WHAT STORY DOES YOUR TIMELINE TELL?

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WHAT STORY DOES YOUR TIMELINE TELL?
WHERE IS

YESTERDAY
THE BIG BANG
THE 2050s
LUNCH TIME
NOW
THE TRIASSIC PERIOD
YOUR 8th BIRTHDAY
THE 1980s
THE 15th CENTURY
(just a few) VISUAL REPRESENTATIONS OF TIME
Joseph Priestley (1765)
(PD) Wikimedia Commons
42 released detainees who were identified as engaging in terrorist or insurgent activity after being released are shown with dark lines.

Seven detainees who died in custody are marked with small triangles.

Guantánamo Detainees
Each line tracks one of the 779 Guantánamo detainees from the month of his arrival to the day of his transfer or death.

Lines for the 172 men still in detention extend to the edge of the chart.
Females require blood meal to develop eggs.

Molting occurs between each larval and pupal stage.
Mercator’s Chronology (1569)

Reference: Cartographies of Time (2010) Rosenberg & Grafton

Nothing much happening

Look! Something happened!
Blanchett’s
*Catholic Ladder*
(1838)

Reference:
*Cartographies of Time* (2010)
Rosenberg & Grafton

- each line = 1 century
- each dot = 1 year
Peabody's Polish American System of Chronology (mid 19th century)

Reference: Cartographies of Time (2010) Rosenberg & Grafton
The Shape of History
Reimagining Elizabeth Palmer Peabody’s Historical Visualization Work

Lauren Klein & colleagues (2016)
Georgia Tech Digital Humanities Lab
shapeofhistory.net
How to Make History Dates Stick

By Mark Twain

With Many Illustrations by the Author
(just a few) VISUAL REPRESENTATIONS OF TIME
WHAT STORY DOES YOUR TIMELINE TELL?
WHAT HAPPENED WHEN?

WHEN & HOW MUCH?

WHERE, WHAT, & WHEN?

WHAT WAS RELATED WHEN?

WHAT IF & WHEN?
WHAT HAPPENED WHEN?

WHEN & HOW MUCH?

WHERE, WHAT, & WHEN?

WHAT WAS RELATED WHEN?

WHAT IF & WHEN?

Minard graphic: (PD) Wikimedia Commons
Noun Project icons (CC): @olsjoe, @mabusafiah, @b4bb, @makeiev, @mordarius, @barracuda, @ratch0013
WHAT HAPPENED WHEN?

in what sequence?
for how long?
did events A and B co-occur?
when, relative to event C?
Visualising painters' lives

© Accurat (2013)
REPRESENTATION

SCALE

LAYOUT
WHAT STORY DOES YOUR TIMELINE TELL?
Revolutionary User Interfaces

The human computer interface helps to define computing at any one time. As computers have become more mainstream the interfaces have become more intimate. This is the journey of computer technology and how it has come to touch all of our lives.

From punch cards to multi touch.
CHRONOLOGICAL

Dali was born, THEN he started painting, THEN moved to Paris, ...

NON-CHRONOLOGICAL

Dali lived in Paris during his Surrealist period, ... MEANWHILE, Matisse was in Italy, ..., YEARS EARLIER, he too lived in Paris, ...
EXPRESSIVE STORYTELLING WITH TIMELINES

Chronological OR non-chronological
Choice of representations for time
Choice of time scales
TIMELINE STORYTELLER
timeline storyteller.com

Chronological OR non-chronological

Choice of representations for time

Choice of time scales

Annotate, emphasize, reveal,
1.5 x speed
3x speed
The Daily Routines of Famous Creative People

Turns out great minds don't think alike. Discover how some of the world's most original artists, writers and musicians structured their day, based on 'Daily Rituals' by Mason Currey. Filter the different categories by toggling on or off, and hover over the colored bars to learn more about the daily routines.

Left: © 2014 Podio, podio.com/site/creative-routines
Consider the 24 hours daily routine of French writer Victor Hugo.
THE TIMELINE DESIGN SPACE

Different combinations of timeline representation and scale tell different stories about your data.

STORYTELLING CONSIDERATIONS

Don’t limit yourself to a single combination!

Use animated transitions and annotation for incremental reveal, and to connect consecutive narrative points.
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TIMELINE PROJECTS:

- timelinesrevisited.github.io (survey w/ 250+ entries, journal paper)
- timelinecurator.org (text → timeline tool, open-source)
- timelinestoryteller.com (presentation tool, open-source)
- Timeline Consortium (toward a standard for timeline data)

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