

René Descartes

Certainty of Knowledge

René Descartes (1596-1650), was a french mathematician and philosopher, popularly known as the “father of modern philosophy.” He is famous for his aphorism ***cogito ergo sum*** (“I think, therefore I exist”).

He is also known as the “father of analytical geometry” (combining geometry with algebra), and his work laid the basis for the development of calculus. Analytical geometry, also known as coordinate geometry or Cartesian geometry, is the study of geometry using a coordinate system. The Cartesian coordinates are the foundation of analytical geometry and are essential to astronomy, physics, engineering, etc.

His main publications were *Discourse on Method* (1637), *Meditations on First Philosophy* (1641), *Principles of Philosophy* (1644).

Descartes' Doubts

Descartes had a keen desire to know the truth. And so, he did all he could do to do best in his studies at school and college. He also read the most important books of his day, and searched for knowledge. However, at the end of all this, he found out that he knew nothing significant because:

1. He was full of doubts
2. All the topics in philosophy were controversial and there was no consensus or agreement among philosophers regarding a single subject.
3. The other sciences of the day were based on such controversial philosophy; so, they were also unreliable.
4. Theology was a field of study that began with divine revelation (e.g the Bible) and not with reason. He felt that this was beyond him.

So, Descartes left his home and went about traveling, mixing with people, meeting armies, and gathering as much diversity of experience as possible. He realized that people of other customs and cultures (who were called barbarians by many Europeans) were also intelligent and civilized in their own respect. So, he concluded that

1. What most people were believing to be absolute truths were actually only relative to their own customs and cultures. Such beliefs could not be relied upon if one really wanted to have absolute certainty of truth in life.
2. What the majority think is no guarantee of truth. The majority of people believe all sorts of weird things.
3. What is needed is practical truth, knowledge that is personally useful.

Descartes' Precepts

Descartes decided to observe 4 precepts in his quest for truth.

1. Accept only what is indubitably certain.
2. To solve a problem, first break it into small bits. Solve it bit by bit.
3. Solve the easier bits first, then move on to solving the more difficult ones.
4. Rigorously review and re-test everything.

He got his inspiration for this method from mathematics. Mathematicians always broke a problem into bits, moved from the easier to the more difficult, and rigorously reviewed their findings.

However, though Descartes had strong confidence in mathematics he had one big problem to solve before he could accept it. Unless he could solve it, mathematics was also not indubitable. This problem is known as the deceiving god or evil demon problem.

The Deceiving God aka Evil Demon Problem

Suppose there is an all-powerful God, but he has created us (programmed us) in such a way that every time we calculate $1+1$, we get the result 2 (but, in reality it may not be the case). If this was true, then all my mathematical calculations would be wrong (though I imagined them to be right). Similarly, it is possible that all my other experiences (that I see people, trees, vehicles, buildings) are an illusion created in my mind by this God (as in the *Matrix*) so that what I am experiencing right now is all just an illusion as in a dream. In that case, my knowledge is based on uncertainty.

Suppose we were not created by any God, but exist by some other means (e.g. imperfect natural forces or an imperfect god or gods). Then, in that case, we would be more deceivable and open to error than ever. [Obviously, because there is no solid ground or foundation to guarantee the reliability of my faculty of knowledge].

Unless the deceiving god aka evil demon problem was solved, Descartes realized, all knowledge (including mathematics) is covered by the shadow of doubt.

Descartes finds his Foundations

But, Descartes suddenly realized that even if a God or a demon were deceiving him, and he could doubt the whole world of experiences (people, trees, things, etc), there is one thing that he could not doubt, the fact that it is he who is doing the doubting or it is he who is wondering if he is being deceived. In other words, he could not doubt his own existence. Thus, he was able to see that:

I think, therefore **I exist**
Cogito ergo sum (in Latin)

It could also be stated as

I am doubting, therefore I am existing
Or
Am I being deceived? That means, I exist.

Descartes thought that this truth “I exist” is so simple and commonsensical that it cannot be refuted. For, if someone said “I don’t exist”, he only contradicts himself. This truth is self-evident, *a priori* and is known by **intuition** (i.e. clear and definite knowledge), not by inference (or reasoning and arguments).

Next, Descartes realized that this meant that he is a thinking being (**I think**) which meant that he is a mind. This also meant that the mind is different from the body, because he was able to doubt the reality of his body (he could imagine his body did not exist and that it was an illusion), but he could not doubt the reality of himself as a thinking being. This led him to identify the **mind-body dualism** (for which Descartes is famous as well).

Next, Descartes focused on the idea of perfection and claimed to be able to see that an all-perfect being (God) necessarily and eternally exists. He claimed to know this not on the basis of reasoning, but by clarity of intuition. He said that if people would steadily fix their mind on this concept of the all-perfect being, they would be able to see for themselves that this all-perfect being must have necessary and eternal existence. Descartes went forward and gave a few arguments to help others see this for themselves.

a. The Ontological Argument:

1. Whatever I clearly and distinctly perceive to be contained in the idea of something is true of that thing.
2. I clearly and distinctly perceive that necessary existence is contained in the idea of God.
3. Therefore, God exists. (See Nolan 2015)

This argument is based on Descartes' rule of clear and distinct perception (intuition), that whatever is clear and distinct to the mind's eye is also true in reality.

Another way of putting this argument would be:

1. I have an idea of a supremely perfect being, i.e. a being having all perfections.
2. Necessary existence is a perfection.
3. Therefore, a supremely perfect being exists (See Nolan 2015)

If we say that we have the concept of the all-perfect, but also say that such an all-perfect being does not exist, then we are actually saying that this all-perfect being is lacking something, viz., existence. However, if the all-perfect lacks something, then how can it be all-perfect? Therefore, the all-perfect must necessarily exist.

b. The Trademark Argument:

This has come to be known as the trademark argument because of Descartes' claim that the idea of the all-perfect could only be stamped on our minds by an all-perfect God. It is his trademark.

Argument 1

1. We have a concept of things, e.g. a machine on the basis of either previously seeing another machine or because (if we have never seen the like) we have invented it ourselves.
2. We have the concept of an all-perfect being.
3. We have neither seen such a being nor have ever created such a being (for nothing around us nor we are all-perfect).
4. Therefore, the concept of an all-perfect being must have some other source.
5. That source must be all-perfect, or else it cannot produce the concept of an all-perfect being.
6. Therefore, such a source, viz. an all-perfect being necessarily exists.

Argument 2

1. If I have the concept of something more perfect than myself, then I am not the source of my own being.
2. I have the concept of something more perfect than myself
3. Therefore, I am not the source of my own being.
4. If I am not the source of my own being because I am not all-perfect, then an all-perfect being must be the source of my being.
5. I am not the source of my own being because I am not all-perfect.
6. Therefore, an all perfect being is the source of my being.

In other words,

1. I have a clear and distinct idea of an all-perfect being.
2. The idea of an all-perfect can only be produced by an all-perfect being.
3. Therefore, the idea of an all-perfect being in me has been produced by an all-perfect being.

c. The Argument from Contingency or the Conservation Argument:

1. If contingent (dependent) things continually exist (endure, are conserved), then a self-existent reason for their endurance necessarily exists.
2. Contingent things continually exist.
3. Therefore, a self-existent reason for their endurance necessarily (independently) exists.

In other words,

1. If things that are dependent and changing can persist through time, then there must be an independent and unchanging being that makes this possible.
2. Dependent and changing things persist through time.
3. Therefore, there is an independent and unchanging being who makes this possible.

Note that these arguments were only formulated as eye-openers by Descartes. He, actually, believed that the knowledge of God's existence is not derived from arguments but is the result of clear and distinct perception.

Descartes' Problem Resolved

Once Descartes was able to become certain of the existence of an all-perfect God, he could immediately also be sure that this all-perfect God **would not** deceive him by creating in him a faulty faculty of knowledge; in other words, God who is all-powerful, all-knowing, all-good, and all-true would not lead Descartes into falsehood since such an act would be contrary to the perfect nature of God. Thus, Descartes found his foundation for knowledge: reliance on God's perfect nature.

Proceeding on from here, he was able to recover his faith in mathematical truths (since he was able to now rely on his reasoning faculty) and proceed on to enquire of other things.

Note: In all this search, Descartes did not turn to any of the previous philosophers (like Plato or Aristotle). He began afresh as if none of them ever existed. This was the bravest and boldest step a philosopher could have ever taken in that time, and so we may say that Descartes is rightly called as the father of modern philosophy.

Thus, Descartes' knowledge began with the sure foundation of:

1. I exist
2. God exists
3. My reasoning faculty is reliable
4. Mathematical truths are indubitable

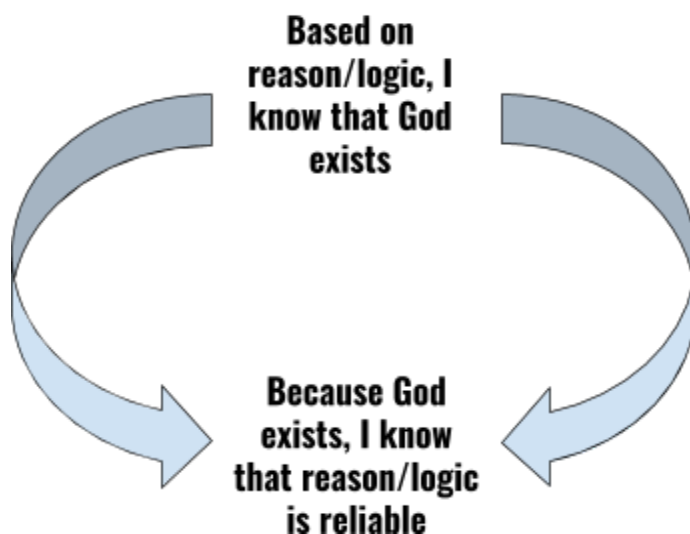
Some Associated "isms"

1. **Internalism** - evidence for knowledge is internal and individually accessible
2. **Foundationalism** - there are foundational (basic) truths that are indubitable
3. **Rationalism** - reason more reliable than sense-experience in knowing truth
4. **Intuitionism** - there are things that can be immediately and distinctly perceived to be true without the aid of inferential reasoning. Descartes' rational intuitionism, however, does not accept any claim to intuitive perception that cannot be rationally established.
5. **Methodological Skepticism** - employ doubt in order to dissolve all doubts. Use doubt as a method of enquiry.
6. **Theological voluntarism** - God does whatever he wants to do.
7. **Mind-body dualism** - the mind is distinct from the body

Objections to Descartes' Arguments

Descartes circulated his draft of *Meditations* among prominent thinkers of his time in order to review and retest his philosophy before he sent for print. He received numerous responses and reviews and responded to all objections that he considered to be serious. The objections further consolidated his belief that his findings were true. Some of the key objections were:

1. **“I think” does not necessarily entail “I exist”; it may only entail “some thinking is going on” or “thinking exists.”** However, for Descartes “I exist” is not an entailment (not the result of a syllogism), but is intuited. Descartes had more confidence in inductive reasoning (starting with small bits before coming up with the bigger picture) than in deductive reasoning. After reaching a general conclusion through accurate inductive reasoning, one can start deducing conclusions from such general premises. But, one has to begin with individual instances and smaller bits of information. “I exist” is the smallest first bit of truth that one just is aware of most distinctly. To Descartes, denying this truth is self-contradictory.
2. One critic thought that Descartes was arguing in a circle (begging the question) when he was trying to use reason to prove God’s existence, but then using the certainty of God’s existence to prove the reliability of reason.



However, Descartes would again assert that this is a misconception. Knowledge of God’s existence is not derived from reason/logic, it is clearly and distinctly

perceived by intuition. Thus, through intuition, he claims to be able to see that God exists. This reconsolidates his faith in the reliability of right reasoning. Of course, what is known by intuition is not irrational but is rational. Therefore, Descartes' intuitionism may be referred to as **rational intuitionism**. He does provide several rational proofs for what he regards as truths that are clearly and distinctly perceived.

3. Another criticism was that the idea of any being includes its existence, but that does not necessitate its existence in reality. For instance, just because I can think of a triangle or a giant tree does not mean that such a triangle or a giant tree exists. Descartes responded by admitting that this is true. However, there was a distinction between the idea of finite things and the idea of an infinite and all-perfect God. The idea of finite things (e.g. a triangle with three sides) includes contingent or possible existence; however, the idea of the all-perfect God includes necessary existence.
4. Another criticism was that the idea of the all-perfect one is not actually clear to all people, not everyone has it. Descartes response was that the idea of the all-perfect one is certainly not clear to everyone; one is only able to see it clearly and distinctly through careful and steady contemplation on the truth.
5. Critics of the trademark argument have challenged the possibility of the concept of the all-perfect. They have asked how it may be possible that a finite mind can have a clear and distinct idea of an infinite God. Descartes responds by stating that though a finite mind cannot grasp the infinite God, it does have a clear and distinct idea of the infinite, which itself proves that only an infinite God can provide finite minds with such clear and distinct idea of the infinite.
6. Also, it was objected that the fact that Descartes has an idea of something more perfect than him does not prove that such an idea is more perfect than him. Descartes responds by saying that though the mental idea may not be more perfect than him, the object that it represents must by definition or by nature of its essence be more perfect than him.
7. To the problem that the idea of the infinite is not perceived by a true idea but only by the negation of the finite (in the same way that one perceives repose and darkness as the negation of movement and of light), Descartes responded by asserting that "there is manifestly more reality in infinite substance than in

finite, and therefore that in some way I have in me the notion of the infinite earlier than the finite—to wit, the notion of God before that of myself.”

8. To the objection that “possibly I am something more than I suppose myself to be, and perhaps all those perfections which I attribute to God are in some way potentially in me, although they do not yet disclose themselves, or issue in action”, Descartes responds that this is not possible, firstly because the idea of God does not include anything that is merely potential since he is all-perfect and, secondly, because “the objective being of an idea cannot be produced by a being that exists potentially only, which properly speaking is nothing, but only by a being which is formal or actual.”

In conclusion, Descartes contends that his findings will always raise issues for people who do not take time to follow his quest for truth step by step. Those who just pull out passages from his book out of context and try to attack it are not the ones who have been seriously approaching his writing. In fact, if anyone would take care to follow his query step by step, and also read through all the objections and Descartes’ responses to them, then he would be rid of a lot of doubts and biases and through proper focus on the truth, he would himself be able to see the truth through his natural light.

Additional Notes:

1. When seeking religious protection for his *Meditations*, Descartes affirmed his Catholic faith and stated that if a Christian wanted to prove to a non-Christian his beliefs on the basis of biblical revelation, such proofs would not be acceptable to the non-Christian; however, if the truths of Christian faith were proved by reason, then the non-Christian would be able to see that the Christian faith is rational.
2. Hindu non-dualism uses skepticism regarding the external world to emphasize on the doctrine: “I alone exist” and “I am all-reality”. For it salvation is self-realization, to know that “I alone exist”, and that everything else is illusory.
3. Buddhism also approaches the sensory world with skepticism, but emphasizes on the teaching that true salvation is to realize the falsity of self and its desire. For Buddhism, the concept of the self is a combination of various things, and is ultimately false. It emphasizes on “no-self realization”.

Questions for Reflection:

1. If you were to use Descartes' method to find some self-evident foundations of knowledge, what would you find out?
2. Do you think there is an alternative solution to Descartes' deceiving God problem in order to reconsolidate the reliable position of mathematics?
3. Think of a few things that are known by intuition and not by reasoning. Are there any such things that you know of?
4. If you were to list intuition, reason, and experience in an hierarchy of importance, which one would you list as the most important and which as the least important?

References:

Nolan, Lawrence, "Descartes' Ontological Argument", *The Stanford Encyclopedia of Philosophy* (Fall 2015 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2015/entries/descartes-ontological/>