

The American school child learns early on to 'tell the time.' -That is, read the dial positions and the numbers on the clock. Not much is said about what Time is actually. Why 12 numbers? Where did all this start? What the narrative as to units of measuring of something we can't touch or see? Seconds, minutes, and hours? I am convinced that we are missing a terrific opportunity not taking the time to go beyond the mere 'Telling Time'. Does this instrument measure anything 'real'? Or is it just something we invented that does not at all exist? And how and why have we become so addicted to needing to "know what time it is??"

In grade school there are no stories that go beyond the lesson about 'telling the time'. How old must a child be to learn that it is connected to the making calendars, or that there is an actual 'history of horology'? Nor do we take it further along at the high school level. What is the story as to accurate time measurement being needed? What for? The accuracy of sighting longitude and latitude on the high seas with no landmarks in sight?

When and who won the prize for designing a clock that really worked on a ship that bobbed and tilted that didn't sit still like a clock on a shelf or a bell tower?

Questions should and ought to arise for children in an age of computers and the internet. -The choice as to whether we keep it Solar Time or convert it into units that are quantum vibrations. How did we go sub atomic, how did it all evolve?

And so rapidly?

In just these past decades of the twentieth century?

How is it that we of this Here and Now generation are so completely ignorant and disinterested in these matters? Why should a nation, a so called democracy allow so many people to be left out of the loop? We are missing our best opportunities for teaching what I believe are things that matter - and to do it in more meaningful ways. Should we not be coupling the cosmologies of ancient civilizations with our recent discoveries and theories in cosmology? We've done far better with their other works of art! As imagined by our forebears, the maps of their universes expressed how they imagined it and how they saw themselves in it -how they dealt with their fears, enemies, their mortality. How have continent-crossing railroads in our recent history alter our concepts of Time and Space? How has salaried workers (replacing slaves) require a new function for clocks that tell time impartially -without fear or favor! What part does the ownership of Time have? The ancient emperors of China did not do this, they were the sole owners of Time and therefore did not have a need for clocks. How we tell time says a lot about us.

Plotting the shortest distance for an Intercontinental flight from New York to Tokyo requires charting the shortest route so as to save time and money. The planet being spherical, the shortest path is not a straight line on a flat plane. It is an arc above a sphere aligned to a circle of which the center is at the center of the earth. Oh, Wow!

So much is there to learn and teach of mysteries. And to do so in the Here and the Now in spacetime where the sole constant is the speed of light. Mind boggling, mind altering! Weird visions of a universe and its creation that is alien to anything we've so far learned -and there is so little time! So little time.

Norman Shapiro, Geometry Through Art, November 21, 2007