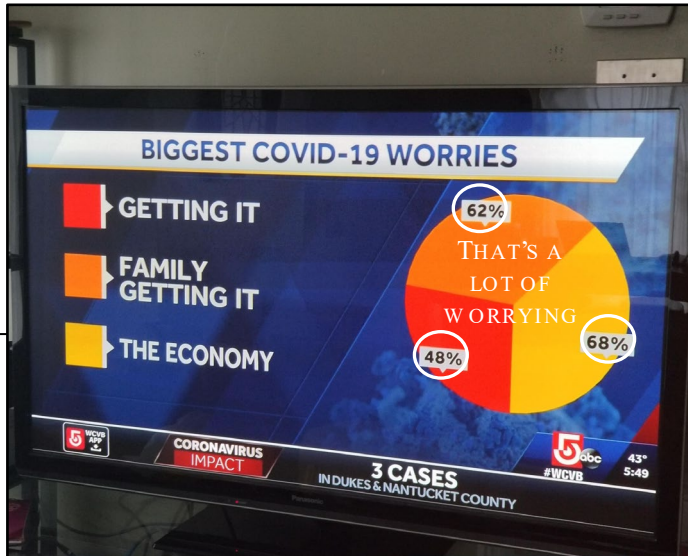


UCCS DFEI 2020/2021 Ethics Roundtable Series

May 7, 2021



Information Design & Students' Ethical Awareness in the Visual Presentation of Data

This material was developed by Tom Wahl, MA, and Cameryn Fox, and is intended for classroom discussion rather than to illustrate effective or ineffective handling of administrative, ethical, or legal decisions by management. No permission or compensation is needed for classroom use as long as it is acknowledged to be the creative work of the author and the UCCS Daniels Fund Ethics Initiative. For public action or electronic posting, please contact the UCCS Daniels Fund Ethics Initiative Collegiate Program at UCCS College of Business at 1-719-255-5168. (2021)

PRESENTERS

Tom Wahl

Senior Instructor

Technical Communication & Information
Design Dept.

&

Cameryn Fox

Student Ethics Ambassador

El Pomar Intern, Summer 2021

Jr. // BusinessMgmt Major // TCID Minor





Agenda

- What is TCID & TCID 2080?
- The Assignment
 - The Purpose
 - The Why
 - The Description
- Questions



What is TCID?

UCCS COLLEGE OF LETTERS, ARTS & SCIENCES

BACHELOR OF ARTS IN
**TECHNICAL
COMMUNICATION
AND INFORMATION
DESIGN**



PROGRAM OVERVIEW

- Dr. Sean Williams, PhD – Department Head
- One of few standalone technical communication degree programs in the country
- Prepares students for developing career fields:
 - USER EXPERIENCE (UX) DESIGN
 - TECHNICAL // PROFESSIONAL WRITING & EDITING
 - DEFENSE
 - NONPROFITS
 - BUSINESSES
 - WEB CREATION
- 11,000: US Bureau of Labor estimates of new jobs in field of technical communication & information design
- Curriculum designed to provide foundation of theory, technology, and practical application



What is TCID?

UCCS COLLEGE OF LETTERS, ARTS & SCIENCES

BACHELOR OF ARTS IN TECHNICAL COMMUNICATION AND INFORMATION DESIGN



“TCID is on the cutting edge of collaborative real-world experiential learning affording immediate benefit to corporations seeking strong technical communication professionals.”

– Paul H. Massey, L3Harris Technologies, Inc.

22%

field growth in Colorado

10%

field growth nationally

TOP 10

Colorado Springs is rated among the ten fastest growing areas for technical communication in the US

by the annual STC Salary Database

\$72,850

median income per year for technical communicators

According to the U.S. Bureau of Labor Statistics



CORE COMPETENCIES

Graduates of the TCID program:



write clearly and correctly for specific audiences



assess and learn new technologies to meet communication goals



communicate fluently in multiple media formats



collaborate with others from diverse backgrounds, including subject matter experts, end users and the public



manage complex projects and ethically manage the work of others



conduct user research on complex products and communicate that research effectively to others

Some of the positions graduates fill include:

- **TECHNICAL COMMUNICATOR**
- **USER EXPERIENCE DESIGNER**
- **CONTENT STRATEGIST**
- **INFORMATION ARCHITECT**
- **USABILITY RESEARCHER**



What is TCID?

UCCS COLLEGE OF LETTERS, ARTS & SCIENCES

BACHELOR OF ARTS IN
**TECHNICAL
COMMUNICATION
AND INFORMATION
DESIGN**



Class Sampling

- INTRO TO TECH WRITING
- INTRO TO BUSINESS WRITING
- UX DESIGN PRINCIPLES
- DOCUMENT DESIGN
- INTERNSHIP
- SPECIAL TOPICS:
 - Technical Communication & Social Justice
 - Social Media
 - Grant Writing for Nonprofits
 - Structured Authoring

TCID 2080 - Business and Administrative Writing

3 Credits (Minimum) 3 Credits (Maximum)

This course is about writing strategies, specifically understanding and applying these strategies within the context of workplace communication. This course will teach you the best practices to communicate in real-world professional environments. You will organize, design, write, and revise clear documents and visuals. Genres include everyday workplace communication such as memos, letters and emails; employment documents; and research-based documents such as proposals, reports, and presentations. ENGL 2080 is an option for the second core writing course across the university. Prer., ENGL 1308 or ENGL 1310 or ENGL 1410.

So then:
What is TCID *2080*?

“This course will teach you the best practices to communicate in real-world professional environments.”

GENRES: Memos, Letters, Reports, Proposals

STYLE: Concise, Plain Language

FORMAT: Topic Headings, Bullets

Short Paragraphs & Sentences

Document Design

Visual Hierarchy & Easy to Skim

VS. ACADEMIC WRITING

Yolonda Alston

Eng101

Professor Alicia Bolton

13, June 2012

Covergirl: Queen Latifah TrustsCoverGirlProducts

The CoverGirl adfrom March 2012 includes a picture of Queen Latifah in a grayish background with her green eye shadow. Queen Latifah has small brown eyes with long curly black eyelashes. She has a beautiful big smile with shiny white teeth. Queen Latifah also has a lovely pair of small gold round danglinglearrings in her ears. The word "CoverGirl" is written in big bold green letter across her forehead, all to improve her appearance. Queen Latifah written in small green letters underneath in the right hand corner. The p is from her head to her shoulders, just enough for the viewers to focus o CoverGirl's product. Queen Latifah appears to be wearing an olive green same color as CoverGirl's product, with her hair pulled back into a long p The advertisement effectively uses logos, ethos, and pathosto convince viewers to buy CoverGirl products.

The first appeal is shown by using logos to give the viewer's reason buy CoverGirl products. CoverGirl claims that their products are for wom

FORMAT = DOCUMENT DESIGN = INFORMATION DESIGN

- AUDIENCE ORIENTED
- EMPATHETIC

ETHICS ASSIGNMENT → DATA PRESENTATION

- CHARTS, GRAPHS, ETC.
- ETHICAL APPLICATIONS



GENDER NEUTRALITY

The Marsh Style Guide is referring secretaries as *she* throughout the text. It is sexist and outdated.

When the secretary signs a letter in her own name as secretary to someone, she should not include his initials unless another person in the organization has the same surname.

We suggest updating the guide to make the pronouns neutral since the role of a secretary can be any gender. For example: "When the secretaries sign a letter in their own name as a secretary to someone, they should..."

CLICHÉS & JARGONS

Cliches and jargons are terms that lost meaning because of overuse. It's difficult to avoid them since they come up everywhere. Finding these in business writing can make bad impressions and assumptions about the writer. It can also cause confusion and misunderstanding.

The best way to write a business document is to make sure the simplest words were used. According to the *Pro Writing Aid's* article, "How to Avoid Jargon in Your Business Writing".

A good rule of thumb is, would a 13- or 14-year-old be able to understand what you wrote? If not, then you might want to consider doing some revising.

PLAIN LANGUAGE

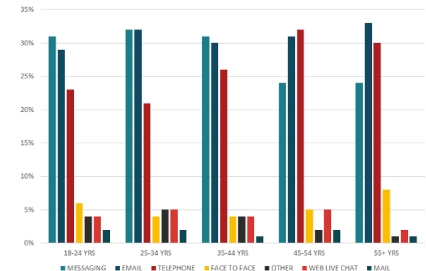
We the writers always need to put ourselves in the shoes of the reader. We need to ask ourselves these questions:

- Will my message come across without confusion?
- Is my document written in active voice?
- Have I removed the unnecessary information?

COMMUNICATION

Communication is what makes us fast via emails, texts and want to teach employees the how to communicate through the Marsh Style Guide is because it was created 34 years ago and wasn't invented yet.

It is not acceptable in the workplace to compose an email or how therefore, we suggest we're about how to effectively through these



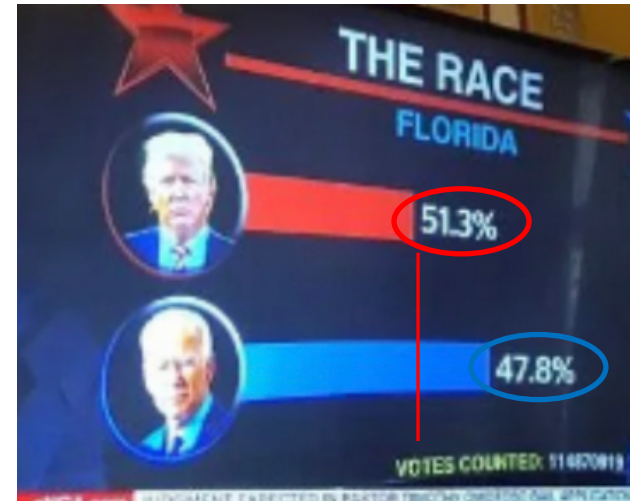
Breaking down the lengthy paragraphs and sentences. It needs to be brief and concise. It is to read the more time it takes to understand.

The Assignment

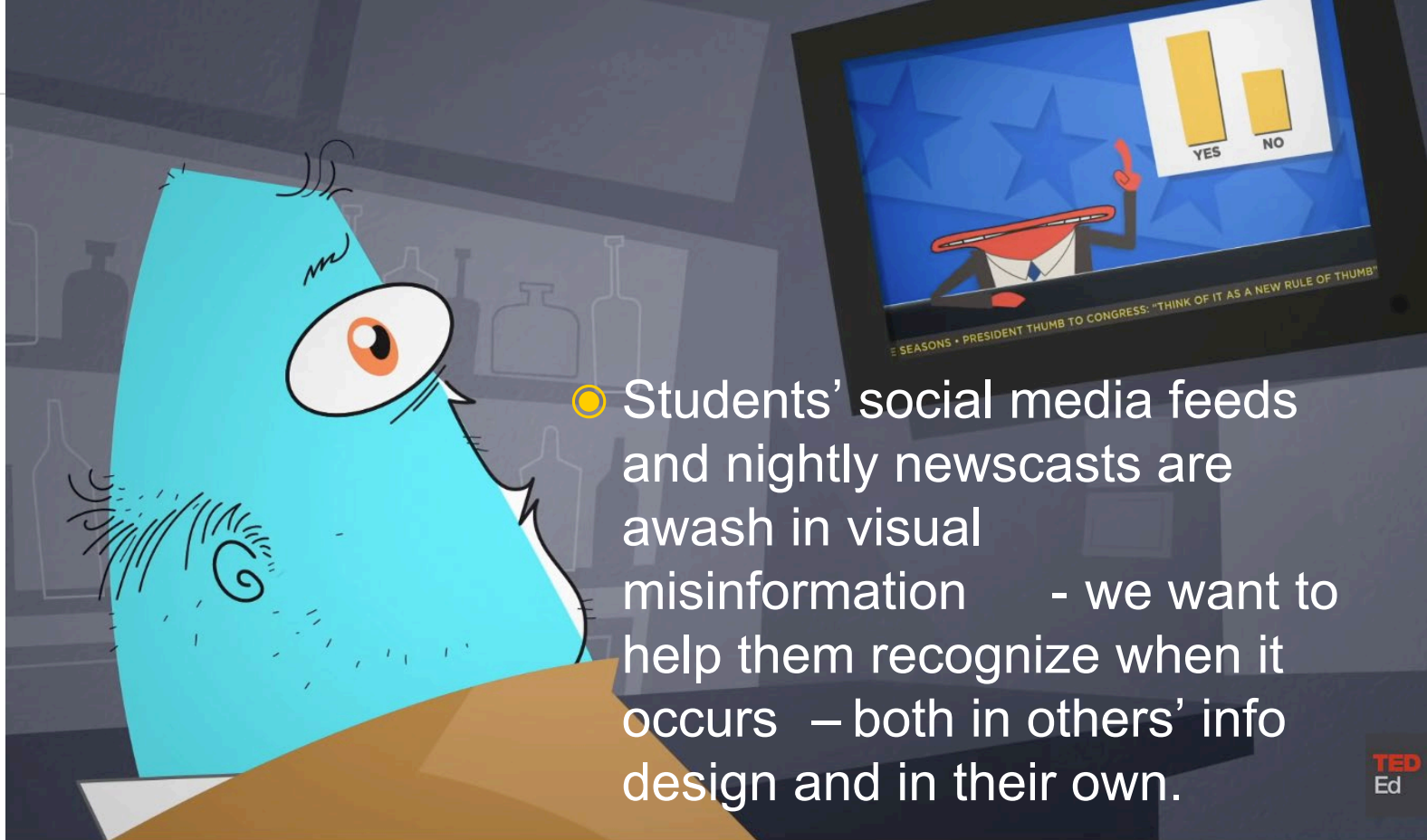
Information Design & Students' Ethical Awareness in the Visual Presentation of Data (charts, graphs, etc.)

*OR

Adventures in Misleading Information Design



Why?

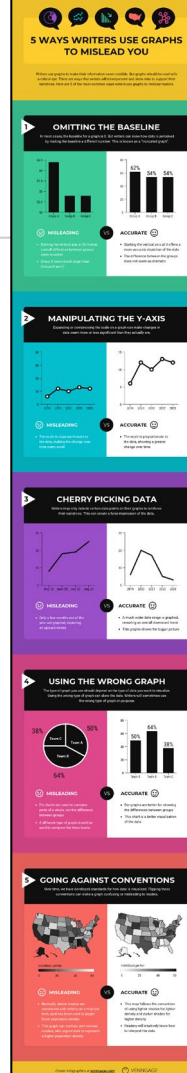
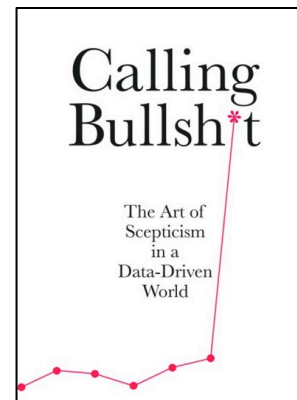
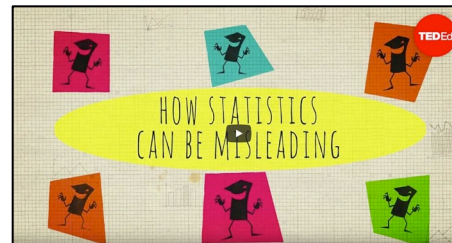




Assignment Description:

PRE-ASSIGNMENT

- Review/Assign web-based resources: *Ways Writers Use Graphs to Mislead, TED Talks, etc.* – informative & appealing to students
- Review Examples
- Discuss the prevalence of misleading Information Design
- Tie into key Daniels Fund Ethics Institute Principles





Assignment Description:

DISCUSSION

- Please find your own example of unethical data representation or technical design. This can be from a news outlet, social media, or a creation of your own using real data. Explain why this is unethical and the impact it can have on its viewers.
- Respond to the person above you in the discussion thread by fixing the data/example they have provided. Please explain what you changed.

To receive full credit, they need to post their initial post (#1) by a certain day, so that others have time to do their responses (#2)

MEMO

- Please write a short memo reflecting on the material of this module.
 - The Daniels Fund Ethics Initiative Principles
 - The impact of unethical data
 - Why is it important to be ethical when we are presenting data to an audience?
- Add a page at the end of the Memo answering the following questions:
 - What do you think you did well on this assignment?
 - What do you think you could have done better at?
 - What are some ways you implemented material from this class into your work?
 - How will you implement this into your own work/life?

Daniels Fund Ethics Initiative Principles

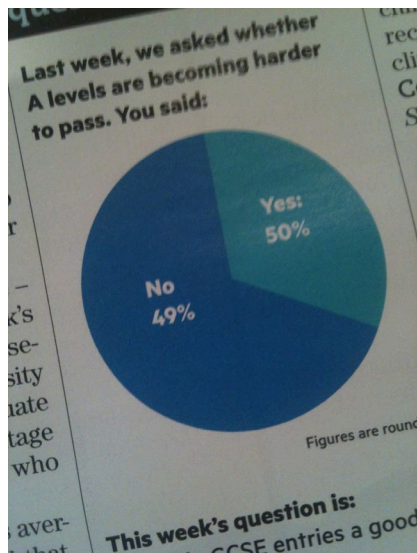
- Integrity
- Trust
- Accountability
- Transparency
- Fairness
- Respect
- Rule of Law
- Viability



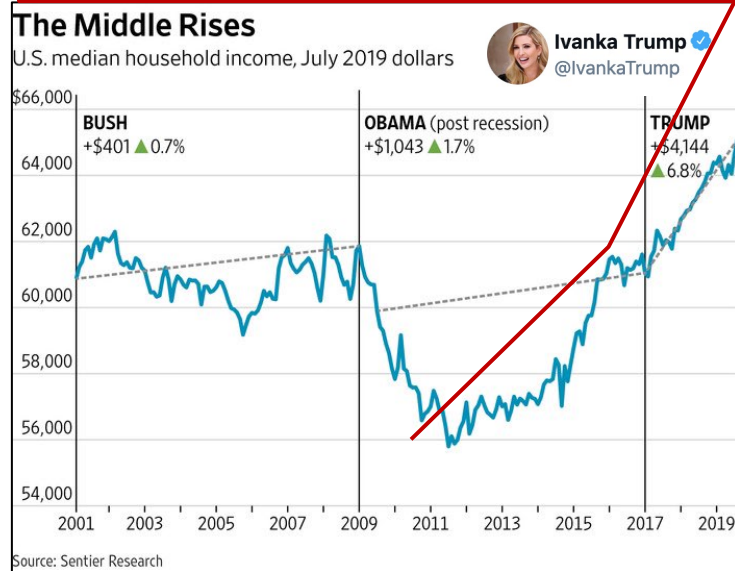


Integrity: Act with Honesty in All Situations

- Represent data in an honest way, that is not misleading to the audience.



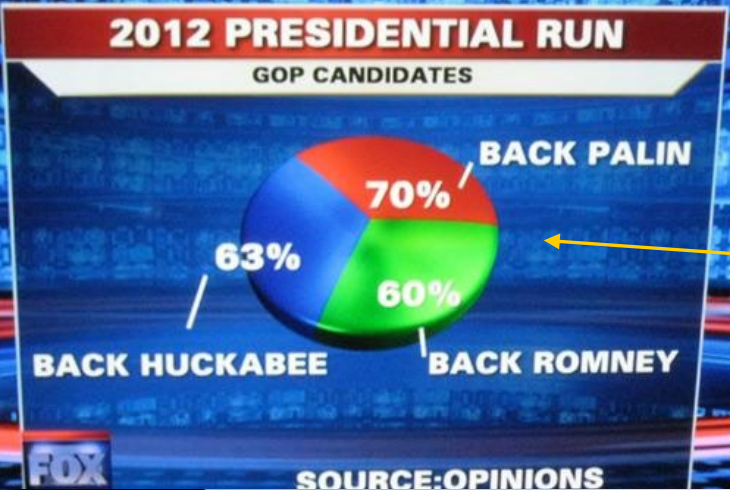
Maybe this could be a bit more accurate than Ivanka would like?



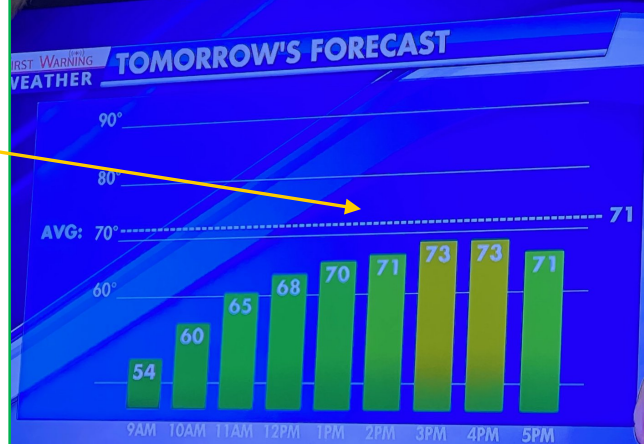
Trust - Build Trust in All Stakeholder Relationships

- This graph lacks accuracy and doesn't make sense.
- This will cause the viewer to lose trust in the information and the source.
- You want viewers to trust the information you are giving.





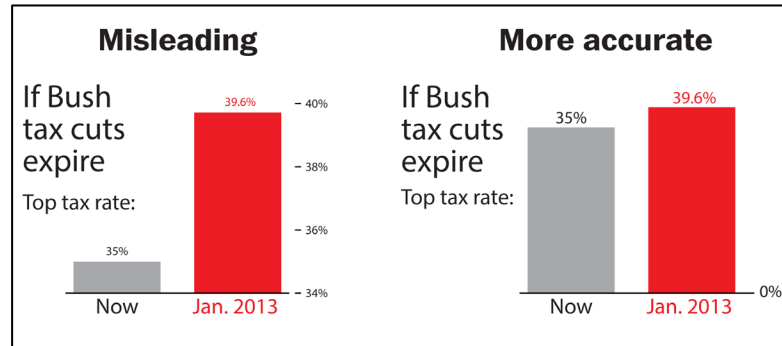
*Issues with math and alignment are not country-specific





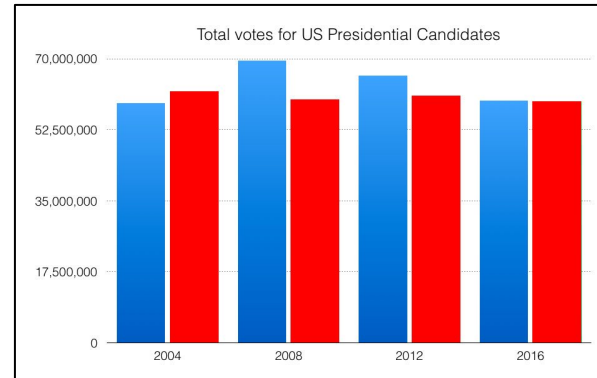
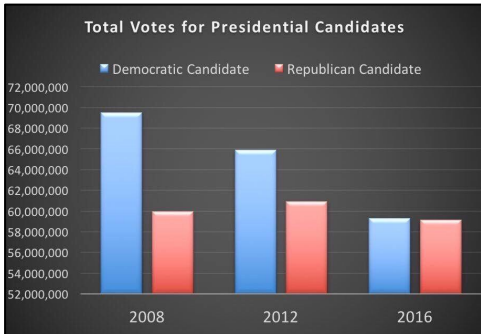
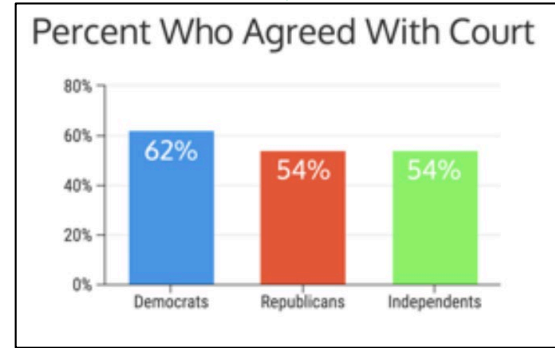
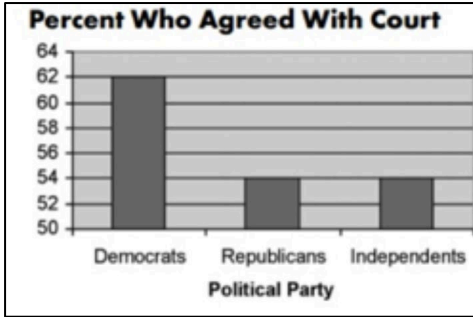
Accountability - Accept Responsibility for All Decisions

- Know when you are being dishonest or skewing the graph axis scale.
- The scale can skew the data and change the message.
- Color can also help people easily understand the graph.
- Be aware when *design* impacts assumptions or interpretation.

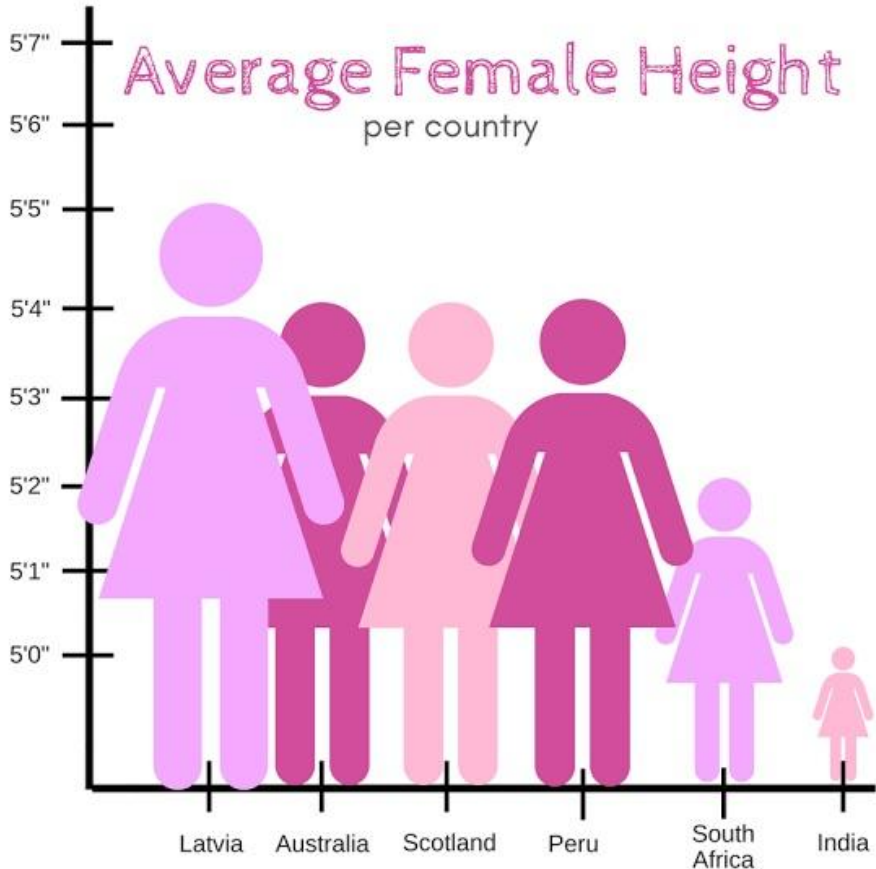




Which Graph Accurately Displays the Information?

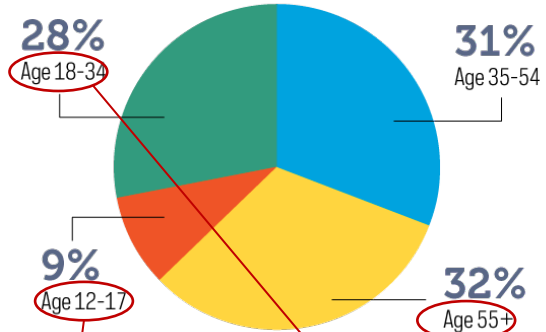


Design Issues

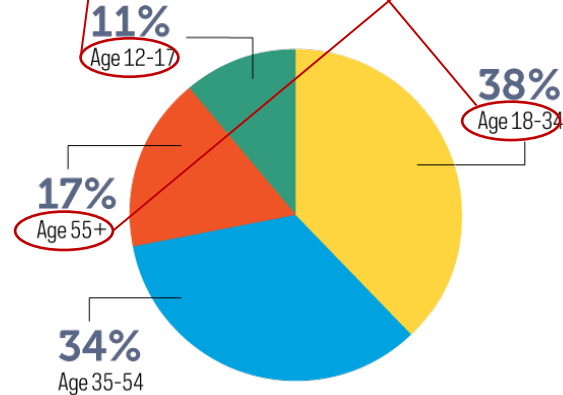


Who listens to podcasts?

U.S. population 12 years of age or older



Podcast consumers 12 years of age or older

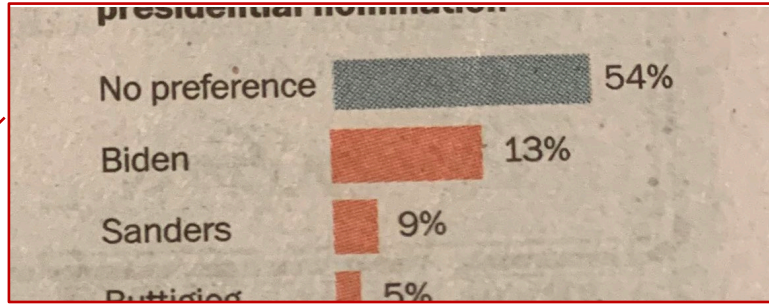
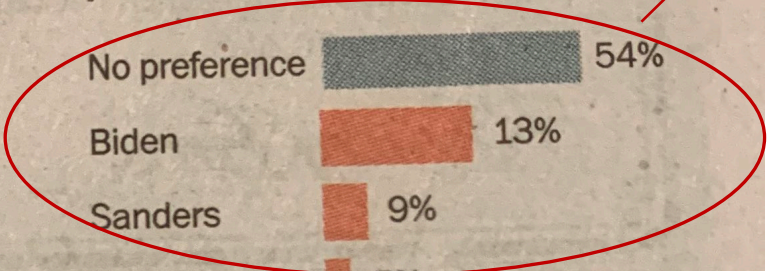


Colors and positioning changes

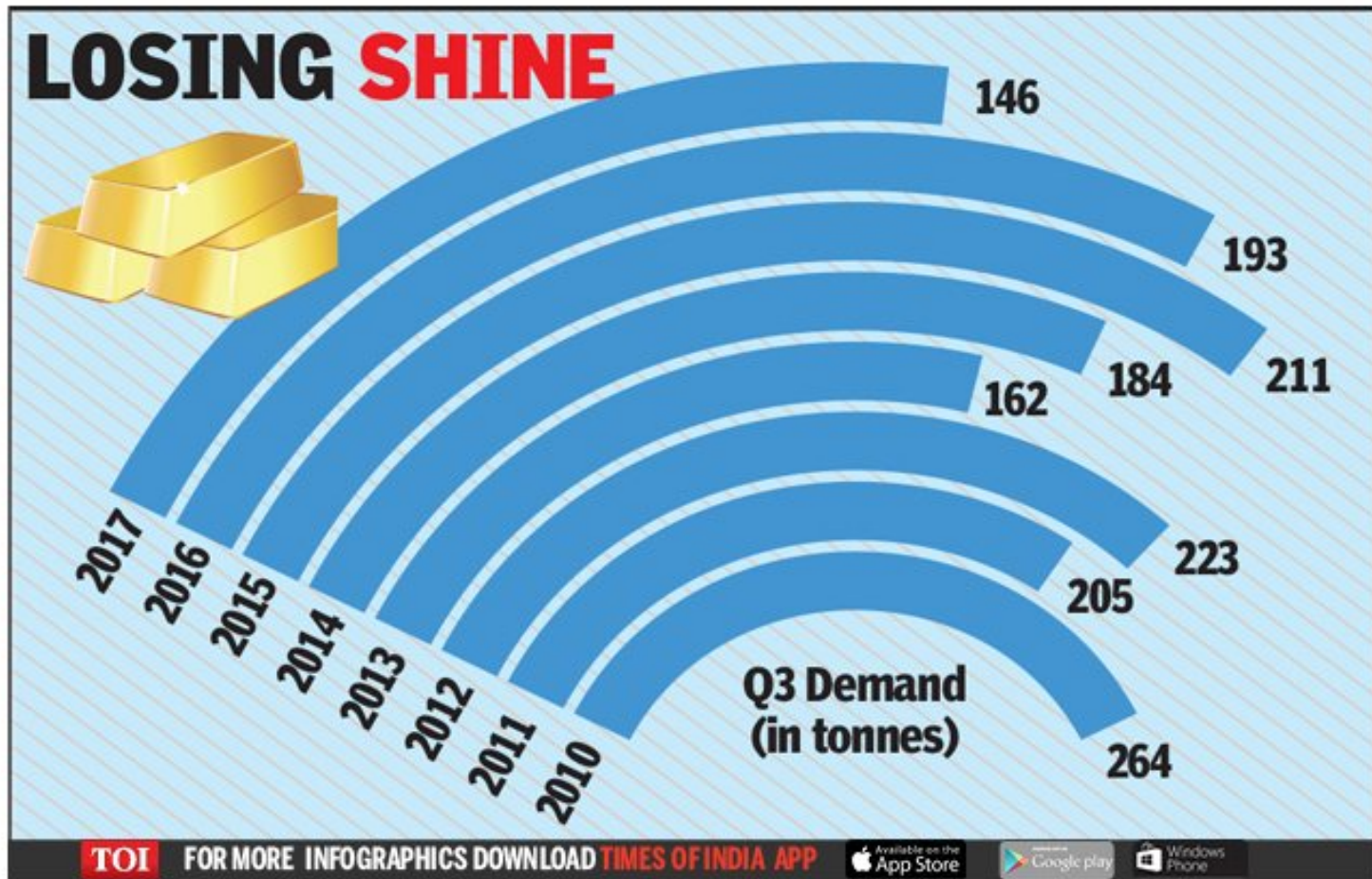
... ahead in ... Trump

Readers will assume that size differences in shapes or areas are proportional to values

Preference for Democratic presidential nomination



The curved design doesn't help the reader

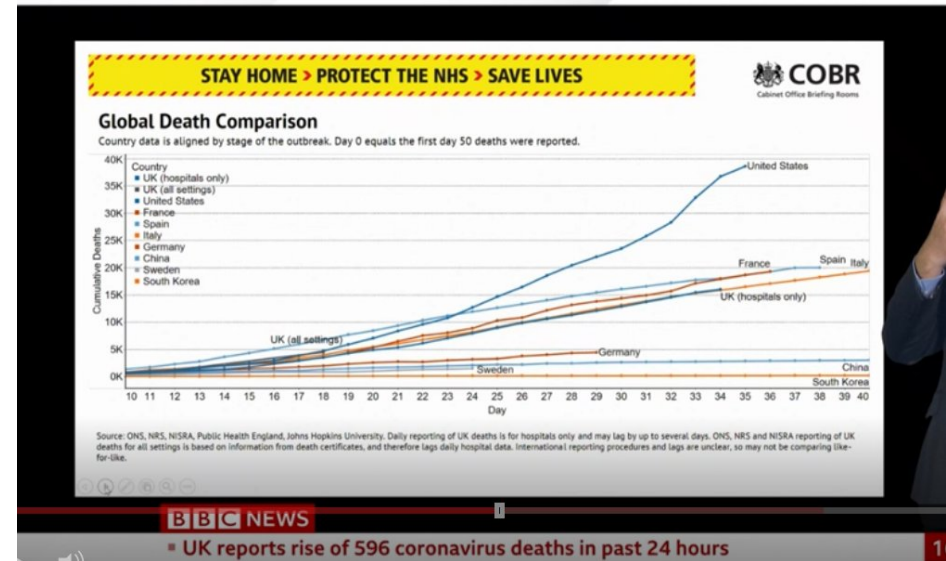
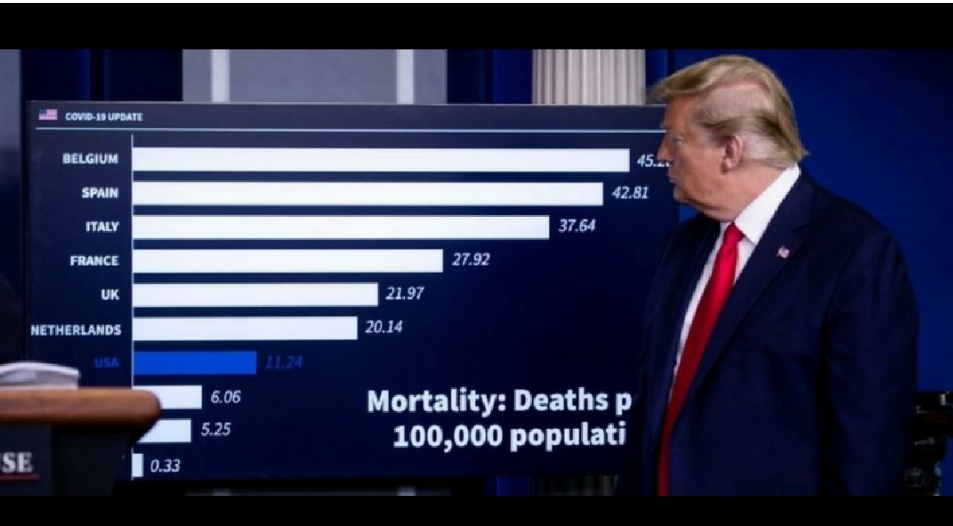




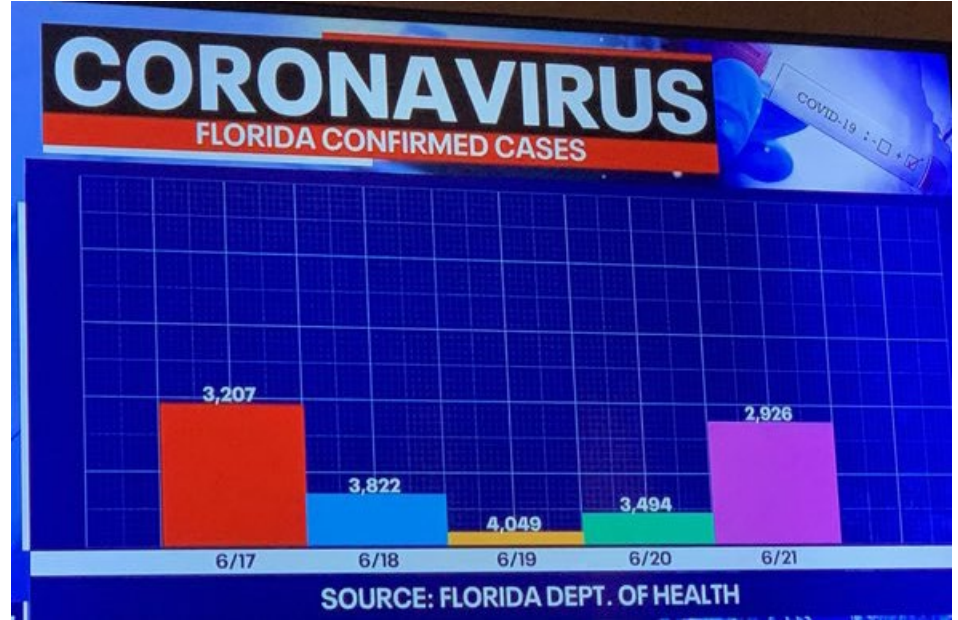
Transparency - Maintain Open and Truthful Communications

- ⦿ Information Design needs to be clear.
- ⦿ Tell the truth .
- ⦿ Don't try to change the graph to change the results.
- ⦿ Know your sources and their bias.
- ⦿ Use the appropriate type of graph to communicate your information.

Example of a Graphs that Lacks Transparency



Another example is focusing on ratios and not providing whole numbers for users to see the big picture

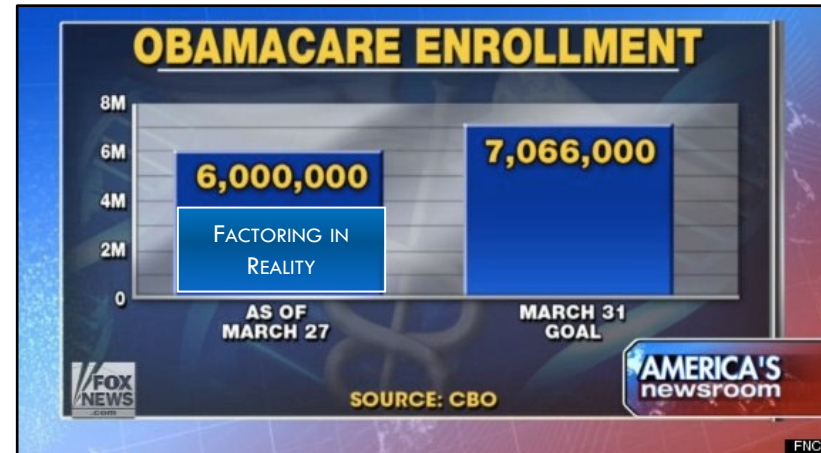
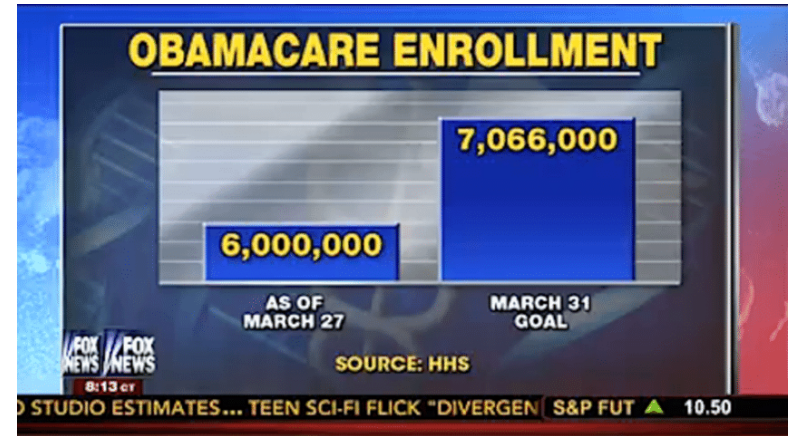


This past year we have seen how news outlets haven't portrayed data in an honest way. These types of graphs lead people to be more anxious and nervous during uncertain times.



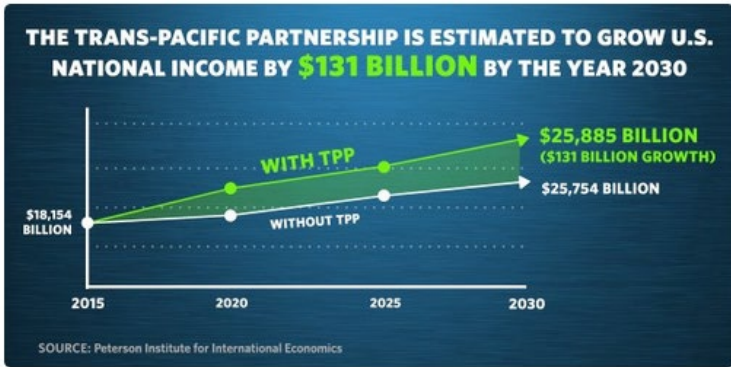
Fairness - Be Fair and Equitable

- ⦿ You can't let your own bias be reflected in the information Design
- ⦿ Let the data speak for itself





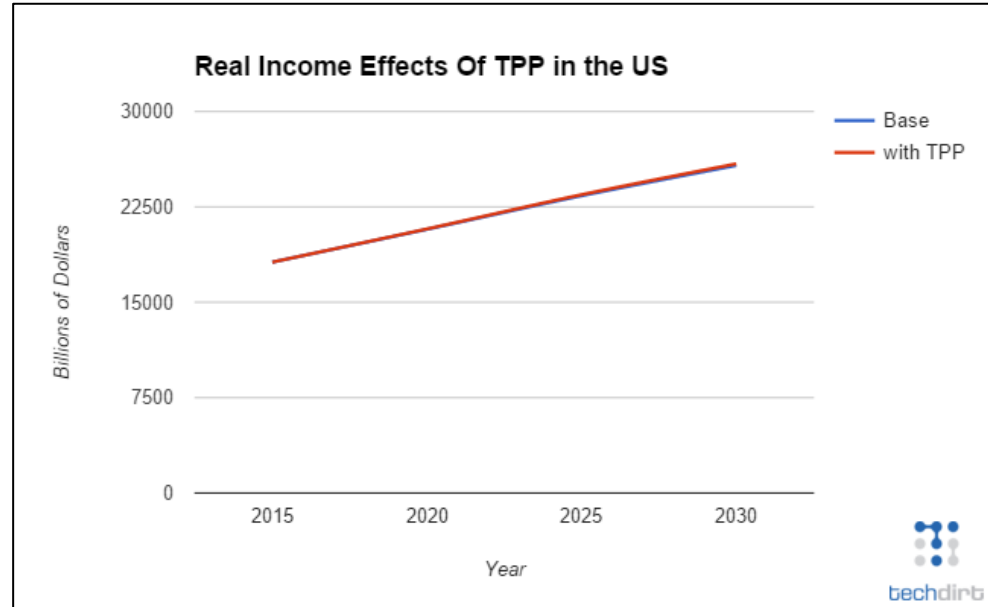
New @PIIE_com Report: US national income estimated to grow by \$131 billion w/ #TPP by 2030 [iie.com/publications/i ...](http://iie.com/publications/i...)



RETWEETS 15 LIKES 7



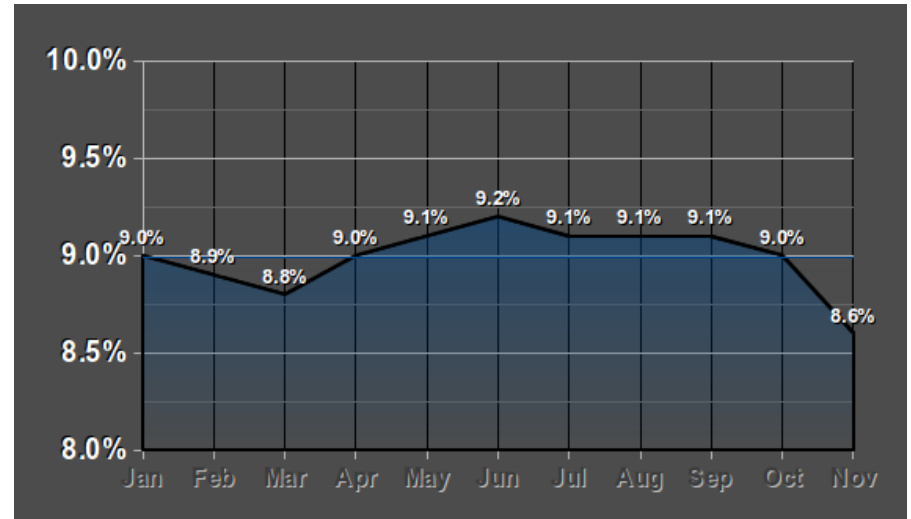
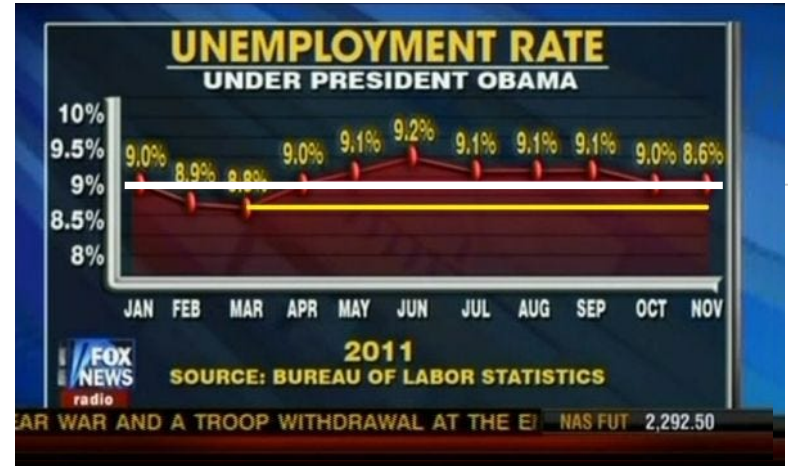
9:10 AM - 25 Jan 2016



Examples aren't just from Fox either – trade groups with assumed credibility will also act unethically to present their point, though they can easily be assumed to be a credible source of information

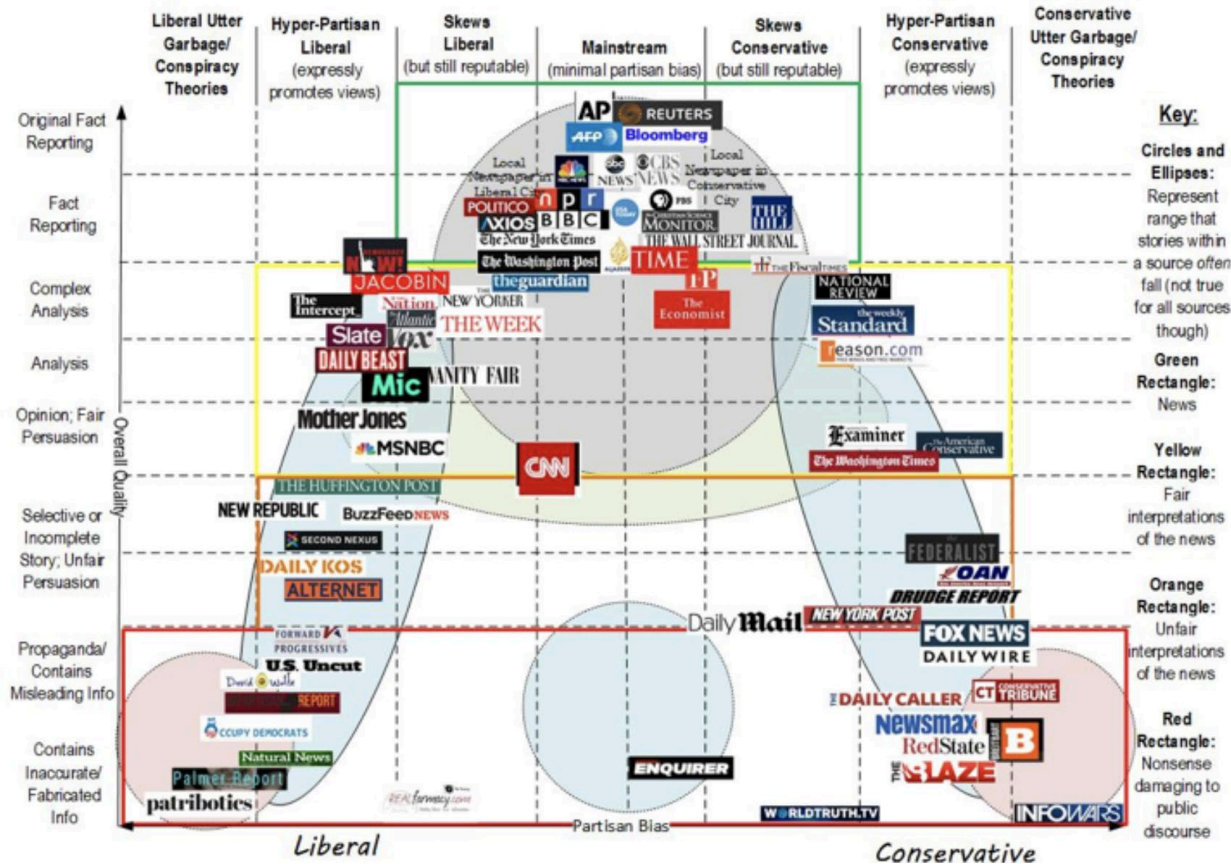
Discussion: Ways Misleading Information Can be Improved

- An improved scale
- Clear lines and points on the graph
- Accurate Plotting of the Data



Discussion: News Source Bias

Where you get your information from can play a role in your own unconscious biases



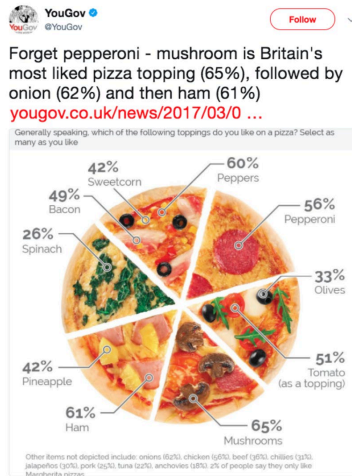


Discussion: Things to Avoid When Presenting Information Design Ethically and Clearly

- Misleading and unclear axis labels
- Inconsistent Scales/Omitting the baseline
- Numbers not adding up correctly, especially in pie charts
- Cherry-picking data, like including limited years or responses chosen to support a specific argument
- No key for the information in the graph
- Going against the conventions.
 - Bad graphic choices, like low-contrast color choices or a distorting perspective.
 - Visual deceptions, like inappropriate use of white space or comparative elements that don't seem to correspond to the data they represent
 - Poor use of a graph type (like making a series of bar graphs when a line graph would be clearer)

Discussion: Let's Review

- Information Design is very important for relaying truthful information to the public.
- Small errors in Information Design can change what people perceive the message to be.
- But** all rules are out the window for (Pizza) Pie Charts.



Dan McClellan @makielelan · Mar 6
Replying to @YouGov
How did you poll 695% of the population?
5 29 378

Kane @kanecalvin · Mar 6
people can pick more than one topping
2 23

Dan McClellan @makielelan · Mar 6
Then they can also use something other than a pie chart.
6 1 265

Leon @StephensLeon · Mar 6
it's a pizza chart. Different rules.
3 14 327



Daniels Ethics Initiative Principles: Key Points

☉ Integrity and Trust

- Build a truthful relationships
- Be honest
- Honesty will put you ahead, in comparison to other competition

☉ Accountability

- If you are putting information out, ensure that it is accurate.
- Take responsibility for your own bias and errors.

☉ Transparency and Fairness

- Understand bias (sources and you own)



Thanks!

*Any
questions ?*

