Temporal Modeling experiment Johanna Drucker 6.30.2010

As a quick summary, here are the issues I am trying to address:

From a humanistic standpoint we have the task of modeling the *experience* of time/temporality and also of modeling the ways time/temporality are *represented* in humanities documents and artifacts (texts, films) and across multiple representations (collections, archives etc.).

Whether we are finding graphical expressions for *experience* or for *representations* we have the same challenges in terms of graphic language:

The challenges for modeling temporality from a humanities approach are:

- 1. Generating non-standard metrics in a systematic way
- 2. Creating variable metrics in a single display (rubber timelines)
- 3. Showing ruptures/breaks/overlaps in temporal sequence on the level of experience (many things happening at once at different rates in a lived situation) and also in the representations of temporality (the difference between the telling and the told, or plane of discourse and plane of reference)
- 4. Modeling event structures (non-deterministic complex systems)

The series I am attaching here addresses #1 through a series of transformations. The images document a transformation of standard metrics into affective ones. a. In the first graph, affective experience is quantified (amount of anxiety or anxiety state) in relation to a standard metric (time in regular intervals). The graph charts changes in levels of anxiety by connecting the points at which the measurements of anxiety were taken in a period of time.

- b. The same information, but charted to show the discrete values at each measurement (anxiety state and a given moment), rather than the change between states.
- c. The amount of difference between discrete values anxiety states is generated simply as a graphic artifact, to show intensification expressed as a value of area (amount of shaded shapes).
- d. A similar treatment of the graphic expression of the continuous values of anxiety states. (n.b. There are a few inconsistences in this graphic, e.g. the first triangle should be long and reach to the baseline as per the negative space of graph a.)
- e. In the next graph, the temporal scale is altered by using the rate of intensification of anxiety to transform the metrics into a "perceived" anxiety scale.
- f. Then the temporal scale is transformed into "perceived" time. The rate of change is projected onto the temporal axis to alter the standard metric according to the affective experience. In this way, an experiential, subjective temporal scale is generated systematically.

The graphics were created with the conceptual and design collaboration of Xárene Eskander.