Notes for Hersh’s essay on Immanuel Kant (1724-1804)

Important Terms

- **Idealism**: Originating with Plato, Idealism is the philosophy that ideas form the basis of the essence of reality.
- **Rationalism**: Rationalism is the view that knowledge is primarily gained through reasoning. The original rationalists were Descartes, Sinoza and Liebniz.
- **Empiricism**: Empiricism asserts that knowledge comes primarily from sensory experience. Therefore experiments and empirical data are critical for gaining proper knowledge.
- **Epistemology**: The branch of philosophy concerned with the nature and scope of knowledge. It questions what knowledge is and how it is acquired.
- **Metaphysics**: The fundamental nature of being, existence, and the world. It addresses the questions: What is there? What is it like?
- **Ontology**: The philosophical study of the nature of being, existence, or reality. Traditionally part of metaphysics, ontology deals with questions concerning what entities exist or can be said to exist, and how such entities can be grouped. Not to be confused with ontogeny.
- **A posteriori knowledge**: Knowledge that is dependent upon experience or empirical evidence (e.g., “Cats have four legs”).
- **A priori knowledge**: Knowledge arrived at independent of experience. (e.g., “All bachelors are unmarried”). You don't have to examine the way things are in the physical world. You don't have to do any science. For Kant there were two kinds of a priori knowledge:
  - **Analytic a priori** (Descartes’ “necessary deduction”). Conclusions of this sort are reached through logical deduction, such as mathematical proofs.
  - **Synthetic a priori** (Descartes’ “evident intuition”). We can know some things are true purely through our intuition. Kant had 3 types of intuition, all of which are universal (completely objective). See the below question.

Key questions from the reading

1. What are Kant’s 3 types of intuition (synthetic a priori)?
2. Which of the three great foundationist gurus (leader of each school of mathematical philosophy) were Kantians?
3. How did Kant justify the existence of God?
4. Does Kant agree with Plato saying any healthy human being intuitively knows “the good”?
5. What is the Euclid myth? Was it a problem for Kant? How is it a problem for his philosophy today?
6. What is the dominant philosophy today? How does it deal with the Euclid myth?
7. Was Kant an empiricist or a rationalist?

Explain each of the following statements:

8. (p130) “Is metaphysics at all possible?”
9. (p131) “Kant’s intuitions are supposed to explain...how we actually do conceive of time and space...They are properties of the mind.”
10. (p132) “Physics doesn’t prefer Euclid to non-Euclid.”
11. (p135) “The trouble with today’s Platonism is that it gives up God, but wants to keep mathematics a thought in the mind of God.”
12. (p136) How does Mathematics play a special role in “the battle between rationalism and empiricism”?
13. (p136) “For many years the accepted assumptions in science have been materialism in ontology, empiricism in epistemology.”