No study is less alluring or more dry and tedious than statistics, unless the mind and imagination are set to work - William Playfair
Effective storytelling “require[s] skills like those familiar to movie directors, beyond a technical expert’s knowledge of computer engineering and science” - Gershon & Page 2001

**Defining “story”**

**Aristotle**

beginning ➔ middle ➔ end

**Freytag’s Pyramid**

- exposition
- inciting incident
- rising action
- complication
- climax
- falling action
- denouement
- resolution
- reversal

**set-up**

- deviation from expected

**Inverted Pyramid**

Most important news
who, what, where, why and how?

Important details

Supporting content

**leda**

**nut graf**

**Inverted Pyramid**

From Data Storytelling: Separating Fiction from Fact, B. Dykes

**Defining “story”**

**Most important news**

who, what, where, why and how?

**Important details**

**Supporting content**
Defining “story”

A story *is*
- facts
- causal relationships
- narrative sequence

A story *does*
- tie facts together
- provide a narrative path through the facts
- present a particular interpretation of those facts

---

For sale: baby shoes, never worn. - Hemingway
Narrative Visualization: Telling Stories with Data, Segal & Heer 2010

58 Case Studies
The author/reader spectrum

Author driven
- strong ordering
- heavy messaging
- no/limited interactivity

Reader driven
- limited ordering
- limited messaging
- free interactivity

Examples

Visual Design

Design Space

Duo-Specific
Captions
Annotations
Attached Article
Summaries
Interpret
Headlines

Messaging

Interactivity

Text Tutorial
Selection
Navigation
Details on Demand
Timelines
Filtering
Highlighting

755 Steroids or Not, the Pursuit Is On

US public debt as a percentage of GDP

Differing Paths to the Top of the Charts

U.S. gun deaths in 2013

11,422 people killed

501,489 stolen years
Scientific Proof that Americans are Completely Addicted to Trucks

By Adam Pearce at Black Milkcoat and Deceptipat on Jan 15, 2015

Car geeks will be elbowing each other out of the way for a glimpse of Ford’s gorgeous new GT sports car when the Detroit auto show opens to the public this weekend. But when it comes to the new vehicles people actually buy, the story is all about light-trucks—the broad category that includes pickups, SUVs, crossovers, and minivans. As the economy gains strength and gas prices drop, Americans are turning away from cars and snapping up trucks of all sizes.

2014 new US auto sales, by model

References

- Narrative Visualization: Telling Stories with Data, E. Segal, J. Heer, TVCG, vol 16, issue 6, 2010
- What is a Story, J. Schwabish, https://policyviz.com/2017/03/20/what-is-story/

Additional Examples

The Fallen of World War II
2021 N.F.L. Playoff Picture:
Every Team’s Playoff Chances

Explore the 2021 N.F.L. playoff picture like an expert.

By Josh Katz, Kevin Queally and Rumsey Taylor
Oct. 31, 2021 Updated 7:58 p.m. ET

<table>
<thead>
<tr>
<th>TEAM</th>
<th>RECORD</th>
<th>CHANGE IN PLAYOFFS, LAST 5 WEEKS</th>
<th>RANK PLAYOFFS</th>
<th>WIN DIVISION</th>
<th>ROUND 1 BYE</th>
<th>SUPER BOWL</th>
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In comparison, only 12% of YouTube’s traffic went through cellular networks, but they were by far the most expensive part of YouTube’s content delivery pipeline, accounting for approximately 8,800 Gigawatts-hours of electricity usage—enough to power over 780,000 U.S. homes [3]. At over 10 times the electricity usage per unit of traffic, the relative inefficiency of cellular transmission is clear.

Bubble to Bust to Recovery

By Matthew C. Klein / Bloomberg View / Feb 25, 2014