

HPS208 – How we think about life

Course Business

- ▶ Mid-Term grades will be released in the next couple of days
- ▶ The mid-terms themselves will be returned in class next week (March 14th)
- ▶ Grades for the first assignment are coming ASAP!
- ▶ Feedback will be somewhat minimal, but contact me if you want more detailed feedback
- ▶ The second assignment will be posted next week

Key terms

- ▶ Mechanism
- ▶ Cartesian Dualism
- ▶ Great Chain of Being

Let's review...

- ▶ We started from roughly this question: which bits of the world is it ok to eat?
- ▶ We looked briefly at Hindu, Jain, and Anishinaabe views on this
- ▶ All three regard plants and animals as having sentience
- ▶ And all three attribute moral standing to plants and animals, and sometimes other parts of the world



Let's review...

- ▶ We talked about the ASENT criteria for sentience, which apply to living things with a nervous system
- ▶ And we considered the literature on plant cognition, where there is a debate about how intelligent they are
- ▶ And finally we looked at Levin and Baluska's argument that cognition is extremely widespread (if we define 'cognition' loosely enough)



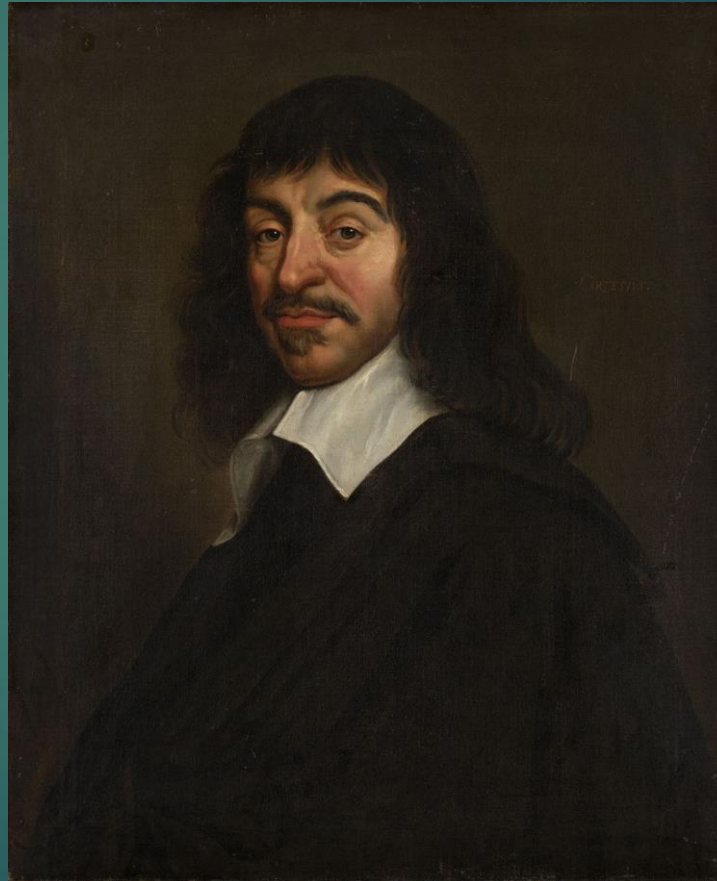
Looking forward

- ▶ For the next four weeks, we'll be dealing with the issue of mechanism
- ▶ This is a collection of ideas and ways of seeing the world that became common during the 'scientific revolution'
- ▶ This week we'll talk about its origins, the next two weeks its problems, and the week after talk about contemporary alternatives
- ▶ (and then we'll do a week on astrobiology because I think it's neat)



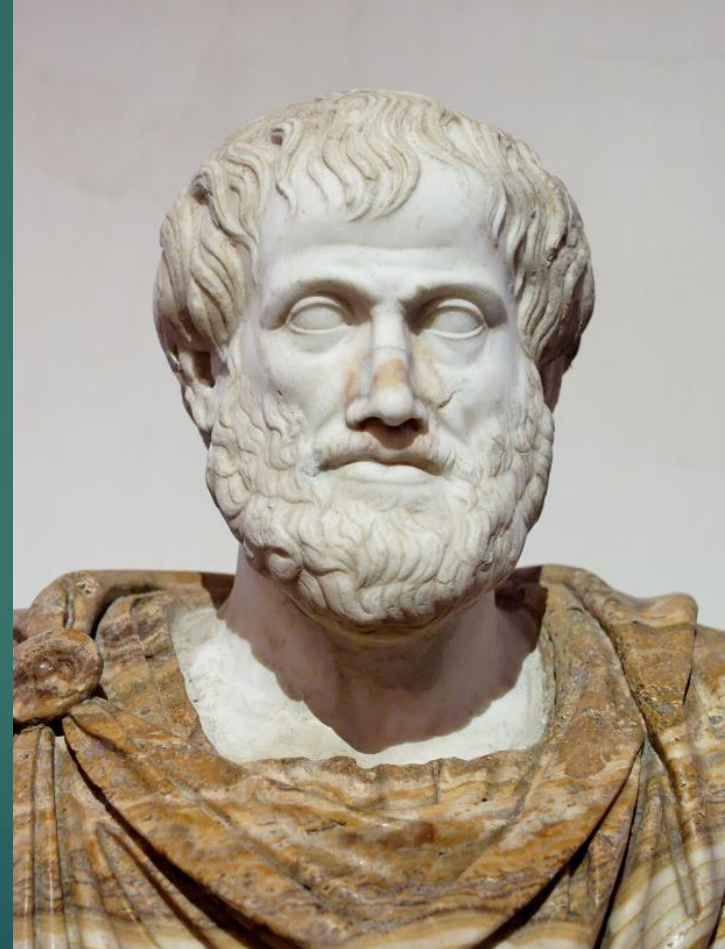
Descartes (1596-1650)

- ▶ The main guy our reading for this week focused on in Rene Descartes
- ▶ He's a mechanist about the material world, meaning he believes that everything can be explained in terms of the interactions of its smallest parts
- ▶ But he believes that human beings specifically have immaterial souls, which make us the only morally important living things



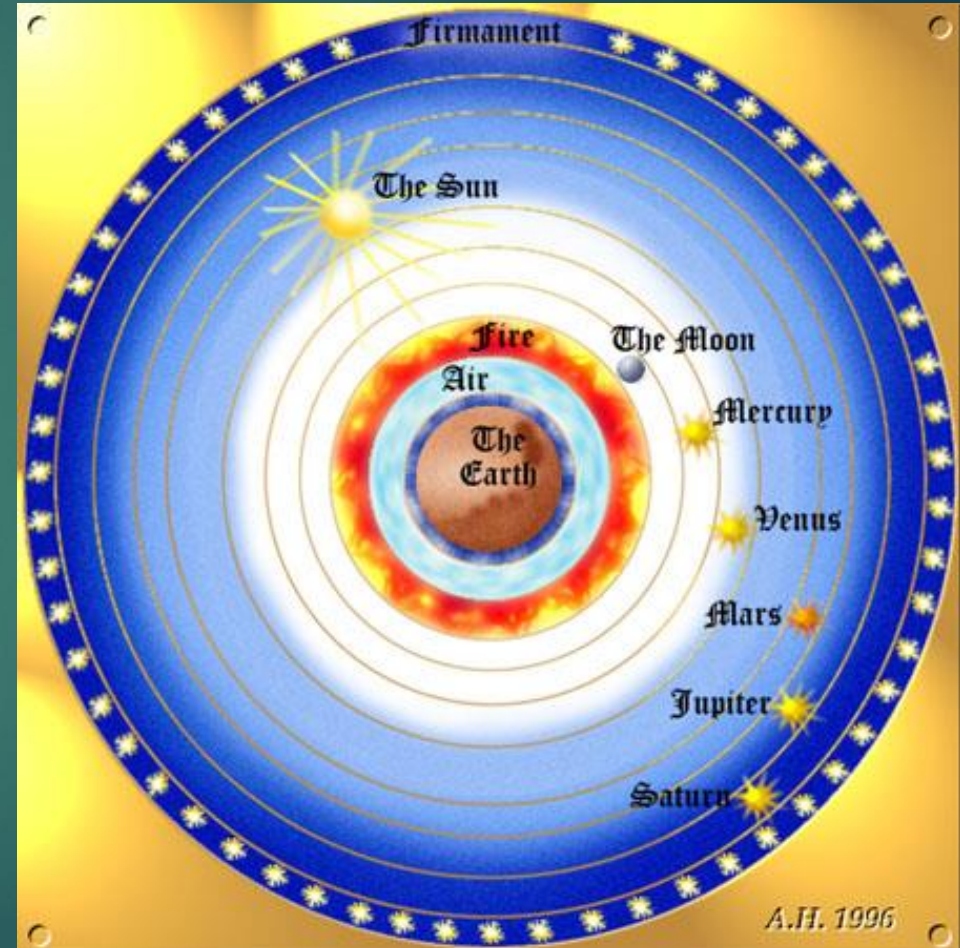
The Aristotelian Worldview

- ▶ But before we talk about mechanism, let's step back and see what it's a response to
- ▶ That is, the Aristotelian worldview
- ▶ This is particularly relevant for us because Descartes picture of the world is largely Christian in character, and Christianity of this period is heavily influenced by Aristotle



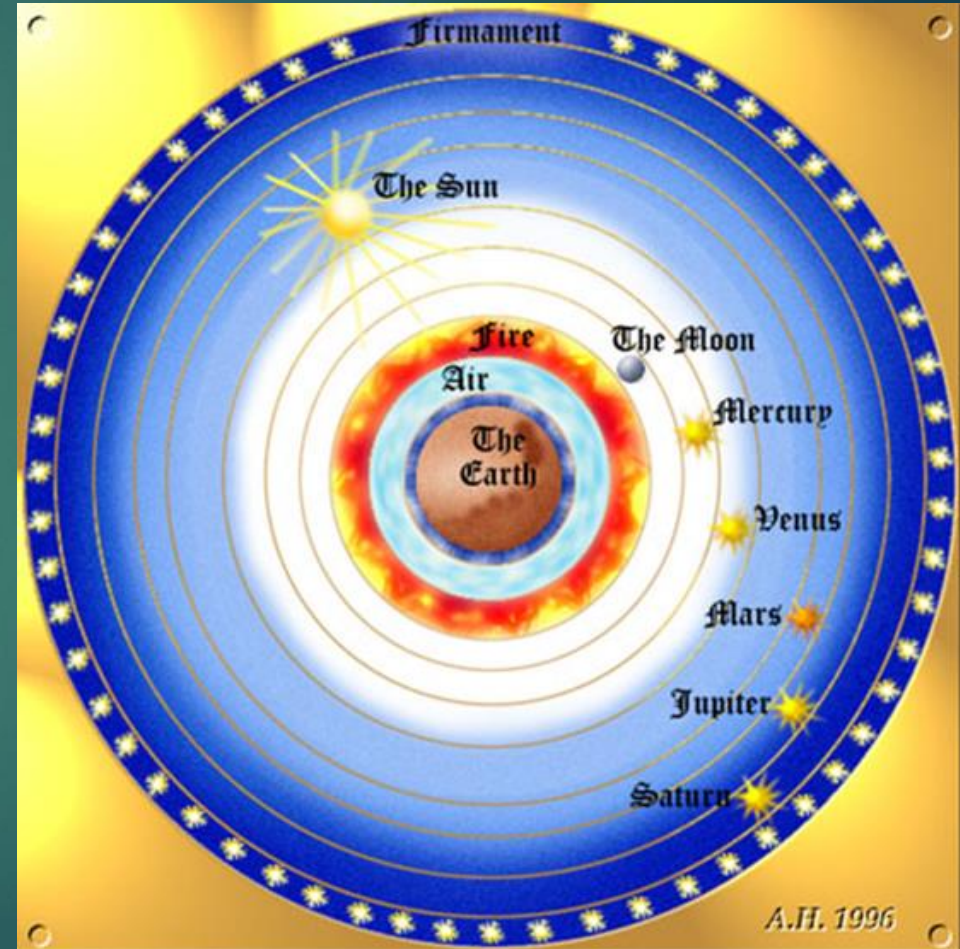
Aristotelian Worldview

- 1) The theory of natural motions
- 2) The conformity theory



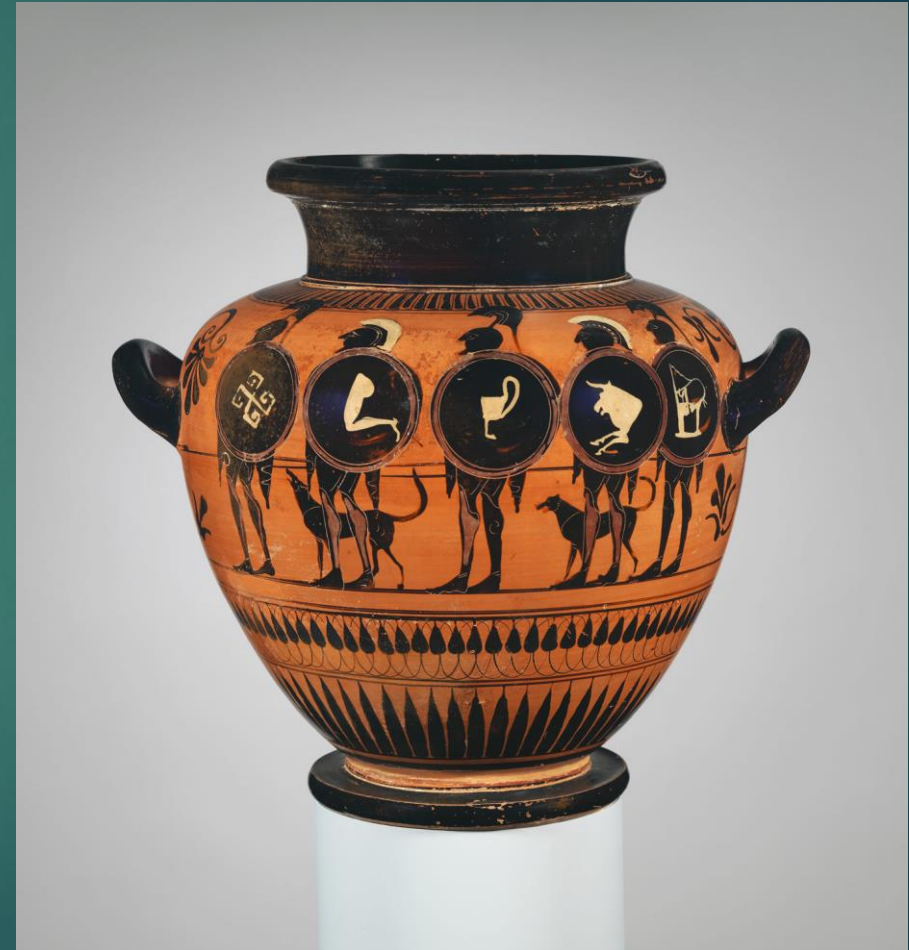
The Theory of Natural Motion

- ▶ Everything has an essence
- ▶ Its essence defines its purpose
- ▶ Things move according to their purposes



Four 'causes'

- ▶ Material
- ▶ Efficient
- ▶ Formal
- ▶ Final



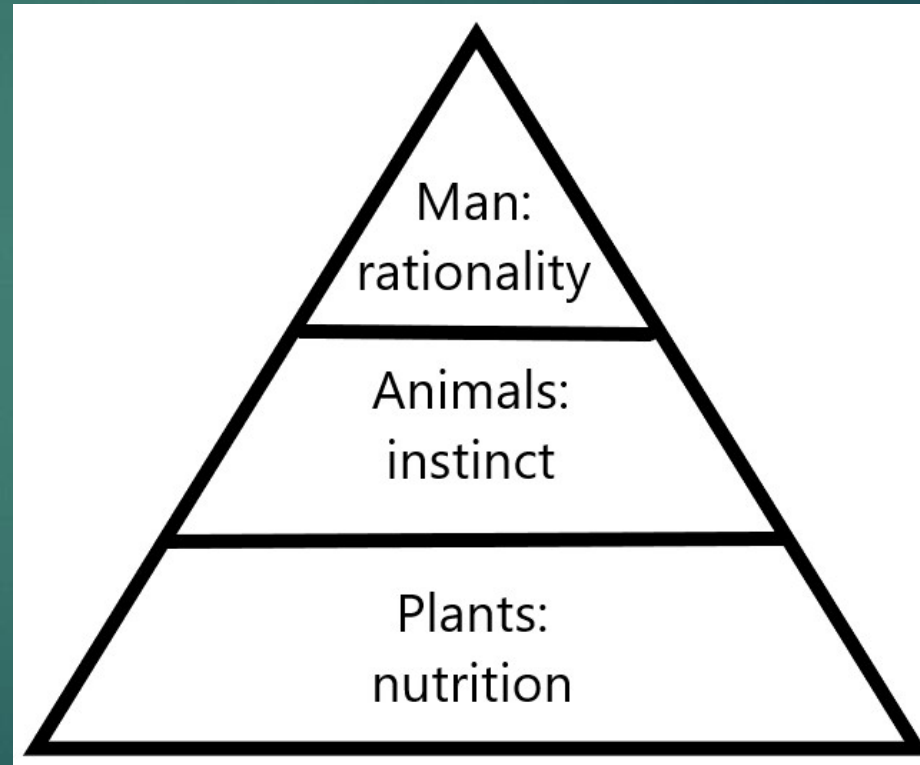
The Conformity Theory

- ▶ 'Eides' (translated usually as 'form') exist both in objects, and in our minds
- ▶ We are in direct contact with reality



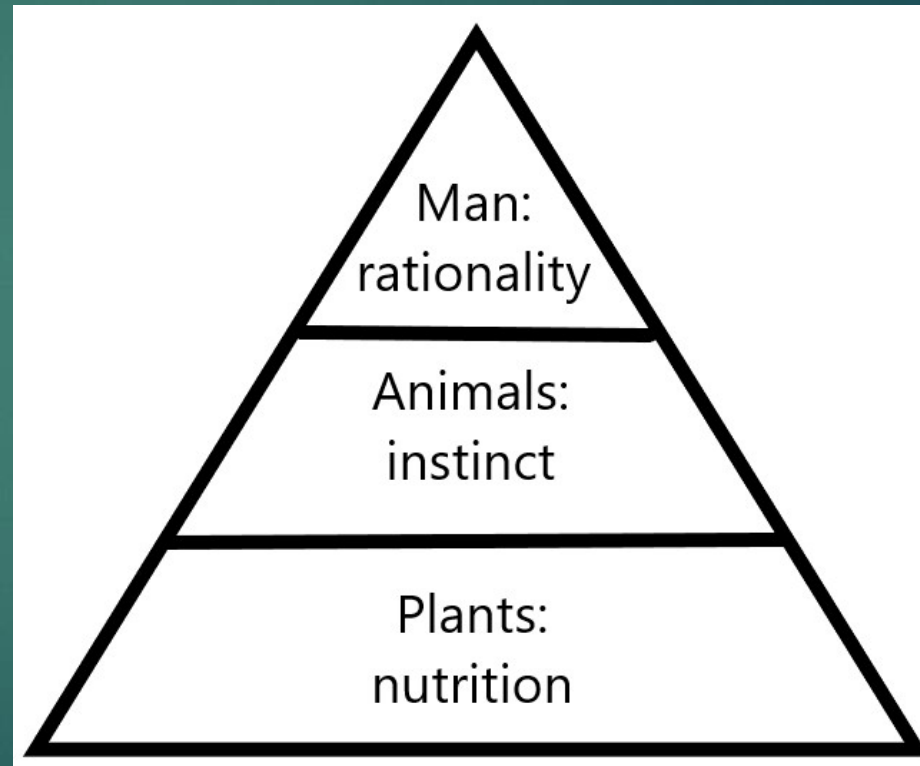
Aristotle's Three Souls

- ▶ Aristotle says humans have three souls, animals two, and plants just the one
- ▶ But for Aristotle, the soul is just the form of the body
- ▶ The soul is material, but only in the same way that the shape of a chair is different from the stuff it is made from



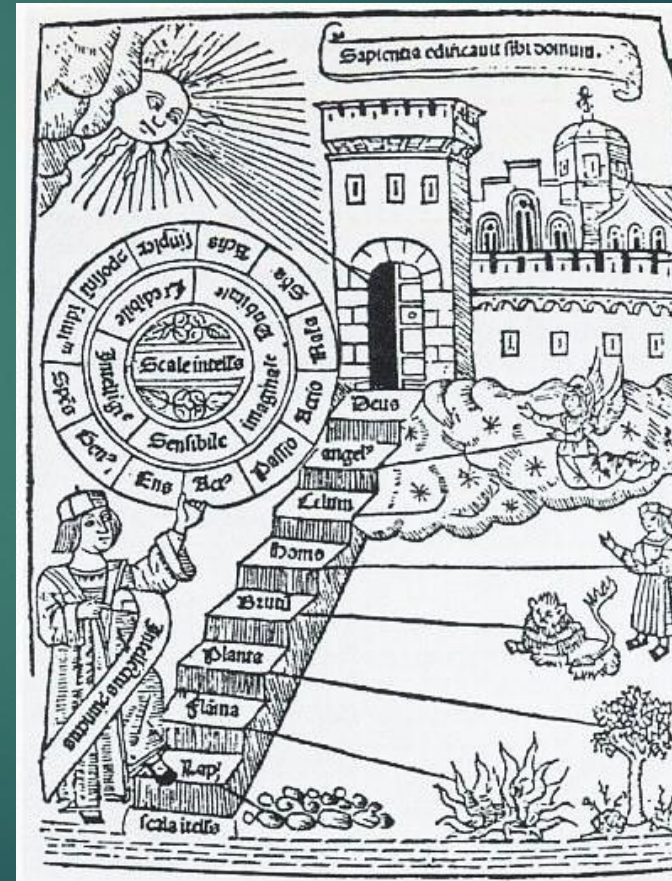
Aristotle

- ▶ There is a clear hierarchy here, determining the degree of moral consideration a living thing deserves
- ▶ When we get to mechanism we'll see a change in the metaphysical background theory, but the retention of the hierarchy



Monotheisms

- ▶ To get from Aristotle to Descartes, we'll take a quick detour through Christianity
- ▶ To get to Christianity, let's quickly talk about Judaism



Hierarchy, Kinship, and Responsibility

- ▶ Kalechofsky (2006) describes the Jewish relation to animals as hierarchical (with humans on top)
- ▶ But also one that is supposed to include a feeling of kinship, and kindness
- ▶ One strain of interpretation suggests that God commanded Adam and Eve to only eat plants in Eden, and only gave permission for meat eating after the flood
- ▶ Kalechofsky, R. (2006). Hierarchy, kinship, and responsibility: The Jewish relationship to the animal world. *A communion of subjects*, 91-102.



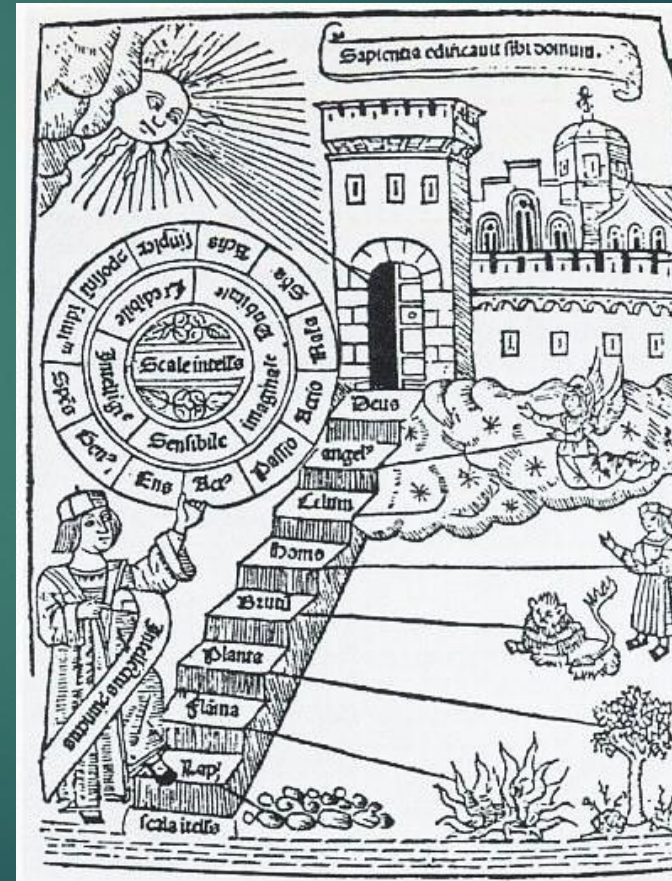
Hierarchy, Kinship, and Responsibility

- ▶ Kalechofsky (2006) explains that there is a great big long debate about vegetarianism in Judaism
- ▶ But at least one interpretive tradition regards it as the spiritual ideal
- ▶ Partly the idea was to treat animals kindly, but also to act in a restrained and chaste manner



Christianity and Animals

- ▶ Similar debates can be found within Christianity, though the New Testament seems fairly clear that eating meat is generally ok
- ▶ "One person's faith allows them to eat anything, but another, whose faith is weak, eats only vegetables." (Romans 14:2)
- ▶ "Eat anything sold in the meat market." (1 Corinthians 10:25)



Aristotle in the Islamic World

- ▶ While western Europe is falling to bits, a series of Caliphates are growing
- ▶ The Abbasid Caliphate in particular spent a lot of money to collect and translate books, including works by Aristotle
- ▶ A great deal of new science and philosophy is done in this period



Al-Ghazali (1058-1111)

- ▶ Studies both philosophy and theology
- ▶ Writes “The Incoherence of the Philosophers”
- ▶ Questions the Aristotelian idea that causal relations are necessary



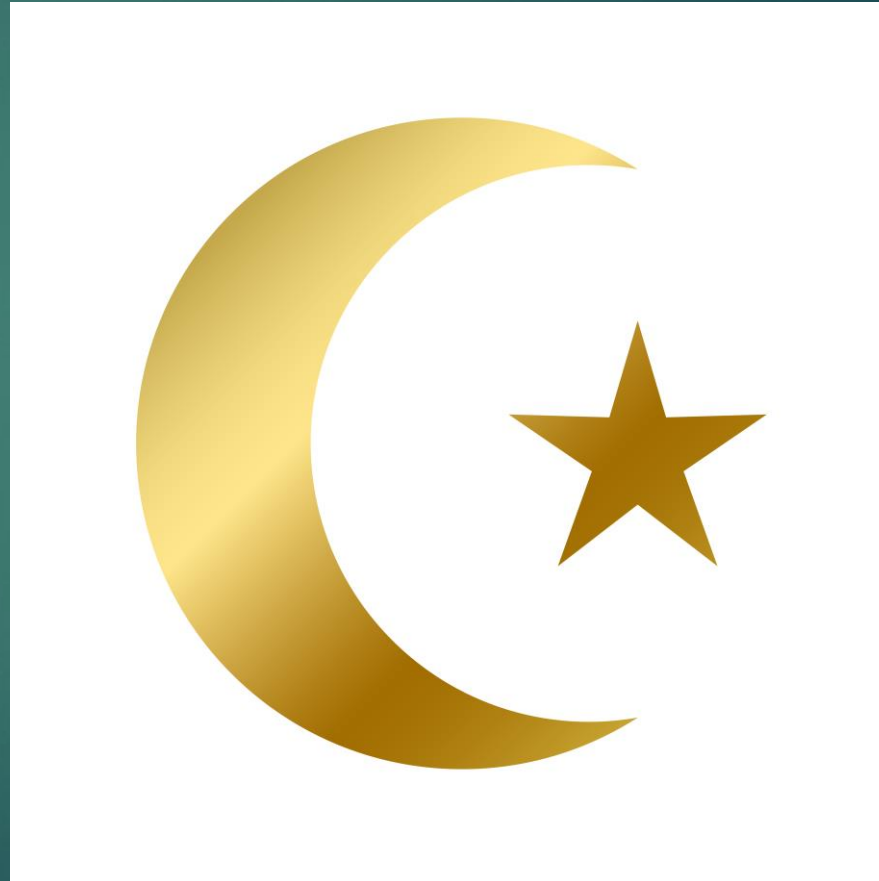
Islam and Animals

- ▶ “According to Islamic teachings, animals have specific position and purpose in the creation hierarchy. Fundamentally they have been created to fulfil the multiple needs of the mankind. On the other hand humans have been directed not to waste the lives of animals and are held responsible for their well-being and feed.”
- ▶ Awan, J. A., & Rahim, S. F. (2018). Animal rights and welfare in Islam. *International Journal of Avian & Wildlife Biology*, 3(6), 427-430. p.440



Islam and Animals

- ▶ A number of cruel practices are forbidden by Islam, including using animals as target practice, making them fight each other for sport, beating them on the face, etc.
- ▶ Halal practices are intended to reduce cruelty in the slaughter of animals for food



Great Chain of Being

- ▶ Christian Europe also had a clearly hierarchical picture of our relationship with the natural world
- ▶ The Great Chain of Being is a term for this hierarchy
- ▶ At the top is God, and just below Him are the angels, composed of spirit and unchangeable
- ▶ Below them are humans, who have both spirit and matter
- ▶ And below us are animals, then plants, then minerals, which are just matter



Great Chain of Being

- ▶ Each level has moral priority over the level below it
- ▶ This was understood both as a metaphysical hierarchy, and as a social/political one
- ▶ Kings and Queens are closer to God than the peasants, so serving nobility is our proper place in the universe



The Heavenly Spheres

- ▶ This hierarchy was reflected in the structure of the universe itself
- ▶ The unchanging stars above all, composed of quintessence
- ▶ Below them the wandering stars
- ▶ And below it all, Earth where all the elements are mixed up and changing



A transitional period in Europe

- ▶ The 14th century was not awesome for Europe
- ▶ The bubonic plague killed 1/3rd of the population
- ▶ The 100 years war ran from 1337 to 1453
- ▶ The Catholic church schisms in 1378



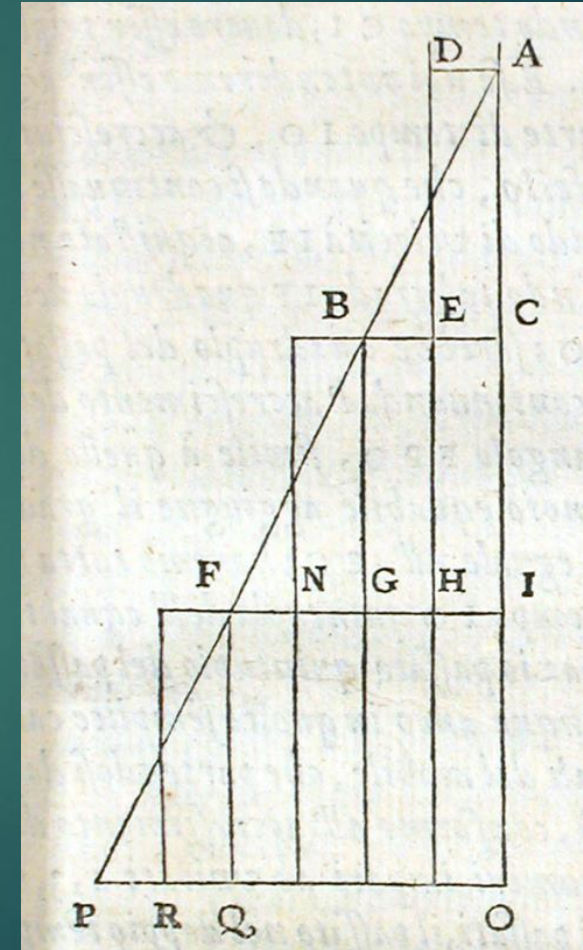
Copernicus (1473-1543)

- ▶ Using newly imported math, Copernicus rewrites the picture of the cosmos
- ▶ (He wasn't the first to suggest that the Earth moves, Aryabhata (476-550) had argued this some time ago)



Galileo and Math

- ▶ Galileo starts using mathematics do to terrestrial physics
- ▶ Aristotle's physics had no math whatsoever – it was believed that the earthly world was too much of a mess for math to apply



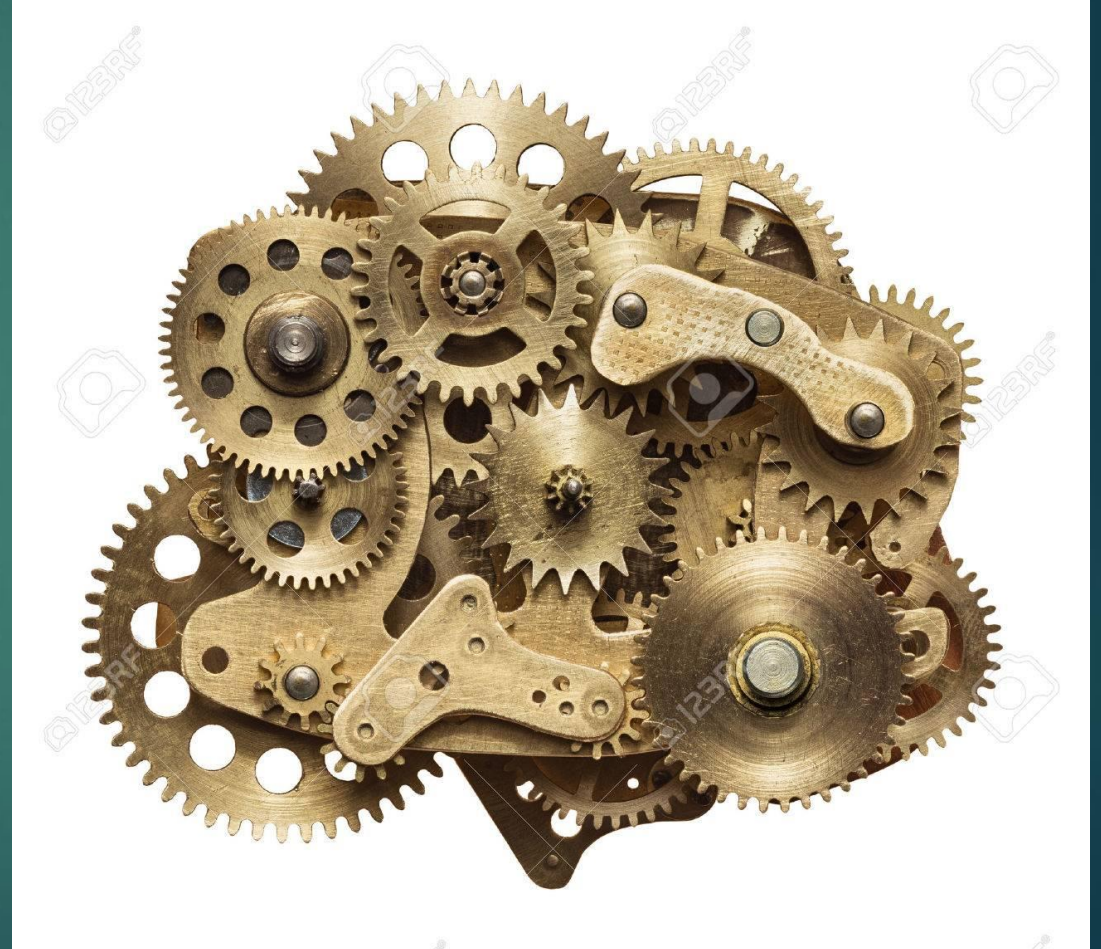
Primary and Secondary Qualities

- ▶ Primary qualities: those that would still be there without any observer
- ▶ Secondary qualities: those that require someone to experience them



Mechanical Worldview

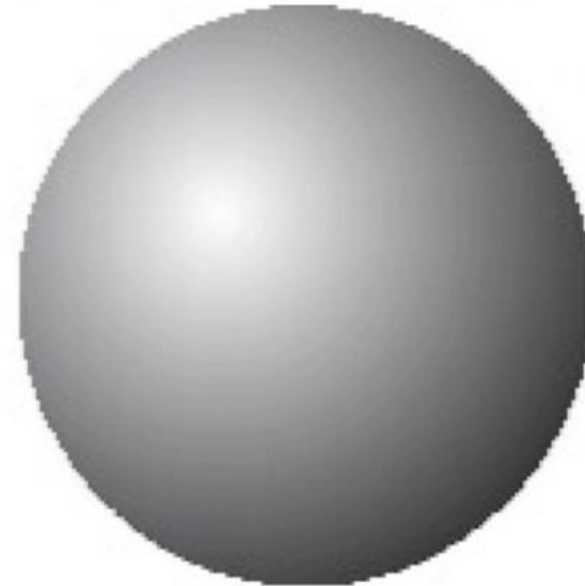
- ▶ The scientific revolution introduces the idea that the world is just mechanical
- ▶ It has no purposes in it, no meaning
- ▶ Our minds are the only place those things live!



Mere Extension

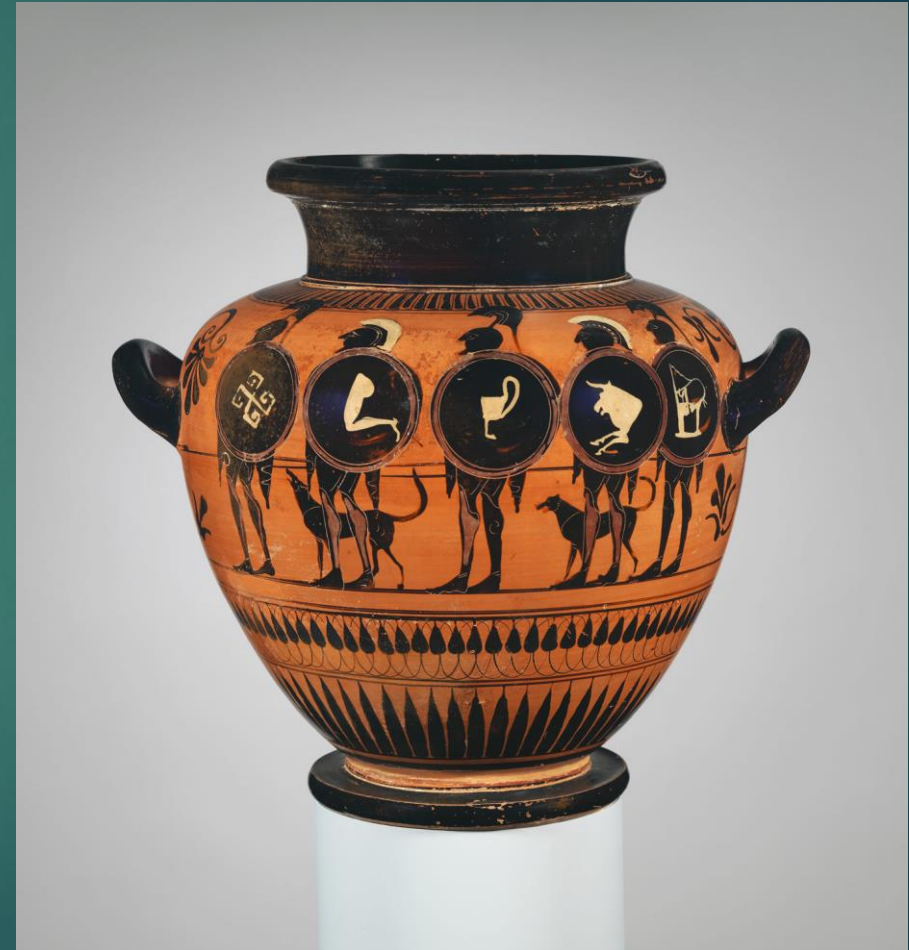
- ▶ The mechanical philosophy reduces explanation of physical phenomena to just efficient causation – pushing and pulling
- ▶ Matter has only one primary property, extension
- ▶ And all matter can do is exclude other matter

DEMOCRITUS' ATOMIC MODEL



Four 'causes'

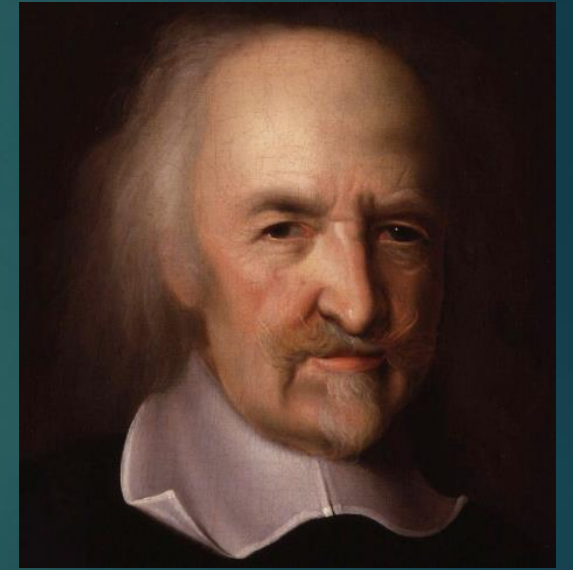
- ▶ ~~Material~~
- ▶ Efficient
- ▶ ~~Formal~~
- ▶ ~~Final~~



Descartes-Hobbes debate

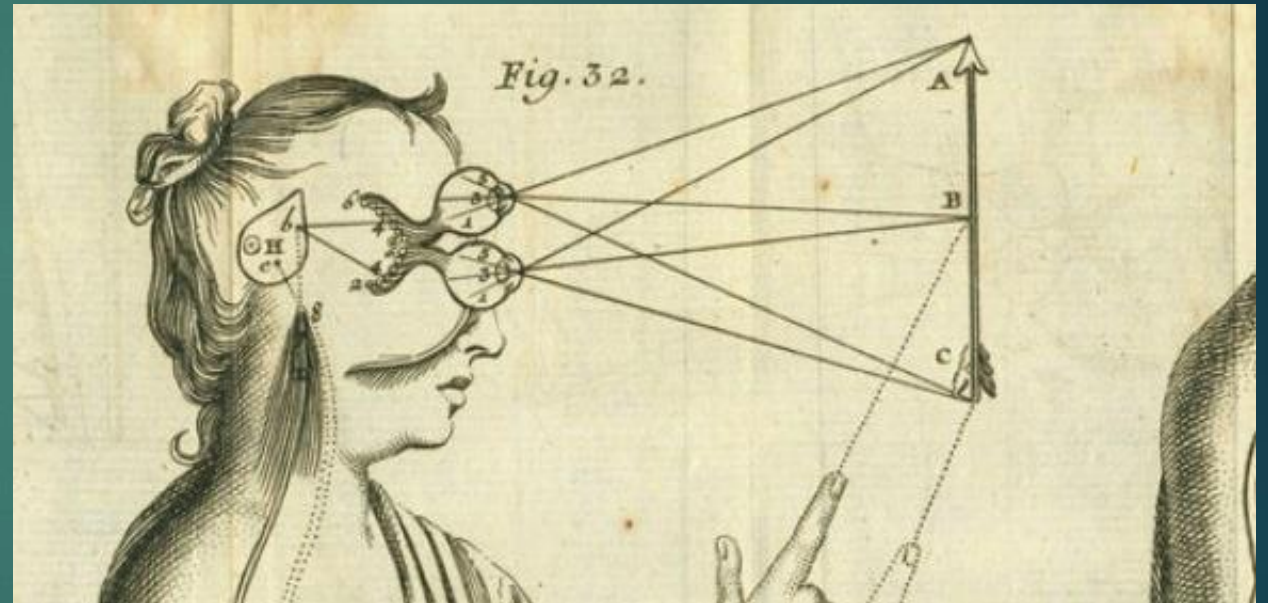
- ▶ Hobbes: “I think we’re just meat machines!”
- ▶ Descartes: “Meat machines can’t think...”

(not actual quotes)



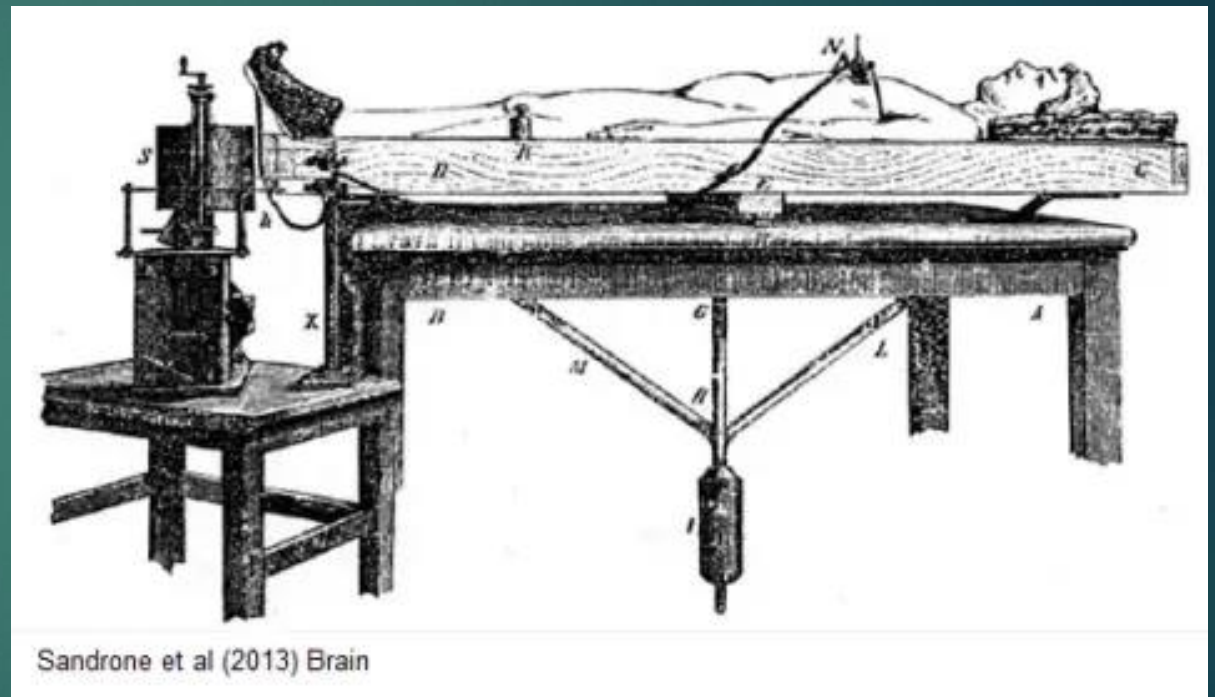
Cartesian Dualism

- ▶ Descartes argues that it's impossible for something mechanical to think and speak in the way humans do
- ▶ But he does accept that the physical world is governed by mechanical principles
- ▶ Therefore, the mind must not be a physical thing!



What Substance Dualism is not

- ▶ In 1901 a physician called Duncan MacDougall tried to measure the weight of the soul
- ▶ If the soul has weight, then it's a physical thing!
- ▶ Or if there is a 'soul particle' that physics just hasn't discovered yet, then it is physical



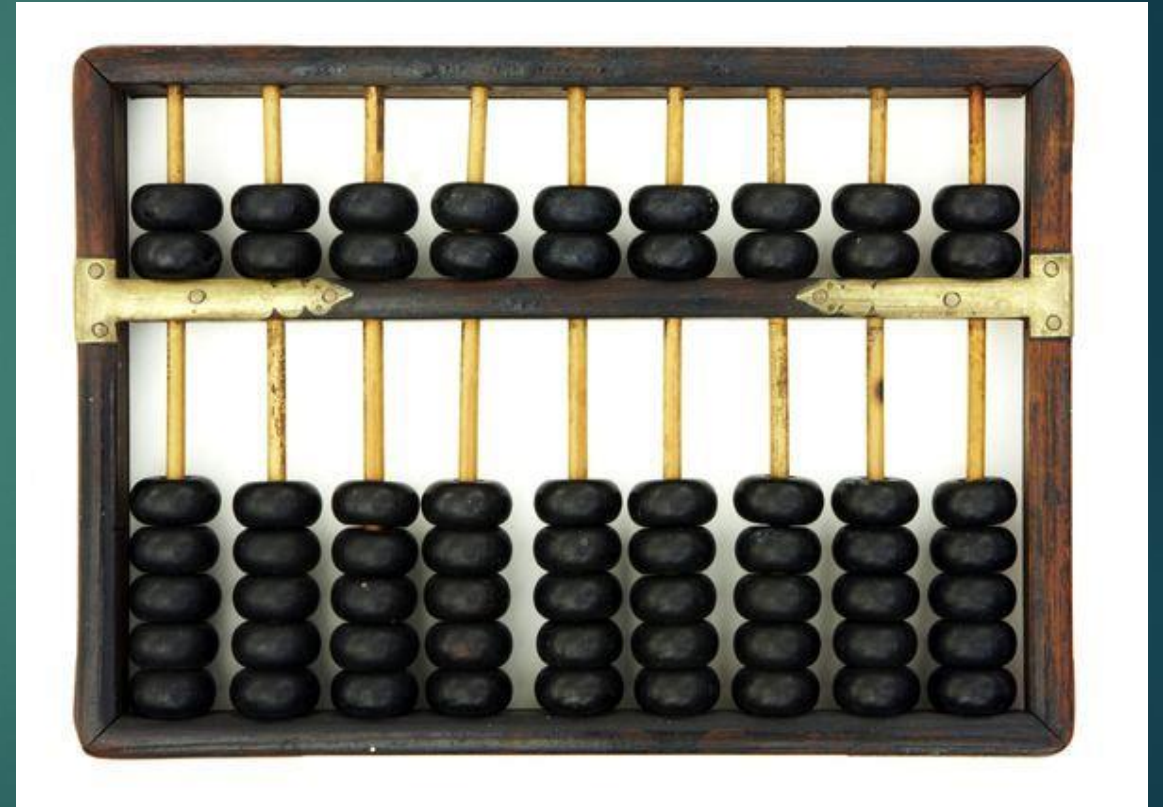
Substance Dualism

- ▶ A substance dualist thinks that minds have no weight, location, size, shape, etc.
- ▶ For them, minds are totally non-physical



Paradox of mechanical reasoning

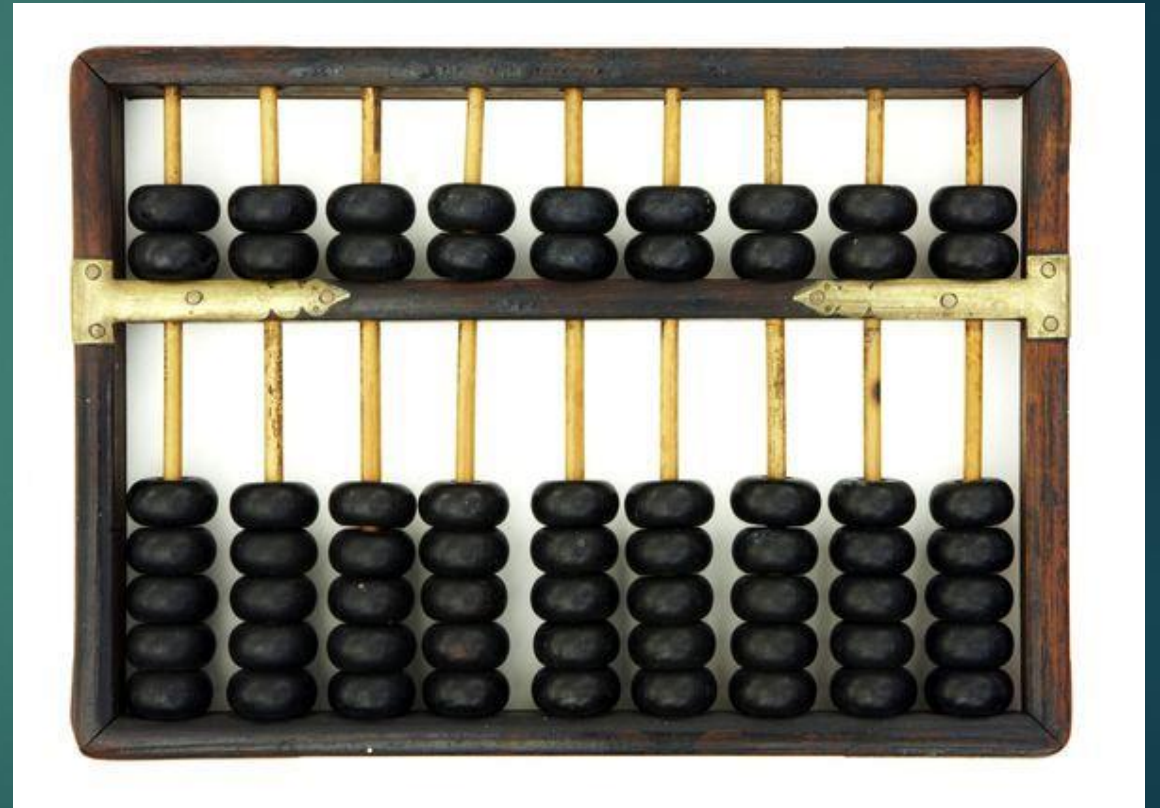
- ▶ Reasoning is truth-tracking
- ▶ Evaluating truth requires understanding meaning
- ▶ But if the scientific revolution showed anything, it's that 'meaning' is not in the world



Paradox of mechanical reasoning

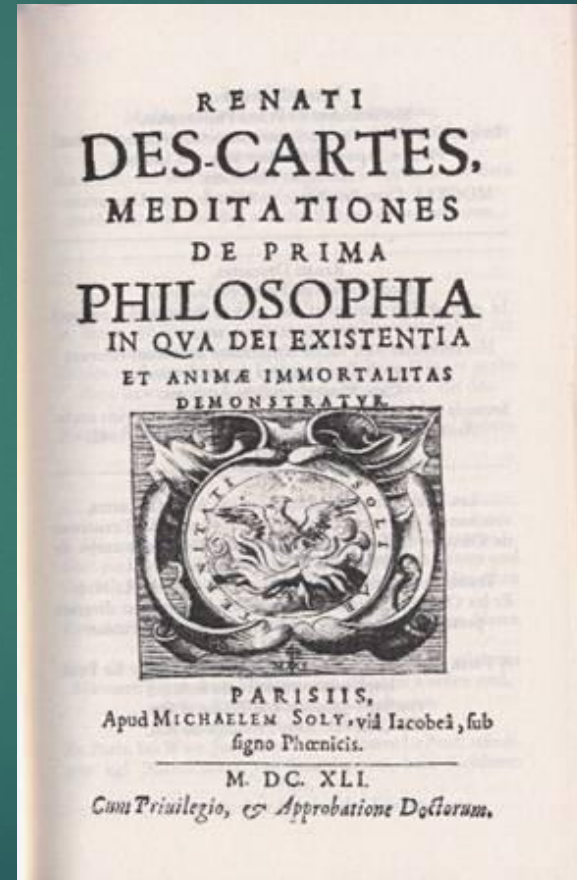
“It is not conceivable that such a machine should produce different arrangements of words so as to give an appropriately meaningful answer to whatever is said in its presence, as the dullest of men can do.”

- Descartes, *Discourse on Method*



The Argument from Doubt

- ▶ Another line of argument Descartes develops in the meditations focuses on how we know about minds and bodies
- ▶ We know our mind directly, immediately, and certainly
- ▶ But he finds he can doubt that he has a particular body, or any body at all



Descartes on Animals

- ▶ Our main reading for this week was a chapter from *Anthropocentrism and Its Discontents*, by Steiner
- ▶ The take-home message of the chapter is that Descartes' views about mechanism, bodies, and minds, entails that he thought animals should get essentially no moral consideration



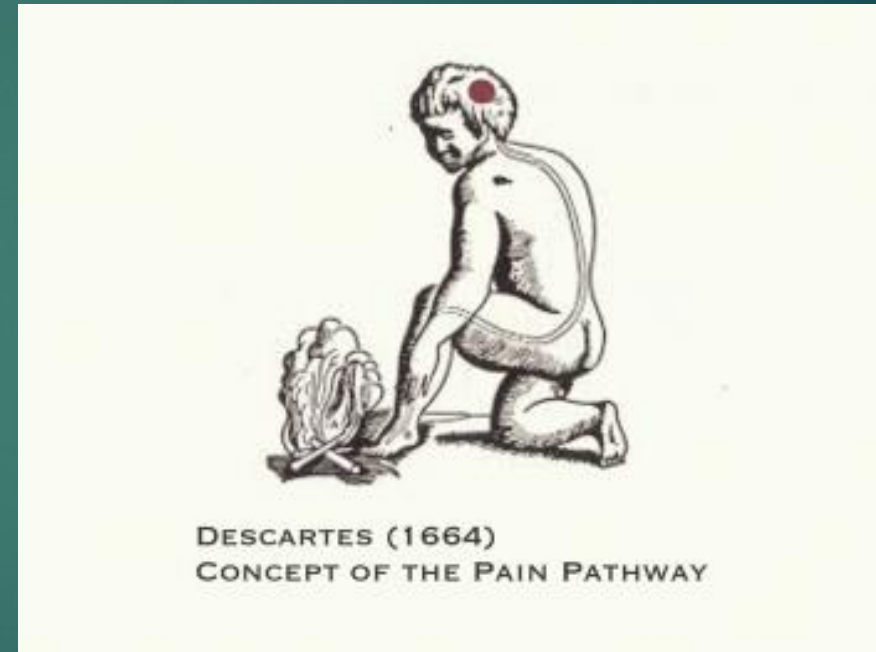
Descartes on Animals

- ▶ Steiner first goes through some scholarly debates about exactly what Descartes thought
- ▶ Some have argued that he attributed some moral weight to animal suffering
- ▶ But Steiner thinks this is wrong
- ▶ “It is as though current defenders of Descartes simply cannot believe that he held a view that is repugnant by contemporary standards, so they attempt to revise Descartes to make his views acceptable by those standards.” (p.134)



Animal Spirits

- ▶ Descartes regards all animal movement, and some of our own (reflexes), as driven by 'animal spirits'
- ▶ That is 'spirits' in the sense of alcohol, not spirits in the sense of ghosts
- ▶ He thinks a subtle fluid in the nervous system transmits sense data



DESCARTES (1664)
CONCEPT OF THE PAIN PATHWAY

Animal Spirits

“When people take a fall, and stick out their hands so as to protect their head, it is not reason that instructs them to do this; it is simply that the sight of the impending fall reaches the brain and sends the animal spirits into the nerves in the manner necessary to produce the movement even without any mental volition, *just as it would be produced in a machine*. And since our own experience reliably informs us that this is so, why should we be so amazed that the ‘light reflected from the body of a wolf onto the eyes of a sheep’ should be equally capable of arousing the movements of light in the sheep?” (Descartes, quoted in Steiner, p.146)



DESCARTES (1664)
CONCEPT OF THE PAIN PATHWAY

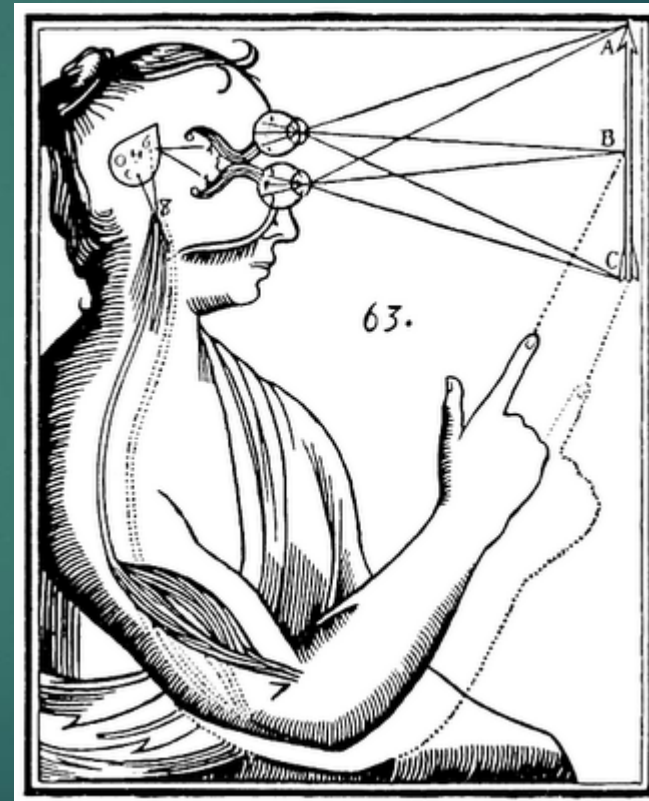
Problems for Cartesian Dualism

- ▶ Elisabeth of Bohemia (1618-1680) wrote Descartes a letter, asking: “tell me please how the soul of a human being (it being only a thinking substance) can determine the bodily spirits and so bring about voluntary actions”



Descartes' Response

- ▶ Descartes suggests that the mind and body interact via the pineal gland in the brain
- ▶ 'Animal spirits' which are very subtle matter fill the nerves, which transmit signals to the pineal gland, and then to the soul



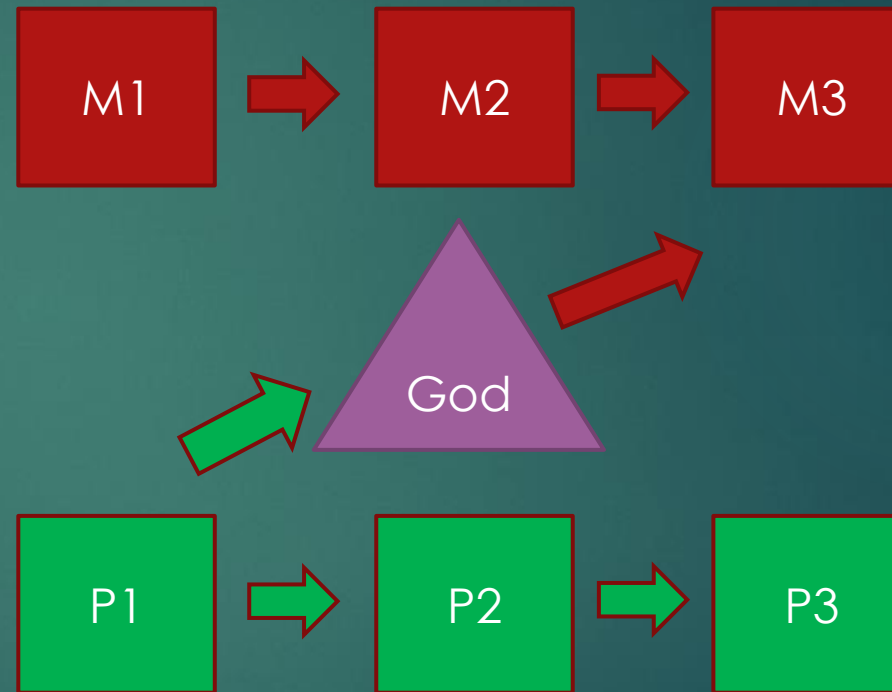
Parallelism

- ▶ Leibniz proposes parallelism
- ▶ Mind and body are separate substances
- ▶ But minds and bodies don't interact
- ▶ Rather, they are both perfectly set up to look like they're coordinated



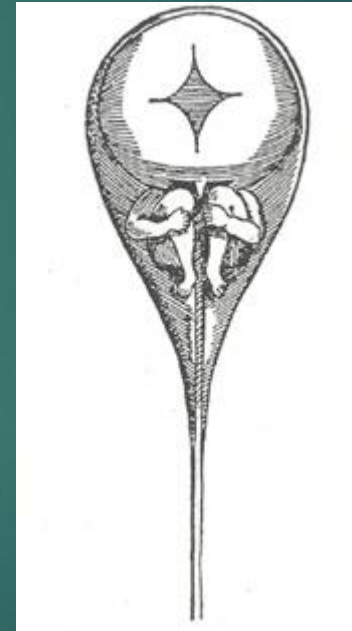
Occasionalism

- ▶ Malebranche defends occasionalism
- ▶ Here, minds and bodies are separate substances
- ▶ Whenever it seems like a physical event causes a mental event (or vice versa), that is God stepping in



Mechanical Life

- ▶ Next week we'll talk about another type of problem for mechanism
- ▶ That is, how can you explain living things mechanically?
- ▶ We will see that this was regarded as a tricky thing to do





Next time: Malebranche on
Preformationism