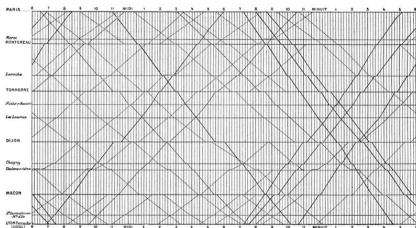
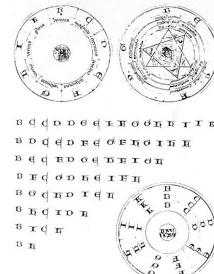


## Visualizations as representations, or as knowledge generators



Train table, France 1880.

## Visualizations as representations, or as knowledge generators

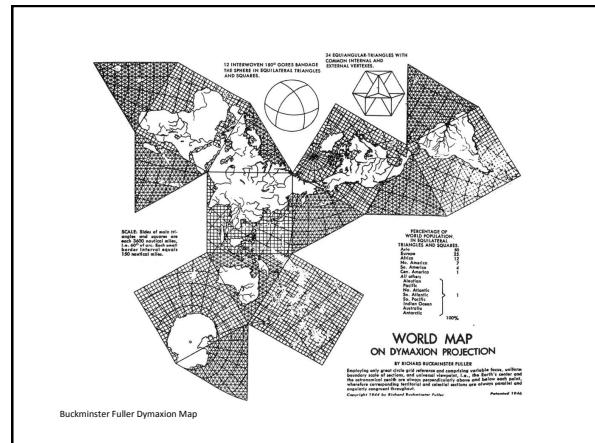
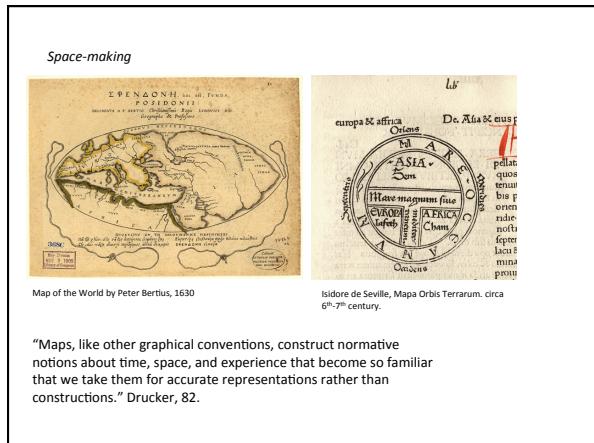
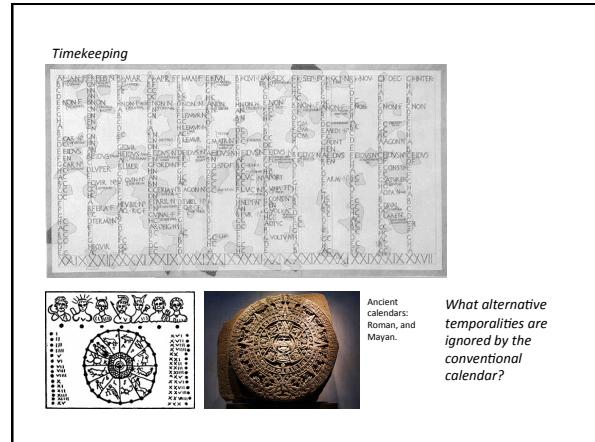
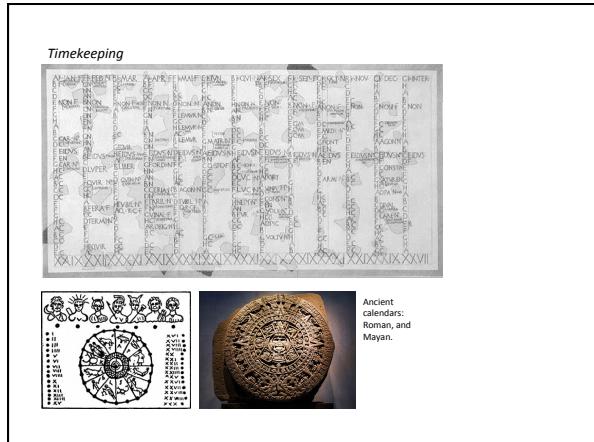


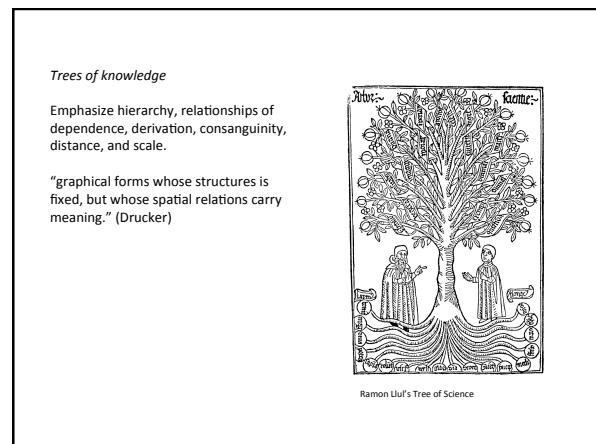
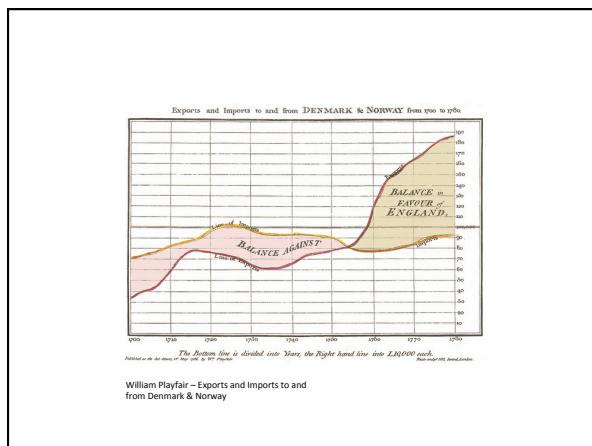
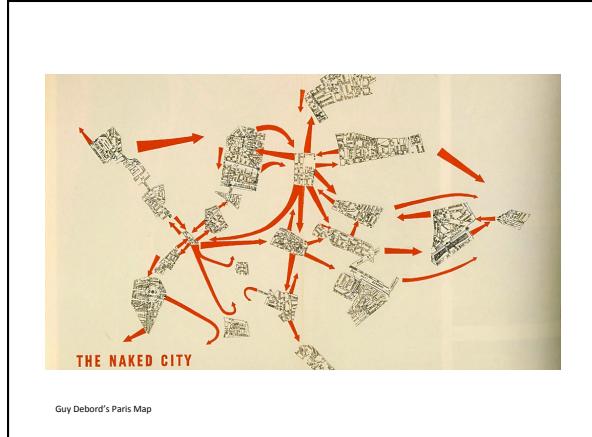
*Ars generalis ultima* or *Ars magna* ("The Ultimate General Art", published in 1305) by Ramon Llull's

"A zairja (also transliterated za'irajah, zairojah and zairdja) was a device used by medieval Arab astrologers to generate ideas by mechanical means."  
(<http://en.wikipedia.org/wiki/Zairja>)

## Visualizations have histories and distinct intellectual purposes

*Timekeeping*  
*Space-Making*  
*Record-Keeping/Administration*  
*Trees of knowledge*  
*Dynamic Systems*





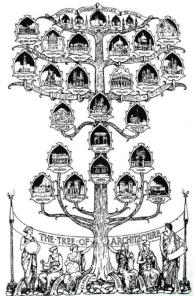
Visualizations have venerable histories

*Trees of knowledge*

Emphasize hierarchy, relationships of dependence, derivation, consanguinity, distance, and scale.

"graphical forms whose structures is fixed, but whose spatial relations carry meaning." (Drucker)

They are can index powerful ideological propositions.



Existing forms of information visualization are rooted in long standing traditions of *diagramming, charting, and mapping*.

While early practices are unsurprisingly linked to the **printing press** and the intellectual and social transformations in the sixteenth and seventeenth centuries, many contemporary forms of information visualization are rooted in the demands for **bureaucratic management** of the **emerging modern state** during the eighteenth century

Drucker, Johanna. *Graphesis: Visual Forms of Knowledge Production*. Cambridge, Massachusetts: Harvard University Press, 2014.

—. "Humanities Approaches to Graphical Display." *Digital Humanities Quarterly* 5, no. 1 (2011). <http://www.digitalhumanities.org/dhq/vol/5/1/000091/000091.html>.