Ptolemy, *On the Criterion of Judgment*

Review

- Observation -> theory -> model
- How do we *persuade*?

Questions before reading a text

- who wrote it?
- when was it written?
- who was the audience?
- what was the author's purpose?

Figure out these examples

- JK Rowling, *Quidditch through the Ages*
- Stephen King, *Nightmares and Dreamscapes*
- Björn Brembs et al., "Operant reward learning in Aplysia: neuronal correlates and mechanisms," *Science* 296, issue 5573 (2002) 1706-1709

Ptolemy

- datable observations in *Almagest* to 141 CE

Works of Ptolemy

- *Mathematical composition (Almagest)*
- *Planetary Hypotheses*
- *Handy Tables*
- *Effects (Apotelesmatica)*
- *Geography*
- *Harmonics*
- *Optics*

Works of Euclid

- *Elements of Geometry*
- *Phaenomena*
- *Data* (*Givens*)
- *Divisions of Figures*
- *Catoptrics*
- *Optics*

Context: the law court

Why this choice?

- act
- instrument
- agent
- means
- goal

Form of Ptolemy's work

- analogy
- use of tables

Persuasion and language

The verbal adjective

- expresses idea of *necessity, compulsion, obligation*
- appears in two kinds of texts:
  - oratory
  - scientific texts

Practice of persuasion

- political rhetoric and scientific argument both begin in the classical Greek world
- shared assumption of persuasion within peer group

Thursday: observation using instruments

- Quiz on how to interpret a shadow plot
- Questions:
  - what would a shadow plot from a different point on the earth look like?
  - what would a shadow plot at a different time of year look like?