

# Reading and Analyzing Arguments

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# Goals

1. Help you better understand and evaluate written arguments
2. Help you understand and evaluate evidence and source material

# Identifying Arguments

Is someone trying to convince you of something?

What are they trying to convince you of?

Why do they want you to believe they're right?

What may influence the perspective of the argument?

# Identifying Arguments

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**Argument is an overloaded term!**

# 1. Argument = Thesis

Easy to confuse a descriptive argument for an argument

Examples:

Textbooks explaining events

Many news reports

Descriptive term papers describing how a system works

Course lectures (most of them...)

## 2. Argument = Persuasion

There is a stance AND the author is trying to convince you of it

Examples:

Advertising

Op-Ed pieces in the newspaper

Discussions with your family at Thanksgiving

Blog posts arguing for a particular view

Persuasive lectures

Cable news talk shows

### 3. Argument = Debate



### 3. Argument = Fight



# *“Amazon Knows Why Alexa Was Laughing at Its Customers”*

<https://www.nytimes.com/2018/03/08/business/alexa-laugh-amazon-echo.html>

Is there an argument? What made you decide this?

# Continuum of Persuasion



# Continuum of Persuasion



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# Identifying Conclusions

The conclusion is the “point” of the paper.

Conclusions exist in descriptive and persuasive arguments.

# Evidence

**Evidence:** information used to strengthen a claim, support an argument, or reach a conclusion

Also known as warrants or support

# Evidence Sandwich

CLAIM

EVIDENCE

SUMMARY/TRANSITION to another claim...

# Evidence Sandwich

...This mechanism enables deep learning to perform many tasks that were virtually impossible with rule-based software. But it also means **deep-learning software can inherit covert or overt biases.**

"AI algorithms are not inherently biased," says Professor Venkatesh Saligrama, who teaches at Boston University's Department of Electrical and Computer Engineering and worked on the word-embedding algorithms. "They have deterministic functionality and will pick up any tendencies that already exist in the data they train on."

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# Kinds of Evidence

<https://www.pcmag.com/article/361661/artificial-intelligence-has-a-bias-problem-and-its-our-fault>

**“Artificial Intelligence Has a Bias Problem, and It's Our Fault”**

# Kinds of Evidence

- Facts
- Scientific knowledge
- Stories/narratives
- Photographs and videos
- Testimonies
- Quotes from literature
- Hypothetical examples
- Analogies and metaphors
- Experiences
- Statistics or surveys
- Personal anecdotes

# Evaluating Evidence

This is a process, not a decision – common sense about trustworthiness is important.

- What's the source? Is this source trustworthy?
- If citing facts, are those facts correct and corroborated by a trustworthy source?
- Does the kind of evidence makes sense for the claim that is being made?
- How timely/recent is the evidence? (in CS/tech, more timely is better, whereas other fields are slower)?
- Is the evidence fair, or does it present an atypical or extreme response?

# Referencing Evidence in your Work

- Citations and references are one way we let others can do this fact-checking with us
- Think about “leaving breadcrumbs” for others to follow along after you – when in doubt, leave more breadcrumbs
- An important part of the argumentative process in formal writing

# Brief Comment About Better Citations

- Citation Machine (incognito mode/cookies off to avoid the limit)
- Google Scholar auto-generates references for you for scholarly articles
- Mendeley and Zotero will auto-generate citations for most kinds of content for you (programs to

Just have to pick the right citation style!

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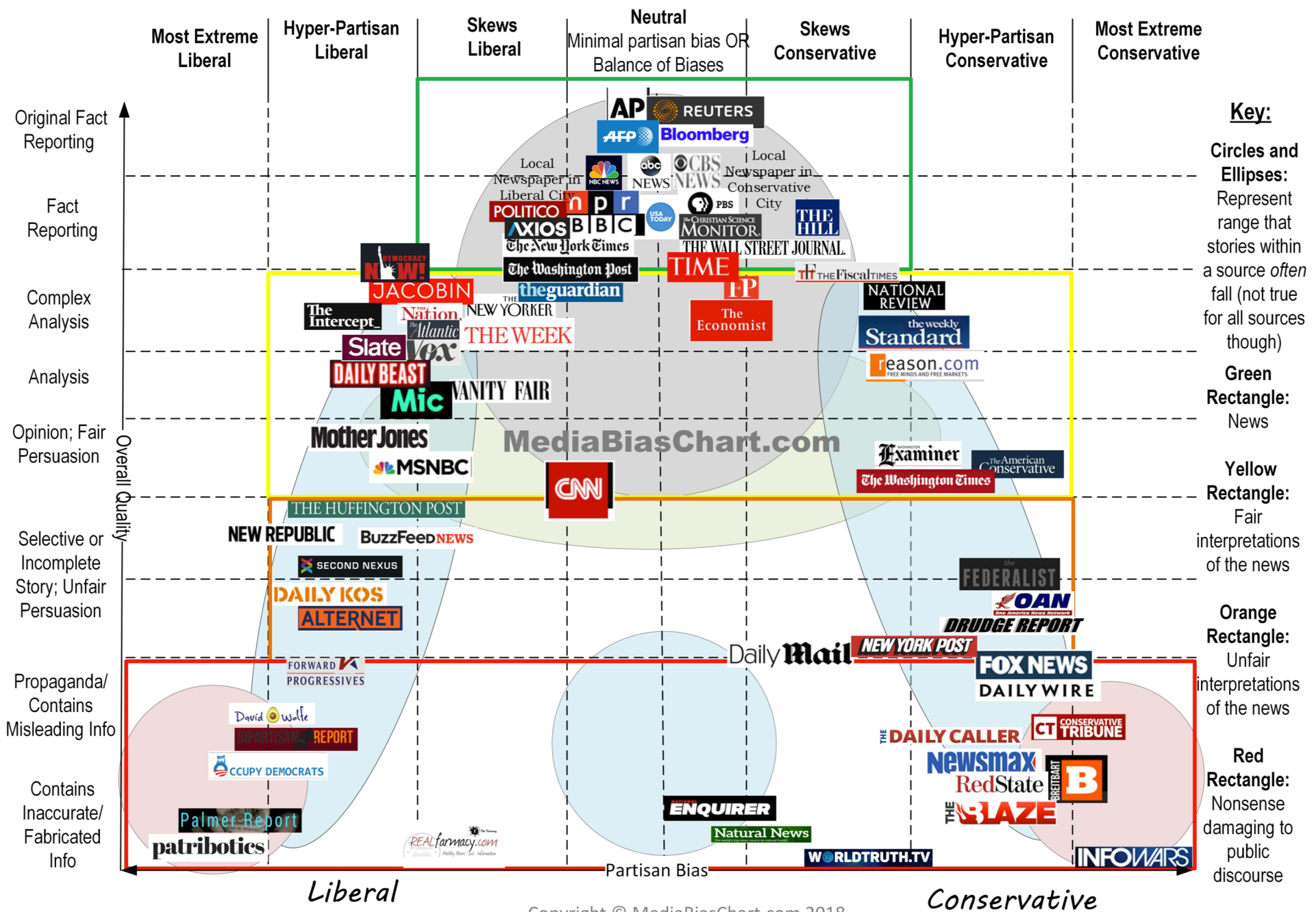
Why do they want you to believe they're right? (*reasons/evidence*)

**What may influence this person's perspective? (*bias*)**

# Bias

Bias: prejudice or opinion in favor of or against a thing compared to another group

- NOT necessarily a bad thing!!
- We ALL have biases



# Implicit Bias/Viewpoints

**Implicit bias:** bias that you're assumed to already have before engaging with the argument

Unspoken assumptions that underlie an argument

*What would I need to believe ahead of time to assume this is true?*

# Identifying Implicit Bias/Values and Morals



**Elizabeth Warren**  @ewarren · 20h

William Barr, @realDonaldTrump's pick for Attorney General:

- Expressed bias against the Mueller investigation
- Said Roe v Wade was wrongly decided
- Supported efforts to gut the ACA
- Has a terrible record on criminal justice

The Senate should vote NO on his confirmation.



920



6.3K



21K



# Framing vs. Bias

**Framing:** rhetorical technique to orient the reader to believe a specific viewpoint

Can look for framing, implicit bias a little more tricky...