ORGANIZATIONAL BEHAVIOR AND HUMAN RESOURCE MANAGEMENT

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Lesson 04
anchoring and sunk cost bias

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Let me invite you to a particular auction

they give you a piece of paper, where you write
- your name
- the last two digits of your «codice fiscale» (fiscal code, social security number)
- and your offers for each product

it's a real auction,
with real money

you make an offer
only if you're really
interested in buying
the object

the highest offer,
will buy the product

A PECULIAR AUCTION

Average prices paid for the various products for each of the five groups of final digits in social security numbers, and the correlations between these digits and the bids submitted in the auction.

	Range of last two digits of SS number					
Products	**00–19**	**20–39**	**40–59**	**60–79**	**80–99**	**Correlations***
Cordless trackball	$8.64	$11.82	$13.45	$21.18	$26.18	0.42
Cordless keyboard	$16.09	$26.82	$29.27	$34.55	$55.64	0.52
Design book	$12.82	$16.18	$15.82	$19.27	$30.00	0.32
Neuhaus chocolates	$9.55	$10.64	$12.45	$13.27	$20.64	0.42
1998 Côtes du Rhône	$8.64	$14.45	$12.55	$15.45	$27.91	0.33
1996 Hermitage	$11.73	$22.45	$18.09	$24.55	$37.55	0.33

An experiment to demonstrate what happens when an anchor that is obviously unrelated to the problem

write down on a piece of paper the last 3 digits of your phone number (XYZ):

calculate 400 + XYZ =

Do you think that Attila (king of the Huns) was defeated before or after 400 + XYZ?

Write down your estimate of the year in which Attila was defeated:

RESULTS

range of the anchor	average answer
400 – 599	629
600 – 799	680
800 – 999	789
1000 – 1199	885
1200 – 1399	988

ANCHORING (and andjustment)

- When we evaluate a problem, we are influenced by the first information that we find «resembles» to a solution to that problem
- That information works as an «anchor»; we then adjust our evaluation depending on our contextual reasoning, but not enough.
- This is true even when:
  - the anchor is obviously wrong
  - the anchor is obviously unrelated to the problem
  - the subject is an expert in the field
  - the subject is instructed not to be influenced by the anchor

MORE ON ANCHORING

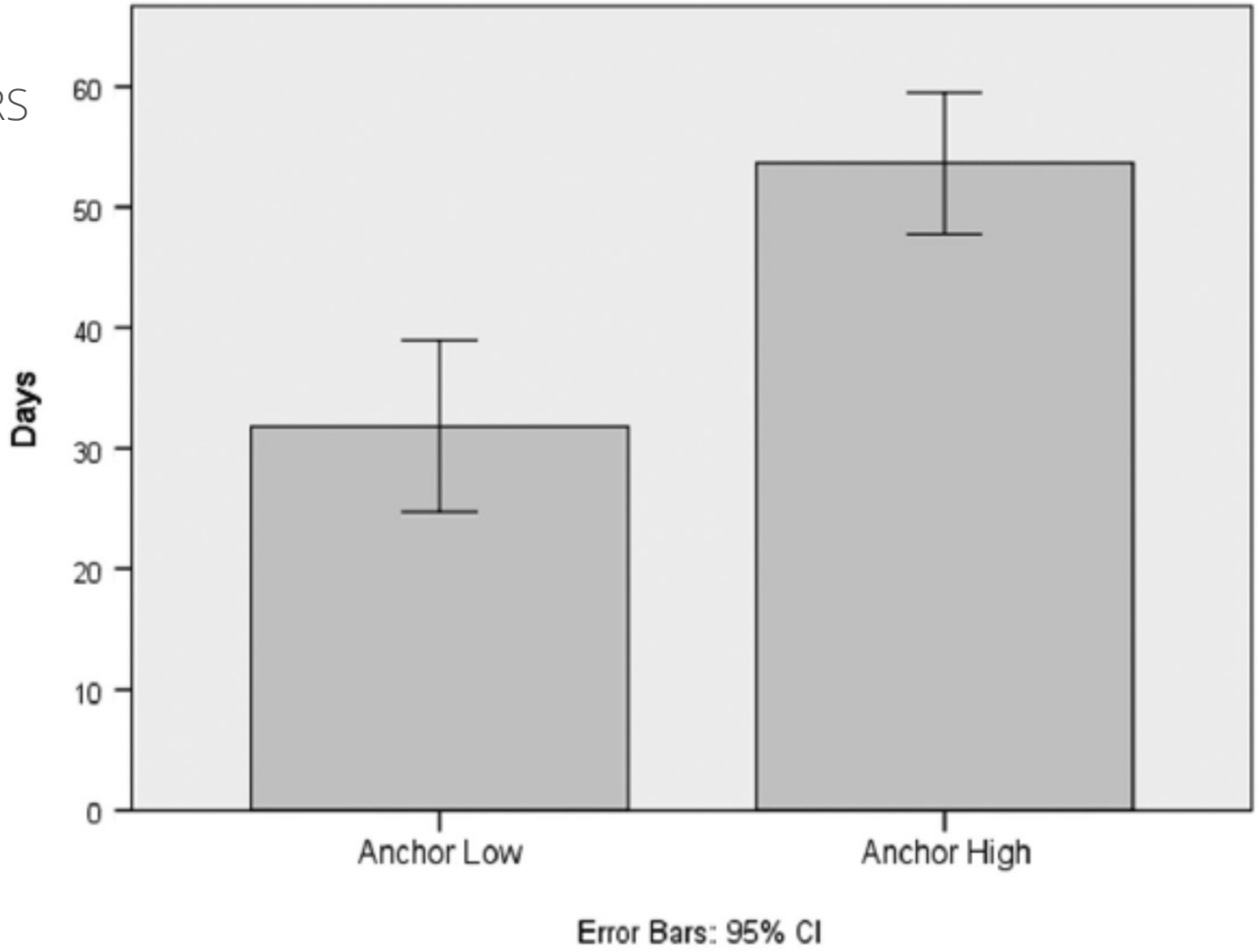
- Tversky and Kahnemann call this phenomenon «Anchoring and Adjustment», meaning that we are influenced by the anchor and then we adjust our estimate, but we don't adjust enough

- There are several theories about why we are sensitive to «anchors». For example:
  - anchoring can be understood as a way to save cognitive effort (a sort of «efficiency mechanism»)
  - anchoring is also closely related to the availability bias (they can reinforce each other)
  - anchoring can be the outcome of social learning, which has important positive effects, but may also lead to negative consequences

an experiment on 600 public employees (in ITALY)

- You are a Public Relations Manager of a average-sized municipality. You have to establish the maximum number of days within which your collaborators must respond the the citizines' requests via email. Please consider whether the maximum days should be higher or lower than 2 (anchor low) / 90 (anchor hi) What would be the appropriate maximum number of days, in your opinion?

ABOUT 60% MANAGERS



ANCHORING and MANAGEMENT

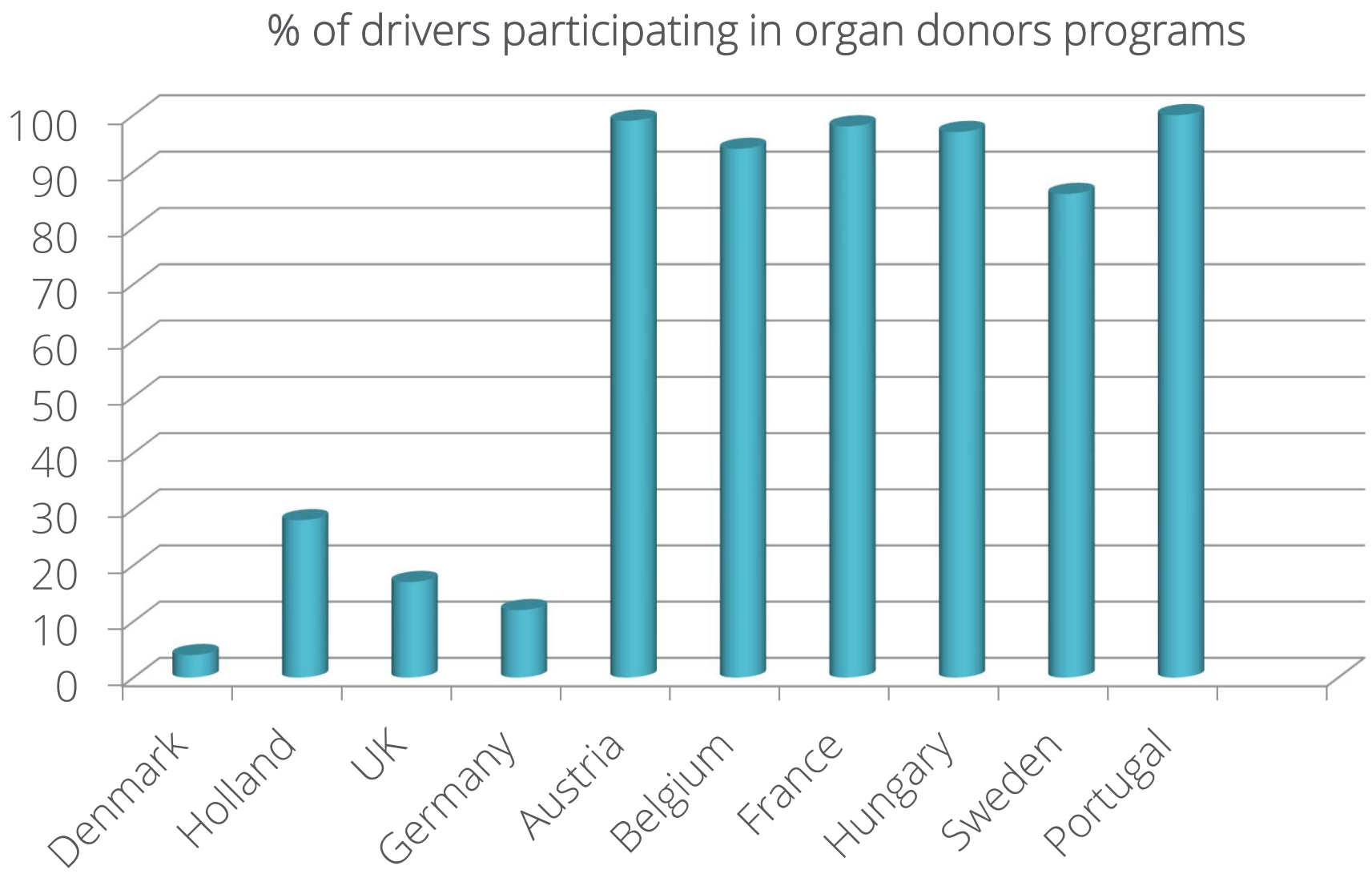
- When managers need to solve a problem, a very obvious way to find possible solutions is to look at how similar organizations (competitors, for example) have solved that problem, especially if they have been successful in doing so
- Looking at what «similar others» do is a very powerful anchor
  - e.g. looking at «benchmarks» or «industry standards»
  - in HRM: benefits, salary, career opportunities etc
- That «external» solution becomes a powerful anchor; the managers may then «adjust» that anchor to their own specific organizational context, but they may not adjust enough
- Anchoring can be useful, but the «danger» is that:
  - the drive to find innovative solutions is decreased
  - the relevance of context-specific factors is underestimated

ANCHORING and PROSPECT THEORY

- The anchors we use can be a significant element of our frames
- For example, they can generate a gain frame or a loss frame
- In a Change Management process, the perception of potential losses / opportunities may depend on what anchors are used to identify the possible outcomes of such change.
  - e.g. the success / failure of an external organization / team similar to our own in a change process analogous to the one we want to implement

- A very common and very influential kind of «anchor» ....

an example with real data



Johnson, Goldstein 2003

Johnson, Goldstein 2003

☐ check if you want to participate to the organ donor program

people don't check, so they don't participate

☐ check if you do not want to participate to the organ donor program

people don't check, so they participate

DEFAULTS AS ANCHORS

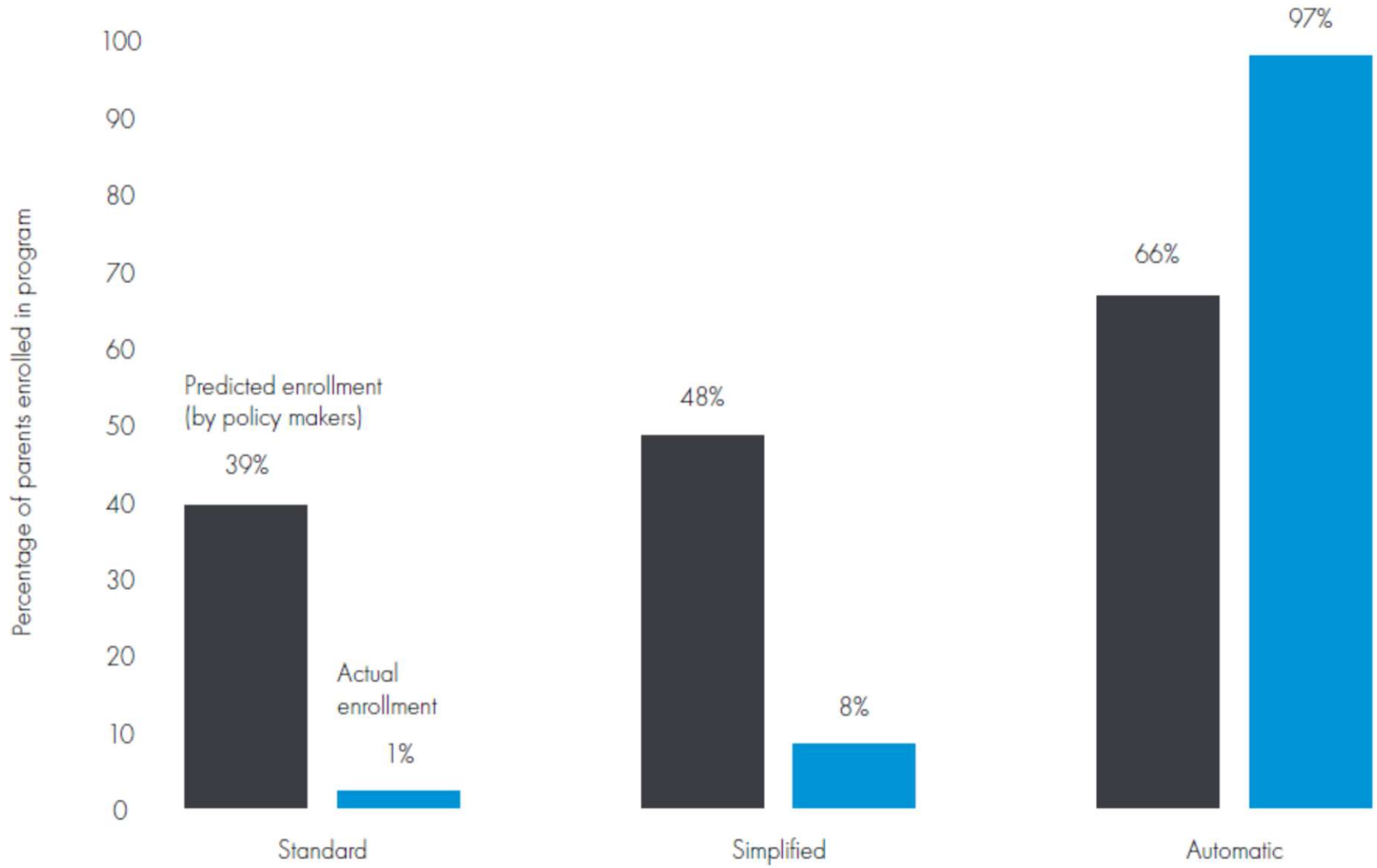
- Defaults are extremely powerful, widespread anchors
- Also, we tend to underestimate their effects

EXAMPLE: 3 groups of parents were informed about the possibility to participate to a free support program about their children school experience and performance. In order to participate:

1) text message in which it was explained that they could participate by signing up through a website
2) text message in which it was explained that they could participate by responding «start» to the same message
3) text message in which it was explained that they could cancel participation by responding «stop» to the same message

UNDERESTIMATION OF DEFAULTS' EFFECTS

Several policy makers were asked to exstimate the participation rate of parents in the 3 groups. THE RESULTS:



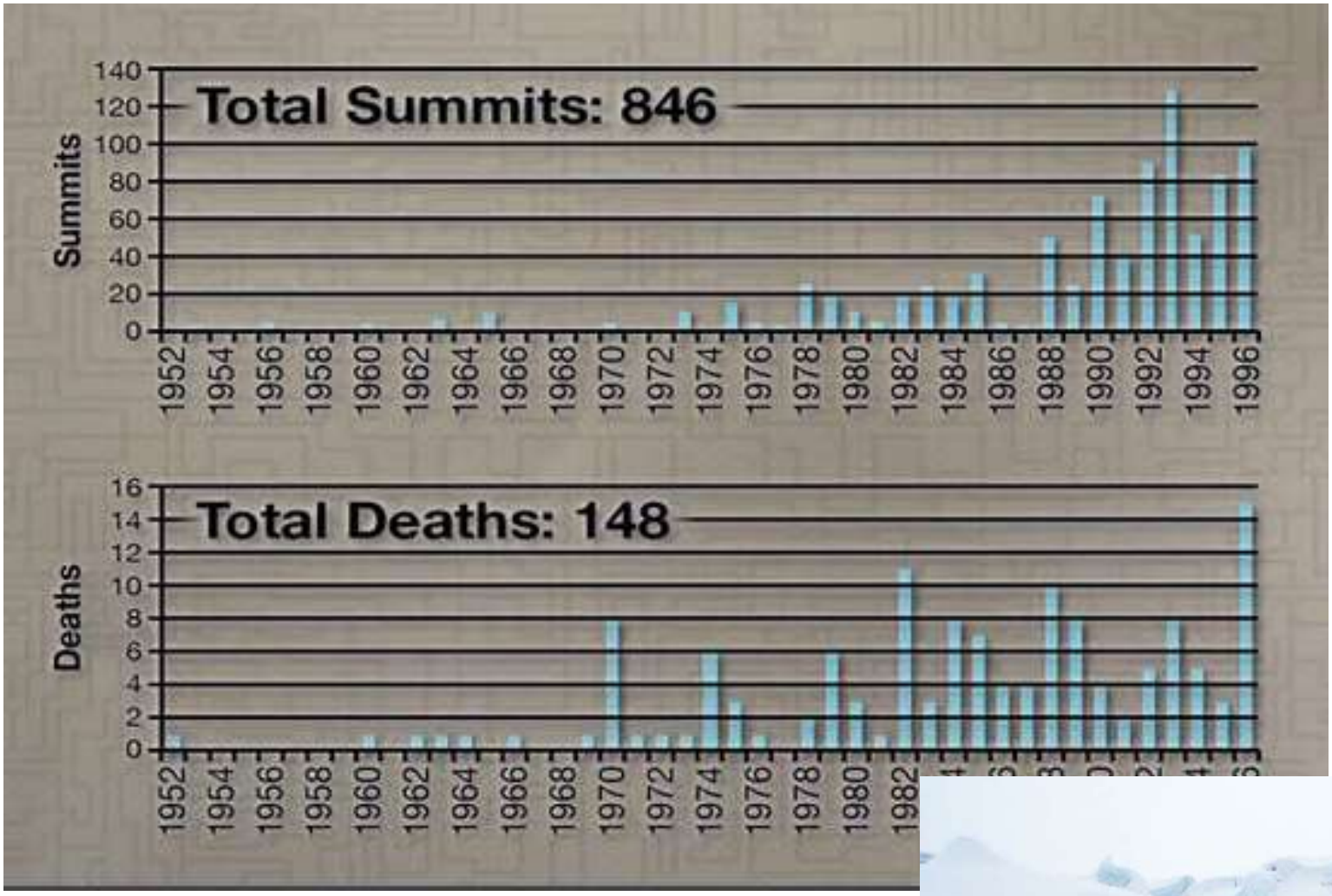
WHAT KINDS OF DEFAULT?

- simple default (the same for all)
  - easy to implement, it neglects the specificity of individuals
- random default
  - it avoids a «directed» influence (is this a bad thing or a good thing?)
- forced choice (the product / service is not provided unless the user makes and explicit choice)
  - positive: it forces an explicit consideration of options
  - negative: defaults are particularly useful for people with less competence / knowledge / ability / interest in making a well informed / reasoned choice
- customized default
  - most complex to implement
- persistent default
  - for repeated choices (last choice is proposed as default the next time, or last choice is not proposed as default the next time)

A CASE STUDY: THE EVEREST EXPEDITION IN 1996

- Lead by two famous world experts, Rob Hall and Scott Fisher
  - Hall and Fisher already had lead several similar expeditions
  - Both managed expedition agencies (60k dollars per person to be lead in each expedition)
  - Extremely difficult expedition
    - 2 months necessary for acclimatation
    - without acclimatation, at 8k meters you lose conscience in less than a minute
    - You have to arrive on top at 1pm and then go back down immediately (night descent is very dangerous)
    - Last part is extremely difficult. It takes 30 minutes just for a few meters


Everest Summit (8848m)
Camp IV (7900m)
Camp III (7300m)
Camp II (6500m)
Camp I (6100m)
Base Camp (5300m)

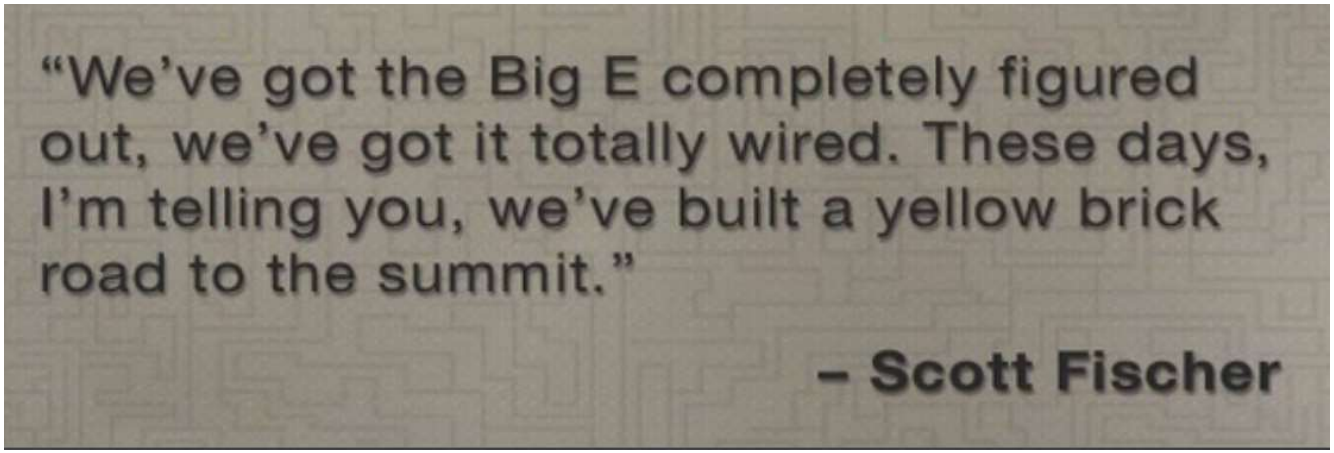

Total Summits: 846
Summits
140
120
100
80
60
40
20
0
1952
1954
1956
1958
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
Total Deaths: 148
Deaths
16
14
12
10
8
6
4
2
0

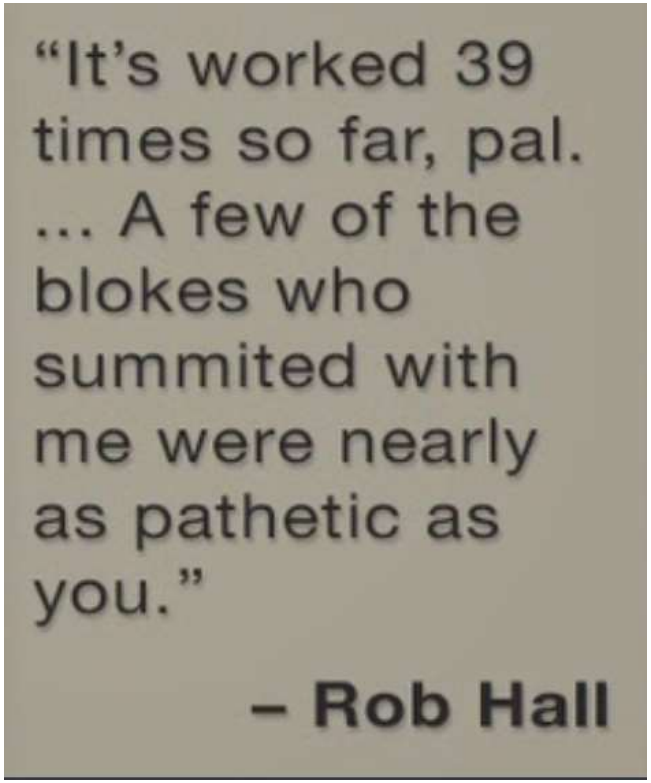
WHAT HAPPENED

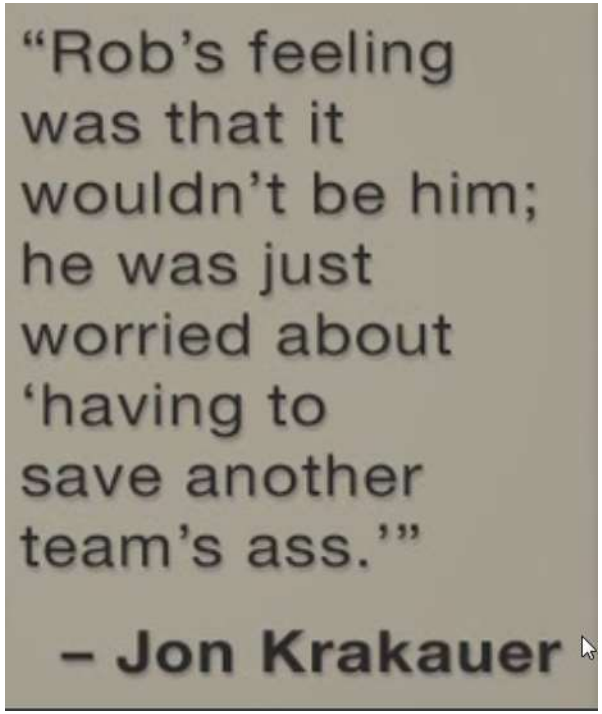
- Turn-Around Rule
  - *“at 1 pm, you have to back down, no matter where you are”*
  - *the rule was violated: they arrived on top at 4pm*

- Cognitive biases that help explaining the tragedy:
  - Over-Confidence Bias
  - Recency Effect
  - Sunk-Cost Effect

OVER-CONFIDENCE







THE UNPLEASANT SHOW EXAMPLE

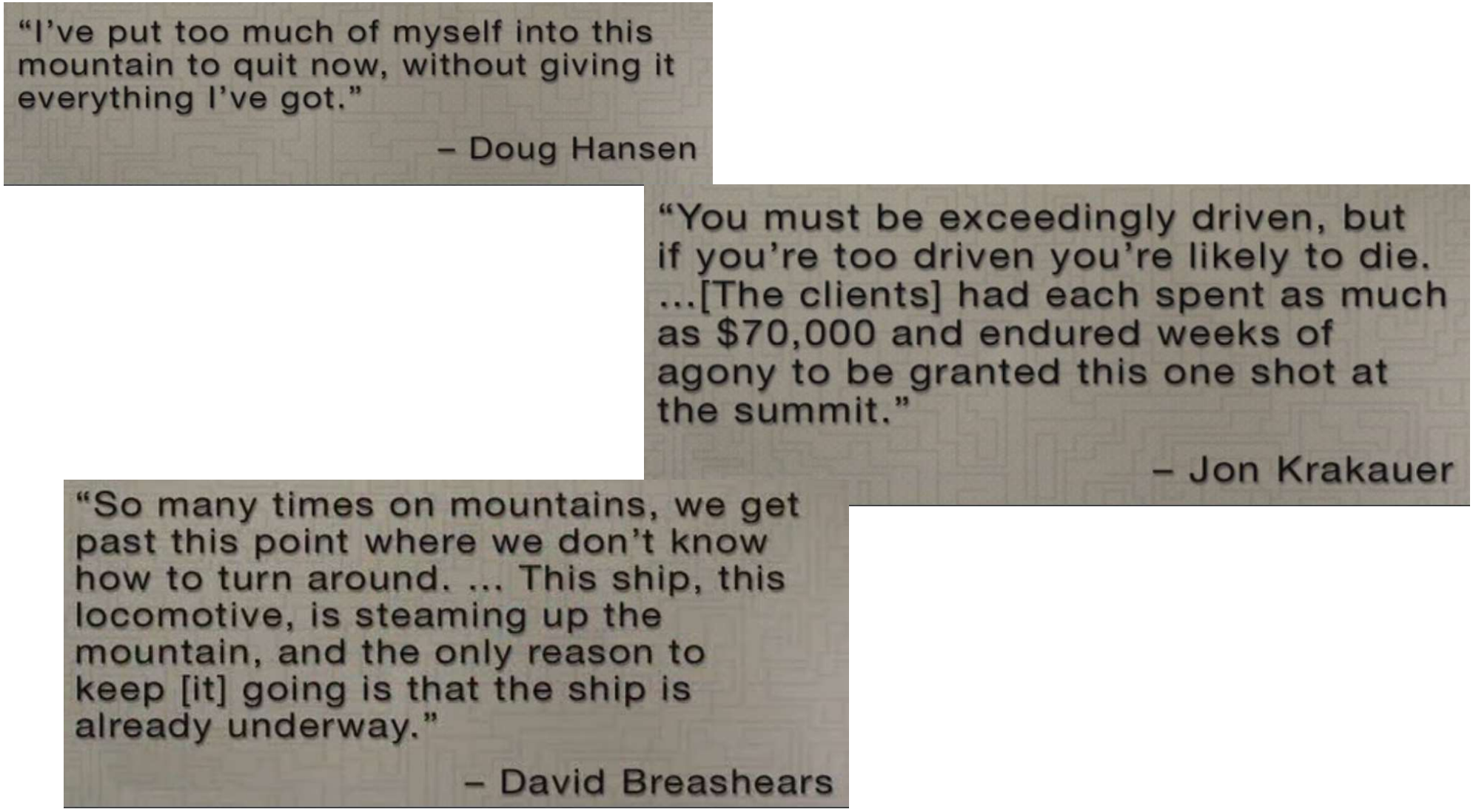
- Imagine you go to a theater to see a show (it could be a play, a concert, or a movie, it doesn't matter)
- You pay 5 euros for the ticket
- You know that the show will last for 2 hours
- The show begins
- After 10 minutes, you realize that you HATE the show. It's the type of show that you really, really don't like. And you know that it's going to be just like that for 2 hours.
- What do you do? You a) stay for 2 hours watching a really terrible, horrible, show, or b) you get up and leave and do something fun?
- Most people say that they leave, but ...
- what if you paid 10 euros?
- what if you paid 20 euros?
- what if you paid 50 euros?
- what if you paid 100 euros?

SUNK-COST EFFECT

- We intensify our efforts and commitement too much in actions where we heavily invested ourselves (time, resources, etc.)
  - A rational investiment decision should only consider future costs and benefits, not sunk costs
  - In M&As, rarely the CEO who carried out an unsuccessful merger is the one to re-sell the acquired company: usually a change of leadership is needed
- Staw's research on NBA teams management
  - expensive players are more utilized, independently on performance
- Explanations
  - cognitive dissonance: (the mental discomfort experienced when a person's belief clashes with facts and evidence)
    - to reduce that discomfort, we rationalize the current negative situation and we insist on the same course of action because we hope that new, future evidence will prove us right, eventually
  - prospect theory and loss aversion: we tend to be risk takers when we expect losses, in order to try to reduce them or to avoid them, if we believe that we have that chance. Our over-confidence may increase our belief that by «doubling down» the outcome will be positive, so that we will be able to avoid such losses

SUNK-COST EFFECT in the EVEREST case

- The TURN-AROUND RULE was a smart way to avoid the sunk cost effect, but ….



Origins of the SUNK-COST EFFECT

Why do you think we tend to be influenced by sunk costs?

Can you imagine some evolutionary advantages that may help explain its origin?

- Advantages in action (more resilience, effort, motivation, etc)
- Disadvantages in deciding about what action to pursue (e.g. continuing on a course of action vs changing the course of action)

- please notice the overlapping with the overconfidence bias (but there are also clear differences)
  - Difference: over-confidence is mostly about miscalibration of judgment, while the sunk cost effect is about loss-aversion (especially loss of self-esteem and reputation)

HOW TO DEAL WITH THE DANGER OF THE SUNK COST EFFECT

1. Reframe the Decision

Ask yourself: "Would I make the same decision today if I had not already invested time/money?"

If you have been watching a bad movie for an hour, instead of thinking, "I've already spent an hour, so I should finish it," ask: "Would I choose to spend another hour on this if I hadn't already started?"

2. Focus on Future Costs and Benefits

- Shift your attention from "what has been spent" to "what will bring the best return moving forward"

- Evaluate whether continuing on the same path is the best use of future time, money, or effort

If you've spent $5,000 on a failing business idea, instead of throwing another $5,000 into it just because you've already invested, analyze if more investment will realistically lead to success.

3. Set Pre-Commitment Exit Points

- Before starting a project, define conditions under which you will stop

- Set financial, time, or performance-based thresholds that will trigger an exit.

A company might decide: "If our new product does not reach 1,000 sales within 6 months, we will discontinue it."

HOW TO DEAL WITH THE DANGER OF THE SUNK COST EFFECT

4. Seek an Outside Perspective

Ask someone who is not emotionally invested to evaluate the situation objectively

5. Separate Ego from the Decision

Recognize that admitting a mistake is not failure, it's smart decision-making

Many people persist because they don't want to feel like they "wasted" resources, but wasting even more is worse.

6. Use Probabilities and Expected Value

- Instead of focusing on past investments, ask:

"What are the odds that continuing will lead to success?"

"Does the expected return justify further investment?"

7. Learn from Past Mistakes Without Guilt

- Instead of feeling bad about past failed investments, treat them as learning experiences

HOW TO DEAL WITH THE DANGER OF THE SUNK COST EFFECT

8. Use Opportunity Cost Thinking

- Ask: “What am I giving up by continuing this?”

- Every decision to persist is also a decision not to invest elsewhere

If you stay in a failing job, you’re giving up the chance to explore better opportunities

9. Train Yourself to Accept Small Losses

- The more comfortable you are with cutting losses early, the less likely you are to fall into the sunk cost trap
- Start practicing by letting go of small sunk costs in daily life.
- Obviously, this doesn’t mean that we should stop at the first sign of difficulty or failure!!!

- Stop reading a bad book halfway instead of forcing yourself to finish it.

- Cancel subscriptions you don’t use instead of thinking, “I already paid for the year.”

OTHER BIASES

- Many other commong biases in human judgment and decision making have been identified
  - Sometimes (but not always), they are just sub-types or peculiar manifestations of the biases that we have seen already
- We don't have the time to go through all of them (it would take an entire course or more), but I will provide a short bibliography of books that you can read if you are interested to go deeper

- However, before abandoning decision making and moving to another topic, I want to give you a glimpse of another set of interesting phenomena

WHAT HAPPENS WHEN WE ARE ALREADY GIVEN A CERTAIN SET OF OPTIONS TO CHOOSE FROM, AND WE JUST HAVE TO SELECT THE ONE THAT WE PREFER?