



NOVA SCHOOL OF
BUSINESS & ECONOMICS

PERSUASION & NEGOTIATION

Heuristics and most common biases

Introduction

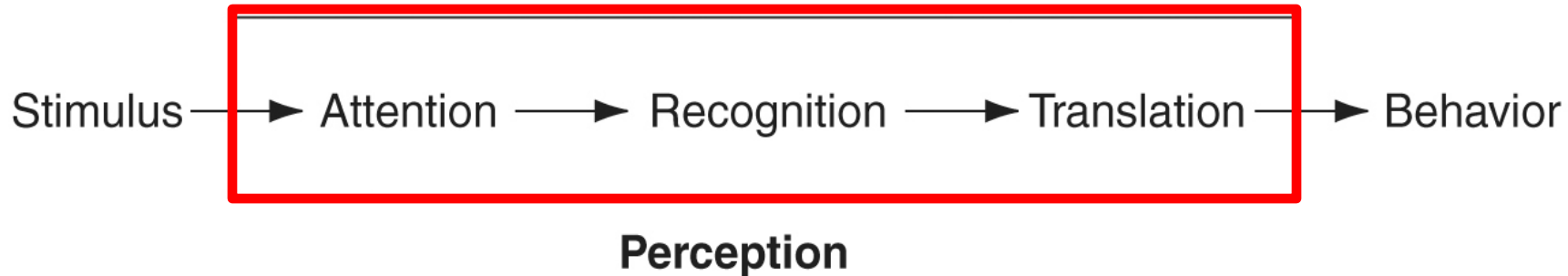
Topics:

1. What are heuristics?
2. Four judgemental heuristics;
3. A special type of heuristic: framing
4. Types of biases;
5. How to manage biases?

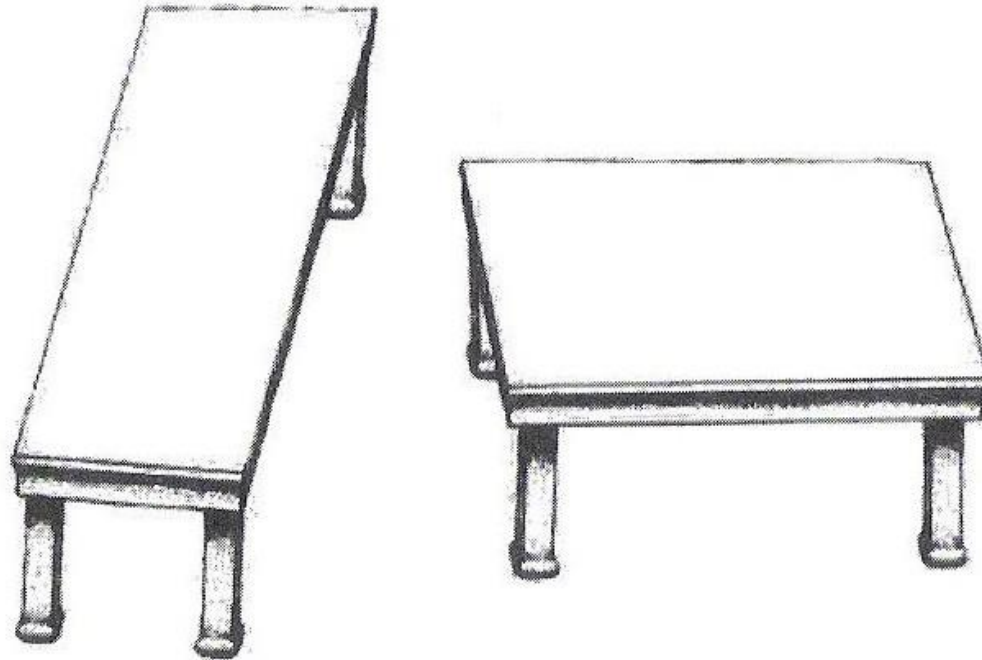


What are heuristics?

- **heuristics** are simplifying strategies used when making decisions
 - e.g., rules of thumb
- they provide people with a simple way of dealing with a complex world
 - And usually, they produce correct (or partially correct) judgements
 - e.g., difference between intuition and reasoning



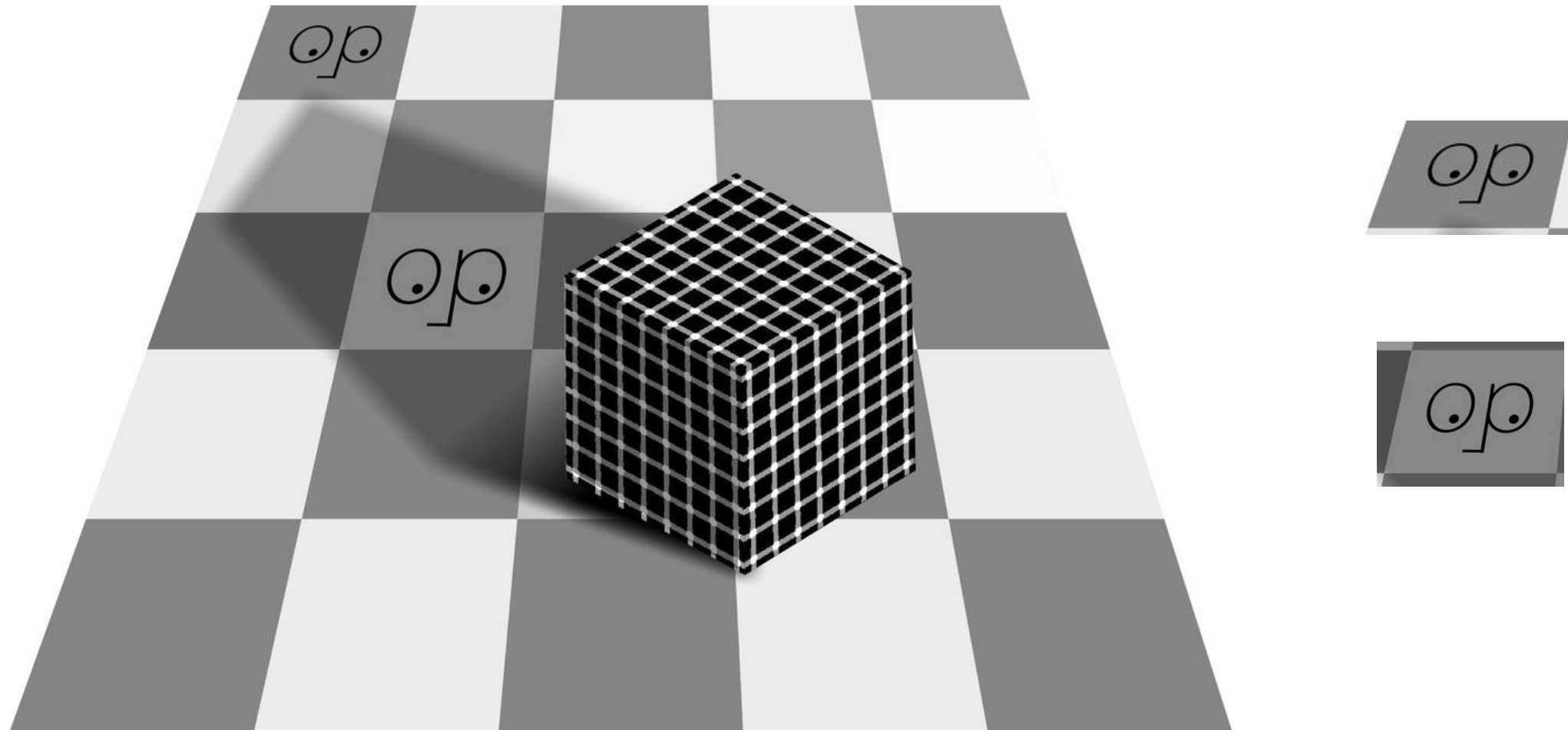
Are you as reliable as you think?



However, they can lead to **severe errors**

Especially because we are usually not aware that we are using them

Are you as reliable as you think?



Four judgmental heuristics

- Availability heuristic (examples)

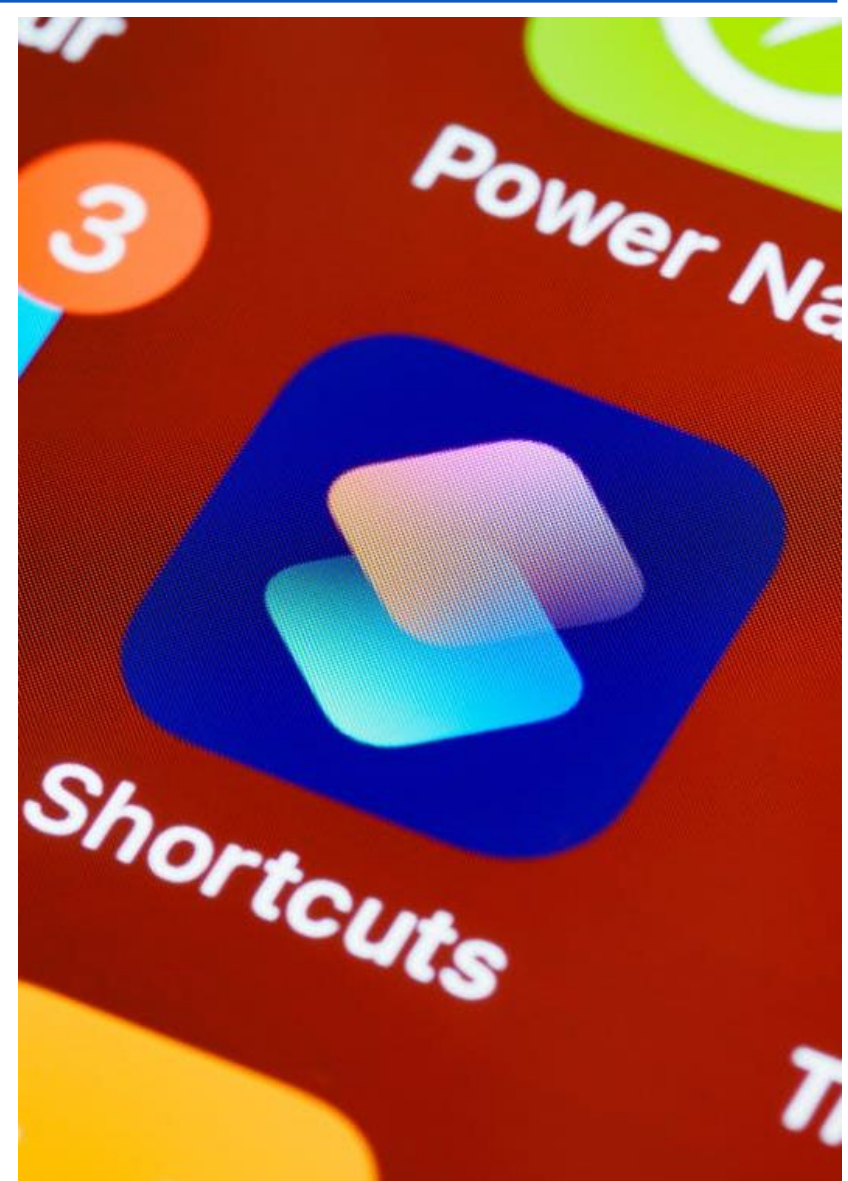
RISK OF ACCIDENT (US Census stats)	
Airplane	0.02 / 100.000 population
Car	6.55 / 100.000 population
Motorcycle	1.56 / 100.000 population
Bicycle	0.28 / 100.000 population
Train	0.0007 / 100.000 population
Pedestrian	1.73 / 100.000 population

Bette Davis	Nicolas Cage
Ingrid Bergman	Jeremy Irons
Katherine Hepburn	Daniel Day-Lewis
Shirley MacLaine	Forest Whitaker
Geraldine Page	Russell Crowe
Vivien Leigh	Philip Seymour Hoffman
Patricia Neal	Sean Penn
Glenda Jackson	Anthony Hopkins
Liza Minnelli	William Hurt
Norma Shearer	Adrien Brody
Ginger Rogers	Kevin Spacey
Anne Bancroft	Jeff Bridges
Joanne Woodward	Denzel Washington
Mary Pickford	Jamie Foxx
Marie Dressler	Tom Hanks
Claudette Colbert	Michael Douglas
Luisse Rainer	Marlon Brando
Helen Hayes	
Janet Gaynor	

Four judgmental heuristics

- Availability heuristic

- we tend to evaluate the frequency, probability, or likely causes of an event by the degree to which instances or occurrences of that event are readily “available” in memory (Tversky & Kahneman, 1973)
 - e.g., those that work closer to the “boss” tend to be evaluated more critically
- emotionally charged events are more available than unemotional events
- Why is it useful in negotiation and management?
 - because we generally recall events of greater frequency more easily than rare events



Four judgmental heuristics

- Representativeness heuristic (examples)



Person A (Stephen Hawking)
Presidential Medal of Freedom (2009)

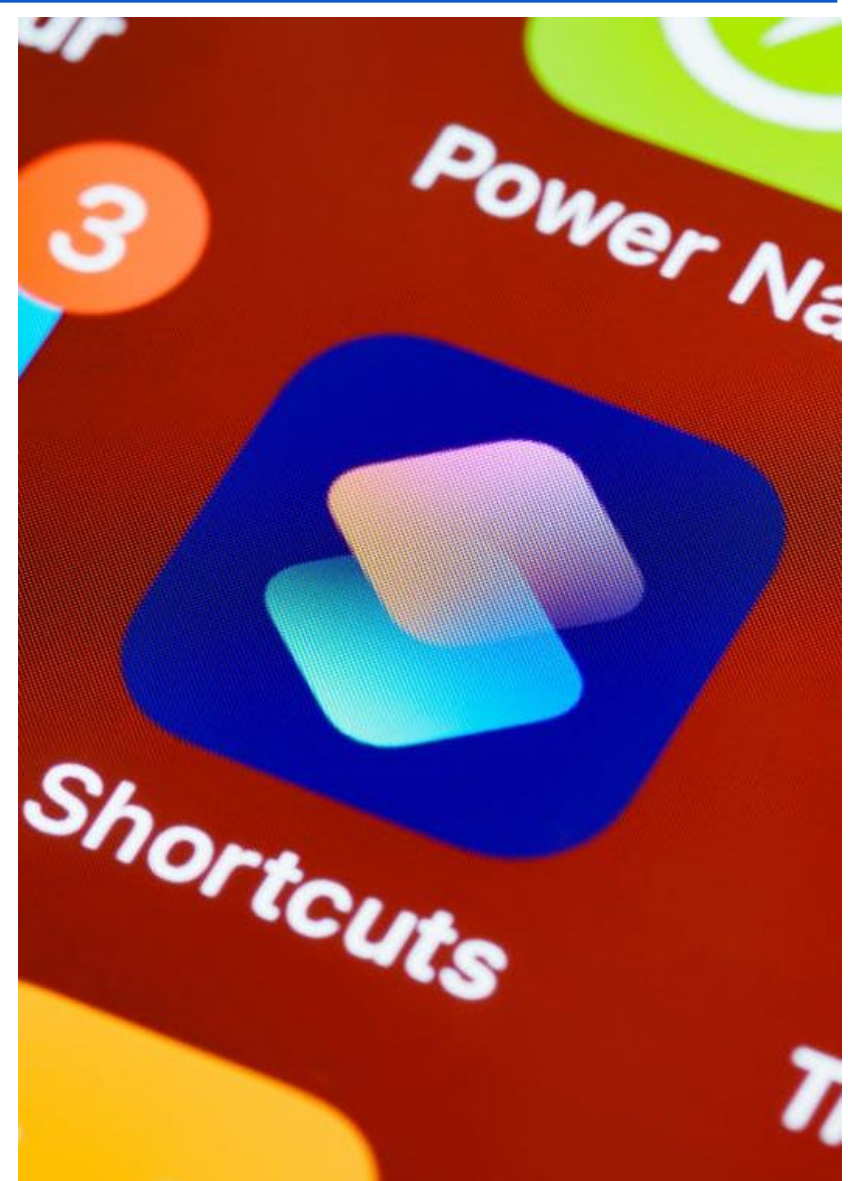


Person B (Bernie Madoff)
Serving a 150 years sentence for the
largest Ponzi scheme in history

Four judgmental heuristics

- Representativeness heuristic

- When making a judgment about an individual (or object or event), we tend to look for traits an individual may have that correspond with previously formed stereotypes (Tversky & Kahneman, 1973)
 - e.g., women tend to be more emotional;
 - e.g.2, we tend to overrate the probability of success if there are previous success stories
- It also works at the unconscious level
 - e.g., by doing something that we morally believe is wrong)
- Why is it useful in negotiation and management?
 - because it draws our attention to the best options at first sight



Four judgmental heuristics

- Congruence heuristic / Positive Hypothesis Testing (examples)

Sequence: 2, 4, 6

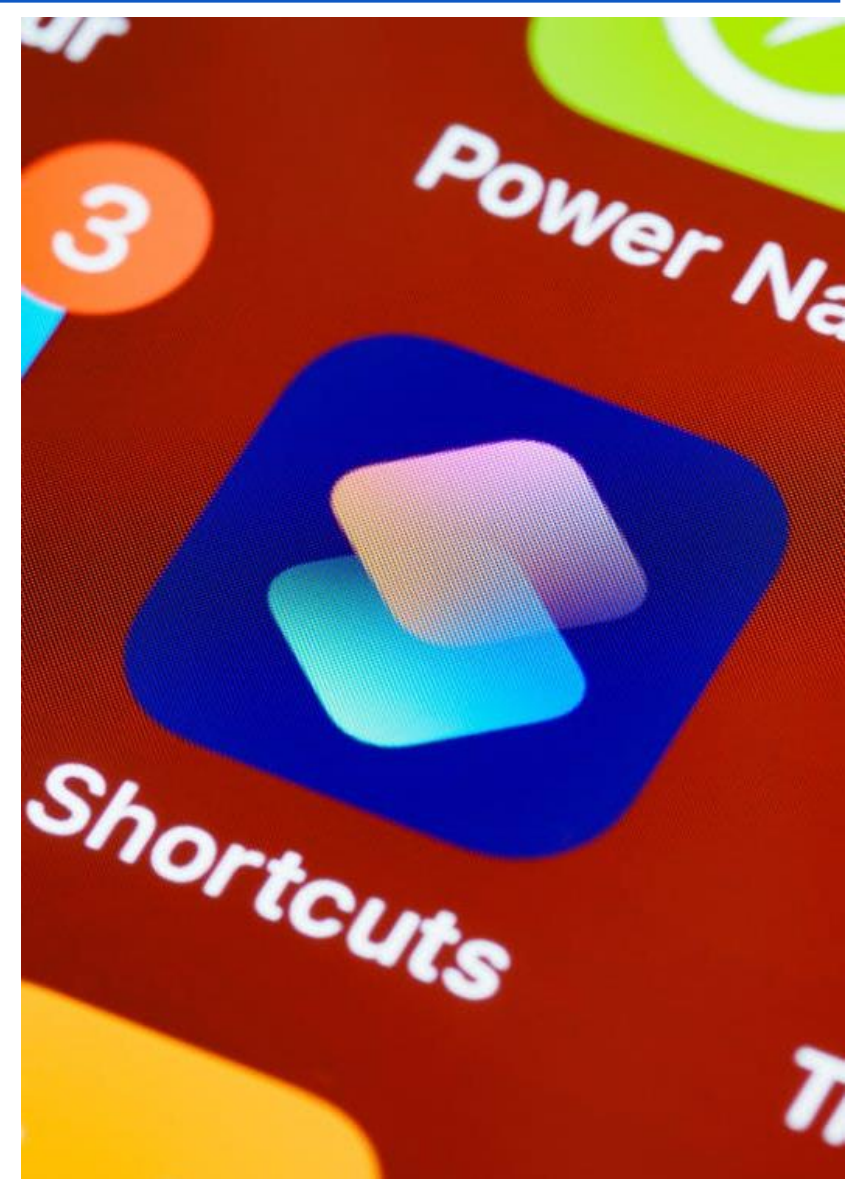
What is the criterion? Describe your own sequence.

Rule is: list ascending numbers

Four judgmental heuristics

- Congruence heuristic / Positive Hypothesis Testing

- we intuitively use selective data when testing hypotheses (Klayman & Ha, 1987; Baron et al., 1988)
 - e.g., Is marijuana use related to delinquency?
 - e.g.2, Do religious people have more children?
- It involves a failure to consider alternative hypotheses
 - we test a given hypothesis by only thinking of results that would be found if that hypothesis is true
- In the absence of evidence to the contrary, we tend to behave as if a given statement is true
 - solution is to try to think of alternative hypotheses – and to choose a test that most likely to distinguish them



Four judgmental heuristics

- Affect heuristic (examples)

You just found out that your girlfriend/boyfriend – which whom you were together in the weekend - is infected with a highly transmissible virus. You have a negotiation exam in the afternoon plus another week of exams. How much do you think this will interfere with your exam?

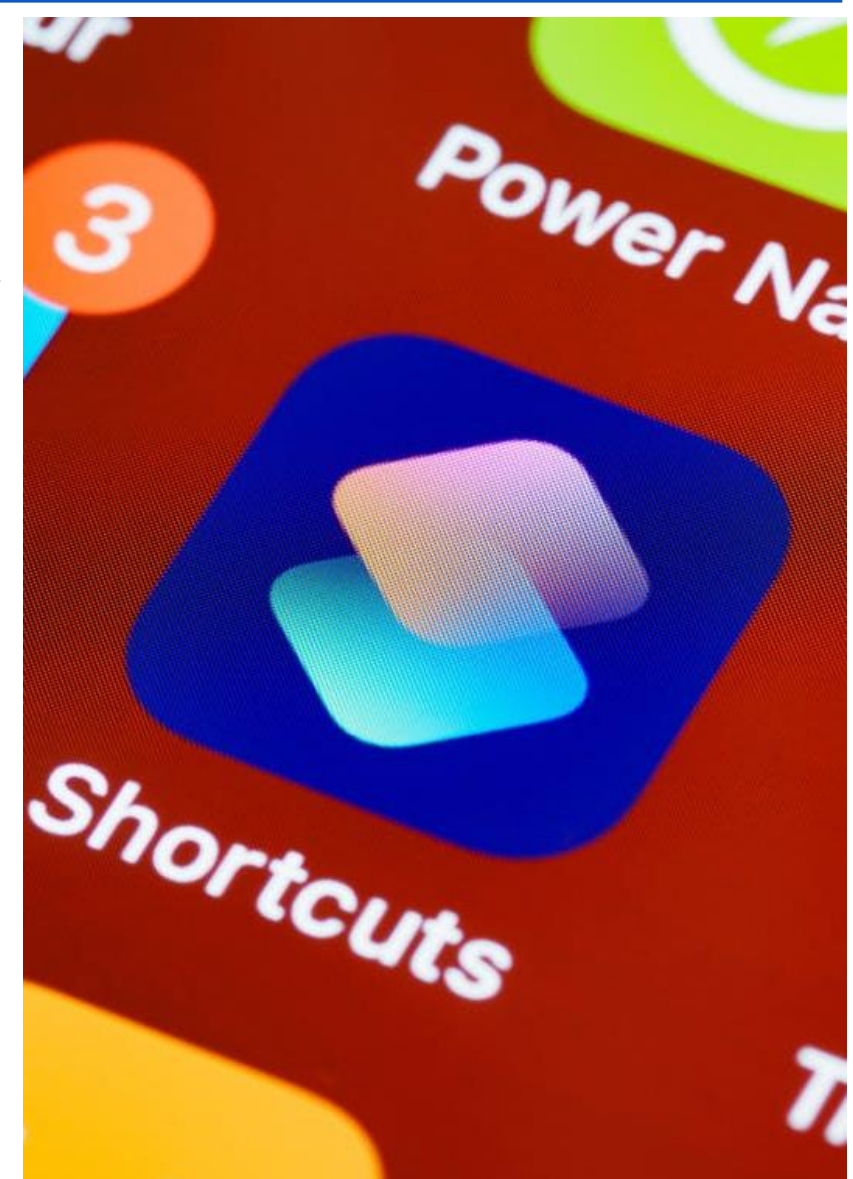
You woke up late and starving and found nothing in your fridge. You decide you might as well go shopping for the month and while you are at it, you will get something for lunch. How concerned are you about spending more money than usual?

Today you will have a job interview. You woke up, your favorite song was playing on the radio, and your best friend called you with some great news. It feels like the beginning of a great day! You find yourself thinking about the interview. How do you think the job interview will go?

Four judgmental heuristics

- Affect heuristic

- Most our judgments are accompanied by an emotional / affective response (Slovic et al., 2002; Kahneman, 2003)
 - when making a decision, we look at the associated emotions (positive and negative)
- These emotions can be conscious or unconscious
 - this is an easier solution (more efficient) than weighting all the pros and cons of searching for information (especially in complex problems)
- The use of such heuristic is more common under constraints
 - e.g., time, resources, environment



Another heuristic

Problem 1/A. . Imagine that a small city in Portugal is preparing for the outbreak of an unusual virus that is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimates of the consequences of the programs are as follows:

Program A: If Program A is adopted, 200 people will be saved.

Program B: If Program B is adopted, there is a one-third probability that 600 people will be saved and a two-thirds probability that no people will be saved.

Program A: If Program C is adopted, 400 people will die.

Program B: If Program D is adopted, there is a one-third probability that no one will die and a two-thirds probability that 600 people will die.

Which program would you choose?

Another heuristic

Problem 2/B. You are lying on the beach on a hot day. All you have to drink is ice water. For the last hour you have been thinking about how much you would enjoy a nice cold bottle of your favorite beer, which usually costs about 2€ in a supermarket. A friend of yours gets up to get something from the car and offers to bring back a beer from the only nearby place where beer is sold, *a fancy resort hotel / a small, rundown grocery store*. He says that the beer might be expensive and asks how much you are willing to pay for it. He says that he will buy the beer if it costs as much as or less than the price you state. But if it costs more than the price you state, he will not buy it. You trust your friend, and there is no possibility of bargaining with the *bartender / store owner*.

What price do you tell him?

2

B

2

B

Another heuristic

Problem 3. It is May, and is time for the Champions League Final, where your favorite team is playing this year. You would very much like to attend the game. The game is sold out, and you won't have another opportunity to see your team play in a final for a long time, if ever. You know someone who has a ticket for sale. The face value of the ticket is 150€. **What is the most you would be willing to pay for it?**

3

Problem C. It is May, and is time for the Champions League Final, where your favorite team is playing this year. You have a ticket to the game (the face value of the ticket is 150€) and would very much like to attend. The game is sold out, and you won't have another opportunity to see your team play in a final for a long time, if ever. **What is the least that you would accept to sell your ticket?**

C

Framing

- Another type of heuristic
 - Subjective mechanism through which people evaluate and make sense out of situations
 - e.g., two people see the same problem in different ways
- Leads people to pursue or avoid subsequent actions
 - Focus, shape and organize the world around us
 - Make sense of complex realities
 - Based on previous experiences
- Why are they important in negotiation?
 - Different interpretations of the same event
 - One cannot avoid them



Types of frames

- 1. Substantive** - what the conflict is about. Parties taking a substantive frame have a particular disposition about the key issue or concern in the conflict.
- 2. Outcome** - a party's predisposition to achieving a specific result or outcome from the negotiation.
- 3. Aspiration** - a predisposition toward satisfying a broader set of interests or needs in negotiation.
- 4. Process** - how the parties will go about resolving their dispute.
- 5. Identity** - how the parties define "who they are."
- 6. Characterization** - how the parties define the other parties.
- 7. Loss-gain** - how the parties define the risk or reward associated with particular outcomes.



How do frames work in negotiation?

1. Negotiators can use more than one frame.
2. Mismatches in frames between parties are sources of conflict.
3. Parties negotiate differently depending on the frame.
4. Specific frames may be likely to be used with certain types of issues.
5. Particular types of frames may lead to particular types of agreements.
6. Parties are likely to assume a particular frame because of various factors.



What are cognitive biases?

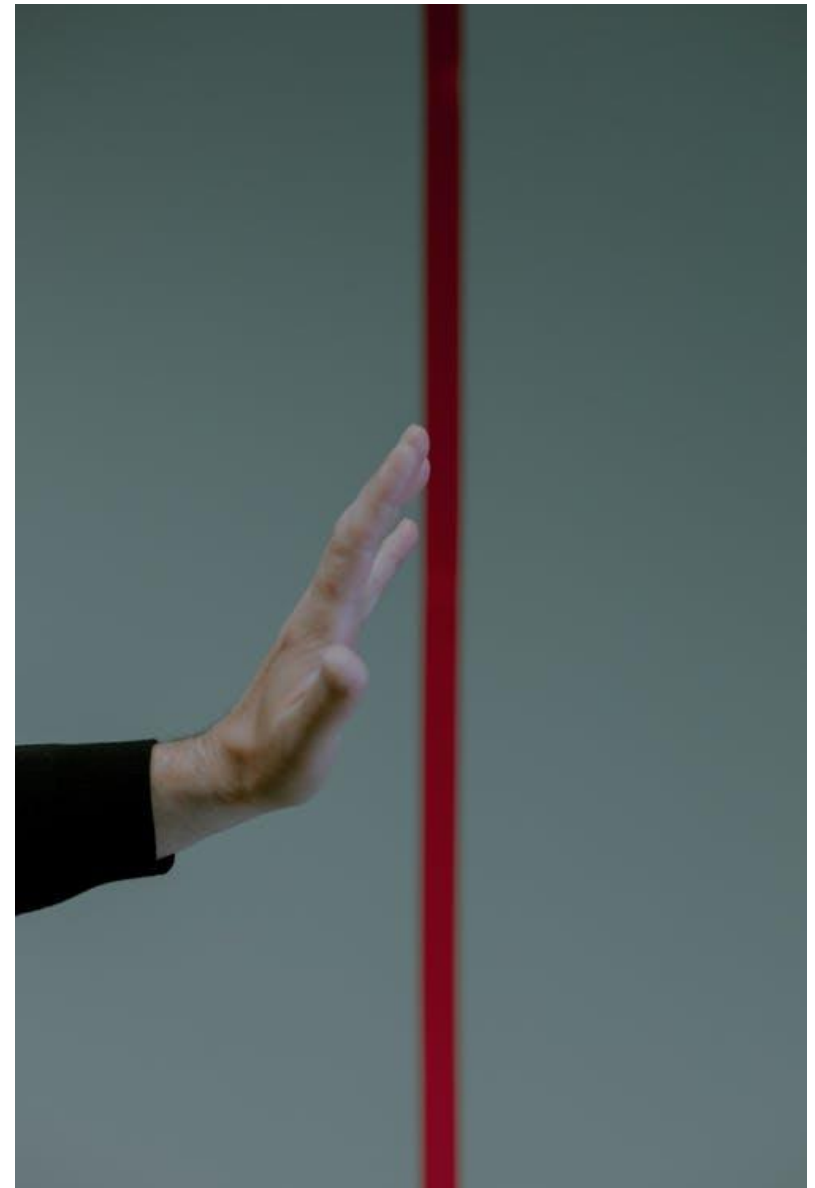
- Negotiators have a tendency to make systematic errors when they process information. These errors, collectively labeled *cognitive biases*, tend to impede negotiator performance.
- Some of these errors derive from the heuristics studied earlier



- Escalation of commitment

- Negotiators maintain commitment to a course of action even when that commitment constitutes irrational behavior
- due in part to biases in perception and judgment

You work for a private equity firm and make a decision to invest 2 million € in a start-up venture. You personally argued for this investment against some skeptics in your firm. One year later, the CEO from the start-up appears in your office and says “I have bad news, and I have good news. The bad news is that the company is running out of cash. Without additional funds we will definitely go under, and your company will lose the 2 million €. The good news is that I am quite confident that if you invest another 1 million €, we can work out the bugs in our invention and still be a great success. ” **Do you invest the additional 1 million €?**

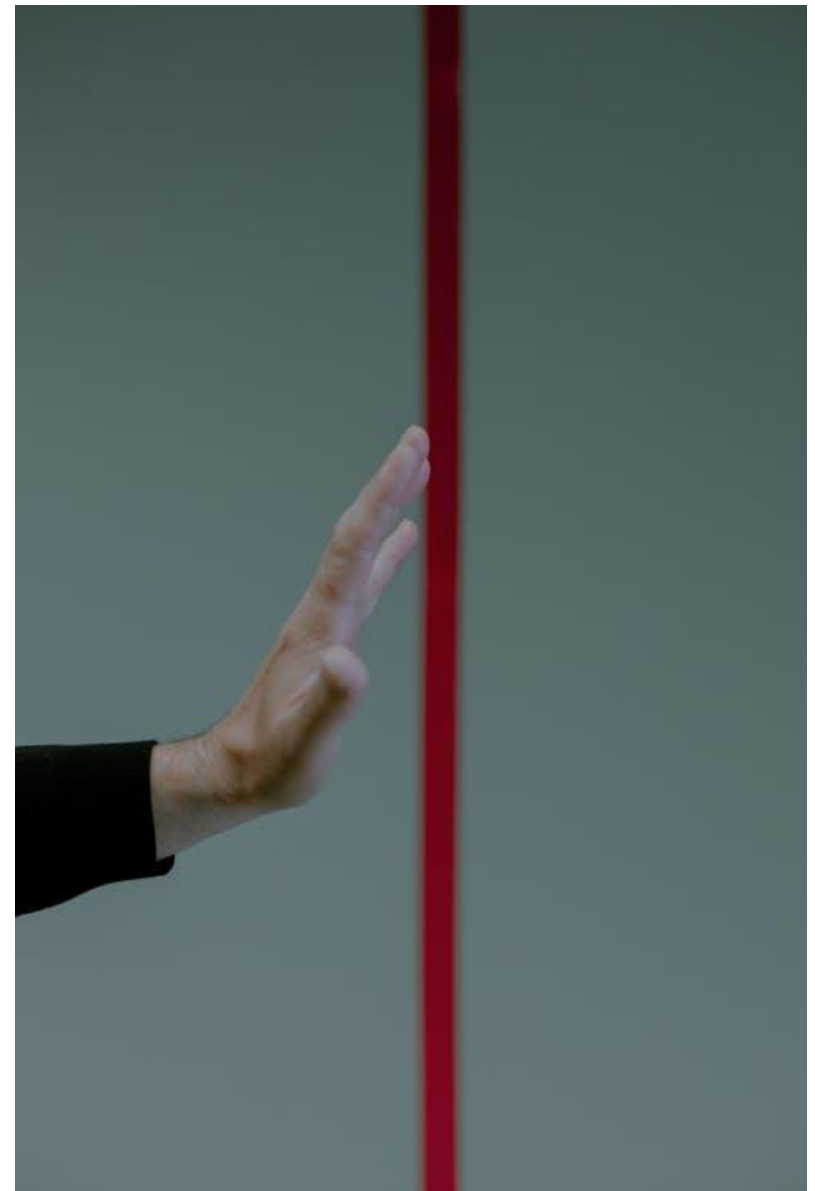


Types of biases

- **Mythical fixed-pie beliefs**

- Some negotiators assume that all negotiations (not just some) involve a fixed pie (zero-sum);
- This assumes there is no possibility of integrative settlements;
- As a consequence, you suppress your effort to search for an agreement.

War: do you surrender if you believe the enemy will kill you?



Types of biases

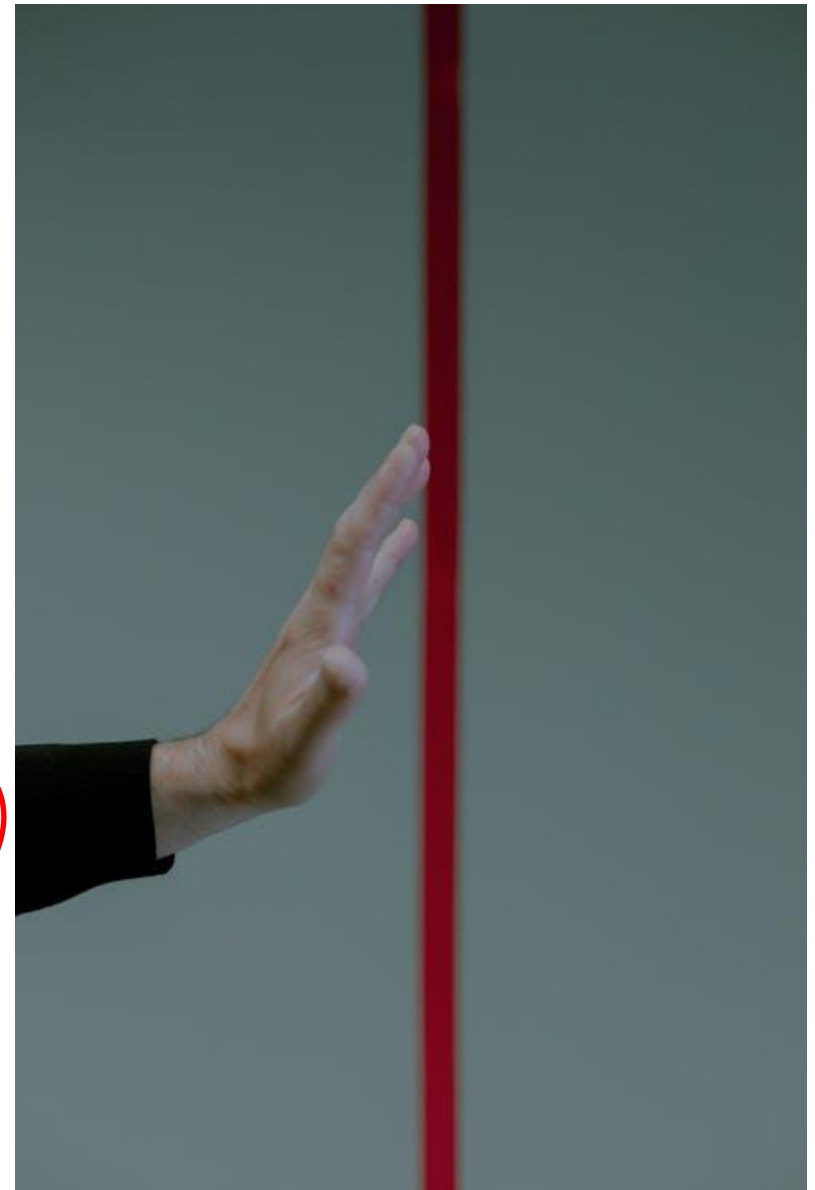
- Anchoring and Adjustment

- The effect of the standard (anchor) against which subsequent adjustments (gains or losses) are measured
- Once the anchor is defined, parties tend to treat it as a real, valid benchmark by which to adjust other judgments, such as the size of one side's opening offer.
- The anchor might be based on faulty or incomplete information, thus be misleading

Take the last three digits of your phone number. Add the number one to the front of the string, so that now you have four digits. Think of that number as a year. Now try to estimate the year that the Taj Mahal was completed. Was it before or after the date made by your phone number? _____ Before _____ After

On the line below, please make your best estimate of the actual year in which the Taj Mahal was completed. _____

1648



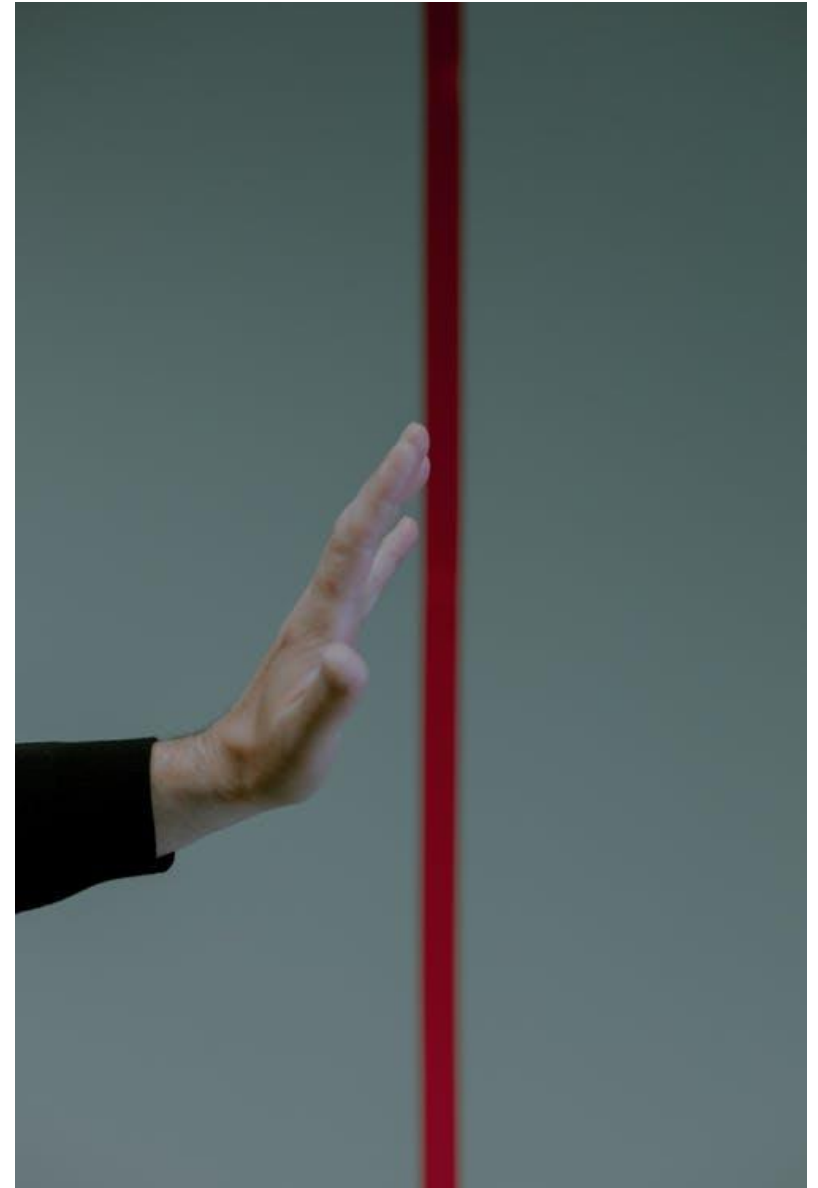
Types of biases

- Issue framing and Risk

- Frames can lead people to seek, avoid, or be neutral about risk in decision making and negotiation

- Availability of information

- Operates when information that is presented in vivid or attention-getting ways becomes easy to recall.
- Becomes central and critical in evaluating events and options
- Can take place during recall (vividness and recency) and retrievability (memory structure)



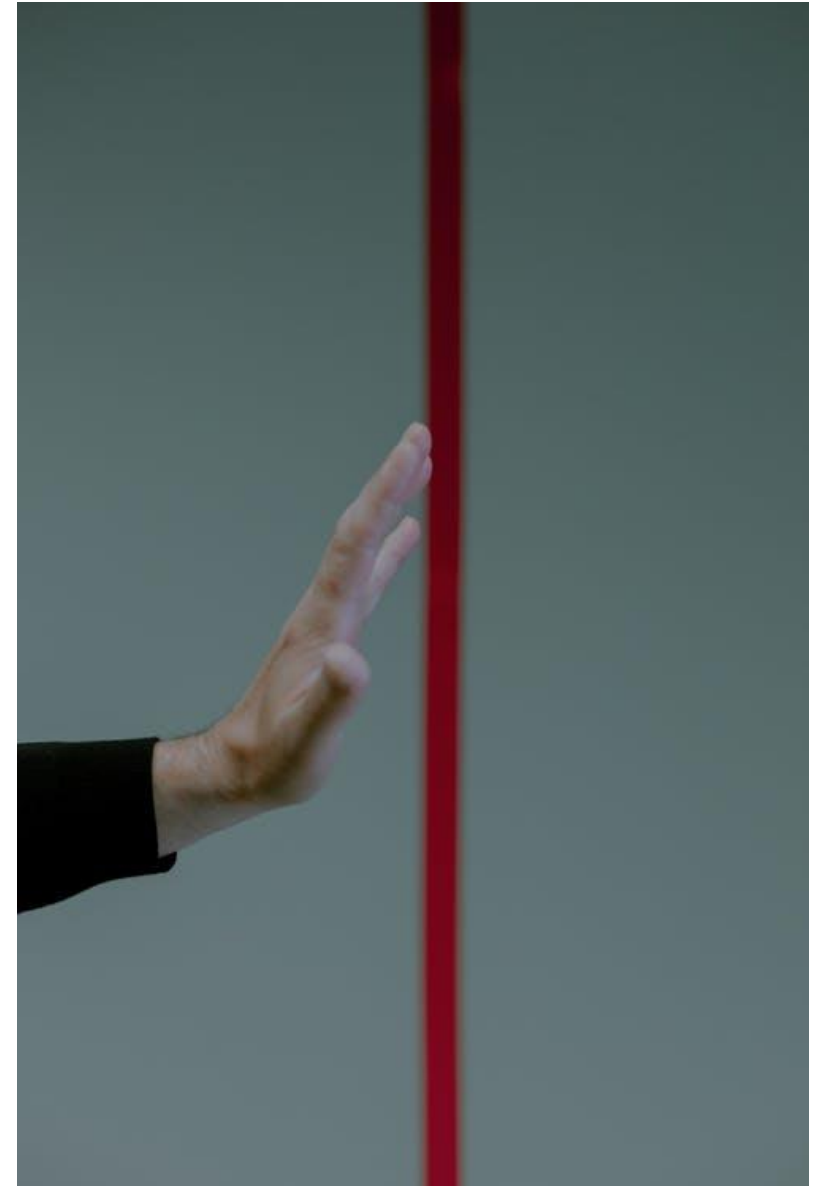
Types of biases

- The Winner's curse

- The tendency to settle quickly on an item and then subsequently feel discomfort about a win that comes too easily
- There is a feeling that you might have overestimated the value

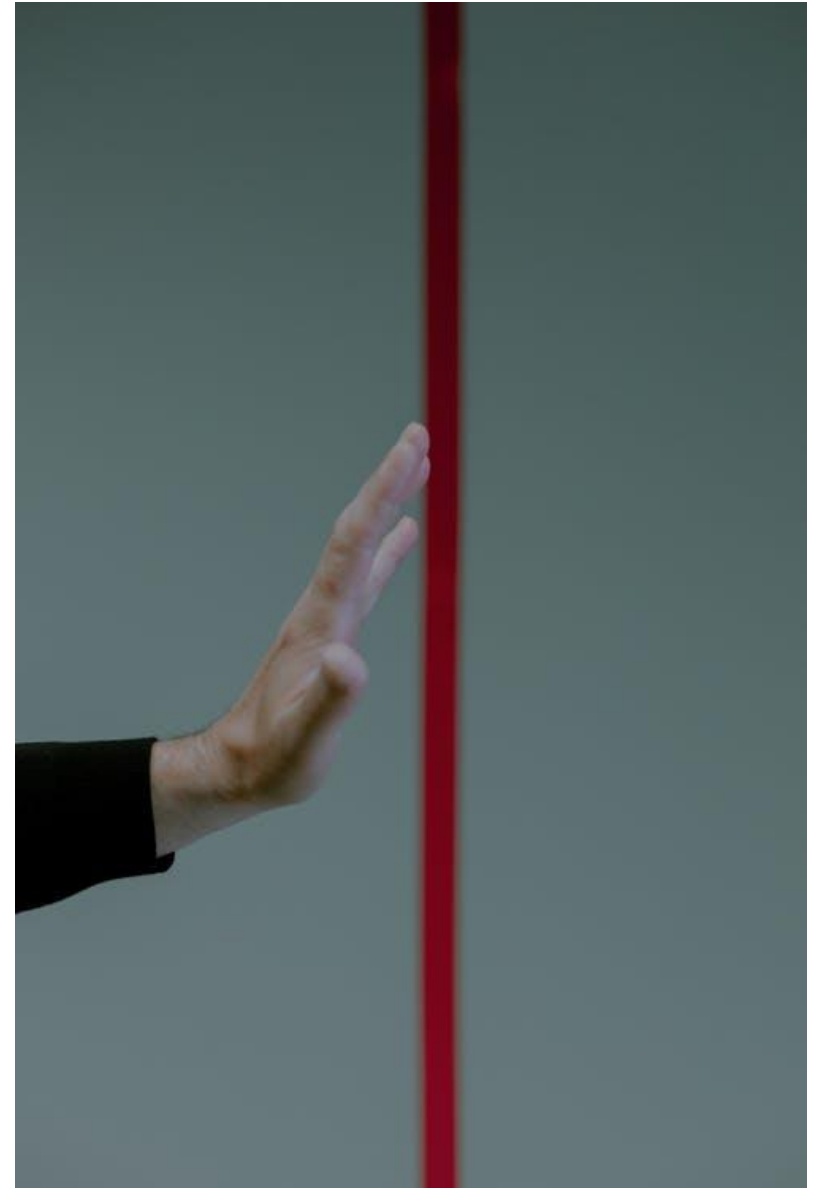
- Overconfidence

- The tendency of negotiators to believe that their ability to be correct or accurate is greater than is actually true
 - While confidence in one's ability is important, overconfidence is a barrier to effective decision making
- “No problem (...) is more prevalent and potentially catastrophic “



-The law of small numbers

- The tendency of people to draw conclusions from small sample sizes
- The smaller sample, the greater the possibility that past lessons will be erroneously used to infer what will happen in the future
- This tendency leads to a *self-fulfilling prophecy* - e.g., people who expect to be treated in a distributive manner will:
 - Be more likely to perceive the other party's behaviors as distributive and
 - Treat the other party in a more distributive manner.



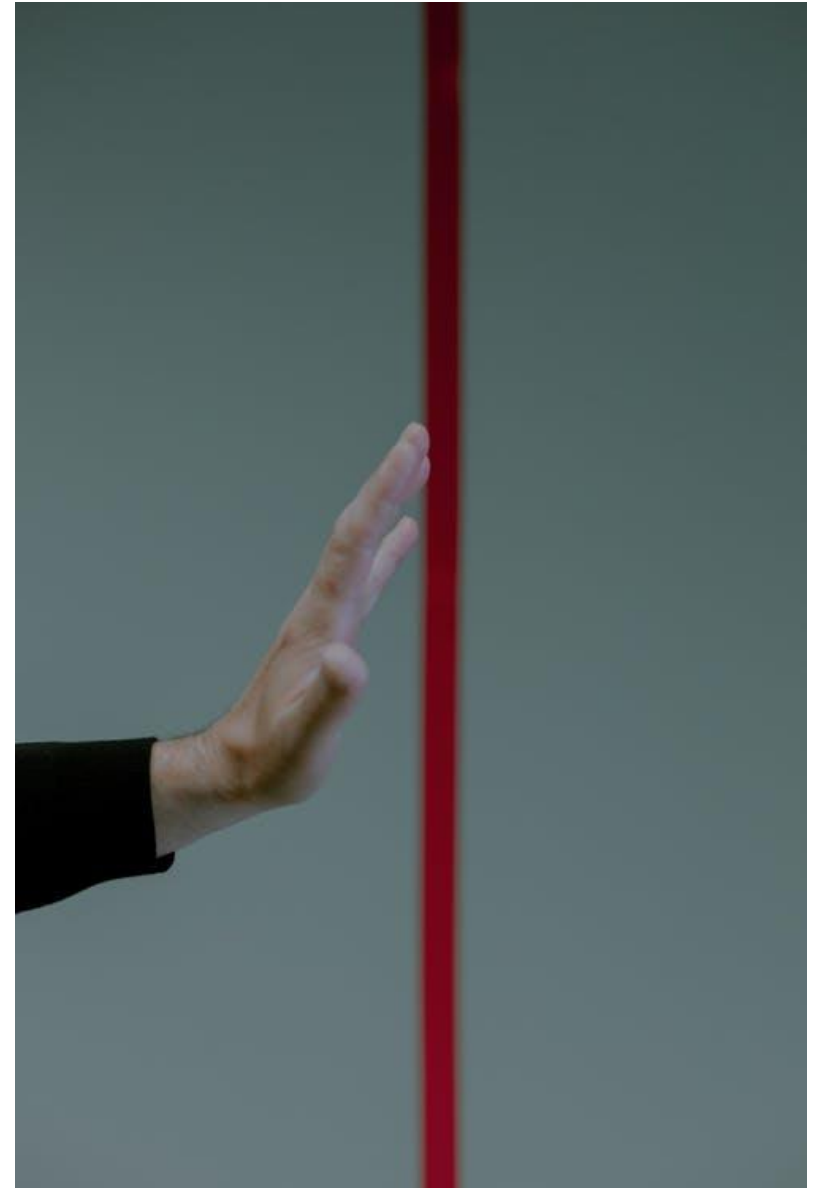
Types of biases

- Self-serving bias

- People often explain another person's behavior by making attributions, either to the person or the situation.
 - There is a tendency to overestimate the causal role of personal or internal factors and underestimate the causal role of situational or external factors (on others).
- Self-serving biases effect the negotiation process in a number of ways, for example:
 - Perception of greater use of constructive tactics than the other party

If someone sues you and you win the case, should he pay for your legal costs?

If you sue someone and lose the case, should you pay his costs?



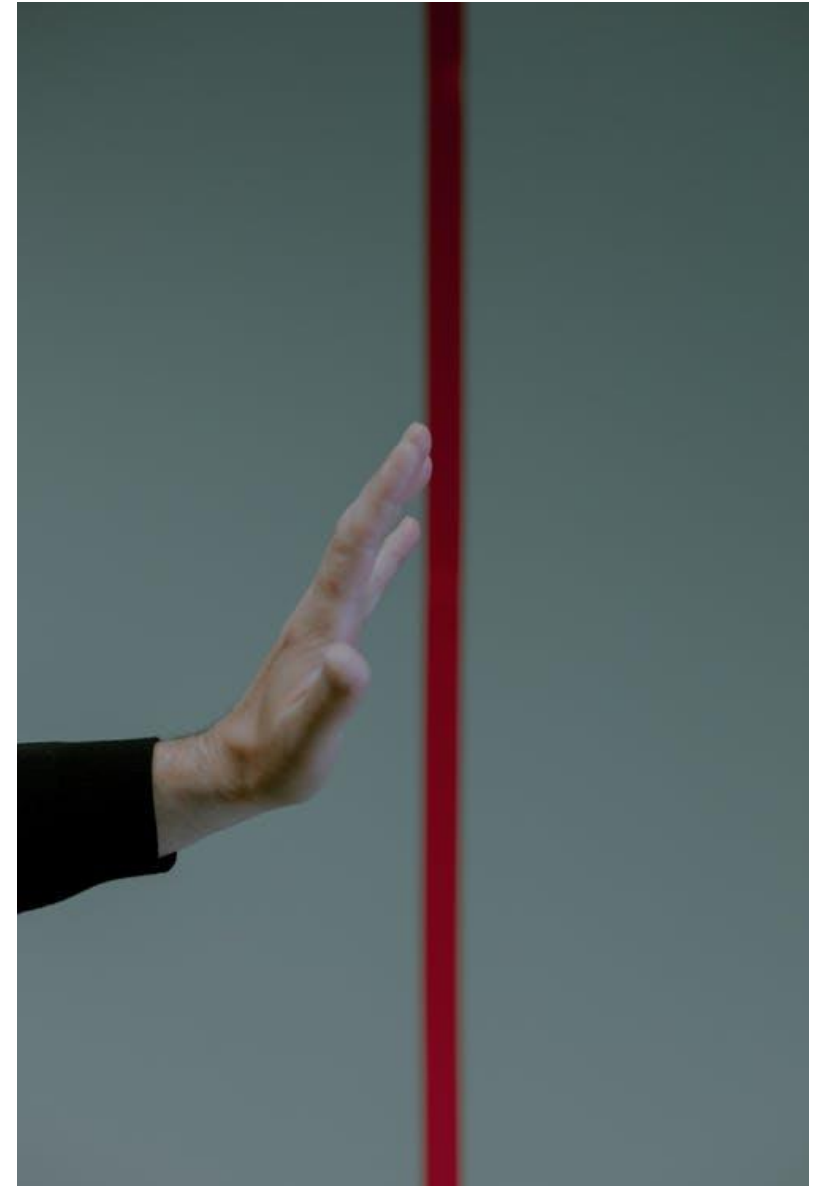
Types of biases

- Endowment effect

- The tendency to overvalue something you own or believe you possess
- The endowment effect can lead to inflated estimations of value that interfere with reaching a good deal.
e.g., game tickets last session

- Ignoring others' cognitions

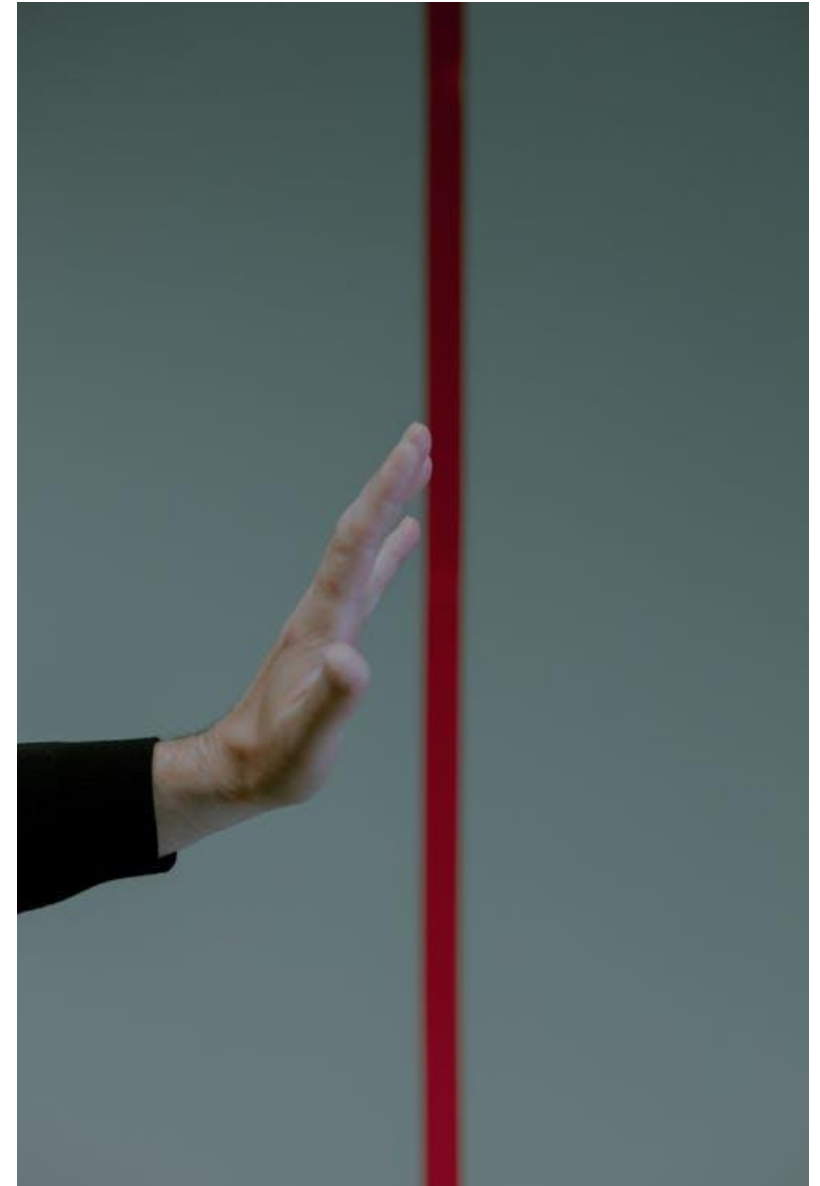
- Negotiators don't bother to ask about the other party's perceptions and thoughts – *leads to distributive strategy*
- This leaves them to work with incomplete information, and thus produces faulty results



- **Reactive devaluation**

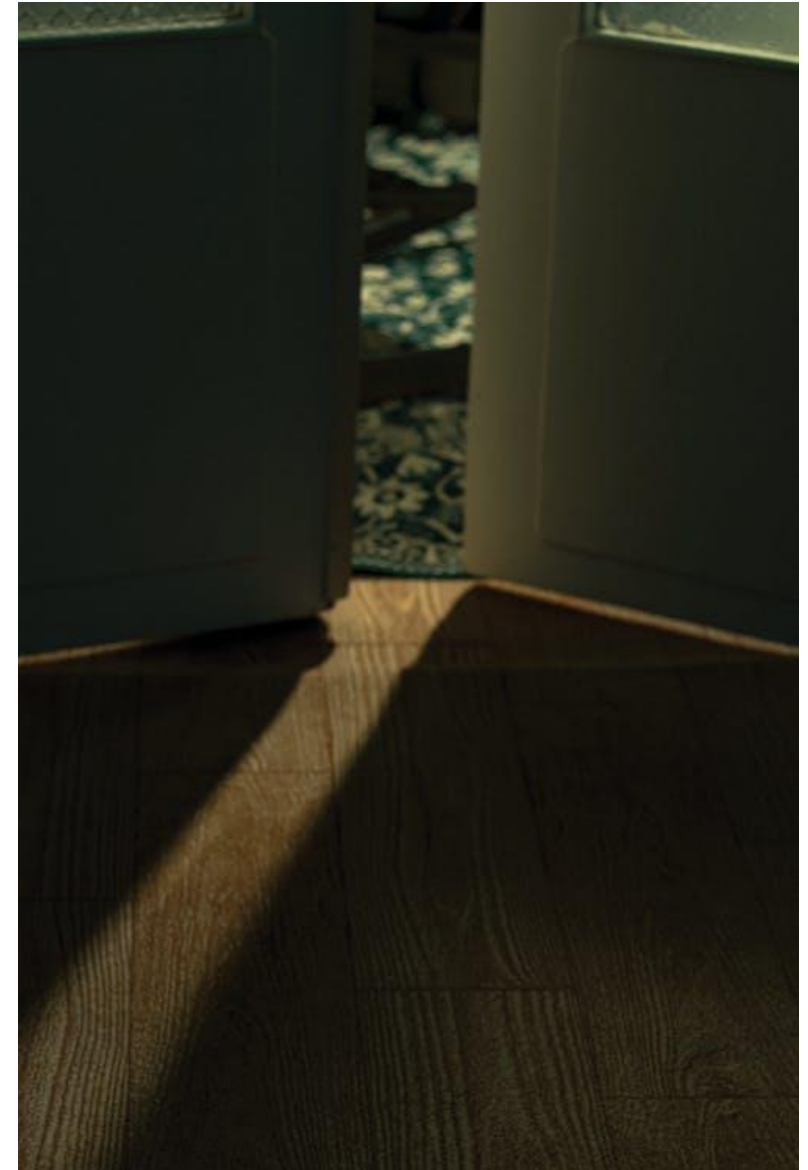
- The process of devaluing the other party's concessions simply because the other party made them
- Reactive devaluation leads negotiators to:
 - a. Minimize the magnitude of a concession made by a disliked other
 - b. Reduce their willingness to respond with a concession of equal size, or
 - c. Seek even more from the other party once a concession has been made

...



How to manage biases?

- Misperceptions and cognitive biases typically arise out of **conscious awareness** as negotiators gather and process information.
- The **best advice** that negotiators can follow is:
 - Be aware of the negative aspects of these biases;
 - Discuss them in a structured manner within the team and with counterparts.





REGRET

IT HURTS TO ADMIT WHEN YOU MAKE MISTAKES-
BUT WHEN THEY'RE BIG ENOUGH, THE PAIN ONLY LASTS A SECOND.

THANK YOU FOR YOUR ATTENTION!