

Human-Computer Interaction Design

Project 1.A Time Keeping & Time Telling Systems

Tuesday September 2nd 2009

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Project

Find or create your own images or illustrations which denote or picture time keeping and time telling systems. Choose three contrasting images or illustrations. At least one of your choices must be connected to digital technologies in some way. Explain why your choices contrast and what's interesting about them in some of the following terms: human conceptual models; operational models; product semantics; visual aesthetics; design; visceral, behavioral, and reflective processing levels of affective response; any aspect of human interactivity with digital and other technologies and materials.

Format:

Your project must be presented on a **single landscape mode page in pdf format**, for both the initial rough first iteration and the final form completed project. You may include auxiliary files of other media types, as instructed in class. Upload your work to oncourse, as instructed in class. Be certain to reference all of your sources accurately and completely.

The example on the page that follows gives an idea of what a design research project could look like for the purposes of this class assignment. The example is by no means the most ideal project—yours should not be longer, but it can be more compelling and interesting than the example.

DUE Wednesday September 3rd no later than 23:59:

An initial rough **SKETCH** first iteration of your ideas for how you will complete this project.

DUE Tuesday September 9th no later than 11:15:

A **FINAL** form completed project.

old ancient new

24 Hours Automatic Winding Mechanical Watch



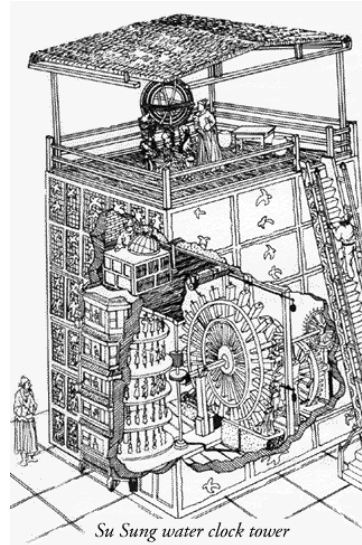
Glycine Airman Special II No. 48 Automatic Winding Mechanical Watch

(source: E. Blevis)

This is a reinterpretation of a 1960's vintage watch intended for use by pilots traveling across time zones. The idea is to set the inner dial to GMT or "Zulu" time and the outer dial to local time, enabling the wearer to change time zones using the outer bezel, without needing to adjust the minute or second hands. A slightly different version of this watch is available as an iPhone application: www.glycine-watch.ch (shown bottom center and right)

The "user's" likely **conceptual model** is that the hour hand rotates once per day, imitating the movement of the sun, since 12 is placed at the top of the watch and 24 (or 0) is at the bottom. The **operational model** is that of an automatic winding mechanical watch—that is, a wound spring turns gears at a fixed rate of movement of the hands.

Su Sung clock tower



Su Sung Clock Tower, China, 1088 CE

(source: <http://physics.nist.gov/GenInt/Time/early.html> @ 8.31.09)

This 30 foot tall ancient clock tower used water as an energy source to move an elaborate mechanism. The interface is the globe at the top and the manikins pictured in the lower left of the illustration. For a complete description, see: physics.nist.gov/time.

The clock is interesting for its **large scale**, **immobility**, and **materiality**—bronze, stone, water, and other materials.



E-Ink Digital Watch



Phosphor E Ink Digital Watch

(source: <http://www.watchismo.com/phosphor-dh01-watch-digital-hour-clock.aspx> @ 9.23.09)

This digital watch uses a **new material**—an EPD or electronic paper display—for its interactivity. The use of this material allows the display to be **curved**. Also, because digital paper is **bistable**—that is, it preserves its state without power and power is only required to change the display—this watch uses very low energy. The display is also much more configurable than the other two examples and it is easy to imagine a myriad of other applications of this material, aside from time keeping and time telling, many of which are described on this particular EPD manufacturer's site: www.eink.com.

