CB2300
Decision Making: Should I attend YJ's CB2300?

Dr. You Jin (YJ) Kim
Department of Management
City University of Hong Kong

- Do not skip tutorials. Your attendance will be counted.

專業 創新 胸懷全球
Professional · Creative
For The World

Class Agenda

- Announcement

- Review

- Decision-Making

Announcement

- **Quiz 1 (By Jan 28, 11:59PM)-**Unlimited attempts & No Time Limit
- Keep the highest score
- **No late submissions will be accepted**
- Chat messages; I can't read all while my lecture
- Please speak out if necessary
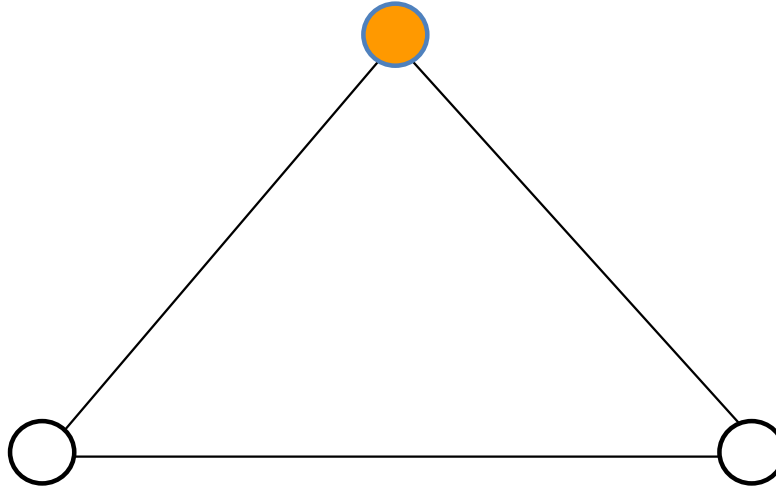
I need to teach proactivity

- The most wanted employees..
- I reward proactive students
- Extra credit for week 1 is up (Only for lectures)
- Modules→ Week1

A Triangle of Management

- What are the three criteria?

- Anyone who can explain?

Be efficient (low waste)

Be effective (high attainment)

Be happy (sustainable)

A Triangle of Management

- Matthias: I want to develop smartphones

- Finally developed them (??)

- Within only 1 year & reasonable $$ (??)
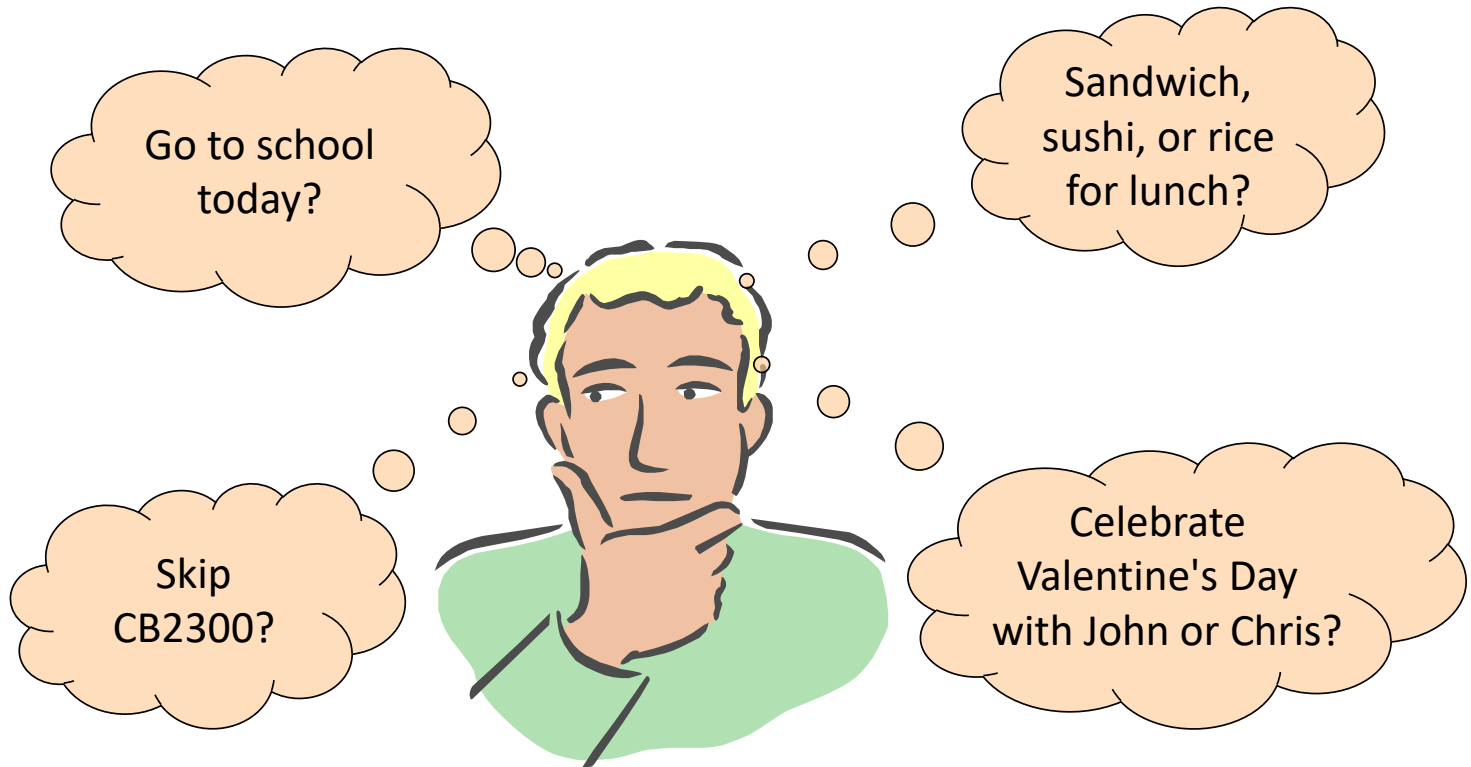
- Employees were satisfied with the process (??)

A Triangle of Management

- Matthias: I want to develop smartphones

- Finally developed them (Be effective)

- Within only 1 year & reasonable $$ (Be efficient)

- Employees were satisfied with the process (Be happy)

Decisions in Everyday Life...

Go to school today?

Sandwich, sushi, or rice for lunch?

Skip CB2300?

Celebrate Valentine's Day with John or Chris?

Decisions in Organizations…

- Hire? Fire? Part-time or full-time?

- Cut Salaries?

- Open up a foreign division?

- Buy a new business? Expand?

Decision Making

Definition:

The <u>process</u> by which managers respond to opportunities and threats <u>by analyzing options</u> and making determinations about specific organizational goals and courses of action.

Two Types of Decisions

- ***Programmed Decisions***

  Decisions that have been encountered and made in the past (Routine)

- ***Non-programmed Decisions***

  New, novel, complex decisions having no proven answers (Significant implications)

Types of Decision Making

- ***Types of Decisions***

- Programmed Decisions

- Any example?

- Nonprogrammed Decisions

- Any example?

Types of Decision Making

- ***Types of Decisions***

- Programmed Decisions

- Sitting at your desk

- Turning your computer on

- What to eat for lunch

- Nonprogrammed Decisions

- Choosing your career

- Choosing to invest in a new product line

Should I attend CB2300?

1. Rational Decision Making Models

Define the problem…

Should I go to CB2300?

Identify Decision Criteria

Exam related	
Feeling together	
Fun & engaging	
Total Values	

Allocate Weights to Criteria

	Level of Importance	
Exam related	9	
Feeling together	8	
Fun & engaging	7	
Total Values		

Develop Alternatives

	Level of Importance	CB2300 (MGT)	Lunch	Her/Him	Switch
Exam related	9				
Feeling together	8				
Fun & engaging	7				
Total Values					

Evaluate Alternatives

	Level of Importance	CB2300 (MGT)	Lunch	Her/Him	Switch
Exam related	9	10	6	7	5
Feeling together	8				
Fun & engaging	7				
Total Values					

Evaluate Alternatives

	Level of Importance	CB2300 (MGT)	Lunch	Her/Him	Switch
Exam related	9	10	6	7	5
Feeling together	8	3	8	5	8
Fun & engaging	7				
Total Values					

Evaluate Alternatives

	Level of Importance	CB2300 (MGT)	Lunch	Her/Him	Switch
Exam related	9	10	6	7	5
Feeling together	8	3	8	5	8
Fun & engaging	7	10	2	5	7
Total Values					

Evaluate Alternatives

	Level of Importance	CB2300 (MGT)	Lunch	Her/Him	Switch
Exam related	9	10	6	7	5
Feeling together	8	3	8	5	8
Fun & engaging	7	10	2	5	8
Total Values		**184**	**132**	**138**	**165**

Step 1: Identifying the Problem

- **Problem:**
  A discrepancy between an existing and desired state of affairs
  - **There is a pressure to solve the problem**

Step 2: Identifying Decision Criteria

- **Decision criteria:**
  Factors that are relevant to resolving the problem
  - **Costs that will be incurred (investments required)**
  - **Risks likely to be encountered (chance of failure)**
  - **Outcomes that are desired (growth of the firm)**

Step 3: Allocating Weights to the Criteria

- **In order to give a priority of the decision(s)**

Step 4: Developing Alternatives

- **Alternatives are listed (without evaluation) that can resolve the problem**

Step 5: Analyzing Alternatives

- **Each alternative is evaluated against the criteria**

Step 6: Selecting an Alternative

- **Choosing the best alternative**

Step 7: Implementing the Alternative
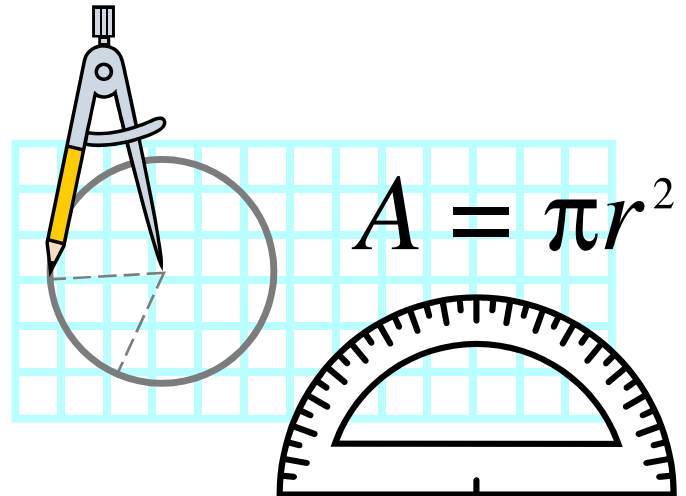
- **Putting the chosen alternative into action**

Step 8: Evaluating the Decision's Effectiveness

- **Determine whether the problem is resolved**

Rational Decision Making

Decisions are <u>consistent</u>, <u>value-maximizing</u> choices with <u>clear</u> goals.

Rationality

$$A = \pi r^2$$

Let's Play a Game!

Bidding Rule

- Let's use the chat option for bidding!
- Here is a $50 dollar bill
- Bidding begins at $5
- Subsequent bids must be in $5 dollar increments
- Both the highest and the next highest bidder pay me their last bids
- The dollar bill will only go to the highest bidder

Let's choose

- What would you choose, A or B?
  - Choice 1
    - A: Getting $1,000,000 for sure
    - B: 10% of getting $2,500,000, 89% of getting $1,000,000, and 1% of getting $0
  - Choice 2
    - A: 11% of getting $1,000,000, and 89% of getting $0
    - B: 10% of getting $2,500,000, and 90% of getting $0

Let's choose

- Choose A or B for Choice 1 & 2.

- Explain why you choose A or B for Choice 1 & 2

Allias Paradox in Rationality

- Choice 1
  - A: $1,000,000 for sure

    EX(A)=1,000,000
  - B: 10% of $2,500,000, 89% of $1,000,000, and 1% of $0

    EX(B)= 0.1*$2,500,00+0.89*1,000,000+0.01*0=1,140,000
- Choice 2
  - A: 11% of $1,000,000, and 89% of $0

    EX(A)=0.11*1,000,000=110,000
  - B: 10% of $2,500,000, and 90% of $0

    EX(B)=0.1*2,500,000=250,000

Allias Paradox in Rationality

- People choose Alternative A in the first situation because they focus on the *chance* of getting $1,000,000

- However, people choose Alternative B in the second situation because they focus on the *amount* difference between $1,000,000 and $2,500,000 instead of the *chance*

Allias Paradox in Rationality

•If people are rational decision makers…

(A-A) or (B-B)

•Anyone choosing Alternative A in the first situation should also choose Alternative A in the second after considering the chance rather the amount

•Or they need to choose B-B after calculating the expected values for each

Allias Paradox in Rationality

- People are not consistent when applying their decision criteria to problems (They did not choose A-A)

- They do not want to calculate exact expected values for each choice to make a right decision (They did not choose B-B)

- **People are NOT rational decision makers**

Assumptions of Rationality
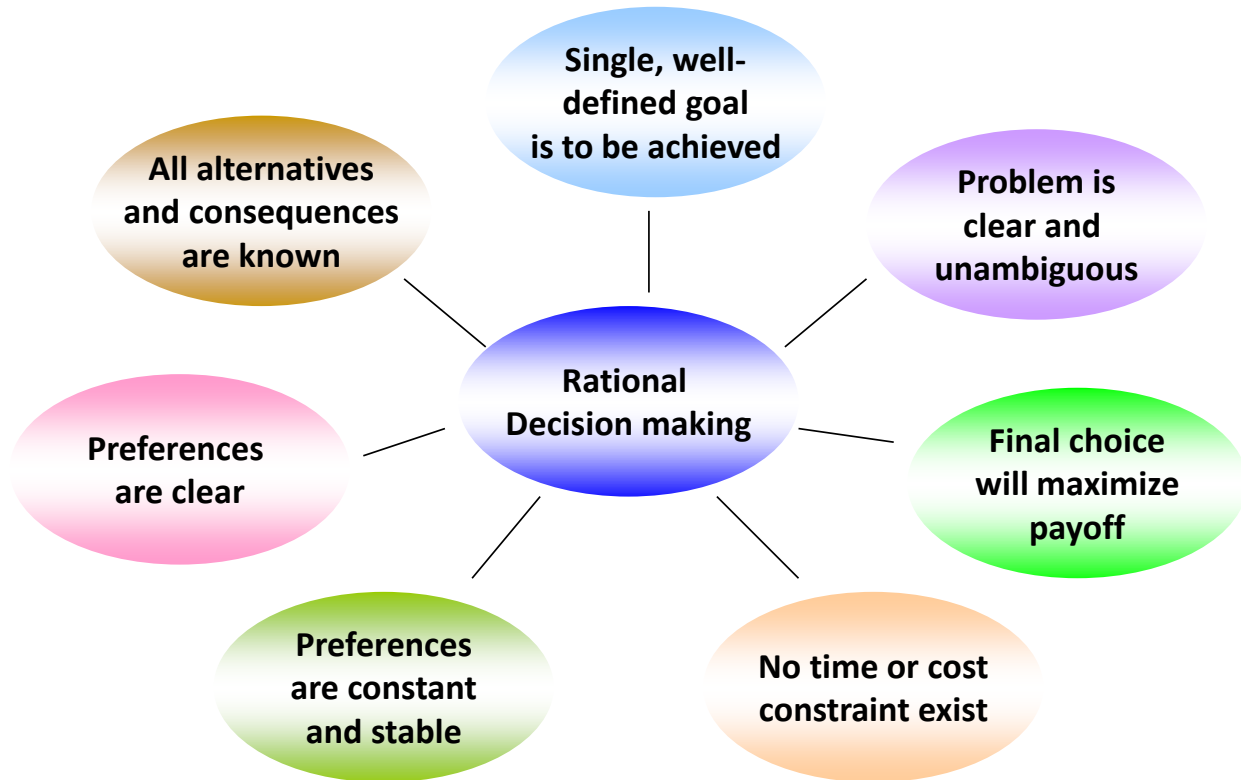
- Single, well-defined goal is to be achieved
- Problem is clear and unambiguous
- All alternatives and consequences are known
- Rational Decision making
- Final choice will maximize payoff
- Preferences are clear
- Preferences are constant and stable
- No time or cost constraint exist

However…

- This world is NOT that simple!

- Our brains are NOT that super!

- Human are NOT always rational!

2. Bounded Rationality

Bounded Rationality

- **Bounded rationality**
  - Alternatives and information can be so extensive that managers cannot consider them all.
  - Decision making is limited (bounded) by individuals' cognitive limitations.

- **Incomplete information**

- **Ambiguous Information**
  - Information whose meaning is not clear allowing it to be interpreted in multiple or conflicting ways.

Bounded Rationality

- **Time constraints and information costs**
    - Managers have neither the time nor money to search for all possible alternatives and evaluate potential consequences

- **Satisficing (Not the best one)**
    - Searching for and choosing an acceptable, or satisfactory response to problems and opportunities, rather than trying to make the best decision
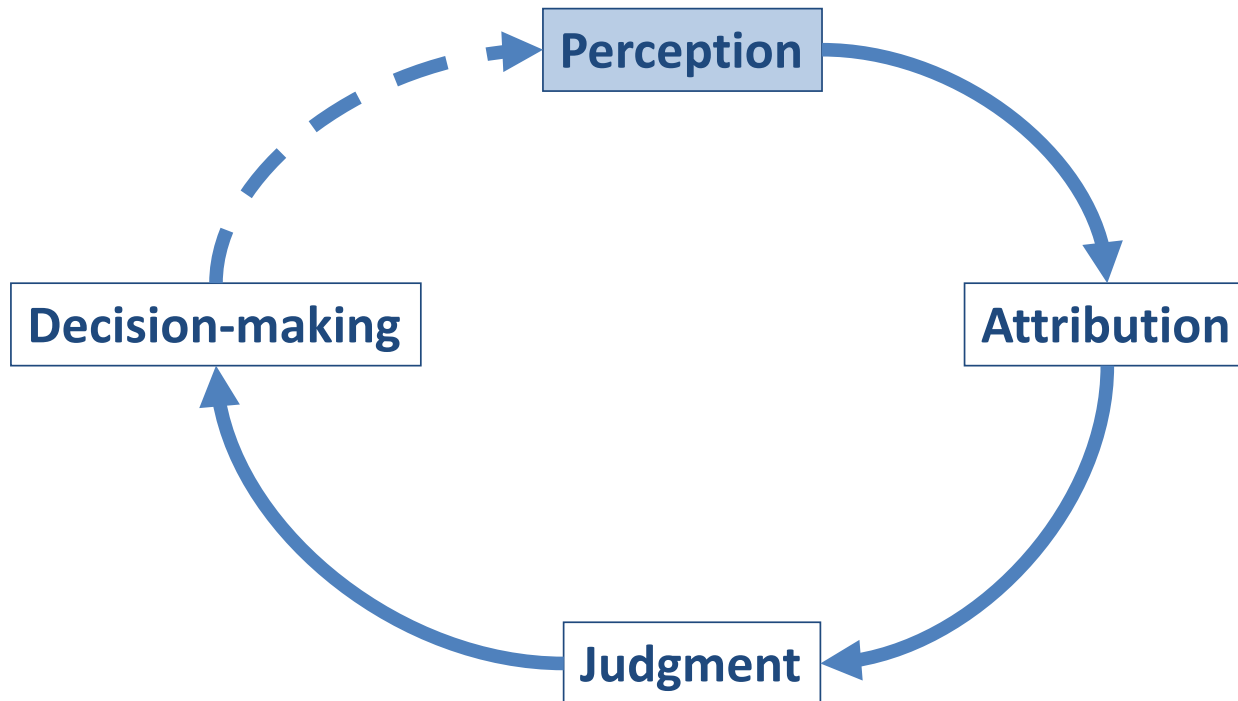
Factors Influencing a Satisficing Decision

Information Processing Biases

Perceived problem

Triggers

Limited search

Limited information

Leads to

Satisficing decision

Decision-Making Process

What do you choose to do?

Perception

What do you see?

Decision-making

Attribution

What conclusion do you draw?

Judgment

What is the cause of what you see?

Decision-Making Process

Perception → Attribution → Judgment → Decision-making → (back to Perception)
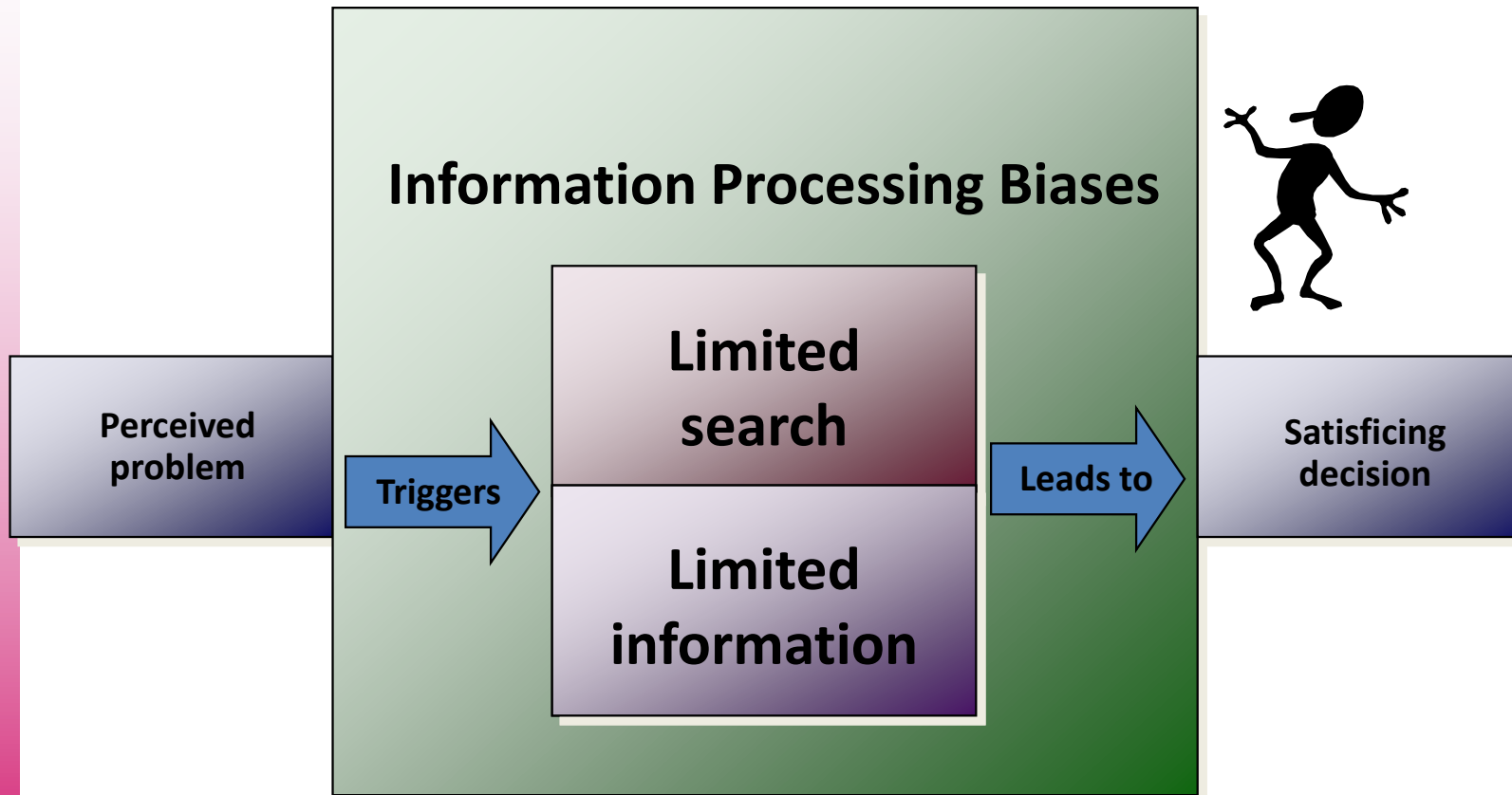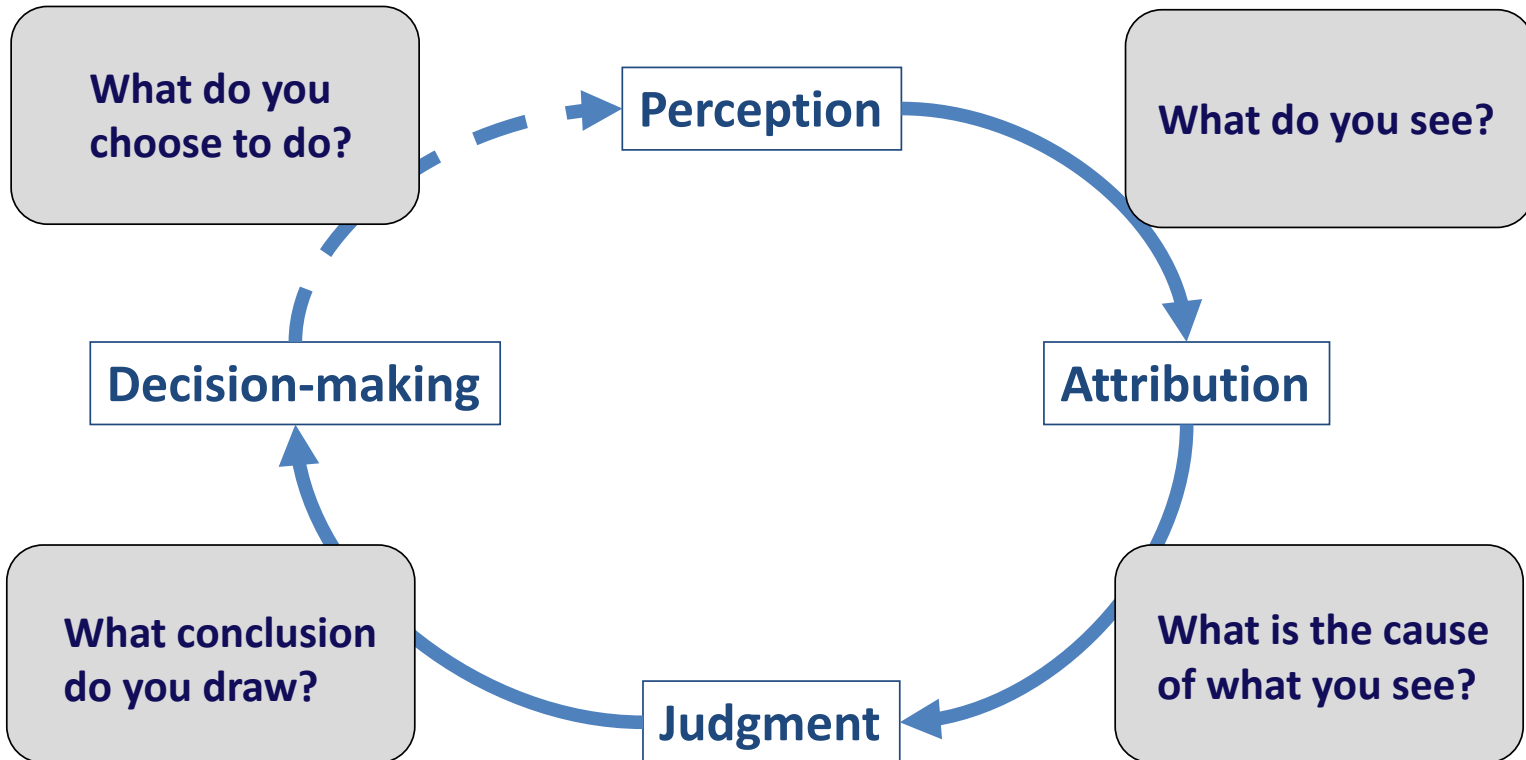
What is Perception?

Perception

A process by which individuals organize and interpret their sensory impressions in order to give meaning to their environment.

People's behavior is based on their perception of what reality is, not on reality itself.

- Polling

Which circle is bigger?
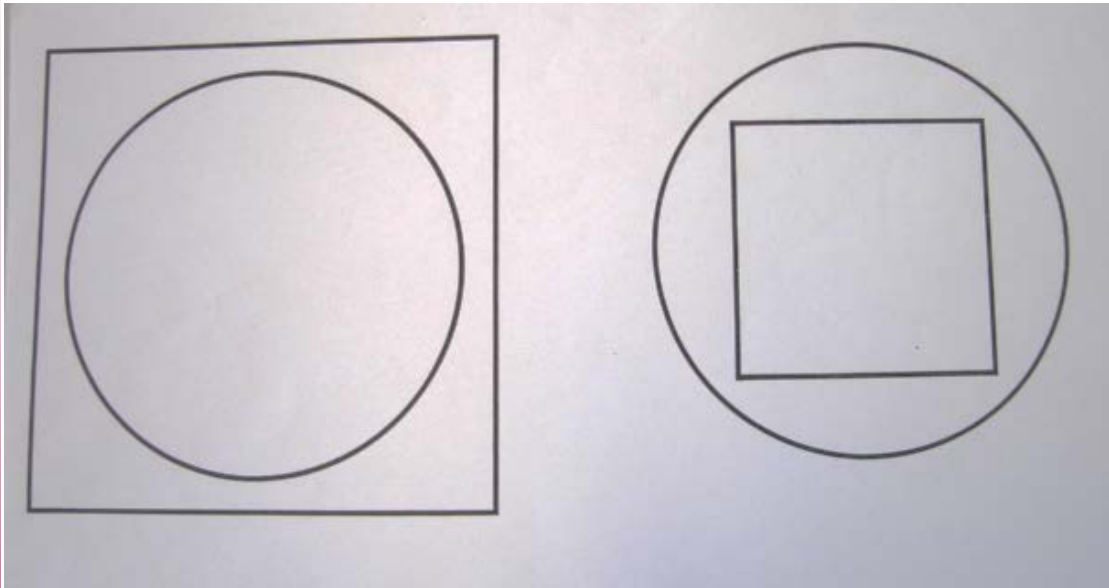
1. Left

2. Right

3. Same

4 . I'm not paying attention. Sorry

Which line is longer?
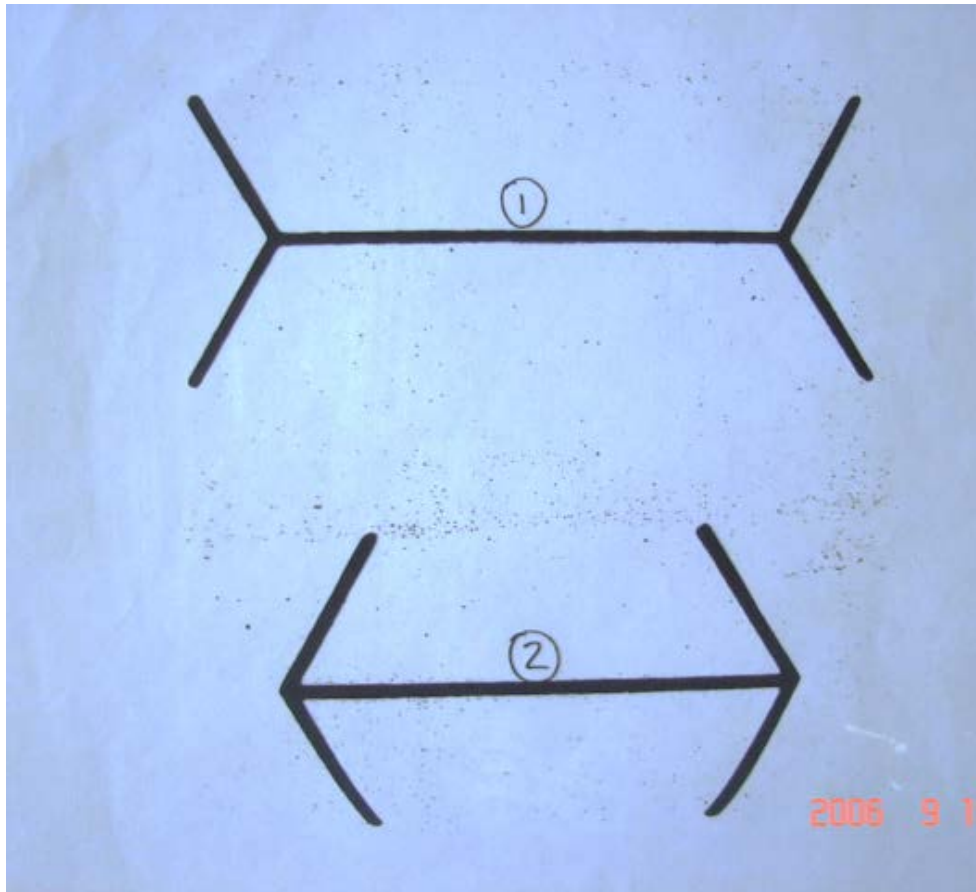
1. Top line
2. Bottom line
3. Same
4. I'm not paying attention. Sorry.

What is the MIDDLE object?
Let's use the chat option!
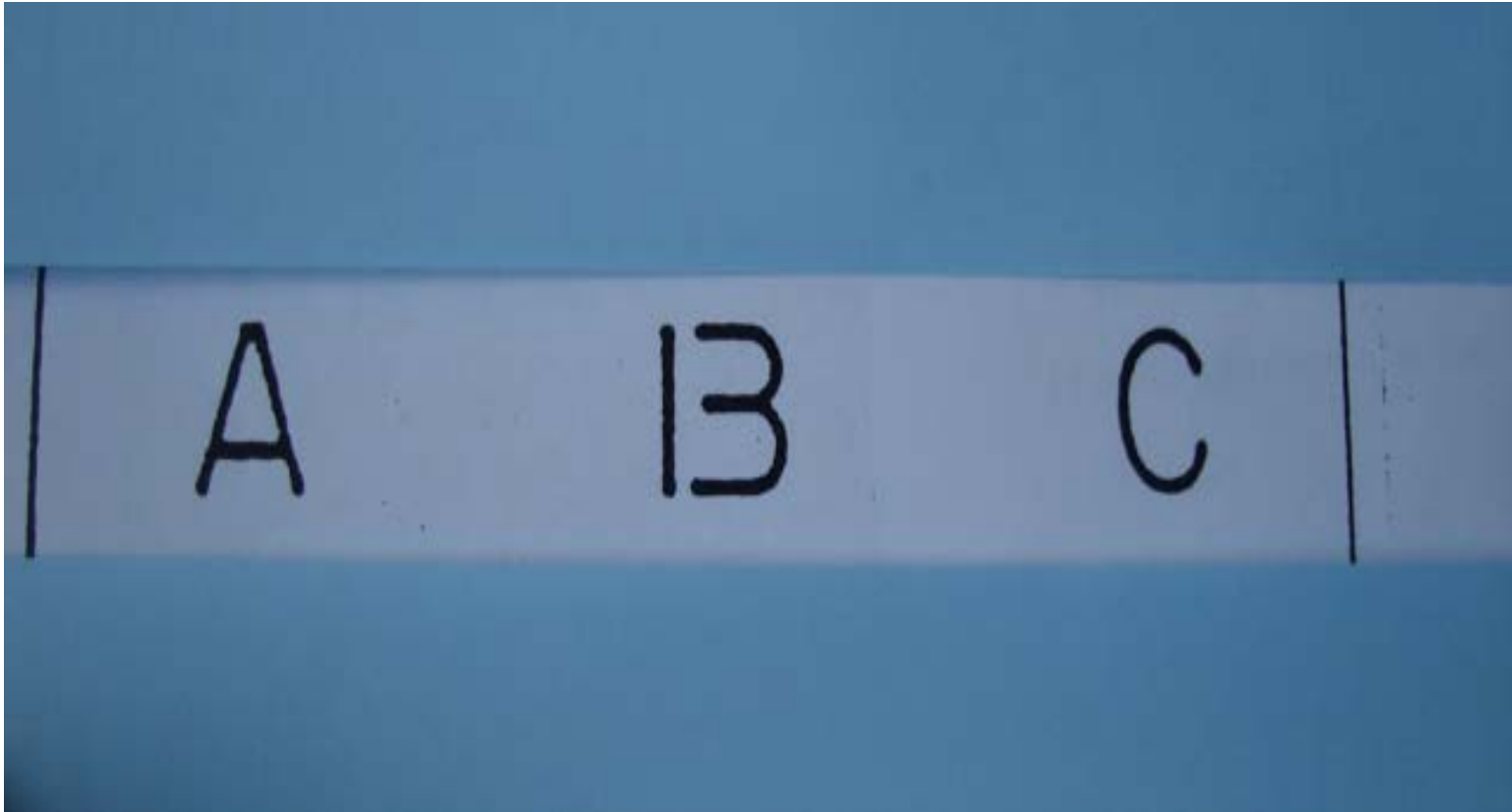
What is the MIDDLE object?
Let's use the chat option!

12

A 13 C

14

Surroundings and contexts change our perceptions.

Female students:
Eyes remain open.

Male students:
CLOSE YOUR EYES!

Female students :
CLOSE YOUR EYES

Male students :
Open your eyes

Now everyone…

What do you see?

▸ **1. Young lady**

▸ **2. Old Lady**

▸ **3. Both**

▸ **4. Black**

▸ **5. White**

Say the COLOR, not the WORD

RED	**GREEN**	**BLUE**	**YELLOW**
BLACK	**BLUE**	**RED**	**YELLOW**
BLACK	**GREEN**	**BLUE**	**RED**
RED	**BLUE**	**BLACK**	**GREEN**
GREEN	**YELLOW**	**RED**	**BLACK**

Say the COLOR, not the WORD

RED	**GREEN**	**BLUE**	**YELLOW**
BLACK	**BLUE**	**RED**	**YELLOW**
BLACK	**GREEN**	**BLUE**	**RED**
RED	**BLUE**	**BLACK**	**GREEN**
GREEN	**YELLOW**	**RED**	**BLACK**

Which one is more difficult?
The first one or the second one?

Ok, what was going on?

- Expectations shape our perceptions!
  - If we have seen an old lady, we expect to see an old lady again, but if we have seen a young lady, we see a young lady!
  - The word of green should be paired up with the color of green but not the color of blue or red etc
  - What's the implication for impression management when you interview for a job?

Passing Video

- Students wearing black and white bouncing a basketball
- **Objective**: count the number of passes between the students in white shirts
- **Accuracy is crucial**

Passing Video

- Students wearing black and white bouncing a basketball
- **Objective**: count the number of passes between the students in white shirts
- **Accuracy is crucial**
- Selection Attention
- Selective attention can influence our perception and its accuracy
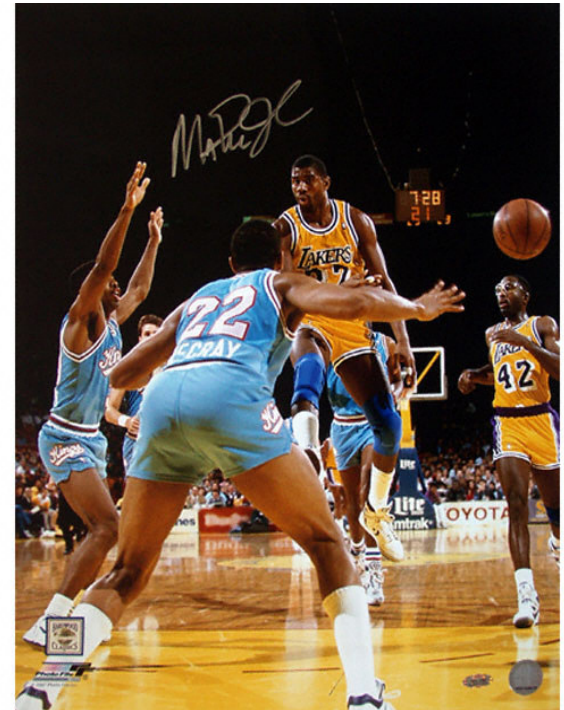
How to become romantic?

Romantic Red (Elliot & Niesta, 2009)

- The relationship between red and attractiveness
- Red-sex link

Elliot, A. J., & Niesta, D. (2008). Romantic red: Red enhances men's attraction to women. *Journal of Personality and Social Psychology, 95,* 1150-1164.

THEORY in building
Conceptual Framework

1. Roots in biological heritage – biologically based predisposition to perceive red as a sexual signal (Dixson 1983, Gerald 2003, Hrdy & Whitten 1987, Setchell, Wickings, & Knapp 2006)

2. Conditioning based on societal use of red (Knight, Powers, & Watts 1995, Kohn 1999, Lee 2006)

   Ancient myth: a symbol of passion, lust, and fertility

   Popular film: red dress represents passion or sexuality

Video link

- What happened to the locker room?
- Why is it in Pink?

Other colors

Red: Aggression, Passion
Pink: Feminine characteristics & Calmness
Blue: Trust & A lot of politicians
Green: Nature & good for eyes
Colors influence our perceptions

Surroundings and contexts (colors) change our perceptions.

CB2300
Decision Making: Should I attend YJ's CB2300?

Dr. You Jin (YJ) Kim
Department of Management
City University of Hong Kong

Class Agenda

- Announcement

- Review

- Decision-Making & Individual Behavior

Announcement

- **Quiz 1 (By Jan 28, 11:59PM)-**Unlimited attempts & No Time Limit
- Keep the highest score
- **No late submissions will be accepted**

- **Tutorials (This week; Week 3): Online**
- Confusion

Emails & Q&A

- Lectures are different
- 500 students (5% asking the same question)
- Where is the password?
- Where are lecture slides?
- **"Syllabus" & "Additional information"** on Canvas

Emails & Q&A

- No answers: What can I do?
- Lecture related (except for the content of lectures): Email to Dr. Toni Maria Tong (mgttong@um.cityu.edu.hk)
- Tutorial related: Ask tutors (Grouping & presentations etc)

Q&A

- OK.. I have questions about the content of lectures
- Chat messages; I can't read all while my lecture
- Trying to read after class; it does not make sense to me
- You can ask me at the end for lectures (only about the content)
- Lecture content: Email me

I need to teach proactivity

- The most wanted employees..
- I reward proactive students
- Extra credit for week 2 is up (Only for lectures)
- Modules→ Week2
- Two ways: Verbal & Written (via chat)

Two Types of Decisions

- ***Programmed Decisions***

  Decisions that have been encountered and made in the past (Routine)

- ***Non-programmed Decisions***

  New, novel, complex decisions having no proven answers (Significant implications)

1. Rational Decision Making Models

However…

- This world is NOT that simple!

- Our brains are NOT that super!

- Human are NOT always rational!

2. Bounded Rationality

Bounded Rationality

- **Bounded rationality**
  - Alternatives and information can be so extensive that managers cannot consider them all.
  - Decision making is limited (bounded) by individuals' cognitive limitations.

- **Satisficing (Not the best one)**
  - Searching for and choosing an acceptable, or satisfactory response to problems and opportunities, rather than trying to make the best decision

Decision-Making Process
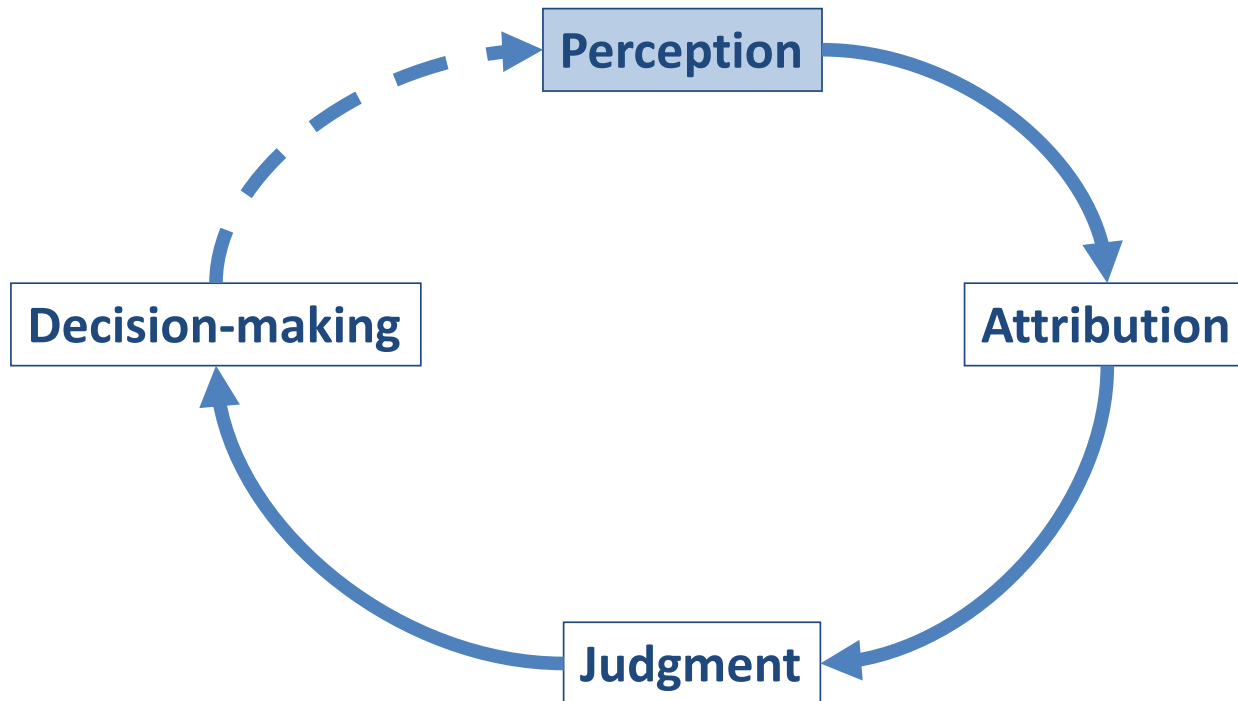
Surroundings, contexts (colors), expectations, & selective attention change our perceptions.

Our perceptions are not accurate

Decision-Making Process

Perception → Attribution → Judgment → Decision-making → (Perception)

Attribution Theory: Judging Others

Attribution Theory

When individuals observe behavior, they attempt to determine whether it is internally or externally caused.

- **Internal causes – under that person's control**
- **External causes – person forced to act in that way**

Your example

When you get an "A" on an exam, you often say_____. But when you don't do well, you often say _____.
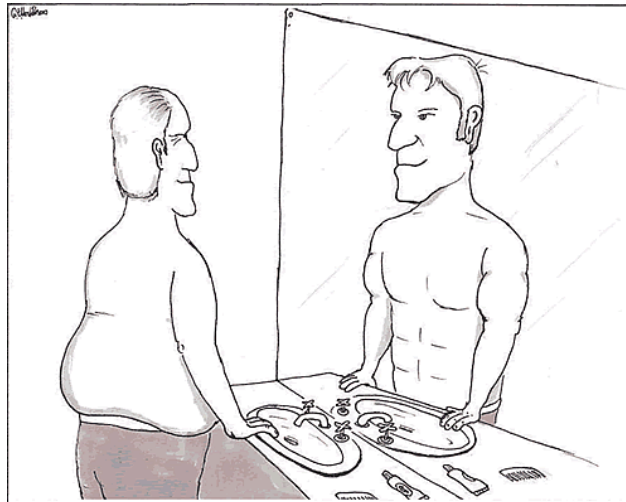
Self-serving Bias

The tendency for individuals to attribute their own successes to <u>internal factors (themselves)</u> while putting the blame for failures on <u>external factors (other people)</u>

When you get an "A" on an exam, you often say_____. But when you don't do well, how does the self-serving bias come into play?

Self-serving Bias

The tendency for individuals to attribute their own successes to <u>internal factors (themselves)</u> while putting the blame for failures on <u>external factors (other people)</u>

When you get an "A" on an exam, you often say you studied hard. But when you don't do well, how does the self-serving bias come into play? Whose fault is it usually when an exam is "tough"?
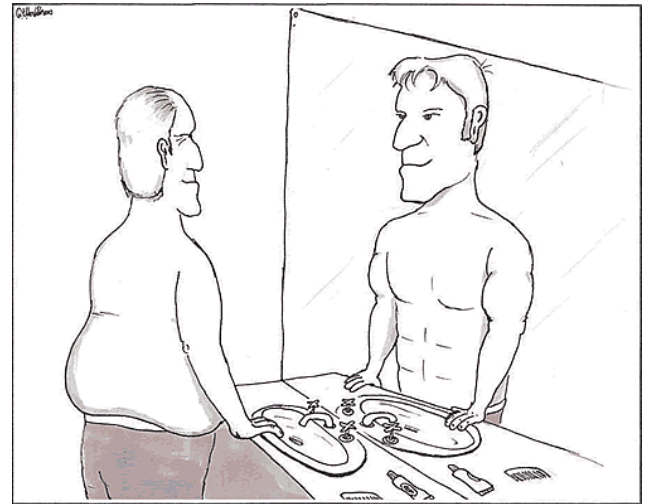
Errors and Biases in Attributions

Fundamental Attribution Error

- An old lady is crossing

- A car hit the lady

- Why did this accident happen?

Errors and Biases in Attributions

Fundamental Attribution Error

The tendency to underestimate the influence of <u>external factors</u> and overestimate the influence of <u>internal factors</u> when making judgments about the behavior of others

In general, we tend to blame the *person* first, not the situation.

Important implication for managerial behavior…

Self-fulfilling Prophecy (Pygmalion Effect)

- Employees suffer; Do not perform well
- What are your managers' responses to this issue?
- What are some common responses?

Self-fulfilling Prophecy (Pygmalion Effect)

Self-fulfilling Prophecy (Pygmalion Effect)

- Superior managers create high and attainable performance expectations... that subordinates fulfill
- Less effective managers fail to develop similar expectations; productivity of subordinates suffers
- Subordinates often appear to do what they are expected to do
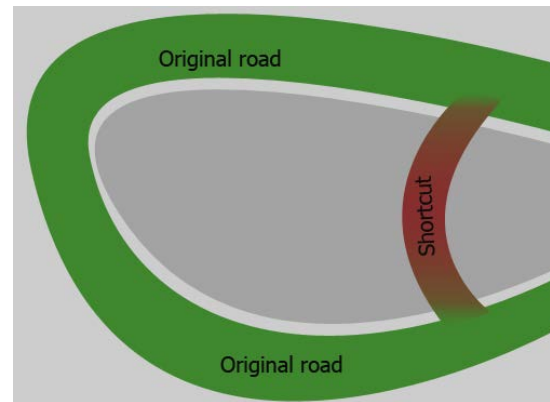
Self-fulfilling Prophecy (Pygmalion Effect)

- Managers may incorrectly attribute an employee's performance to internal characteristics
  - Individual skills, aptitude, or intelligence

- Manager *should* take into account the expectations and other external factors that could explain a subordinate's behavior

Decision-Making Process
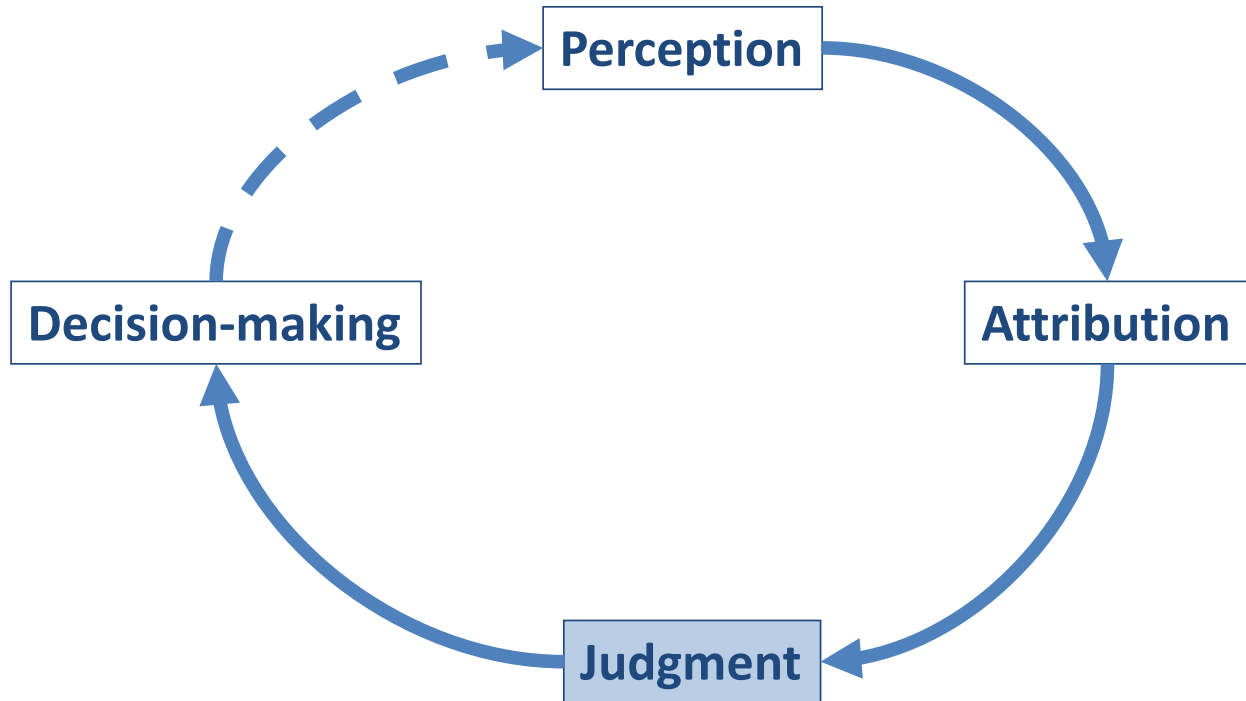
Perception

Attribution

Judgment

Decision-making

Heuristics

- Mental shortcuts (cognitive rules of thumb) that help us make decisions about uncertain events.

- Heuristic can be both GOOD & BAD in decision making

Original road

Shortcut

Original road

- Pick a Number from 1 to 9
- Subtract 5
- Multiply by 3
- Square the number (multiply by the same number - don't take the square root)
- Add the digits until you get only one digit (e.g., if your number is 63, then 6 + 3 = 9)
- If the number is less than 5, add 5. Otherwise subtract 4.

- Multiply by 2
- Subtract 6
- Map the digit to a letter in the alphabet
  (1 = A, 2 = B, 3 = C, and so on)
- Pick a name of a country that begins with that letter
- Take the second letter in the country name and think of a mammal that begins with that letter
- Think of the color of that mammal

Availability Heuristic

Tendency to judge the frequency or likelihood of an event by the ease with which relevant instances come to mind.

- – Ease of recall
- – Retrievability

A riddle...

A father and a son were hit by a car and unfortunately the father was killed. The son was rushed to the Emergency Room for immediate surgery. When the surgeon was about to operate on him, the surgeon said, "I can't do this. He is my son."

How is this possible when the father is dead? Let's chat!

Who is More Representative of a Professor?

Stereotyping

- Assigning traits to people based on their membership in a social category

- Occurs because:
  - Categorical thinking – save energy, simplify our understanding
  - Help us to fill in missing pieces of information - understand and anticipate others' behavior
 - Help us to identify in-group and out-group members
  - Any issues?

Stereotyping

- Stereotyping Problems
  – Overgeneralizes – doesn't represent everyone in the category
  – Basis of systemic and intentional discrimination

Representativeness Heuristic

Tendency to judge the frequency or likelihood of an event by the extent to which it resembles the "typical" case.

- Errors:
    - Misconceptions of chance
    - Regression to the mean
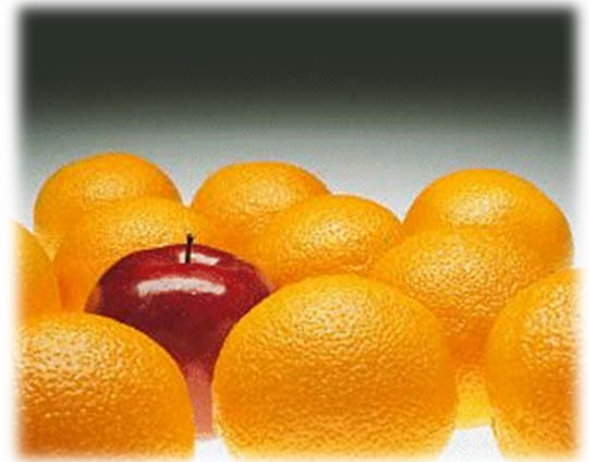
Misconception of Chances

You look at the hit/miss list for the roulette and they were all reds for the past 10 rounds. Which of the following is the more likely outcome for the next round? (Poll)

1. Red
2. Black
3. About the same?

Misconception of Chances

You look at the hit/miss list for the roulette and they were all reds for the past 10 rounds. Which of the following is the more likely outcome for the next round?

1. Red
2. Black
3. About the same?

People's attempt to explain large-scale patterns from samples of a much smaller size.

Sports Illustrated Jinx

- What is that?
- Is the curse real?
- Why is that?

Sports Illustrated Jinx

- "…a demonstrable misfortune or decline in performance following a cover appearance…"
- Of SI's 2,456 covers between 1954-2001, there were 913 "jinxes" – **37.2% of the time**
- "Failure to efficiently metabolize heightened expectations..."
- "Regression to the mean"

Decision-Making Process
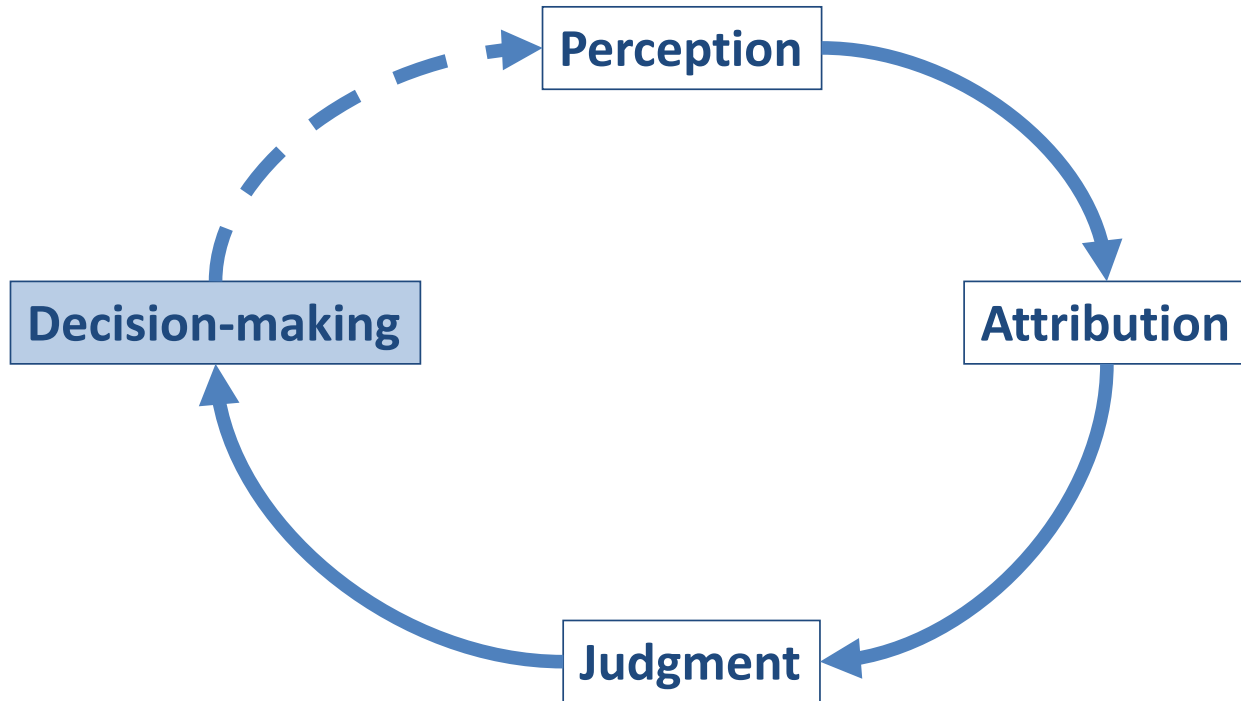
Female students :
CLOSE YOUR EYES

Male students :
Open your eyes

Numbers

Is the percentage of African countries in the United Nations greater or less than 10? What is the exact percentage of African countries in the United Nations?

DO NOT look up; Please type your answer via chat

Female students:
Eyes remain open.

Male students:
CLOSE YOUR EYES!

Numbers

Is the percentage of African countries in the United Nations greater or less than 65? What is the exact percentage of African countries in the United Nations?

DO NOT look up; Please type your answer via chat

Numbers

Plous, S. (1993)

Is the percentage of African countries in the United Nations greater or less than 10? What is the exact percentage of African countries in the United Nations?

25%

Is the percentage of African countries in the United Nations greater or less than 65? What is the exact percentage of African countries in the United Nations?

45%

Anchoring & Adjustment Heuristic

Tendency to judge the frequency or likelihood of an event by using a starting point (anchor) and then making adjustments up or down.

Impact of the First Offer

Initial offers provide a psychological **anchor**. The other party's adjustment to this offer helps to legitimate the anchor.

From Neale and Bazerman (1991)

Field Study:
Replicates Impact of Anchors on Experts

Experts
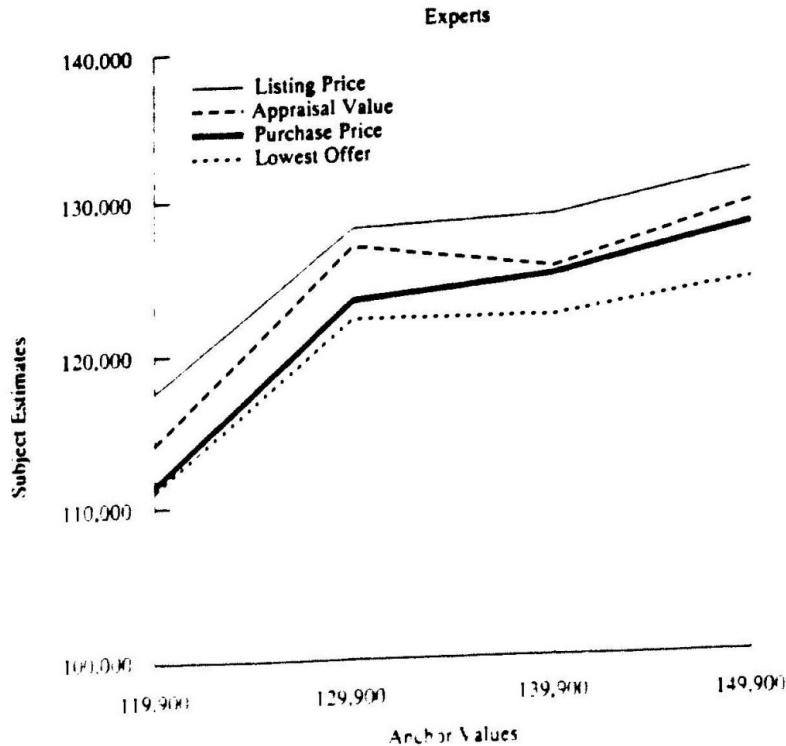
Real-estate agents: Listed Price Functioned as an Anchor on all Four Estimates (Recommended Listing Price, Estimated Appraisal Value, Recommended Purchase Price, and Lowest Acceptable Offer) (Northcraft & Neale, 1987)

Question 1

- Rate your levels of English proficiency, compared with your classmates in this room. (Poll)

1=Top 20%

2=Top 40%

3=Above average (Top 50%)

4=Below average (Between top 80%-50%)

5=Far below average (Below 80%)

Question 2

- Rate your levels of sociability (how social you are), compared with your classmates in this room.
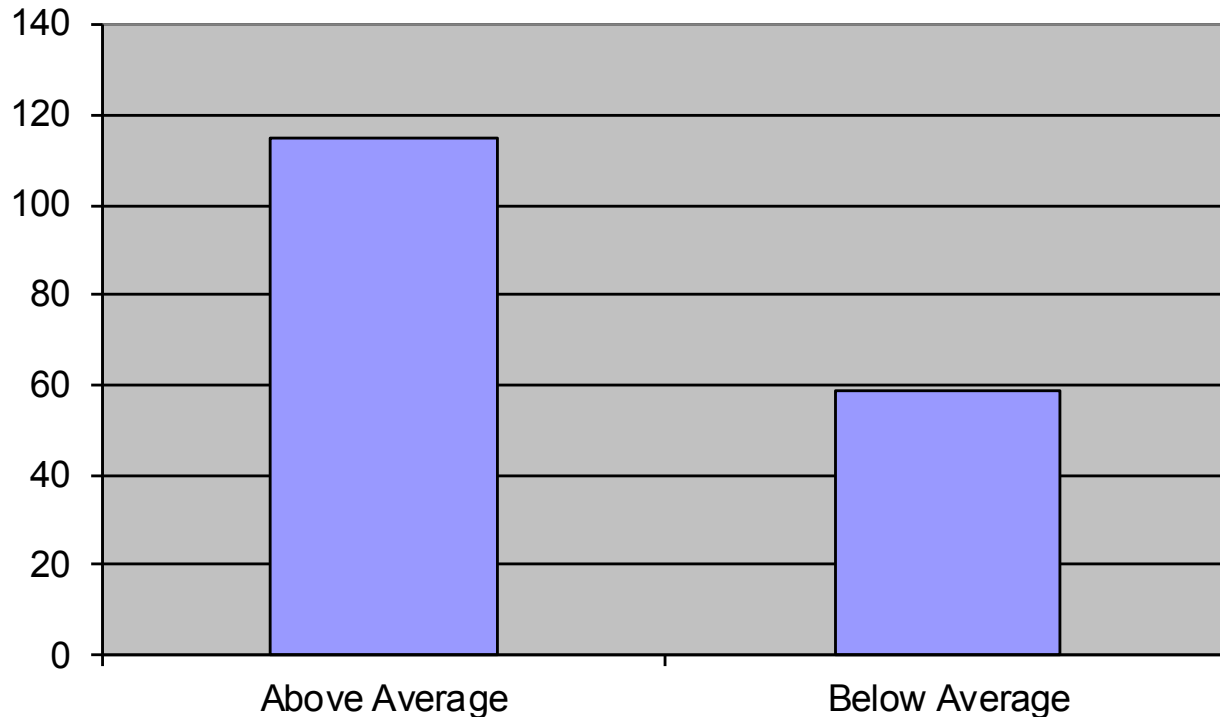
1=Top 20%

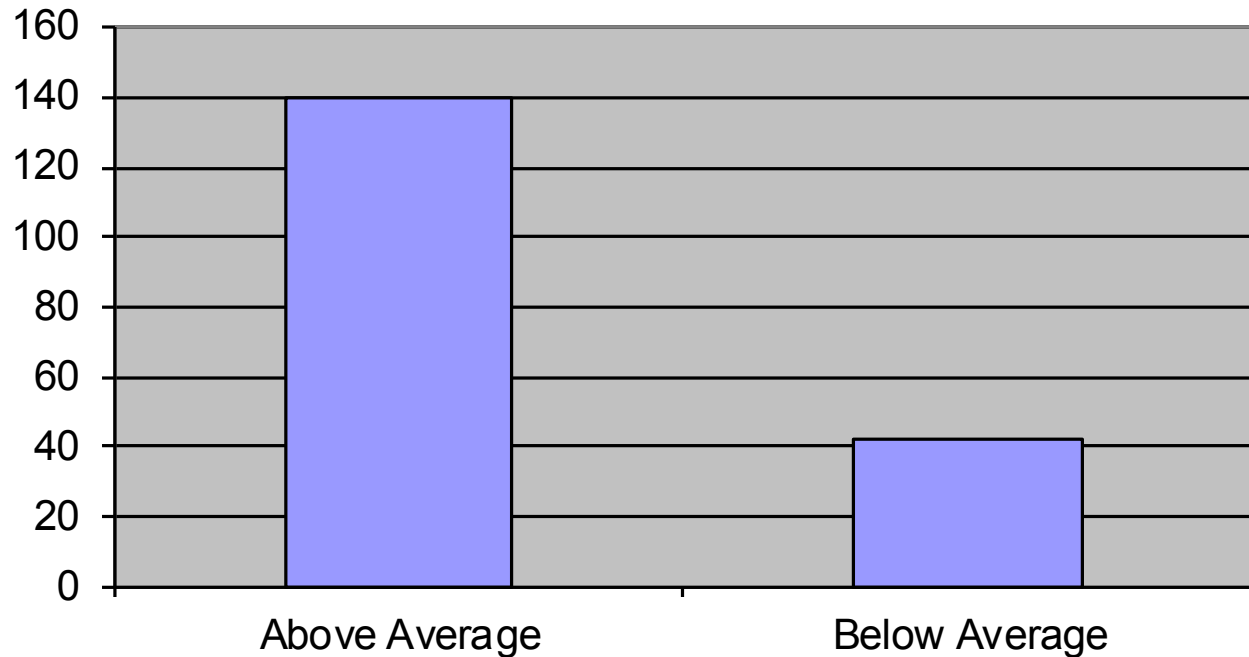2=Top 40%

3=Above average (Top 50%)

4=Below average (Between top 80%-50%)

5=Far below average (Below 80%)

CB2300's English Ability

CB2300's Sociability

Decision Making Biases
(Biases on viewing yourself)

- **Overconfidence bias**
  - Hold unrealistic positive views of ourselves
  - The better-than-average effect
  - We always remembers our As (We wear rose-colored glasses)

Decision Making Biases

- **Confirmation Bias**
  - Seeking out information that reaffirms past choices and discounting contradictory information

- **Hindsight**
  - Falsely believing that they could have accurately predicted the outcome of an event, after that outcome is actually known
  - "I knew all along that this would happen."
  - I knew that Biden would be elected

Escalation of Commitment

a.k.a. psychology of entrapment, sunk-cost effect,
"too-much-invested-to-quit" syndrome

- **Tendency for individuals & organizations to persist in a failing course of action**
- Examples: R&D projects, Relationships

Happy New Year!

CB2300
Decision Making: Should I attend YJ's CB2300?

Dr. You Jin (YJ) Kim
Department of Management
City University of Hong Kong

Class Agenda

- Announcement

- Review

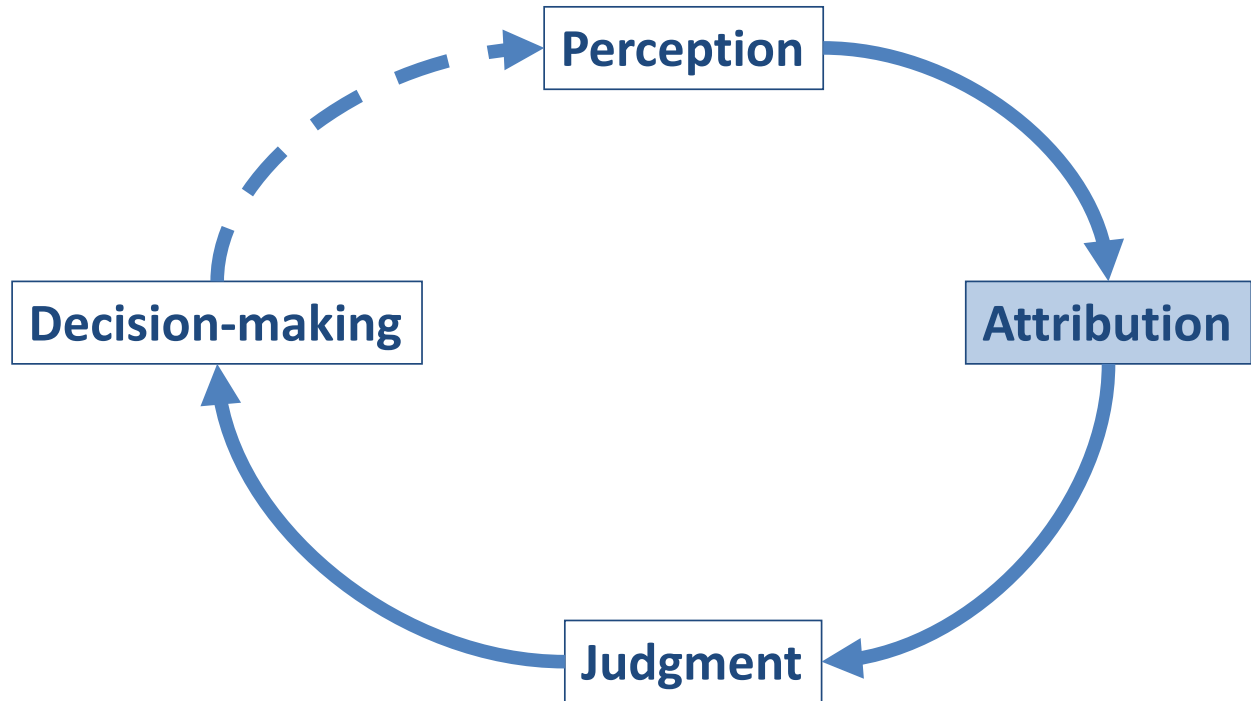- Decision-Making III & Individual Behavior

Happy New Year!

Announcement

- **Quiz 2 (By Feb 25, 11:59PM)-**Unlimited attempts & No Time Limit
- Keep the highest score
- **No late submissions will be accepted**

- **Week 4, 5, & 6 tutorials: Online**
- **Coordinating with the department**

I need to teach proactivity

- The most wanted employees..
- I reward proactive students
- Extra credit for Week 3 is up (Only for lectures)
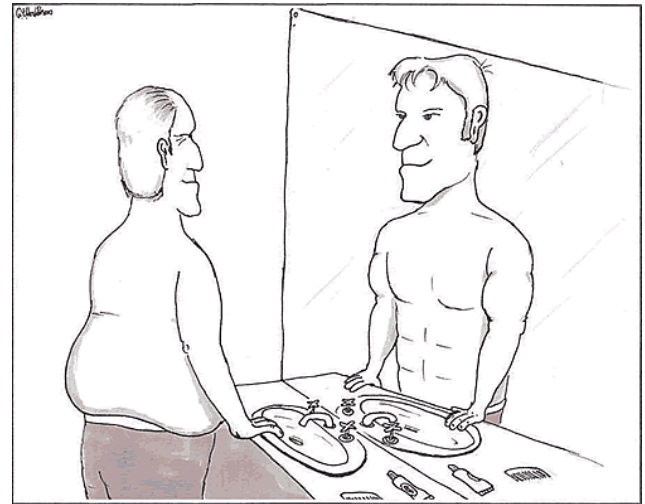- Two ways: Verbal & Written (via chat)

Decision-Making Process

Self-serving Bias

The tendency for individuals to attribute their own successes to <u>internal factors (themselves)</u> while putting the blame for failures on <u>external factors (other people)</u>

When you get an "A" on an exam, you often say you studied hard. But when you don't do well, how does the self-serving bias come into play? Whose fault is it usually when an exam is "tough"?

Errors and Biases in Attributions

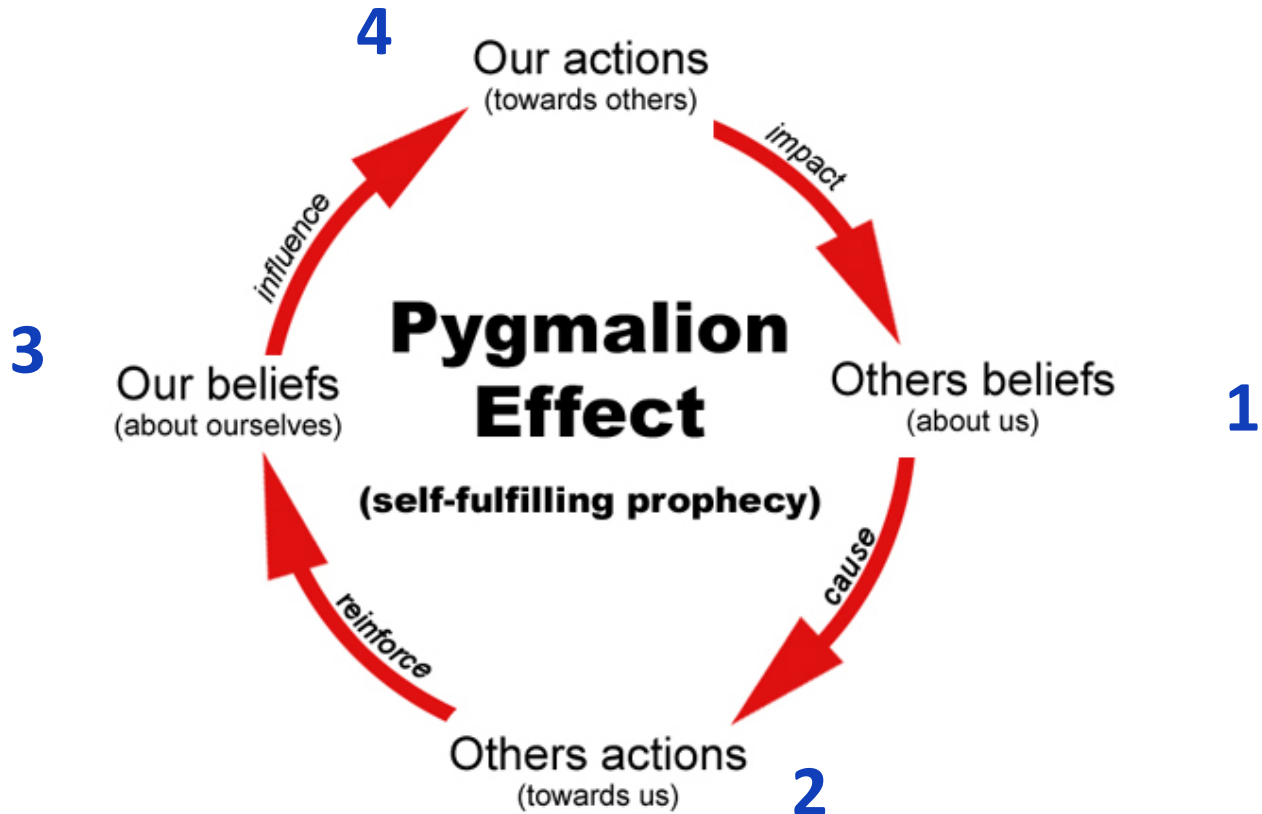## Fundamental Attribution Error

The tendency to underestimate the influence of <u>external factors</u> and overestimate the influence of <u>internal factors</u> when making judgments about the behavior of others

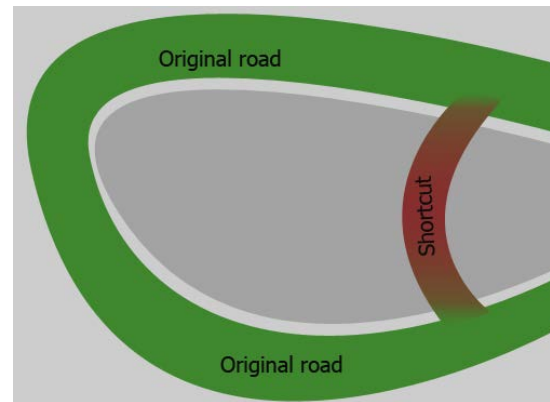In general, we tend to blame the *person* first, not the situation.

Important implication for managerial behavior...

Self-fulfilling Prophecy (Pygmalion Effect)

Heuristics

- Mental shortcuts (cognitive rules of thumb) that help us make decisions about uncertain events.

- Heuristic can be both GOOD & BAD in decision making

Decision Making Bias

What happened?

– Missed my train

– Lost my keys

– Shower

Decision Making Bias

- **Randomness Error**
  - Creating meaning out of random events – superstitions

  - Missed my train
  - Lost my keys
  - Shower
  - It is one of those days
  - Several independent events; But we create a pattern

Tsang (2004):
Superstition and decision-making

- Superstition: An irrational religious belief or practice
- Chinese superstitious practices
  - Feng shui
  - Calculating destines
  - Palmistry

Tsang, W. K. (2004). Superstition and decision-making: Contradiction or complement? *Academy of Management Executive, 18, 4,* 92-104.

Tsang (2004):
Superstition and decision-making

- **Tony Chan (陳振聰) loses battle for Nina Wang's (龔如心) fortune**
- **NINA WANG CASE, Chinachem group (華懋集團)**

  The High Court threw out Fung Shui master Tony Chan Chun-chuen's claim for the estimated HK$83 billion fortune of late property tycoon Nina Wang Kung Yu-sum after a sensational court battle....

Superstition and decision making

- Chinese managers resort to superstition only when they have to make highly important strategic decisions

- Contradiction: inconsistent with modern business management principles

- Complementary: deal with uncertainties

    – Additional source of information
    – Inadequate understanding

Puzzles

- Is the information valid?
- What are some pros and cons?

SUPERSTITIONS

Puzzles

- Is the information valid?

- Some predictions are very accurate

- Yet, none of the respondents claimed that their feng shui experts made consistently accurate predictions.

- About 80 percent of the respondents could recall making wrong decision based on superstition

Pros

- Coping with uncertainty
- Reducing anxiety

Cons

- Invalid information

- Difficulty of assessing the feng shui experts

- Causing distractions to normal decision-making processes

- Anxiety for half-believers in a group decision context

- Creating conflicts between believers and non-believers

Advice

- Consulting an unqualified feng shui expert can be a nightmare
- Avoid hiring young experts
- Go for more popular temples: greater predictive power of a god
- If a god repeatedly fails to provide useful advice, try another one
- It is risky to rely too much on superstition
- Seek second opinion
- Respect religious differences

Advice for Decision Making

- How can we avoid decision making biases and errors?

Advice for Decision Making

- Be aware of decision-making biases and errors
- Having awareness helps
- Seek group consensus
- Check with your colleagues and followers before you make up your mind