Knowledge and Skepticism
The Many forms of Skepticism

- Being skeptical means not believing things too easily. It involves repeated iterations of the question “is that right?” or “how do we know that?” As such, we are often told to be skeptical, but how skeptical? How good of answers do we need?
- Skepticism comes in many forms:
  - First, we can distinguish limited or local skepticism from absolute or global skepticism
  - *Limited* skepticism questions whether we have knowledge about a particular domain of claims. For instance, you might be skeptical that we have any moral knowledge while still accepting that we have knowledge of the physical world.
  - *Absolute* skepticism questions whether we have knowledge at all
Second, we can distinguish between academic and Pyrrhonian skepticism. Academic skepticism claims that we do not know anything. Pyrrhonian skepticism accepts neither that we know anything nor that we do not know anything. The key difference between these two is that Pyrrhonian skeptics think it is equally dogmatic to say we don’t know things as to say we do; they simply remain in a state of doubt about any proposition or its denial. There are other ways to distinguish forms of skepticism, such as skepticism about knowledge, or about justification, or about certainty, but we will focus solely on knowledge for this class.
Knowledge

- If we are skeptical about knowledge, what are we saying we don’t have?
- The classic definition of knowledge: \( S \) knows that \( P \) iff (i) \( S \) believes \( P \), (ii) \( S \) is justified in believing \( P \), and (iii) \( P \) is true.
- It is easy to see motivation for each part of this definition; just imagine someone trying to say that they know \( X \) while denying one of the other conditions.
- There are problems for this definition, because it implies that we could know the time by looking at a broken clock, but it is a good enough definition for now.
Important Distinctions in Knowledge

- One important distinction in epistemology concerns how knowledge is obtained. Suppose we know that P:
- If P is justified prior to (or at least apart from) our experiences in the world, then we say that we have *a priori* knowledge of P.
- If P is justified by our experiences (e.g. through sensory or introspective experience), then we say that we have *a posteriori* knowledge of P.
- For instance, if we want to know whether “all bachelors are unmarried” is true, we don’t go take a survey of bachelors; we know before we ever take that survey that it will turn out that all bachelors are unmarried, because that is part of the meaning of “bachelor”. Thus, “all bachelors are unmarried” is *a priori*.
- On the other hand, if we want to know whether “all trees are under 100ft tall” is true, we do have to look at the world. One could not sit in the armchair and reason to a conclusion about this (Socrates and Leibniz aside), but one could go out and measure trees and figure it out.
Most people accept that there are some *a priori* truths and some *a posteriori* truths (though there are views which deny one or the other which we will ignore). However, there is an important debate about how much knowledge is *a priori*.

Some *a priori* statements do not tell us anything new about the world (they are non-ampliative).

If the truth of a proposition depends *solely* on the meaning of the terms involved, then we will call that proposition *analytic*.

For instance, if someone tells us that “all bulls are males” or “evergreen trees do not lose leaves in fall” we haven’t learned anything about animals or trees in the world; instead, they are just expressing relations between various ideas. It is consistent with these that there are no animals or plants in the world.

If someone “discovers” a married bachelor, we don’t change our understanding of the term bachelor, but rather we just assume they are not using words correctly/the way we use them.
Knowledge

- However, some *a priori* statements do tell us something about the world (they are non-analytic).
- Potential examples of these include:
  - “For any fact there is a sufficient explanation of that fact,”
  - “Out of nothing nothing comes”
  - “Time is linear”
  - “There are prime numbers”
- While these are plausibly not open to empirical investigation, they do in fact tell us something about reality, not just about the relations of our ideas.
- *Rationalists* believe that there are knowable non-analytic *a priori* truths.
- *Empiricists* believe that all non-analytic knowledge comes from experience (i.e. All *a priori* knowledge is analytic—it is only about relations between ideas).
Rationalism

- It is (relatively) easy to see how we have non-analytic knowledge of the world through experience, but it has struck many people as bizarre that we could know facts about the world *a priori*.
- The rationalist owes us an explanation of how this sort of knowledge is possible.
- Some rationalists have said that these are “truths of reason” which, while non-analytic, can be discovered to be true by contemplating them deeply enough.
- Others have appealed to *nativism*, the view that knowledge is innate. Specifically, they have said that all *a priori* knowledge is innate.
- One famous rationalist nativist was Socrates, as shown in the “Meno” geometry example.
- Socrates actually thinks all knowledge is *a priori*, and that learning is just a process of recollecting.
René Descartes (1596-1650) is considered the father of modern philosophy.

In addition to being a philosopher, he was also a renowned mathematician and philosopher.

His most famous work is *The Meditations*.

Just as Plato used Socrates to lead the reader in discovering the philosophical truths, Descartes invites the reader to take on the mindset of the Meditator, because he believes it will lead you to a deeper understanding of the foundations of our knowledge—particularly our knowledge of the existence of God and the soul.
The First Meditation

- Descartes sets out to remove his false beliefs
- His method for doing this is called the Method of Doubt:
  
  *Reason now leads me to think that I should hold back my assent from opinions which are not completely certain and indubitable just as carefully as I do from those which are patently false.*

- According to the Method of Doubt, Descartes refuses to believe anything which can be doubted; this way, we can hope to find exactly what we are certain of—what is beyond doubt!
Descartes also gives us a picture of belief in which there are foundational beliefs and other beliefs are built up out of those. This view is called *foundationalism*.

The most efficient way to doubt large numbers of beliefs is to doubt the foundations—if our knowledge of the latter propositions depends on our knowledge of the foundational propositions, then doubting a foundational belief will call into question everything which assumed that foundational belief.

Notice also that his goal is to establish a basis for the sciences. His science textbook he wrote later opened with arguments much like *The Meditations*.
Descartes starts by noting that the things he considers himself most sure of come from the senses/sensory experience.

But sometimes our senses mislead us (e.g. when we see something far away and mistake what it is).

Thus, our first category of doubt will be our senses in “weird” circumstances.

As long as we are sensing things close to us and not looking through strange refractive glass or mirrors then we cannot doubt our senses (such as that you are here, in this classroom, hearing me).

The only people deceived about such things are madmen, which are not good models for our own reasoning.
However, Descartes then realizes that, just as the madman, he too has experiences of not-real things every night when he dreams

\[ I \text{ see plainly that there are never any sure signs by means of which being awake can be distinguished from being asleep. } \]

Since we cannot know whether or not we are asleep, we can doubt whether or not this classroom is as we experience it, so per the Method of Doubt, we must withhold assent.
The First Meditation

- Descartes next considers if I at least know that there is *something* which gave me the ideas which dreams recombine.
- I may not know that the world is exactly the way I am perceiving, but I know there are chairs and trees and voices and smells in the world, even if those could be recombined in various ways in my dreams.
- Of course, we could imagine there being nothing remotely like a chair in the world, but it was merely recombining various colors the way an artist does. So we can doubt whether there are objects.
- But we can at least be sure that there are the various colors and other components of my experience which could be recombined to make me think there is a chair.
The First Meditation

- Thus, we can doubt the existence of any object outside our minds, because we have doubted the foundational beliefs on which those beliefs were based, namely our belief in the ability of our senses to give us knowledge of the world.
- The only things we know are the various concepts and experiences immediately in our minds.
- We have thus reached *External World Skepticism*—the belief that one cannot know anything outside one’s own mind.
The First Meditation

- At this point we have doubted all *a posteriori* truths.
- But we can at least still be certain of *a priori* truths like math.
- However, we often see people give wrong math answers, and otherwise be wrong when they are most sure of themselves.
- Also, for all I know, an omnipotent God is deceiving me.
- We cannot say that God is so good that he would not let us be deceived, because we are deceived all the time, so it can’t be that God ensures we are not deceived.
- If there is not God, then whatever process brought be about could just have easily led me to be mistaken all the time.
- Thus, I could go wrong in even simple mathematical truths or truths about color.
- Thus, even *a priori* claims can be doubted, so we must not assent to them.
The First Meditation

- We have reached a point at which all our former beliefs can be doubted.
- However, we are still inclined to believe them as likely, even if doubtable.
- Thus, if we are truly to not be deceived by our former prejudice and in fact reach certain foundations, we should in fact suppose all of our former beliefs false.
- Thus, I should assume a malicious demon exists whose sole purpose is to deceive me.
The “malicious demon” is the ultimate standard of doubt. It is difficult to believe you are right on anything if an omnipotent creature exists solely to deceive you.

Do you think any *a posteriori* beliefs survive the evil demon?

What about any *a priori* beliefs?