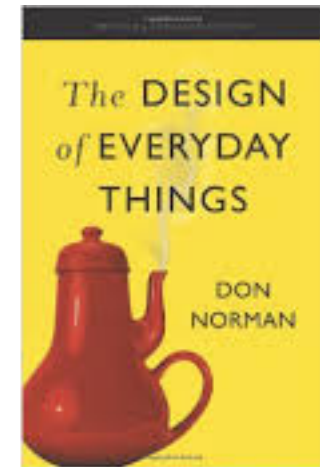How much do you trust this text?

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How much do you trust this text?

The everyday items that are designed the best are the ones that we never have to think about how to use/interact with it.

Can you think of examples?

Highly recommended

Lesson V: design matters

Agenda

- EDA Refresher
- Effective Visualization
    - Graphical Integrity
    - Scope
    - Displays
    - Sensible Design

- Communication
    - Motivation
    - Key Considerations

Agenda

- EDA Refresher

- Effective Visualization

    - Graphical Integrity

    - Scope

    - Displays

    - Sensible Design

- Communication

    - Motivation

    - Key Considerations

Communication

Analyze (Exploratory)

- Explore the data

- Assess a situation

- Determine how to proceed

- Decide what to do

Communicate (Explanatory)

- Present data and ideas

- Explain and inform

- Provide evidence and support

- Influence and persuade

The Persuasive Power of Data Visualization

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After looking into common effects in attitude formation and change we searched for specific mentions to the graphical appearance of charts as a driver for persuasion. Some of the comments we collected seem to back up the findings we found in our results. Some participants explicitly mention the charts as being the main reason for their change: *"I already knew that increased incarceration didn't lower crime, but I wasn't sure of the statistics. To see it on the graphs is really eye opening."*; *"I was influenced by the bar graph showing the reasons why the survey respondents played video games."*; *"I would not know exact numbers on this issue - the graphs gave a visual and helped identify the numbers"*; *"Seeing the graphs conflicted with my previous opinion, so I feel like I need to reevaluate my stance in a way."*

It is also important to mention that the graphical appearance of charts is not the only factor that has a strong impact on people's attitude. In our collected feedback, we found numerous references to statistics and numbers, suggesting that mere exposure to data does have a persuasive effect – maybe at least partially due to the increased sense of objectivity evidence supported by numbers carries. We found comments like: *"It was concrete data that seemed compelling.*; *"Seeing numbers is a good indicator of change rather than just reading what someone has to say"*; *"It showed a large amount of different sources, which made it more credible"*. More research is needed to disentangle what kind of specific effects each of these components have on persuasion.

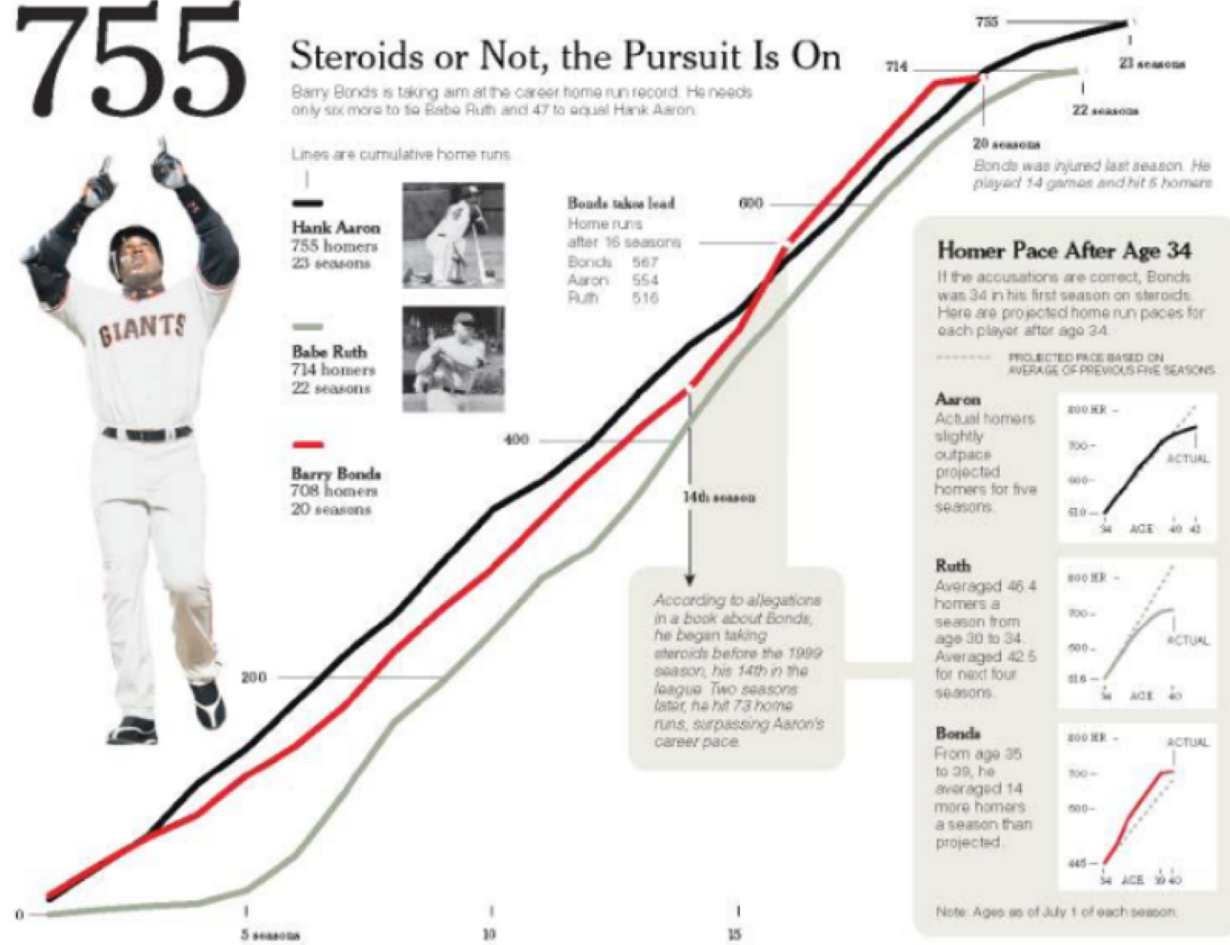http://lsr.nellco.org/cgi/viewcontent.cgi?article=1476&context=nyu_plltwp

755

Steroids or Not, the Pursuit Is On

Barry Bonds is taking aim at the career home run record. He needs only six more to tie Babe Ruth and 47 to equal Hank Aaron.

Lines are cumulative home runs

Hank Aaron
755 homers
23 seasons

Babe Ruth
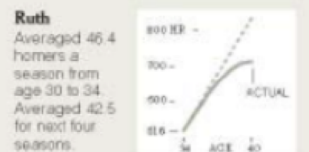714 homers
22 seasons

Barry Bonds
708 homers
20 seasons

Bonds takes lead
Home runs after 16 seasons
Bonds 567
Aaron 554
Ruth 516

20 seasons
Bonds was injured last season. He played 14 games and hit 5 homers

22 seasons

23 seasons

14th season

According to allegations in a book about Bonds, he began taking steroids before the 1999 season, his 14th in the league. Two seasons later, he hit 73 home runs, surpassing Aaron's career pace.

Homer Pace After Age 34
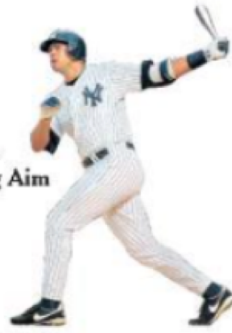
If the accusations are correct, Bonds was 34 in his first season on steroids. Here are projected home run paces for each player after age 34.

PROJECTED PACE BASED ON AVERAGE OF PREVIOUS FIVE SEASONS

Aaron
Actual homers slightly outpace projected homers for five seasons.

Ruth
Averaged 46.4 homers a season from age 30 to 34. Averaged 42.5 for next four seasons.

Bonds
From age 35 to 39, he averaged 14 more homers a season than projected.

Note: Ages as of July 1 of each season.

Others Taking Aim

Alex Rodriguez
Is ahead of the pace set by all three home run leaders.
429 HR
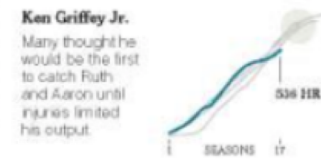Aaron, Ruth and Bonds
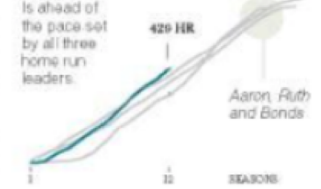
Albert Pujols
Averaging 40 homers a season, he has started stronger than the three leaders did.
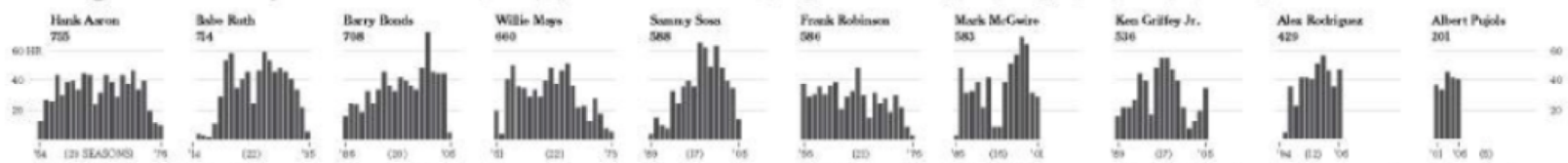201 HR
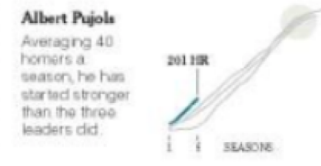
Ken Griffey Jr.
Many thought he would be the first to catch Ruth and Aaron until injuries limited his output.
536 HR

Differing Paths to the Top of the Charts
The top seven players on the career home run list, along with a look at Griffey (12th), Rodriguez (37th) and Pujols (tied 257th).

Hank Aaron	Babe Ruth	Barry Bonds	Willie Mays	Sammy Sosa	Frank Robinson	Mark McGwire	Ken Griffey Jr.	Alex Rodriguez	Albert Pujols
755	714	708	660	588	586	583	536	429	201
15 times hit 30 or more (M.L. most).	Hit only 20 over first five seasons.	Averaged 52 from 2000 to 2004.	No one hit more from 1950-69.	Three 60-homer seasons is record.	Triple Crown in '66 (49, 122, .316).	First to hit 70 in a season.	Only McGwire had more in the 90's.	Youngest to reach 400 homers.	Second most ever in first

8

Minard's Graphic on Napoleon's Russia Campaign

Figurative Map of the successive losses in men of the French Army in the Russian campaign 1812 ~ 1813
Drawn by M. Minard, Inspector General of Bridges and Roads (retired).
Paris, November 20, 1869.

The numbers of men present are represented by the widths of the colored zones at a rate of one millimeter for every ten thousand men; they are further written across the zones. The red designates the men who enter Russia, the black those who leave it. —— The information which has served to draw up the map has been extracted from the works of M.M. Thiers, de Ségur, de Fezensac, de Chambray and the unpublished diary of Jacob, the pharmacist of the Army since October 28th. In order to better judge with the eye the diminution of the army, I have assumed that the troops of Prince Jérôme and of Marshal Davout, who had been detached at Minsk and Mogilev and have rejoined near Orsha and Vitebsk, had always marched with the army.
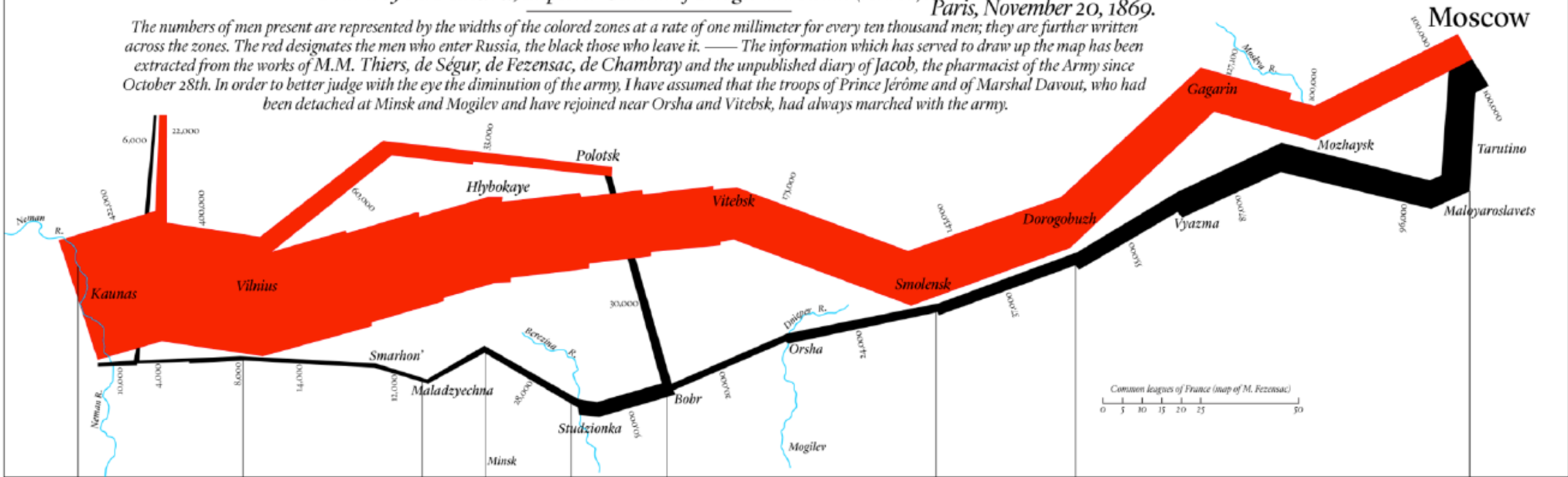
GRAPHIC TABLE of the temperature in degrees below zero of the Réaumur thermometer.