## First impressions

# Automatic thinking accurate

- ps cannot accurately judge the teachers when they have to stop and think their judgement
- snap judgement is fairly accurate
- in a 50ms view of a face, you can accurately judge
  - extraversion
    - \* as indicated by self-report
  - sexual orientation
    - \* as indicated by self-report
  - The success of a CEO's company
    - \* as indicated by company profits
- while we are good at making snap judgements, subtle differences can greatly alter our first impression and we are not always aware of what those subtle differences are
  - villain(坏人) for almost identical images

# Priming

- unattended stimuli can subtly influence what and how we later perceive, judge and behave
  - ps who are exposed to aging-related words walks slower than those who are not
  - ps who are exposed to cleaning material made harsher moral judgements
  - ps who are exposed to warm drink rated another person as more interpersonally(good nature, good personality) than those who are not

### Mood and judgement

• unrelated positive or negative events can influence our judgements of people and things

### Heuristics

- Mental shortcut used in judgment and decision-making
- useful for living in an complex social world, but can lead to faulty beliefs and suboptimal decisions
- Two types:
  - representativeness
  - availability

## Representativeness Heuristic

- we estimate the likelihood of an event by comparing it to an existing prototype that already exists in our minds
  - people are insensitive to base rate frequencies
    - \* determine if person resemble typical member of a group
  - people are insensitive to sample size
    - \* expect small sample to show same pattern as large samples
  - people have a misconception of chance
    - \* assumption that short-term deviations from probability will be corrected in the short-term (Gambler's Fallacy)
  - Gambler's fallacy
    - \* experience a specific event multiple times, then believe that the counter event will be more likely to happen

# Availability Heuristic

- based on the belief that: the ease(容易) with which evidence or examples come to mind is a measure of how common it is
- the more easily we can recall something, the more likely it seems.
- used for judging:
  - how frequent an event is

- how likely an event is
- problem: when we jgnore biases in accessible cognition

## Availability Heuristic and division of labour

- egocentric bias
  - tendency to assume one contributed more than one's fair share to a joint task
- availability Heuristic
  - we notice and recall our own actions more than someone else's, so we tend to overestimate our own contributions
- practical implementation
  - discrepant(相差的) estimates can arise from honest evaluations

## Constructing Memories

- reconstruct memories from different bits of information, including our current beliefs
- Memories of our attitudes
  - \* biased based on our current attitudes
- we remember holding the attitude we currently hold
  - \* e.g. we used to hold A, but when ask us to write the badness of A, then ask which side you hold, our attitude changes.
- implications of constructing memories
  - \* self-serving biases
  - \* self-improvement
  - \* conflict resolution
  - \* relationships
  - \* witnesses

### Fundamental attribution error

- Attribution Theory: two general causes of behaviour:
  - external(situation)
    - \* person's behaviour is caused by situational factors
  - internal (personal)
    - \* behaviour is caused by internal factors like personality, attitudes, motives
  - we tend to make external attribution to ourselves, but we are making internal attribution to other people's behaviours
- correspondence bias
  - the tendency to overlook the impact of a situation and attribute someone's actions to his or her disposition
- why do attributions matter
  - people act on their beliefs, regardless of validity
  - our attitudes towards people are often based on our explanations for their behaviour
  - other people's attitudes towards US are often based on THEIR explanations for OUR behaviour
  - Errors have costs

## why does Fundamental attribution error occurs?

- under-estimate the power of situational factors
- overlook or are unaware of situational factors
  - perceptual salience
    - \* we tend to believe that what we focus on must be important
    - \* actors are percetually prominent
    - \* situational factors that cause behaviour may not be visible to observers
- Do not have enough resources to consider situational factors

- automatic vs. controlled reasoning

## • Gilbert's Model

- pass:
  - \* identify behaviour  $\rightarrow$  automatic process: personal attribution(internal)  $\rightarrow$  if and only if we have time and motivation, controlled process: situation correction (external attribution)
- behaviour  $\rightarrow$  personal attribution + situational attribution = dispositional inference

### Lecture

- Confirmation Biases (光环效应)
  - we seek, interpret, and create info that verifies existing beliefs
  - we interpret ambiguous events in ways that confirm existing beliefs
- Self-fulfilling Prophecies
  - Beliefs that lead to their own fulfillment
  - when we believe something about someone, we may behave in a way that elicits(号)
     诱) confirming behaviour from them
  - Pygmalion effect(卖花女效应-给你的帽子越高, 你的 perform 越好):
    - \* phenomenon in which the greater the expectation placed upon people, the better they perform
  - Steps:
    - \* perceiver's expectation  $\rightarrow$  perceiver's behaviour toward the target  $\rightarrow$  target's behaviour toward the perceiver  $\rightarrow$  perceiver's expectation
    - \* e.g. A thinks B is shy  $\rightarrow$  A treats B with less warmth  $\rightarrow$  B responds by withdrawing  $\rightarrow$  confirm A thinks B is shy
- Self-fulfilling Prophecies and Prejudice
  - black vs white interviewees

- \* sit further from black and more speech error during interview
- \* interview time is shorter for black candidate
- implications for prejudice
  - \* subtle differences in treatment can lead to big disadvantages for stigmatized groups
  - \* stereotypes can be self-fulfilling prophecies and thus be self-perpetuating

## **Experiments**

- Videotaped 13 college teachers during lectures (three 10s clips/teacher)
  - Ratings highly correlated (> .70) with end-of-term student evaluations
  - Follow-up studies showed that using three 2s clips/teacher yielded similar accuracy
- 95 US House & Senate races 2000-2004
  - more "competent" looking candidate won 71% of the time
- Toronto crime rate
  - availability Heuristic takes the domain
- Ross & Sicoly 1987
  - refer to availability Heuristic and division of labour
- Gilbert et al., 1988
  - refer to Gilbert's model
    - \* we are only think about the situational(external) attribution if and only if we have time and motivation, otherwise, personal(internal) attribution will take the domain

# Reading

• judge events, informed by our intuition, by implicit rules that guide our snap judgments, and by our moods.

- perceive and recall events through the filters of our own assumptions.
- explain events by sometimes attributing them to the situation, sometimes to the person.
- expect certain events, and our expectation sometimes helps bring them about.

### Two systems

- System 1 functions automatically and out of our awareness
- System 2 requires our conscious attention and effort.

## Priming

- priming is the awakening or activating of certain associations
- the unconscious indeed controls much of our behaviour.
- Experiments
  - bread with butter (Epley et al., 1999; Merikle et al., 2001)
  - students were more likely to wobble on a balance beam in a room with posters of beer and vodka as opposed to apple or orange juice (Cox et al., 2014)
  - exposed to words such as sexuality, sweat, stiff, and bed behaved in a more gender-stereotypical way (Hundhammer & Mussweiler, 2012).
- Unnoticed events can also subtly prime our thinking and behaviour.
  - Experiments
    - \* (de Lange et al., 2012): exposed to the scent of a cleaning product were less likely to litter
    - \* (Lee & Schwarz, 2012): fishy
    - \* Rob Holland and colleagues (2005): clean
- Much of our social information processing is automatic.
- physical sensations, thanks to our embodied cognition, prime our social judgments

### **Intuitive Judgments**

- thinking is partly automatic processing (impusive, effortless, and without our awareness—System 1) and partly controlled processing (reflective, deliberate, and conscious—System 2).
- automatic thinking examples:
  - Emotional reactions:
  - Schemas(mental templates):
    - \* speaking of religious sects or sex depends on how we automatically interpret the sound.
  - expertise: people may intuitively know the answer to a problem.
- explicitly: facts, names, and past experiences
- implicitly: skills and conditioned dispositions
- blindsight: the patient who "remembered" the painful handshake, these people know more than they know they know (due to their implicit memory)
- Subliminal(潜意识的) stimuli can have intriguing effects:
  - Mark Baldwin of McGill University and his colleagues (1989) had Catholic women read a sexually explicit passage
  - This effect was particularly pronounced for women who reported being more devout Catholics.
  - the image of a disapproving Pope made these women feel worse after reading a steamy passage.
- The limits of intuition:
  - not only our error-prone hindsight judgments but also our capacity for illusion constructed beliefs.
  - Illusory intuition also appears in how we take in, store, and retrieve social information.
  - Demonstrations of how people create false beliefs do not prove that all beliefs are false

### Overconfidence

- overconfidence phenomenon: interpret our experiences and construct memories, our System 1 intuitions are sometimes wrong (unaware of our errors)
  - narrow too small/ lottery
- incompetence feeds overconfidence. It takes competence to recognize competence.
  - Students who score the lowest on tests of grammar, humour, and logic are the most prone to overestimating their abilities
  - our ignorance of our ignorance sustains our self-confidence
- Part of the problem may be that people often give too much weight to their intentions when predicting their future behaviour (Koehler & Poon, 2006; Koehler, White, & John, 2011)
  - predicted whether they would donate blood, they relied heavily on their intentions to do so
- people's confidence runs highest when the moment of truth is off in the future.
- Roger Buehler and his colleagues (1994, 2010) report that most students confidently underestimate how long it will take them to complete major assignments and overestimate how much money they will save in coming weeks (Peetz & Buehler, 2009).
- stockbroker overconfidence
- student overconfidence
- Why exists?
  - Group members rewarded highly confident individuals with higher status
  - Overconfident individuals spoke first, talked longer, and used a more factual tone,
     making them appear more competent than they actually were
- Confirmation bias: We are eager to verify our beliefs but less inclined to seek evidence that might disprove them

- appears to be a System 1 snap judgment: default reaction is to look for information consistent with our presupposition
- calling up System 2: Stopping and thinking a little makes us less likely to commit this error
- Confirmation helps explain why our self-images are so remarkably stable
  - \* William Swann and Stephen Read: students seek, elicit, and recall feedback that confirms their beliefs about themselves.
  - \* People seek as friends and spouses those who verify their own self-views

### • Remedies for overconfidence

- 1. be wary of other people's dogmatic statements.
- 2. receive prompt(准时/准确) feedback:
  - \* weather forecast
  - \* horse racing
- To reduce "planning fallacy" overconfidence, people can be asked to "unpack" a task—to break it into its subcomponents—and estimate the time required for each.
- 3. think of one good reason why their judgments might be wrong
  - \* Force them to consider disconfirming information (Koriat, Lichtenstein, & Fischhoff, 1980).

### **Heuristics: Mental Shortcuts**

- representativeness heuristic: judge something by intuitively comparing it to our mental representation of a category
- Availability heuristic: the more easily we can recall something, the more likely it seems.
  - (McKelvie, 1995, 1997; Tversky & Kahneman, 1973): Most people will, therefore,
     recall having heard more (in this instance) women's names
  - Norbert Schwarz and his colleagues (1991) had students list either 12 times they
    had been assertive(肯定的) or 6 times they had been assertive.

- \* It seems that easily thinking about being assertive had more influence on the students than the number of instances that they thought about.
- availability heuristic highlights a basic principle of social thinking: People are slow to deduce particular instances from a general truth, but they are remarkably quick to infer general truth from a vivid instance.
- A temporary hot day can prime people to believe more in global warming

# Counterfactual Thinking: if ...., then it will be better

- mentally simulating what might have been (如果当时这么做就好了。。。)
  - Bronze medallists exhibited more joy than silver medallists
- counterfactual thinking—imagining what could have been—occurs when we can easily picture an alternative outcome
- Counterfactual thinking underlies our feelings of luck
  - we have barely escaped a bad event—avoiding defeat with a last-minute goal or standing nearest a falling icicle—we easily imagine a negative counterfactual and, therefore, feel "good luck"
- The more significant the event, the more intense the counterfactual thinking

### Illusory correlation

- People easily misperceive random events as confirming their beliefs
- If we believe a correlation exists, we are more likely to notice and recall confirming instances. gambling control: more control, higher chance to win
  - When playing a game of chance against an awkward and nervous person, they bet significantly more than when playing against a dapper, confident opponent
  - more than 50 experiments have consistently found people acting as though they can predict or control chance events
  - In experiments, loss of control has led people to form illusory correlations in stock market information, to perceive nonexistent conspiracies, and to develop superstitions

## Regression toward the average

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- Experience has taught us that when everything is going great, something will go
  wrong, and that when life is dealing us terrible blows, we can usually look forward
  to things getting better.
- Paul Schaffner (1985) showed how the illusion of control might infiltrate human relations.
- Tversky and Kahneman' s provocative conclusion: Nature operates in such a
  way that we often feel punished for rewarding others and rewarded for punishing
  them.

## Mood and Judgment

- Unhappy people—especially those bereaved or depressed—tend to be more self-focused and brooding (Myers, 1993, 2000).
- Moods pervade our thinking
- Joseph Forgas (1999, 2008, 2010, 2011) had often been struck by how people's "memories and judgments change with the color of their mood."
  - If made to feel happy, you feel pleased with what you see, and you are able to detect many instances of your poise, interest, and social skill.
  - we don't attribute our changing perceptions to our mood shifts. (Michael Ross and Garth Fletcher (1985))
- Our moods colour how we see our worlds partly by bringing to mind past experiences associated with the mood.
- Mood-related thoughts may distract us from complex thinking about something else.
- when emotionally aroused—when angry or even in a very good mood—we become more likely to make snap judgments and evaluate others based on stereotypes (Bodenhausen, Sheppard, & Kramer, 1994; Paulhus & Lim, 1994).
- mood has little impact on their impressions of the other person

### Perceive the world

• We respond not to reality as it is but to reality as we construe it.

### Perceiving and Interpreting Events

- Political perceptions:
- people's perceptions of bias can be used to assess their attitudes
- We view our social worlds through the spectacles of our beliefs, attitudes, and values. That is one reason our beliefs and schemas are so important; they shape our interpretation of everything else.

#### Belief Perseverance

- Belief perseverance is the phenomenon in which people cling to their initial beliefs and the reasons why a belief might be true, even when the basis for the belief is discredited.
- belief perseverance: beliefs can take on a life of their own and survive the discrediting of the evidence that inspired them.
- it is surprisingly difficult to demolish a falsehood, once the person conjures up a rationale for it.
- the more we examine our theories and explain how they might be true, the more closed we become to information that challenges our belief.
- Our beliefs and expectations powerfully affect how we mentally construct events.

## Constructing Memories of Ourselves and Our Worlds

- we construct memories at the time of withdrawal
- we reconstruct our distant past by using our current feelings and expectations to combine fragments of information.
- Elizabeth Loftus: misinformation effect(people incorporate the misinformation into their memories)
  - Suggested misinformation may even produce false memories of supposed child sexual abuse, argued Loftus.

- The construction of positive memories brightens our recollections (current attitude affects a lot when recalling previous experience)
- The worse your current view of your partner is, the worse your memories are, which only further confirms your negative attitudes (Diane Holmberg and John Holmes (1994))

## construct past behaviour

- revise the past to suit our present views
- we under-report bad behaviour and over-report good behaviour.

### Explain the social world

- Unhappy couples usually offer internal explanations for negative acts: ( "She was late because she doesn' t care about me" ).
- Happy couples more often externalize: ( "She was late because of heavy traffic" ).
- misattribution: Men's misreading of women's warmth as a sexual come-on
  - Many men believe women are flattered by repeated requests for dates, which women more often view as harassment
  - Misattribution is especially likely when men are in positions of power.
  - Women more often judge the same behaviour as meriting conviction and a stiff sentence
  - Partners of men who underestimate their sexual interest are more satisfied and committed to their relationships.
- Attribution theory analyzes how we explain people's behaviour and what we infer from it.
  - dispositional attribution: internal causes
  - situational attribution: external causes
- spontaneous trait inference: we often infer that other people's actions are indicative of their intentions and dispositions

- Exposure for just one-tenth of a second to someone's face leads people to spontaneously infer some personality traits
- Attribution theory involves how we explain people's behaviour. Misattribution—attributing a behaviour to the wrong source—is a major factor in sexual harrassment, as a person in power (typically male) interprets friendliness as a sexual come-on.

### Fundamental Attribution errors

- we underestimate the impact of the situation and overestimate the extent to which it reflects the individual's traits and attitudes
- Even when people know they are causing someone else's behaviour, they still underestimate external influences.
- Actually, the assigned roles of questioner and contestant simply made the questioner seem more knowledgeable
  - Both contestants and observers of a simulated quiz game assumed that a person
    who had been randomly assigned the role of questioner was far more knowledgeable than the contestant

### Why fundamental attribution errors

## • Perspective and situational awareness

- Attribution theorists point out that we observe others from a different perspective than we observe ourselves
- Bertram Malle (2006) concluded that the actor-observer difference is often minimal.
- The passage of time decreases the tendency toward the fundamental attribution error.
- the "old you" is someone other than today's "real you."

### • Cultural differences

- Cultures also influence attribution errors

- The fundamental attribution error occurs across varied cultures
- Past situations and actions may also provide context for understanding present events, and the Chinese are more sensitive to the relevance of past information than are Canadians
- Some languages promote external attributions
- The fundamental attribution error is fundamental because it colours our explanations in basic and important ways.

# Why Do We Study Attribution Errors?

- first reason: to reveal how we think about ourselves and others.
- Illusory thinking is often a by-product of our mind's strategies for simplifying complex information.
- second reason: humanitarian: people should not always be blamed for their problems
- A third reason for focusing on the biases is that we are mostly unaware of them and can benefit from greater awareness.

## self-fulfilling prophecies

- self-fulfilling prophecies: false beliefs that lead to their own fulfillment
- experimenter bias: research participants sometimes live up to what they believe experimenters expect of them
- Student teacher expectation
  - expectations can affect both student and teacher
  - The attitudes that a class has toward its teacher are as important, it seems, as the teacher's attitude toward the students.

### Getting from others What We Expect

• Studies show that our perceptions of others are more accurate than biased (Jussim, 2012)

- There are times when negative expectations of someone lead us to be extra nice to that person, which induces them to be nice in return
- whether someone expects her partner to be in a bad mood or in a warm, loving mood may affect how she relates to her partner, thereby inducing the partner to confirm her belief.
- When dating couples deal with conflicts, hopeful optimists and their partners tend to perceive each other as engaging constructively.
- behavioural confirmation: erroneous beliefs about the social world can induce others to confirm those beliefs
  - tell children they are clean, neat  $\rightarrow$  they become clean and neat

### conclusion

- people's intelligence scores are uncorrelated with their vulnerability to many different thinking biases
- the mind's premium on efficient judgment makes our intuition more vulnerable to misjudgment than we suspect
- that to cope with reality, we simplify it.
- Illusory thinking can likewise spring from useful heuristics that aid our survival