a person's mind.
      - With St. Augustine, the term comes to refer to the archetypes in God's mind from which he creates the world.

## Descartes' epistemology (cont.).

- To know, say, the nature of the grizzly bear (ursus arctos horribilis) is to understand what God had in mind in creating the species.
  - That requires faith. So the medieval Christian philosophers say, "I do not seek to know in order to believe; I believe in order that I may know."
- It is only through the works of Descartes that this common term, a Greek word merely rendered in our alphabet, comes to designate a thought in that special space we think of as the human mind.
- We can now easily see how a general feeling of confidence in the powers of the mind, in our ability to develop our knowledge and put it to work to improve our lives, and how an optimism about the future of humanity would take hold.
  - We call the historical period in which those feelings are endemic elements of the human spirit in the Western world the Enlightenment.
  - Not only is *Declaration of Independence* and expression of this spirit, but so also is the American Founding itself, and therefore the fundamental ideas of the nation.