

17-Labeling-and-Annotation

Graphical Integrity 1st principle:
the graphical representation should be
directly proportional to the numbers
represented

Graphical Integrity 2nd principle

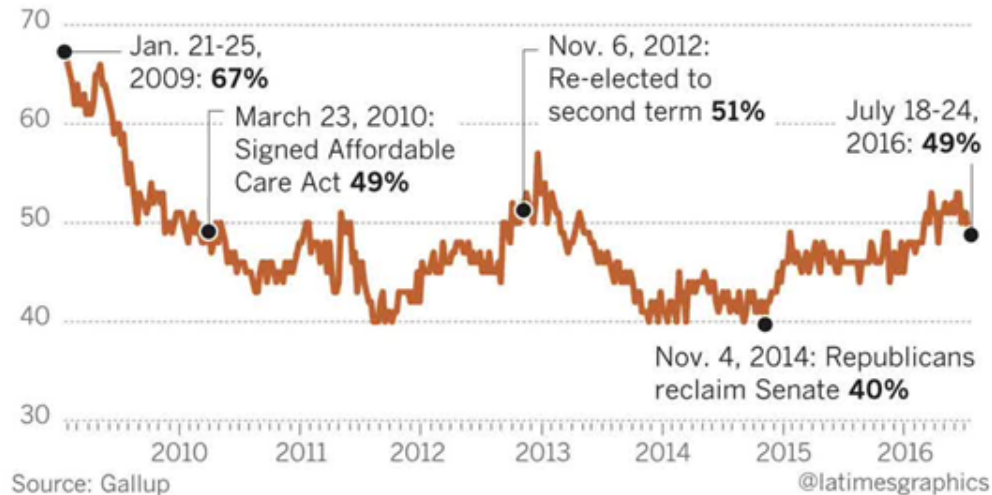
Graphical Integrity 2nd principle

CLEAR, DETAILED, AND THOROUGH LABELING SHOULD BE USED TO DEFEAT GRAPHICAL DISTORTION AND AMBIGUITY.
WRITE OUT EXPLANATIONS OF THE DATA ON THE GRAPHIC ITSELF. LABEL IMPORTANT EVENTS IN THE DATA.

Graphical Integrity 2nd principle

- Sometimes annotations are used to **highlight** important events in the data

President Obama's weekly approval ratings

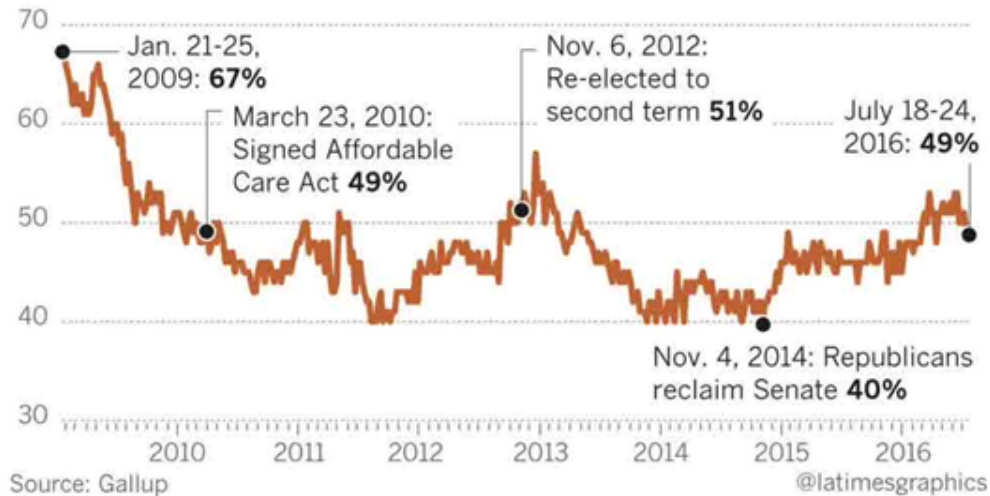


SOURCE: THE BALTIMORE SUN

Graphical Integrity 2nd principle

- Sometimes annotations are used to **highlight** important events in the data

President Obama's weekly approval ratings



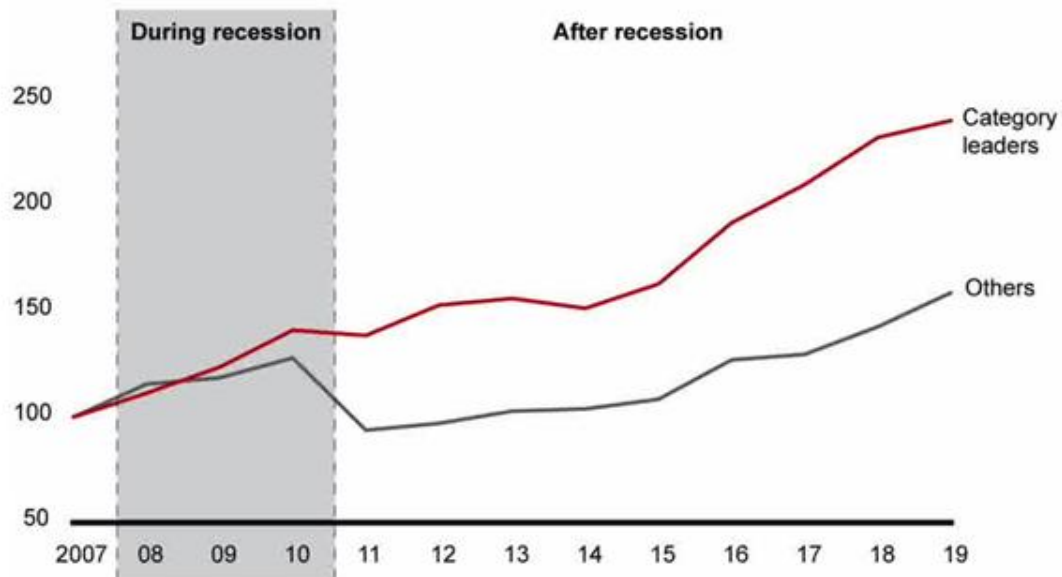
SOURCE: THE BALTIMORE SUN

Ideas ↑↑↑ You want to transmit as much information as you can.	Time ↓ You only have the attention of the viewer for a moment.
	Ink ↓ Think of it as if you had only one pen to write everything. Ink is related to information. Every time you use ink, the viewer will try to decode information from there.
	Space ↓ Space is always limited (newspapers, scientific journal, etc.), and too much space also requires too much attention.

Graphical Integrity 2nd principle

- Sometimes annotations are used to **highlight** important events in the data

Growth in earnings before interest and taxes (2007 indexed to 100)



Note: Analysis of 16 medtech companies
Sources: Capital IQ; Bain analysis

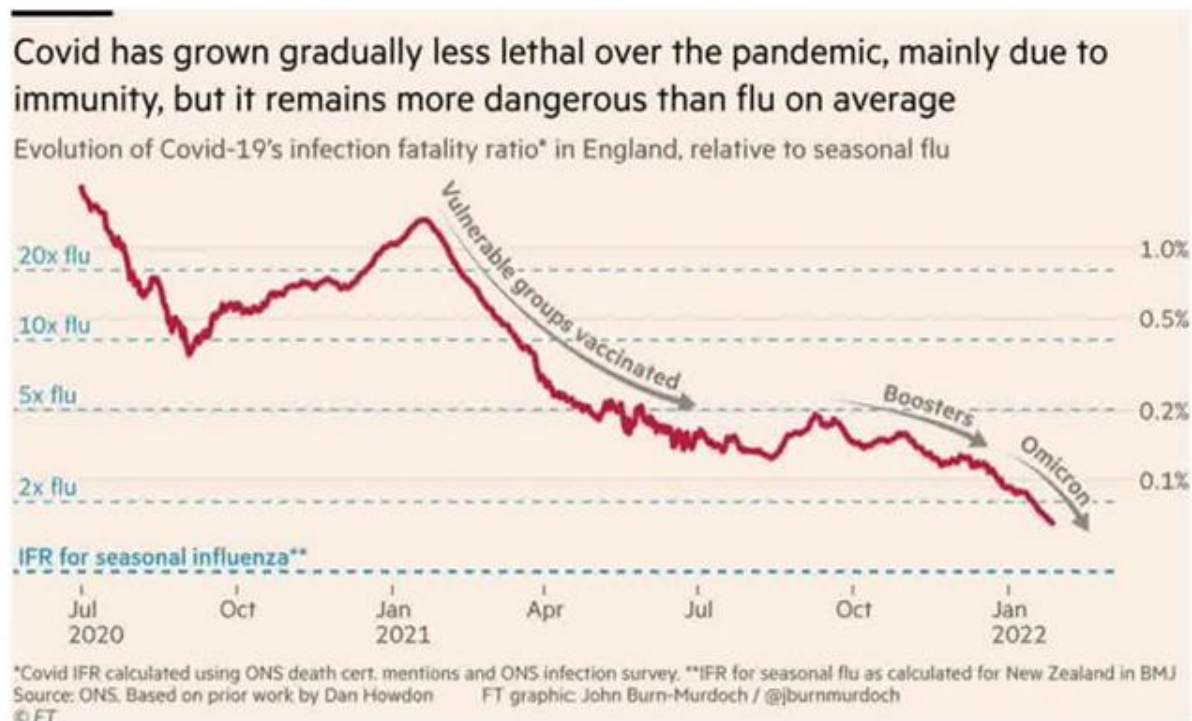
SOURCE: BAIN & COMPANY

Graphical Integrity 2nd principle

- Annotations are also useful to help us **understand** what's going on.

Graphical Integrity 2nd principle

- Annotations are also useful to help us **understand** what's going on.



SOURCE: @JBURNMURDOCH

Graphical Integrity 2nd principle

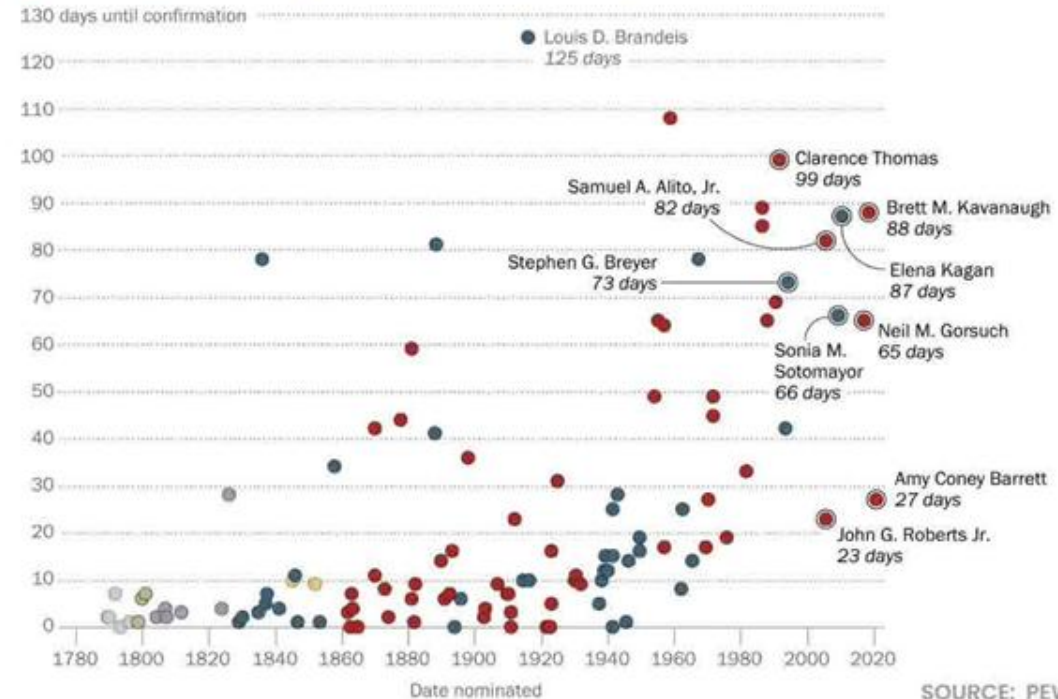
- However **too many** annotations can lead to distortion as well

Supreme Court justice confirmations generally take longer than they used to

Days from nomination to Senate confirmation, by justice

Nominated by ___ president

● Republican ● Democratic ● Whig ● Democratic-Republican ● Federalist ● No party



SOURCE: PEW RESEARCH CENTER

Graphical Integrity 2nd principle

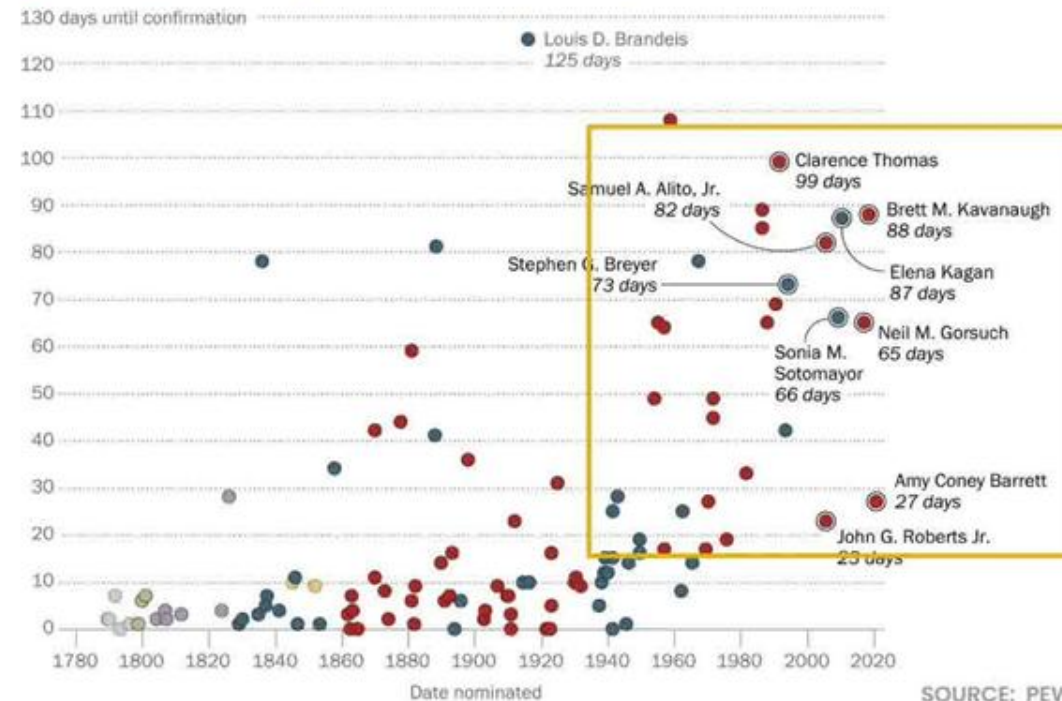
- However **too many** annotations can lead to distortion as well

Supreme Court justice confirmations generally take longer than they used to

Days from nomination to Senate confirmation, by justice

Nominated by ___ president

● Republican ● Democratic ● Whig ● Democratic-Republican ● Federalist ● No party



SOURCE: PEW RESEARCH CENTER

Graphical Integrity 2nd principle

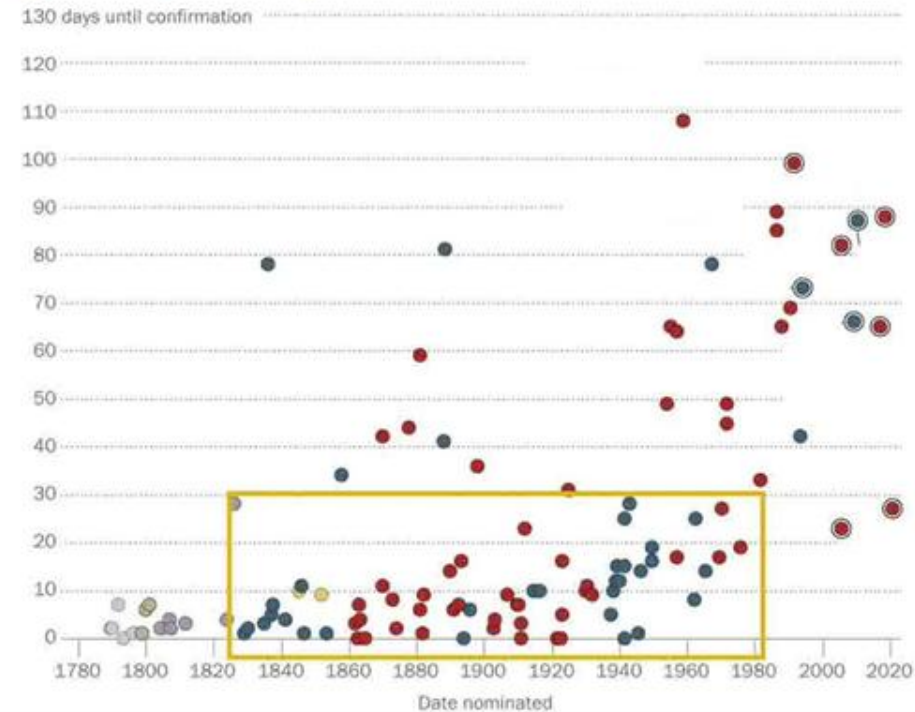
- However **too many** annotations can lead to distortion as well

Supreme Court justice confirmations generally take longer than they used to

Days from nomination to Senate confirmation, by justice

Nominated by ___ president

● Republican ● Democratic ● Whig ● Democratic-Republican ● Federalist ● No party

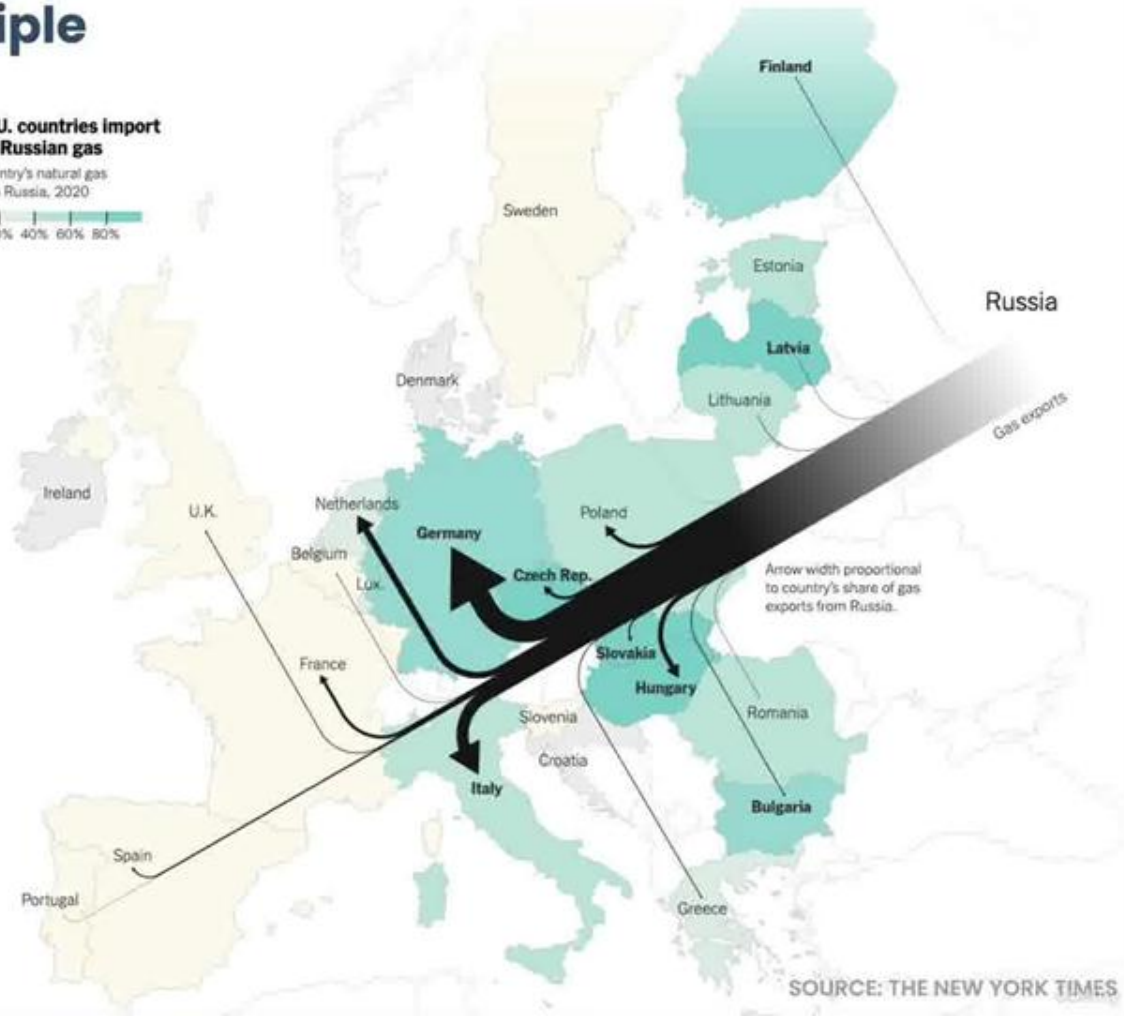


Graphical Integrity 2nd principle

- Showing us **how to read** the chart

Which E.U. countries import the most Russian gas

Share of country's natural gas imports from Russia, 2020



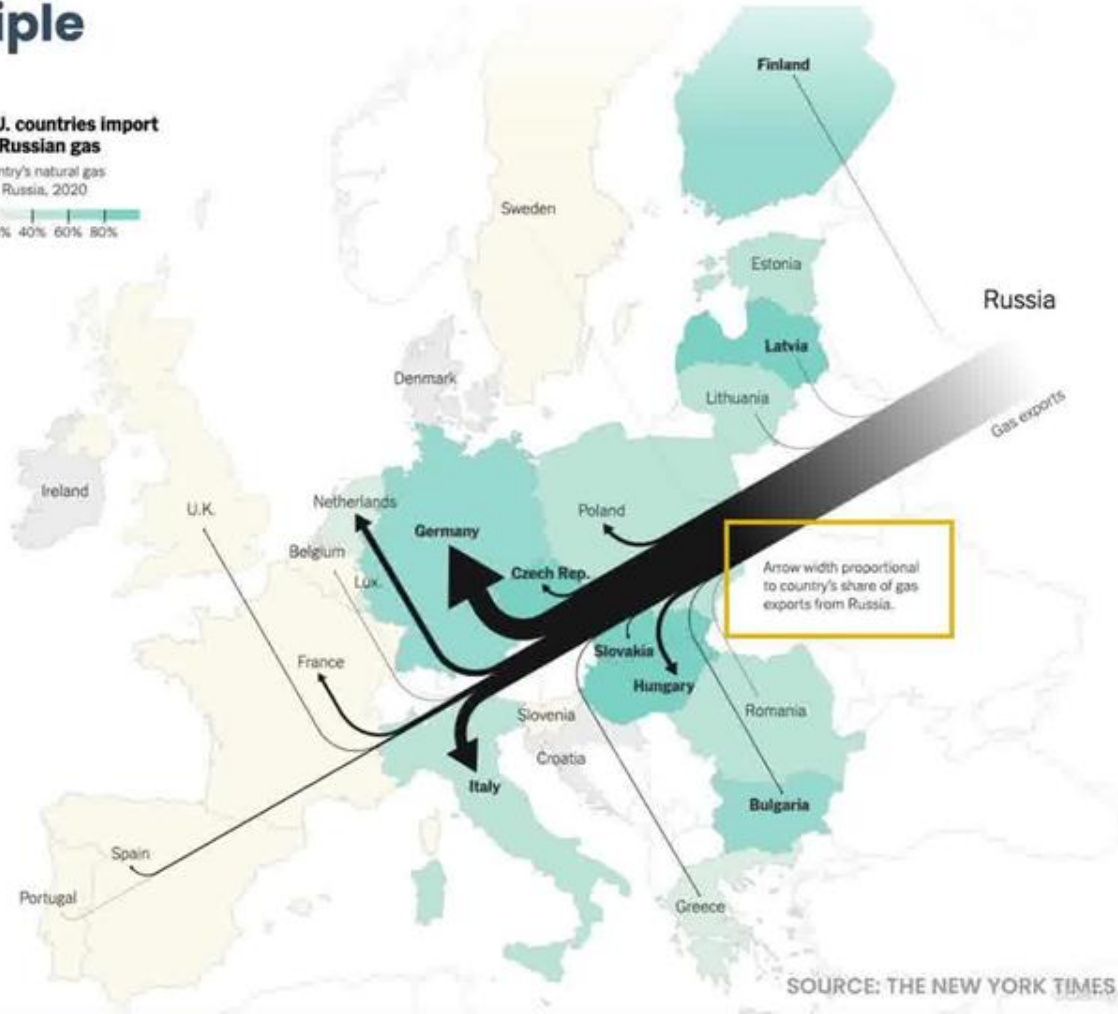
SOURCE: THE NEW YORK TIMES

Graphical Integrity 2nd principle

- Showing us **how to read** the chart

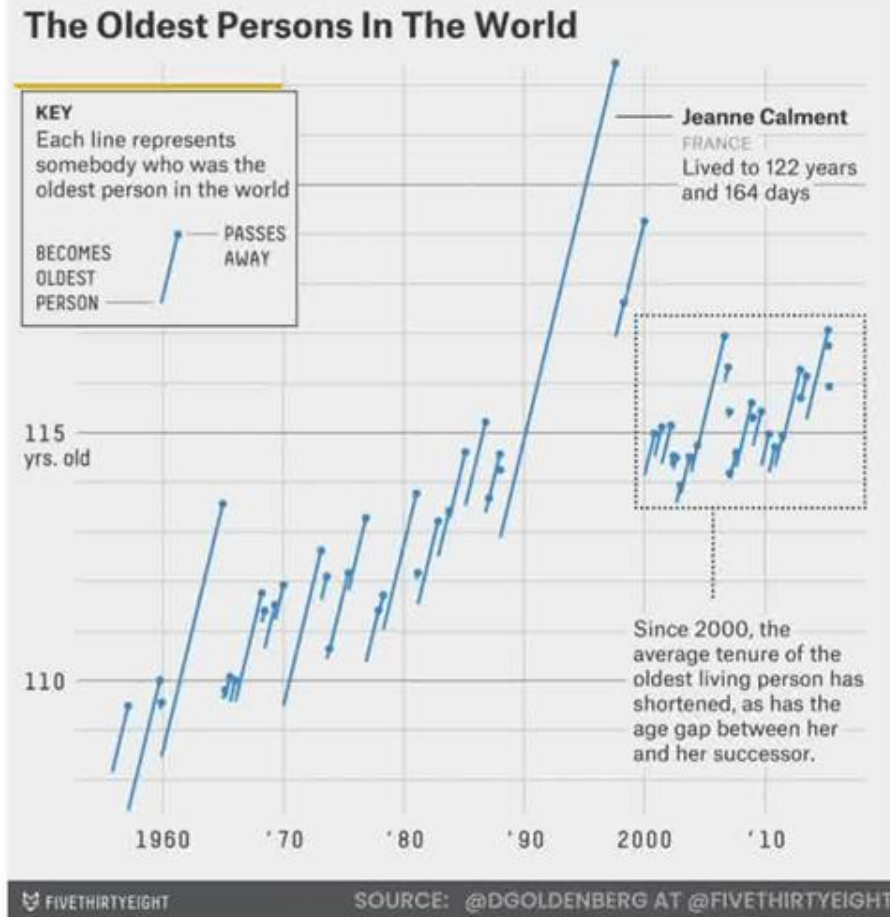
Which E.U. countries import the most Russian gas

Share of country's natural gas imports from Russia, 2020



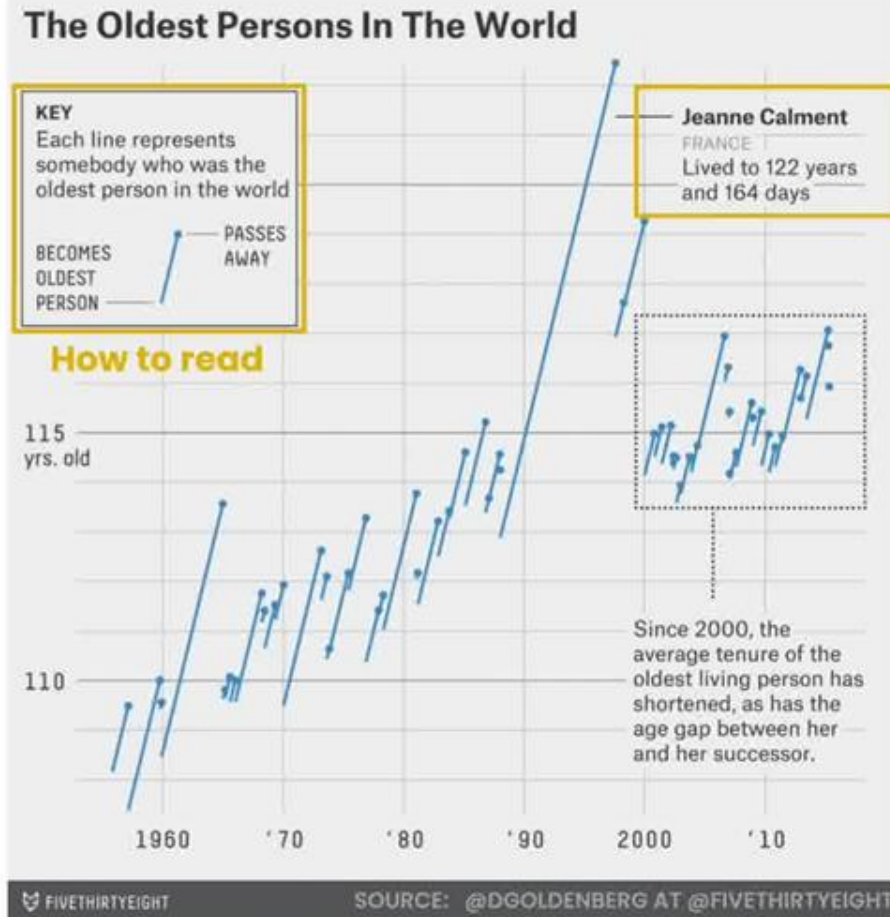
Graphical Integrity 2nd principle

- All of the previous at the same time
- Caution! Don't do too many annotations!



Graphical Integrity 2nd principle

- All of the previous at the same time
- Caution! Don't do too many annotations!



Highlighting data points