

**A Matter of Time**  
**CL 65/Math 5**  
**Winter 2005**

**Friday Discussion #1**

The first questions come from student comments on our web site:

1. "Sorabji believes that Aristotle resolved the second [paradox] by saying that an instant will have ceased at any instant you choose after its occurrence, no matter how close." (p.121, class text) Sorabji's "clarification" of Aristotle's principle of what an instant seems to mean that an instant is completely up to the whim of the observer. An instant is an ambiguous term that lends itself to interpretation depending on the individual. Does this have any broader ramification in discussing the quantity of an instant (as an infinite component of time) since you can choose its endpoint regardless of how long or short it can be? And does this relate to our notion of what time is considering length (if that's possible)? Hope this wasn't too "out there" of a question.
  2. In regards to cyclical, spiral, and arrow time, what attributes define them in a concrete sense, and is there any actual proof as to which one is indeed correct, or more logical, or is it all religious based.
  3. I don't know if this can be answered, but it is something I wonder about nonetheless: In regards to these works of art that encode calendrical information, who were the artists? Were these artworks commissioned by people "in-the-know" or did the artists themselves have such knowledge? Were the works of art visible to the general public or were they located in private, elite areas? Are there other works of art that use similar symbolism but betray an ignorance of the calendrical meaning? Overall, I'm wondering about the degree to which this knowledge was exclusive and what role artists may have played (as opposed to priests and mathematicians, whom we have already discussed).
  4. To what extent can we infer that the Greeks had a knowledge of the solstices and equinoxes? Did knowledge of the solstices and equinoxes expand exponentially with the shift from a lunar calendar to a solar model? And were the solstices deified? If so, how?
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The material below comes from the Connecting Across Borders sections of the textbook, *A Matter of Time*, by Lahr and Pastor.

From section 2.3:

2. Creation myths show us how computational models of time, or time-measuring devices, go well beyond their measurement function. They become cultural time.

How is the cultural time encoded in the *Bible* different from that of the *Enuma Elish* and the *Theogony*?

3. What are the implications of choosing a particular model of time as the dominant one—say, the spiral in the *Bible*, the line in the *Theogony* and the *Enuma Elish*—in terms of the relative positions of men and women in the corresponding creation myth?
4. Think about how the choice of a lunar, lunisolar, or solar calendar gives preference to the male or the female principle. In what specific way does the lunisolar calendar represent a compromise between the two?

From section 3.3:

1. Let us sum up Aristotle's mathematical approach to time with the statement that *instants of time are like points on a line*. This leads to a spatial view of time as, for example, a line, a circle, or a spiral. Compare these spatial views of time with the visual representations of time we find in Minoan art and in the Greek kylix.
2. Aristotle's approach to time is an analytical one. It leads to a definition of what we mean by mathematical or physical time. The approach to time exemplified by Minoan art and the Greek kylix is a mythical one. What fundamental differences do you find between the two views of time they represent?
3. How would you characterize Plato's discussion of time? Is it a physical one because it refers to the movement of the planets? Or a metaphysical one because it conceptualizes time as the *image of eternity* created by a divine Being? Does his approach bridge the separations between analytical/physical and mythical/metaphysical conceptions?
5. Based on the material in Units I, II, and III of the textbook, how do you explain and clarify the connections between time and society? What do you make of Sophocles' view of a calendar reform as a major shift in world-view?