

Reading Guide – chp 1 *The Dome of Heaven* in Coming of Age in the Milky Way

1. Read Plato's quote in the introduction. Do you agree with his last sentence? Why or why not?
2. Of the four motives (pg20-22) the author mentions may have caused the ancients to "bother" to study the two-dimensional movement of stars and planets, which do you identify with?
3. The concept of the cosmos evolved through Eudoxus and Aristotle to Ptolemy (pg 23-31). As time went on the concepts got more and more complicated and more and more further from reality. The last idea, Ptolemy's held sway for 1000 years, one thousand years! After reading of this progression through these men, why do you think Ptolemy's model lasted so long?
4. Today there is still a tension between those that build their models on observation and those that build on theory. Examples (pg 30-32) given in the reading are Einstein's space-time continuum idea (also called the fabric of space-time, a way of thinking about space), particles smaller than neutrons and protons behave in predetermined ways regardless of their surroundings and the idea that the early universe was 10 dimensions with our space and time being one. Do these ideas reflect reality or do they just explain what little we are able to see of the universe? Do you think that we will ever make peace between "old broadshoulders" [theory] and "the brain" [observation]?

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