



# Life and logic

## PART I UNDERSTANDING AND LEARNING

### Overview

This unit explores the theme “Ways to think and behave”. It is a significant theme especially for young college students, who are at a critical stage of growing up and becoming mentally mature. It is necessary to help them to learn how biased ways of thinking can lead to wrong judgments and decisions, so that they will be able to avoid them when they come to make their own decisions.

Text A is a piece of narrative writing following the chronological approach and developed in the form of light conversation mixed with descriptions. It tells a humorous but ironic story. The narrator, a smart and promising young student in a law school who seems to be able to attract beautiful girls easily, ends up in failure in his effort to win a

girl. The story is a vivid and sarcastic example of a misjudgment caused by a biased way of thinking. It illustrates the central theme implied in the title and throughout the essay: It is ridiculous to deal with love in a logical way. It also exemplifies a simple truth: Smart people can make wrong judgments, and they sometimes even create traps for themselves.

Text B is an expository essay. By employing the listing method of writing, the author tries to explain why smart people make bad decisions. Based on the findings of a study by psychologists, the author highlights five cognitive biases that can cause smart people to make wrong decisions.

When teaching Text A, teachers can guide students to analyze the three characters involved in the story, especially why the narrator, being so intelligent and promising, becomes a loser. While handling Text B, teachers can guide students to relate the five cognitive biases to themselves: Are they being affected by these biases when making decisions? And if so, how can they avoid them? Other class activities can be: retelling the story, summarizing the main points, group discussion, survey report, etc.

## Section A

# Love and logic: The story of a fallacy

### Background information

#### 1 Logic

Logic refers to both the study of the modes of reasoning and the use of valid reasoning. It says which forms of inference are valid and which forms are not. Traditionally, logic is studied as a branch of philosophy, but it can also be considered a branch of mathematics. How people actually reason is usually studied under other headings, including cognitive psychology.

Logic is traditionally divided into deductive reasoning (演绎推理), which is concerned with what follows logically from given premises, and inductive reasoning (归纳推理), which is concerned with how we can go from a number of observed events to a reliable generalization.

Here is a famous example of deductive reasoning:

Major premise: *All men are mortal.*

Minor premise: *Socrates is a man.*

Specific conclusion: *Therefore, Socrates is mortal.*

The following is an example of inductive reasoning:

Fact 1: *Heating is becoming more expensive.*

Fact 2: *Lighting is becoming more expensive.*

Fact 3: *Food prices are rising.*

Fact 4: *Our salaries are remaining unchanged.*

Conclusion: *We must cut expenditure, as our daily costs are getting greater.*

Logic was studied in several ancient civilizations,

including India, China, and Greece. In the West, logic was established as a formal discipline by Aristotle, who gave it a fundamental place in philosophy. His conception of syllogistic (三段论式的) logic remains a cornerstone of the study of logic even today. The study of logic was part of the classical trivium (三学科), which also included grammar and rhetoric.

Though logic sounds like an esoteric (限于小圈子的) subject for academic philosophers, the truth of the matter is that logic is applicable anywhere that reasoning and arguments are being used. Whether the actual subject matter is politics, ethics, social policies, raising children, or organizing a book collection, we use reasoning and arguments to arrive at specific conclusions.

#### 2 Fallacy

A fallacy is an error in reasoning that renders an argument logically invalid. By accident or design, logical fallacies are often used in debate or propaganda to mislead people or to distract them from the real issue for the purpose of winning an argument. Some common types of logical fallacies include:

**Red Herring (转移话题):** a fallacy in which an irrelevant topic is presented in order to divert attention from the original issue. For example: Why should we worry about the amount of violence on television when thousands of people are killed in automobile accidents each year?

**Begging the Question (循环论证):** a fallacy that occurs when an argument takes its proof from a factor within the argument itself, rather than from an external one. For example: I believe that the coffee Nescafe Original is great because it says so on the Nestle packaging.

**Slippery Slope (滑坡谬误):** a fallacy based on an argument that assumes that a very small action will inevitably lead to extreme and often ludicrous outcomes. For example: We can't allow people to bring beverages into the conference room. If we do, soon they'll be

bringing in snacks and then meals. Pretty soon we'll have a full-blown restaurant in here! I'd have to hire wait staff and a chef! We could get shut down for a health code violation!

**Bandwagon** (从众谬误): a fallacy that is based on an appeal to popular belief and behavior, not on valid and logical points. For example: Lots of people bought this album, so it must be good.

**False Dilemma** (伪两难谬误): a fallacy of oversimplification that offers a limited number of options (usually two) when in reality more options are available. For example: If we don't reduce public spending, our economy will collapse.

**False Cause (post hoc)** (假因谬误): a fallacy in which one event is said to be the cause of a later event simply because it occurred earlier. For example: Let's not take Bill on our picnic. Every time we take him out with us, it rains.

**Ad Hominem** (人身攻击): a fallacy that involves a personal attack. For example: Don't listen to Eddie's arguments on education. He's an idiot.

**Appeal to Authority** (诉诸权威): a fallacy in which a person seeks to persuade an audience not by giving evidence but by appealing to the respect that people have for the famous. For example: These pills must be safe and effective for reducing pain. They have been endorsed by Miss Wu, star of stage, screen, and television.

The following are the four fallacies mentioned in Text A, which are also common logical fallacies.

**Dicto Simpliciter** (绝对判断): also called Sweeping Generalization. It's a logical fallacy in which a general rule is treated as universally true regardless of the circumstances. For example: Women are shorter and younger than their husbands. If Alan wants to get married, he should date shorter and younger women.

**Hasty Generalization** (草率结论): a logical fallacy of faulty generalization by reaching an inductive generalization based on insufficient evidence – essentially making a hasty conclusion without considering all of the variables. For example: Ford is an American-made car. I owned a Ford, and it broke down all the time. American-made cars are not very good.

**Ad Misericordiam** (文不对题): a fallacy in which someone tries to win support for an argument or idea by exploiting his opponent's feelings of pity or guilt. It is a specific kind of appeal to emotion. For example: You must have graded my exam incorrectly. I studied English very hard, and my career depends a lot on it. If you give me a failing grade, my future will be crushed.

**False Analogy** (错误类比): an analogy in which the two cases being compared are not essentially alike. For example: Mind and rivers can be both broad. It is a known fact that the broader the river, the shallower it is. Therefore it must be true that the broader the mind, the shallower it is.

## Detailed study of the text

### 1 Love and logic: The story of a fallacy (Title)

★ **fallacy**: *n.* [C] an idea or belief that is false but that many people think is true 谬论; 谬见  
*His conclusion sounds reasonable, but it is actually a fallacy.* 他的结论听起来合理,但实际上却是个谬误。

### 2 That year every guy on campus had a leather jacket, and Rob couldn't stand the idea of being the only football player who didn't, so he made a pact that he'd give me his girl in exchange for my jacket. (Para. 1)

**Meaning:** That year every young man in the college wore a leather jacket. Rob was the only one in the football team who didn't have one. He felt frustrated whenever he thought about it, so he made an agreement with me that if I gave him my leather jacket, he would, as an exchange, give me his girlfriend.

★ **pact:** *n.* [C] an agreement between two or more people or organizations in which they promise to do sth. 协定; 契约; 盟约; 条约  
*The pact between the two rivaling nations proved ineffective almost from the start.* 这两个竞争国之间的协定几乎从一开始就证明是无效的。

★ **make a pact:** reach an agreement 约好; 达成协议  
*The four friends made a pact to take a picture together each year.* 这四位好友约好每年拍一张合影。

★ **in exchange for:** giving one thing and receiving another (esp. of the same type or value) in return 作为(对...的)交换(或替代)  
*In exchange for our help, he'll give us \$3,000.* 他将给我们3,000美元以获得我们的帮助。

3 He wasn't the brightest guy. Polly wasn't too **shrewd**, either. (Para. 1)

**Meaning:** He wasn't a very clever boy. Polly wasn't so clever, either.

**Meaning beyond words:** By downgrading Rob and Polly, the narrator implies that he himself is very smart.

★ **shrewd:** *a.*  
1) able to judge people and situations very well and make good decisions (人) 精明的, 机敏的  
*His skill in negotiating earned him a reputation as a shrewd businessman.* 他的谈判技巧使他赢得了精明商人的名声。  
2) well judged and likely to be right (决定和判断) 准确的, 英明的  
*He inherited a considerable fortune and then increased it by shrewd investments.* 他继承了一大笔钱, 然后又通过正确的投资使之得到升值。

4 But she was pretty, **well-off**, didn't **dye** her hair strange colors or wear too much **makeup**. She had the right background to be the girlfriend of a dogged, brilliant lawyer. (Para. 2)

**Meaning:** However, she was beautiful and wealthy. She didn't use special substances to change her hair into strange colors, or use too much creams, powders, lipsticks, etc. on her face to make herself look prettier. She had the right background to be the girlfriend of a strong-minded and brilliant lawyer.

**Meaning beyond words:** Though it seems that the narrator is saying good things about Polly, he is actually taking the opportunity to brag about himself by using such words as "dogged" and "brilliant".

★ **well-off:** *a.* (*informal*) rich, or having enough money to live well 富裕的; 有钱的  
*Tom has just bought another new car; he must be very well-off.* 汤姆刚又买了辆新车, 他一定很有钱。

★ **dye:**  
*vt.* change the color of sth. such as clothing or your hair using a particular substance 给...染色  
*She dyed her hair green.* 她把头发染成了绿色。  
*n.* [C, U] a substance used for changing the color of sth. such as clothing or your hair (用于染衣服、头发等的) 染料, 染剂  
*Immerse the cloth in the dye for 20 minutes.* 把布在染料里浸20分钟。

★ **makeup:** *n.*  
1) [U] substances that people put on their faces, including their eyes and lips, in order to look attractive or change their appearance 化妆品  
*The makeup counter is surrounded by a group of young girls in fashionable clothes.* 化妆品柜台前围着一群衣着时尚的年轻女孩。  
2) [sing.] the people or things that combine to form a single group or whole 组成; 构造; 结构  
*Talk to me about the makeup of this team.* 给我讲讲这支队伍的成员结构吧。

5 If I could show the **elite** law firms I applied to that I had a **radiant**, well-spoken **counterpart** by my side, I just might edge past the competition. (Para. 2)

**Meaning:** When looking for a job, if I could show the top law companies that I had a partner who was not only beautiful but also intelligent and polite, I might well be able to gain an advantage over my competitors and successfully get a job offer.

**Meaning beyond words:** The narrator, though still a young student at college, has got a rather sophisticated idea. He is thinking about how to strategize his future job search by mentioning that he has a beautiful and intelligent partner, who could be an asset both to him and to the law firm.

★ **elite:**

a. of or relating to the best or most skillful people in a group 精英的；精锐的

*Stanford, like most other elite universities, has an increasingly diverse student body.* 和大多数其他精英大学一样，斯坦福大学的学生群体也越来越多元化。

n. [C] a group of people who have a lot of power and influence because they have money, knowledge, or special skills (社会) 精英；上层人士  
*After he attended Stanford University, he considered himself to be one of the elite.* 就读斯坦福大学后，他觉得自己是精英分子中的一员了。

★ **radiant:** a.

1) full of happiness and love, in a way that shows in your face and makes you look attractive 容光焕发的；喜悦的  
*I still remember the radiant faces of my parents when my elder sister got married 10 years ago.* 我仍然记得十年前我姐姐结婚时我父母那满怀喜悦的脸。

2) very bright 灿烂的；明亮的  
*The sun was radiant in a clear blue sky.* 湛蓝的天空阳光灿烂。

★ **counterpart:** n. [C] sb. or sth. that has the same job or purpose as another person or

thing, but in a different place, time, situation, or organization 职务相当的人；职能相当的物  
*Yesterday, Canada's foreign minister met his Russian counterpart in Moscow to discuss their trade issues.* 昨天加拿大外长在莫斯科会晤了俄罗斯外长，商讨两国贸易问题。

6 “Radiant” she was already. I could dispense her enough **pearls of wisdom** to make her “well-spoken”. (Para. 3)

**Meaning:** She was already very beautiful. And I could teach her to speak intelligently so that she would sound very pleasant and smart when she speaks.

**Meaning beyond words:** The word “dispense”, which means “give sth. to people”, shows that the narrator regards himself far superior to the girl. He is again boasting and praising himself. The word shows his arrogance and conceit.

★ **pearl:** n. [C]

- 1) (~s of wisdom) wise remarks – used esp. when you really think that sb.’s remarks are slightly stupid 有见识的评说，智慧的结晶（尤为反话）  
*Sometimes it's a mistake to think that old people have special secrets to impart or pearls of wisdom to hand out.* 有时，认为老年人可以传授特殊秘诀或智慧箴言其实是错误的。
- 2) a small round jewel that is typically white and shiny and that grows inside the shell of an oyster 珍珠  
*The day before the wedding he gave her a string of pearls valued at 20,000 dollars.* 结婚前一天，他送给了她一串珍珠，价值两万美元。

7 After a **banner** day out, I drove until we were **situated** under a big old oak tree on a hill off the **expressway**. (Para. 4)

**Meaning:** After spending an excellent day out with her, I drove my car to a hill by the highway. I stopped when we were under a big old oak tree.

★ **banner**

a. (AmE) excellent, extremely successful 极好的; 非常成功的

*Last year was not a banner year for the airline industry, but it was an improvement over previous ones.* 去年对航空业来说不是很兴旺的一年, 但较前几年有所起色。

n. [C] a wide piece of cloth with a message on it, often stretched between two poles 横幅; 横幅标语  
*In the lobby there was a banner that said "Happy Birthday".* 大厅里有幅横幅, 上面写着“生日快乐”。

★ **situated:** a. (be ~) in a particular place; located 位于...; 坐落于...

*Paris is the capital and the largest city of France, situated on the River Seine.* 巴黎是法国首都, 也是法国最大的城市, 坐落于塞纳河畔。

★ **expressway:** n. [C] (AmE) a wide road with several lanes of traffic going in each direction, built for fast travel over long distances 高速公路  
*The roads in China have completely changed. Ten years ago, we rarely drove on expressways. Now we drive on them almost all the time.* 中国的道路已完全变了。十年前, 我们很少在高速公路上开车, 但现在我们几乎一直走高速。

- 8 What I had in mind was a little eccentric. I thought the **venue** with a perfect view of the **luminous** city would lighten the mood. (Para. 4)

**Meaning:** The plan I had got in my mind was a little strange. I thought the place with a perfect view of the brightly-lit city would make me feel relaxed.

★ **venue:** n. [C] a place where an activity or event happens (事件的) 发生地点; (活动的) 场所  
*The hotel is an ideal venue for conferences and business parties.* 这家酒店是开会及商业聚会的理想场所。

★ **luminous:** a.

- 1) very bright 很明亮的; 灿烂的

*In the evening light the color of the building was so luminous that it seemed to shimmer.*

夜光中大楼颜色十分明亮, 好像在闪烁发光。

- 2) shining in the dark 发光的; 夜明的

*The hands on my alarm clock are luminous, so I can see what time it is in the dark.* 我闹钟上的指针是发光的, 在黑暗中我也能看时间。

- 9 We stayed in the car, and I turned down the **stereo** and took my foot off the brake **pedal**. (Para. 4)

★ **stereo:** n. [C] a machine for playing records, CDs, etc. that produces sound from two speakers 立体声音响(设备)

*He walked over and turned the stereo down, as if the music had annoyed him.* 他走过去调低了音响的音量, 好像音乐让他心烦了似的。

★ **pedal:** n. [C] a part that you push with your foot in order to operate a bicycle, vehicle, or machine (自行车、车辆或机器的) 脚踏板

*The engineer checked the gas pedal and found it was not working properly.* 工程师检查了油门, 发觉它不正常。

- 10 “Cool,” she said over her gum. (Para. 6)

**Meaning:** “Cool,” she said while chewing a gum.

- 11 “The doctrine of logic,” I said, “is a **staple** of clear thinking. Failures in logic **distort** the truth, and some of them are well known.” (Para. 7)

**Meaning:** “The principle of logic,” I said, “is basically about how to think clearly. Failures in logic will twist the truth and lead to a false conclusion. Some of the failures are well known.”

★ **staple:**

n. [C]

- 1) a regular and important part or feature of sth. 主要内容; 基本特点

*The soaring cost of health care has become a staple of dinner-table conversations.* 急剧增加的医疗保健费用成了饭桌上的主要话题。

- 2) 订书钉

*Put these papers together by placing a staple in the upper left-hand corner.* 在左上角订个订书钉, 把这些纸订在一起。

a. (only before noun) forming the greatest or most important part of sth. 主要的; 最重要的  
*The severe drought had ruined the staple summer crop, corn, and the country's farmers faced financial hardships and bankruptcies.* 严重的干旱毁坏了夏天的主要庄稼——玉米, 使该国农民面临经济困难和破产。

★ **distort:** vt.

- 1) change sth. such as information so that it is no longer true or accurate 歪曲; 曲解  
*The statistics are vague and oversimplified, and thus may distort the state's overall economic picture.* 这些数据太模糊、太简单, 所以可能会歪曲国家的总体经济状况。
- 2) change the way sth. looks, sounds, or behaves so that it becomes strange or difficult to recognize 使变形; 使失真; 使反常  
*Electronic interference from kitchen or other appliances can distort radio signals.* 来自厨房或其他电器的电子干扰会使无线电信号失真。

12 I could see she was **stumped**. (Para. 11)

**Meaning:** I could see she felt puzzled about the question.

★ **stump:**

v. (usu. passive) be unable to find an answer or think of a reply to a question or problem 使困惑; 难倒  
*Investigators are stumped. They don't know whether this was an accident, a suicide, or a murder.* 调查者感到困惑, 他们不知道这是一起意外事故, 还是自杀, 或者谋杀。

n. [C] the part of a tree left above the ground after it has been cut through near the base 树桩; 树墩  
*He sat down on a tree stump by the side of the road, and waited there until someone stopped to help him change his car's damaged tire.* 他在路边一个树墩上坐了下来, 等在那儿, 直到有人停下来帮他更换了被损坏的汽车轮胎。

13 "If you have, say, heart disease or extreme **obesity**, exercise is bad, not good." (Para. 11)

**Meaning:** For example, if you have heart disease or you are extremely fat, then exercise is bad, not good.

★ **obesity:** n. [U] a condition in which sb. is too fat in a way that is dangerous for their health 过度肥胖; 肥胖症

*The rate of obesity worldwide has nearly doubled since 1980.* 自1980年以来, 世界范围内的肥胖症患者病率增加了近一倍。

14 "Next is Hasty Generalization. Self-explanatory, right?" (Para. 12)

**Meaning:** Next, let's talk about Hasty Generalization. The meaning of the term is so clear that it doesn't need any explanation, right?

★ **explanatory:** a. (fml.) intended to help you understand sth. 说明的; 解释的

*This explanatory information would be very helpful to regulators for preventing illness and epidemic outbreaks.* 这一说明性的信息对监管者预防疾病及流行病爆发会很有帮助。

15 She seemed to have a good time. I could safely say my plan was **underway**. I took her home and **set a date for** another conversation. (Para. 15)

**Meaning:** It seemed that she had enjoyed my logic lesson very much. I was pretty sure that my plan was going on smoothly. I drove her home and decided on a date for our next meeting.

★ **underway:** a. (never before noun) already started or happening 在进行中的

*The first survey has been completed, and the second one is underway.* 第一个调查已经完成, 第二个调查正在进行当中。

★ **set a date for:** choose a particular day for sth. 为...定日期

*They will set a date for the wedding.* 他们将选定举行婚礼的日子。

16 “Yes, it’s awful,” I agreed, “but it’s no argument. The man never answered the boss’s question. Instead he **appealed to** the boss’s sympathy – Ad Misericordiam.” (Para. 20)

**Meaning:** “Yes, it’s awful,” I agreed, “but it’s not an argument. The man never answered the boss’s question. Instead, he tried to affect the boss’s decision by making the boss feel sympathetic toward him. This type of fallacy is called Ad Misericordiam.”

★ **appeal to:**

- 1) try to get sb. to do or accept sth. by making them think it is a sensible or fair thing to do  
诉诸; 唤起  
*We’ve tried to appeal to their compassion, but it’s just not working. They still didn’t give us any help.* 我们试图唤起他们的同情, 但没有用。他们仍然没给我们任何帮助。
- 2) have a character that makes a particular person interested; attract 吸引; 感染  
*Though there was no pension, the job appealed to her because it provided health benefits.* 虽然没有退休金, 但这份工作仍然吸引了她, 因为有医疗福利。

17 “Polly,” I groaned, “don’t derail the discussion. The **inference** is wrong.” (Para. 24)

**Meaning:** “Polly,” I complained softly, “don’t divert away from the discussion. This conclusion is wrong.”

★ **inference:** *n.* [C] an opinion you form about sth. that is based on information you already have 推理; 推断; 断定  
*He never arrives on time, and my inference is that he feels the meetings are useless.* 他从不准时, 我的推断是他觉得这些会议都没用。

18 “The situations are altogether different. You can’t **make an analogy between** them.” (Para. 24)

**Meaning:** The situations are totally different. You can’t make a comparison between them.

★ **make / draw an analogy between:** make a comparison between (sth. and sth. else) 在…之间作类比

*It’s difficult to make an analogy between cars and airplanes.* 把汽车和飞机进行类比是很难的。

19 With five nights of diligent work, I actually **made a logician out of** Polly. She was an **analytical** thinker at last. (Para. 26)

**Meaning:** After five nights of hard work, I successfully turned Polly into a logical thinker. She was able to think clearly and intelligently at last.

**Meaning beyond words:** Again the sentences here show the conceit of the narrator. Polly was now good enough to be his girlfriend.

★ **logician:** *n.* [C] sb. who studies or is skilled in logic 逻辑学家  
*Aristotle was a great logician and philosopher of ancient Greece.* 亚里士多德是古希腊伟大的逻辑学家及哲学家。

★ **make sth. out of sb. / sth.:** change a person or thing into sth. else 使…变成…  
*Do not try to make a hero out of a man who violently confronted the police.* 不要企图把一个和警察激烈作对的人塑造成英雄。

★ **analytical:** *a.* (also *analytic*) thinking about things in a detailed and intelligent way, so that you can examine and understand them 头脑周密的; 善于分析的; 分析的  
*Philosophy, as a discipline, helps to develop students’ analytical abilities and broaden their intellectual horizons.* 哲学作为一门学科有助于培养学生的分析能力, 拓展他们的知识面。

20 **The time had come for the conversion** of our relationship from academic to romantic. (Para. 26)

**Meaning:** It was time to change our relationship from a purely intellectual type to a type between lovers.

**Meaning beyond words:** The narrator thinks that they should now stop talking about logic but instead to begin their love relationship.

★ **The time has come for sth.:** It is time for sth.  
该是…的时候了

*The time has come for a new way of dealing with the tax and benefit issues.* 用新方法处理税收及福利问题的时候已经到来。

★ **conversion:** *n.* [C, U] the process of changing sth. from one form, purpose, or system to another  
转变; 改造; 转换

*Solar power is the conversion of the sun's energy into heat and electricity.* 太阳能就是把太阳的能量转化为热与电。

21 Favoring her with a grin, I said, "We have now spent five evenings together. We get along pretty well. We make a pretty good couple." (Para. 29)

**Meaning:** Showing that I was happy with her with a broad smile, I said, "We have now spent five evenings together. We get along very well. We make a very good couple."

22 "Hasty Generalization," said Polly brightly. "Or as a normal person might say, that's a little **premature**, don't you think?" (Para. 30)

**Meaning:** "Hasty Generalization," Polly responded quick-mindedly. "Or as an average person might say, it is too early to make such a conclusion, don't you think?"

★ **premature:** *a.*

1) done too soon or too early (做事) 过早的, 过快的, 草率的, 仓促的, 不成熟的

*Though we intend to make investments in your country, we think it's premature to take any action now.* 虽然我们打算在你们国家进行投资, 但现在就行动我们认为还为时过早。

2) happening too soon or before the usual time  
过早的; 提早的

*His career was brought to a premature end by a succession of knee injuries.* 他的职业生涯

因连续的膝伤过早地结束了。

3) (of a baby) born before it should be (婴儿) 早产的

*A baby born two months before the expected time is premature.* 一个比预产期早两个月出生的婴儿属于早产。

23 I laughed with amusement. She'd learned her lessons well, far **surpassing** my expectations. (Para. 31)

**Meaning:** I felt so amused that I laughed out loud. She had learned what I taught her well, far better than I had expected.

★ **surpass:** *vt.* be even better or greater than sb. or sth. else 超过; 胜过

*In the first several years, the cost level of Euro Disney surpassed the revenue level although attendance level had been high.* 在最初几年, 虽然参观率很高, 但欧洲迪斯尼乐园的财政支出超过了收益。

24 "False Analogy," said Polly promptly. "Your **premise** is that dating is like eating. But you're not a cake. You're a boy." (Para. 32)

**Meaning:** "You are committing the logical fallacy called False Analogy," said Polly immediately. "Your assumption is that dating is like eating. But you're not a cake. You're a boy."

★ **premise:** *n.*

1) [C] (*fml.*) a principle or statement that you consider to be true, that you base other ideas and actions on 前提

*This argument is based on the premise that there is life on the planet Mars.* 这一论点是以火星上有生命为前提的。

2) (~s) [pl.] the building and land that a business or organization uses (企业或组织使用的) 房屋及土地, 经营场所

*While on the premises of the airport, all visitors must carry some form of identification.* 在机场区域时, 所有参观者都必须携带某种身份证明。

25 A few more false steps would be my doom. I decided to change **tactics** and try **flattery** instead. (Para. 33)

**Meaning:** If I was wrong for a few more steps, my plan would end in failure. So I decided to change my strategy and try to please her by saying something good and sweet about her.

★ **tactic:** *n.* [C, usu. pl.] a particular method or plan for achieving sth. 方法; 策略; 手法  
*Today, retailers use very different tactics to attract and retain customers than they did 50 years ago.* 如今, 商家用来吸引和留住顾客的策略与50年前十分不同。

★ **flatter:** *vt.* praise sb. in order to get sth. you want, esp. in a way that is not sincere 奉承; 阿谀; 向...谄媚  
*He knew when and how to flatter his superiors.* 他知道何时及如何恭维上司。

★ **flattery:** *n.* [U] praise that is not sincere but is intended to get you sth. that you want 恭维; 奉承; 阿谀; 谄媚  
*I don't take offense, nor do I accept flattery.* 别人冒犯, 我不动怒; 别人恭维, 我也不接受。

26 “You certainly can **discern** a fallacy when you see it,” I said, my hopes starting to **crumble**. (Para. 36)

**Meaning:** “You certainly have learned the ability to identify a false conclusion whenever you see it,” I said, beginning to feel less and less hopeful about my plan.

★ **discern:** *vt.*

1) (*fml.*) notice sth., esp. after thinking about it carefully or studying it (尤指仔细思考或研究之后) 看出, 觉察出, 辨明

*It may be difficult to discern the difference between the two paintings at first, but if you look carefully, it will become apparent.* 一开始要看出这两幅画的差异可能很难, 但仔细看就明显了。

2) see or hear sth., esp. sth. that is far away or not very clear 看到; 听到; 辨认出

*In the darkness, it is very difficult to discern the houses from a distance.* 黑暗中, 要从远处看清这些房子是很难的。

★ **crumble:**

*vi.* stop existing or being effective 崩溃; 瓦解; 消失  
*The housing market started to crumble after a five-year boom.* 在五年的繁荣之后, 住房市场开始崩溃。

*v.* break sth. into very small pieces, or be broken into very small pieces 弄碎; (使)成碎屑  
*Crumble the biscuits over the fruit mixture.* 把饼干弄碎撒在水果拼盘上。

27 I leaped to my feet, my temper **flaring up**. “Will you or will you not go out with me?” (Para. 38)

**Meaning:** I jumped up immediately, losing control of my temper. “Will you or will you not be my girlfriend?”

★ **flare:** *vi.* (*also ~ up*)

1) suddenly become angry or violent 突然发怒; 突然爆发

*Jealousy flared up within the ranks of employees when the promotion list was announced.* 晋升名单宣布后, 员工层中爆发了嫉妒心理。

2) suddenly burn or shine brightly 突然烧旺; 闪耀  
*As the fire flared in the hearth, it was lighting the whole room again.* 当火在壁炉里烧旺起来时, 它再次照亮了整个房间。

3) become worse 恶化; 加剧

*Since the crisis flared up last year, unemployment has remained high and economic growth weak.* 自从去年经济危机加剧后, 失业率一直居高不下, 经济增长疲软无力。

28 “No to your **proposition**,” she replied. (Para. 39)

**Meaning:** “‘No’ is my answer to your request,” she replied.

★ **proposition:** *n.* [C]

1) an offer or suggestion, esp. involving business or politics (尤指涉及商业或政治的) 提议, 建议  
*Many cities now see hosting the Olympic*

*Games as a very attractive proposition that is well worth the investment.* 现在许多城市都把主办奥运会看作很有吸引力的提议，认为值得投资。

- 2) a statement that people can examine in order to decide whether it is true 主张；观点；见解  
*I am sure that evidence can be found to support the newly elected politician's proposition.* 我相信能够找到证据，支持这位新当选的政治家的主张。

29 "I'm more interested in a different **petitioner** – Rob and I are back together." (Para. 41)

**Meaning:** I am more interested in another person who made the same request to me: Rob and I are now back together.

★ **petitioner:** *n.* [C]

- 1) sb. who writes or signs a written request that asks sb. in authority to do sth. 请愿人；请求者  
*The petitioners urged that a law be made to require price tags on every item.* 请愿人敦促制定一项法规，规定每件商品都要明码标价。
- 2) sb. who gives a court an official document in which they ask it to take legal action 起诉人；(向法院) 提出申请者  
*There may be new evidence to prove that the petitioner is innocent.* 可能会有新证据证明起诉人是无罪的。

30 "How could you **give me the axe** over Rob?" (Para. 42)

**Meaning:** How could you like Rob better than me?

★ **axe:** *n.* (also **ax**)

- 1) (**the ~**) a situation in which a government, a company, or an organization decides to end sth. or to get rid of a worker or their job 撤销；取消；解雇  
*More than 500 employees now face the axe when the chemical plant shuts next July.* 明年七月这个化工厂关闭时，有500多名员工将面临被解雇的命运。

- 2) [C] a tool used for cutting down trees and cutting up large pieces of wood, consisting of a long wooden handle and a heavy metal blade 斧；斧头；长柄斧

★ **give sb. the axe:**

- 1) end a relationship abruptly 抛弃（恋人等）；和某人一刀两断  
*Her boyfriend did not want to stop smoking, so she gave him the axe.* 她男朋友不肯戒烟，所以她和他断了关系。
- 2) dismiss sb. from their job 解雇某人；开除某人  
*The boss gave him the axe for coming to work late repeatedly.* 因上班总是迟到，老板开除了他。

31 "Look at me, an **ingenious** student, a tremendous intellectual, a man with an assured future. Look at Rob, a **muscular** idiot, a guy who'll never know where his next meal is coming from." (Para. 42)

**Meaning:** Look at me: a student full of novel ideas, a person with rich knowledge, a man with a promising future. Look at Rob: a stupid person with big muscles, a guy who will never earn enough money to buy his own food.

**Meaning beyond words:** The narrator is again using good words to praise himself and bad words to downgrade others. The sentences also show his arrogance and conceit.

★ **ingenious:** *a.*

- 1) (of a person) good at inventing things and solving problems in new ways (人) 有独创性的  
*They're attacking the honest and ingenious scientist because his ideas are new, not because his ideas are wrong.* 他们攻击这位诚实并富有独创能力的科学家，是因为他的观点新颖，而不是因为他的观点错误。
- 2) (of a machine, plan, etc.) cleverly made and well suited to its purpose (设备或计划等) 别出心裁的，构思巧妙的  
*They are trying to find an ingenious solution to reduce the production costs.* 他们正在努力寻找降低生产成本的巧妙方法。

★ **muscular:** *a.*

1) having large, strong muscles 肌肉发达的; 强壮的

*He kept his firm, muscular body in shape with an hour's run every morning.* 通过每天早上跑步一小时,他把体型保持得很结实,很强壮。

2) relating to muscles 肌肉的

*His goals are to increase muscular development and lose body fat.* 他的目标是促进肌肉生长,减少身体脂肪。

32 “Wow, what presumption! I'll put it in a way someone as brilliant as you can understand,” **retorted** Polly, her voice **dripping with sarcasm**. (Para. 43)

**Meaning:** “Wow, what an arrogant assumption it is! Let me explain it in a way a person as clever as you can understand,” Polly replied angrily, with her voice carrying an extremely unpleasant and mocking tone.

★ **retort:** *vt.* reply immediately in an angry or humorous way to sth. that sb. has said 反驳; 回嘴  
*Though private schools are popular, she retorted that she could get a fine education in the public schools.* 虽然私立学校很受欢迎,但她反驳说她能在公立学校受到良好的教育。

★ **drip:**

*v.* (let liquid) fall in drops 滴(水); 漏(水)

*The rain water was dripping down our necks.* 雨水顺着我们的脖子往下滴。

*n.*

1) [sing.] the sound or action of a liquid falling in drops 滴答声; 滴水声; 滴下

*All she could hear was the slow drip of water from the rusted ceiling pipes.* 她所能听见的就只有从天花板生锈的管道中传出的缓慢的滴水声。

2) [C] one of the small drops of liquid that fall from sth. 液滴

*Drips of paint were accumulating at the bottom of the building.* 在大楼底部,滴下的油漆开始聚积起来。

★ **be dripping with sth.:** contain or be covered in a lot of sth. 满是…; 充满/充溢…

*We are dripping with delight now that you have chosen to stay with us.* 你选择和我们呆在一起,我们满心喜悦。

★ **sarcasm:** *n.* [U] the activity of saying or writing the opposite of what you mean, or speaking in a way intended to make sb. else feel stupid or show them that you are angry 讽刺; 嘲笑; 挖苦

*Believe it or not, teens are highly sensitive to sarcasm.* 不管你信不信,十几岁的孩子对讽刺挖苦是高度敏感的。

33 “Full **disclosure** – I like Rob in leather. I told him to say yes to you so he could have your jacket!” (Para. 43)

**Meaning:** Let me tell you the whole truth: I like Rob wearing the leather jacket. I told him to say yes to your deal so that he could have your leather jacket.

**Meaning beyond words:** It turned out that the narrator had been tricked by Polly and Rob. Although he had taken every opportunity to show off his intelligence, he ended up being the loser in the game.

★ **disclosure:** *n.* [C, U] a secret that sb. tells people, or the act of telling this secret 被公开的秘密; 公开; 透露; 披露

*Frequent disclosures of corruption in major sports events greatly affect the referees' public images.* 重大体育赛事中腐败行为的频频曝光大大影响了裁判的公众形象。

## Structure analysis and writing

### Write a narrative essay

Narrative writing can be broadly defined as story writing. It is a piece of writing characterized by a main character who encounters a problem or engages in an interesting, significant or entertaining activity / experience in a particular setting. What happens to this main character is called the “plot”.

The plot follows a “beginning, middle, end” sequence. The middle of the story is the largest and most significant part, which we call “the main event”. The main event is what the story is all about and involves either a problem to be solved or a significant life experience for the main character.

Narrative writing is found in novels, biographies, autobiographies, essays, and short stories. It has many variations or sub-genres: folk tales, fairy tales, fables, realistic fiction, memoirs, to name a few. While all of these are characterized by particular patterns, they have one thing in common: Each one tells a story.

The thesis (or central idea) of a narrative essay can be directly stated or tacitly implied. In either case, the thesis is typically the driving force behind the narrative, or the ultimate lesson learned. Many narrative essays may just have an implied thesis, since the elaborate explanation of a thesis may make a narrative seem heavy-handed or make the work seem as though it is “talking down” to an audience. For example, a narrative essay about an enjoyable experience of playing basketball one summer may just have some sort of underlying thesis, such as: Playing basketball taught me the importance of practice and hard work for personal improvement.

The structure of a narrative essay usually follows the format here:

- 1 **Introduction:** a beginning which introduces the setting and characters of the story, that is, the time, place and people involved in the story. It may or may not contain a clearly stated thesis. In either case, the introduction must “hook” the readers and make them feel compelled to read on. The introduction should also be as close to the main event as possible in order to get the story off and rolling quickly.
- 2 **Body:** an account and description of the main event that occurred. The main event is the largest and most important part of the story. It is essentially what the whole story is about. This

part involves the problem / struggle sequence, or the adventure or interesting peak experience. Many times the “scene” should be told in slow motion, expanded upon and stretched out through a balance of actions, thoughts, descriptions, and dialogs.

- 3 **Conclusion:** the part that brings the main event to a close, that is, the problem is solved or the adventure comes to an end. The extended ending often summarizes the main character’s thoughts, feelings, memories, hopes, wishes, or decisions in regard to the main event.

The following is a list of important conventions of a narrative:

- 1 It is usually told in chronological order, though flashback structure is sometimes used.
- 2 It is usually written in the first person “I”. However, the third person (he, she, it) is also used sometimes.
- 3 It has a significant main event, the details of which are carefully selected, precise and sensory so as to support or convey the central point.
- 4 It is usually written with vivid and colorful words to help the reader feel the same feelings that the author felt. For example, instead of simply telling what something is like, the author usually tries to describe how it tastes, smells, sounds, or feels.
- 5 It does not merely tell a story; it usually makes a point beyond the story, or teaches a lesson.
- 6 It may or may not use dialog.
- 7 It should include these elements: a setting, characters, a beginning, an ending, a plot, and a climax.

We can have a look at the following paragraphs taken from Text A to see how some of the conventions listed above are used, especially vivid descriptions of details.

*“Polly,” I said when next we sat under our oak, “tonight we won’t discuss fallacies.”*

*“Oh?” she said, a little disappointed.*

*Favoring her with a grin, I said, “We have now spent five evenings together. We get along pretty well. We make a pretty good couple.”*

*“Hasty Generalization,” said Polly brightly. “Or as a normal person might say, that’s a little premature, don’t you think?”*

*I laughed with amusement. She’d learned her lessons well, far surpassing my expectations. “Sweetheart,” I said, patting her hand in a tolerant manner, “five dates is plenty. After all, you don’t have to eat a whole cake to know it’s good.”*

*“False Analogy,” said Polly promptly. “Your premise is that dating is like eating. But you’re not a cake. You’re a boy.”*

*I laughed with somewhat less amusement, hiding my dread that she’d learned her lessons too well. A few more false steps would be my doom. I decided to change tactics and try flattery instead.*

*“Polly, I love you. Please say you’ll go out with me. I’m nothing without you.”*

*“Ad Misericordiam,” she said.*

In the above paragraphs, the author uses the chronological order, the first person “I” as well as the dialog form in writing the plot. He gives clear and vivid descriptions of some details, for example:

- The narrator’s actions: “laughed with amusement”, “patting her hand in a tolerant manner”
- The narrator’s facial expressions: “favoring her with a grin”
- The narrator’s thoughts: “She’d learned her lessons well, far surpassing my expectations.”; “A few more false steps would be my doom. I decided to change tactics and try flattery instead.”
- The narrator’s feelings: “hiding my dread that she’d learned her lessons too well”

## Analysis of the whole text structure

Text A is a piece of narrative writing. It can be divided into three parts.

Part One (Paras. 1-3): The author sets the scene of the story by providing information about the four “wh-” words: who, where, what, and why. “Who” refers to the characters involved in the story: the narrator, his roommate Rob, and the beautiful girl Polly. “Where” refers to the place where the story happens: a college campus. “What” and “why” refer to what to do and why to do it: The narrator decides to make Polly “well-spoken” because as a promisingly brilliant lawyer, he wants to have a girlfriend who is not only beautiful but also intelligent.

Paragraph 1 tells us the deal the narrator and his roommate Rob make with each other – the exchange of a leather jacket for Polly, and the reason why they make the deal.

Paragraph 2 describes what Polly looks like and why the narrator wants to have her as his girlfriend.

Paragraph 3 tells us what the narrator decides to do to make Polly a suitable girlfriend for him. This paragraph also serves as a transition and leads us to the second part of the text.

Part Two (Paras. 4-25): The narrator tries to help Polly become smarter by giving her lessons in logic. Altogether the narrator spends five nights teaching Polly logic. A more detailed structure of this part is as follows:

Paragraphs 4-8: The narrator explains to Polly the importance of logic.

Paragraphs 9-11: The narrator teaches Polly the first logical fallacy: Dicto Simpliciter.

Paragraphs 12-15: The narrator teaches Polly the second logical fallacy: Hasty Generalization.

Paragraphs 16-21: The narrator teaches Polly the third logical fallacy: Ad Misericordiam.

Paragraphs 22-25: The narrator teaches Polly the fourth logical fallacy: False Analogy.

Part Three (Paras. 26-43): Polly refutes the narrator's arguments as logical fallacies by using what he has taught her and refuses to be his girlfriend. The following is a more detailed structure of this part:

Paragraphs 26-30: Polly refutes the narrator's first argument "We make a pretty good couple" as "Hasty Generalization".

Paragraphs 31-32: Polly refutes the narrator's second argument "You don't have to eat a whole cake to know it's good" as "False Analogy".

Paragraphs 33-35: Polly refutes the narrator's third argument "Please say you'll go out with me. I'm nothing without you" as "Ad Misericordiam".

Paragraphs 36-37: Polly refutes the narrator's fourth argument "You know the things you learn in school don't have anything to do with real life" as "Dicto Simpliciter".

Paragraphs 38-43: The climax of the story is reached: Polly refuses to be the girlfriend of the narrator. She likes Rob. She is dating the narrator simply because it is a trick she and Rob have decided to play on him in order to get his leather jacket. The last paragraph also echoes the scene in the first paragraph.

### **Introduction to the story**

The narrator and Rob make a deal: the exchange of a leather jacket for Polly. (Para. 1)

Polly has some basic qualities to be the girlfriend of a lawyer. (Para. 2)

Polly needs to be made more intelligent. (Para. 3)

(Paras. 1-3)



### **Teaching Polly logic to make her intelligent**

Why logic is important. (Paras. 4-8)

The first logical fallacy taught to Polly: Dicto Simpliciter. (Paras. 8-11)

The second logical fallacy taught to Polly: Hasty Generalization. (Paras. 12-15)

The third logical fallacy taught to Polly: Ad Misericordiam. (Paras. 16-21)

The fourth logical fallacy taught to Polly: False Analogy. (Paras. 22-25)

(Paras. 4-25)



### **Polly's refutation of the narrator's arguments as logical fallacies**

"We make a pretty good couple.": Hasty Generalization. (Paras. 26-30)

"You don't have to eat a whole cake to know it's good.": False Analogy. (Paras. 31-32)

"Please say you'll go out with me. I'm nothing without you.": Ad Misericordiam. (Paras. 33-35)

"You know the things you learn in school don't have anything to do with real life.": Dicto Simpliciter. (Paras. 36-37)

Climax of the story: Polly refuses to be the narrator's girlfriend. (Paras. 38-43)

(Paras. 26-43)

## Section B

# Why do smart people do dumb things?

### Reading skills

#### Skimming

We learned the reading skill of skimming in B1U5. Skimming is a method of rapidly moving the eyes over a text with the purpose of getting the main idea or a general overview of its content. For example, many people skim read a newspaper article just to get a quick overview, or a text to see whether it's worth reading in detail. The key word for skimming is "general". Unlike scanning (B1U4), which involves searching for details or isolated facts, skimming requires the reader to focus only on the topic, the main idea or the main points. Good skimmers read selectively, completely skipping over some sentences, paragraphs, even whole pages. Once a skimmer has a general idea about an article, he may decide whether to read the entire article more carefully, or only to scan for some specific pieces of information.

The following are some steps to help you to skim an article.

- 1 Read the title – it is the shortest possible summary of the content of the article.
- 2 Read the introduction or lead-in paragraph(s).
- 3 Read any sub-headings, and identify the relationships between them.
- 4 Read the first sentence of each remaining paragraph; the main idea of most paragraphs appears in the first sentence.
- 5 Alternately read and "float" over the body of

the article, looking for the following:

- Clues about *who, what, when, where, how many, how much*
- Connective words and phrases such as *furthermore, also, however* and *on the contrary*

- 6 Read the concluding paragraph(s) completely.

For example, after a glance at the title of Text A, "Love and logic: The story of a fallacy", and a quick reading of the lead-in paragraphs (Paras. 1-3), you will know that the text will tell a story which happens between the narrator, his roommate Rob, and a beautiful girl named Polly (*who*) in a university setting (*where*), and that the narrator wants to make Polly smarter so that he will be able to have a girlfriend who is not only beautiful but also intelligent (*what*). If you are interested and want to know more about the story, you can continue by skimming the body paragraphs and learn that the narrator tries to make Polly smarter by giving her logic lessons. And if you are curious about the ending of the story, you can keep skimming the final paragraphs and learn that Polly does become a smart girl in the end and refuses to be the narrator's girlfriend.

### Background information

#### 1 Cognitive bias

A cognitive bias is a pattern of deviation in judgment that occurs in particular situations, leading to perceptual distortion, inaccurate judgment, illogical interpretation, or what is broadly called irrationality. A long and ever-growing list of cognitive biases has been identified over the last six decades of research on human judgment and decision-making in cognitive science, social psychology, and behavioral economics. A cognitive bias arises from various processes that are sometimes difficult to distinguish. These include information-processing shortcuts, mental noise,

the mind's limited information processing capacity, emotional and moral motivations, or social influence. Many cognitive biases are often studied for how they affect business and economic decisions and how they affect scientific and experimental researches.

**2 Fundamental attribution error (基本归因错误)**

It is a cognitive bias in social psychology. It refers to the tendency to judge a person in an unpleasant situation in a bad light and attribute his behavior to internal causes and qualities rather than consider the situation or circumstances that may have caused the person to behave in that manner. But, if we ourselves made the same errors, we would easily attribute the causes to external factors. For example, if your friend has not done much today, there could be many reasons, but you assume that it is because he is lazy, rather than perhaps he is tired or lacks the right resources.

**3 Confirmation bias (确定性偏差)**

It is a cognitive bias whereby one tends to notice and look for information that confirms one's existing beliefs, whilst ignoring anything that contradicts those beliefs. It is a type of selective thinking. For example:

- After having bought a piece of clothing, you will look for the same clothing in a more expensive store to confirm that you have bought a bargain.
- A student who is going to write a research paper may primarily search for information that will confirm his beliefs. The student may fail to search for or fully consider information that is inconsistent with his beliefs.
- An employer who believes that a job applicant is highly intelligent may only pay attention to information that is consistent with the belief that the job applicant is highly intelligent.

**4 Overconfidence bias (过度自信偏差)**

It is a cognitive bias which occurs when individuals overestimate their ability to predict

future events, or have inappropriately high confidence in their own answers, opinions or beliefs. These overestimations could be driven by a strong desire to succeed or could just be a consequence of the general optimism produced by cognitive bias. For example:

- Eighty-two percent of the drivers in the US surveyed feel they are among the top 30 percent of safe drivers.
- Eighty-six percent of students at the Harvard Business School say they are better looking than their peers.
- A friend of yours is always 100 percent sure that he can pick the winners of this week's football games despite evidence to the contrary.

**5 Availability bias (可得性偏差)**

It is a cognitive bias whereby one tends to judge the likelihood of an event by how readily examples can be brought to mind. They could be recent events or what one perceives as memorable or dramatic occurrences. For example, investors will choose investments based on information that is available to them (advertisements, suggestions from advisors, friends, etc.) and will not engage in disciplined research or due diligence to verify that the investment selected is a good one.

**6 The Canary Islands (加那利群岛)**

It is also known as the Canaries, the islands are a Spanish archipelago (群岛) located just 67 miles off the northwest coast of mainland Africa. The Canaries are a Spanish autonomous community and one of the outermost regions of the European Union. The Canary Islands are legally recognized as part of Spain. Geographically, they are a part of the African continent.

The archipelago's beaches, climate and important natural attractions, especially Teide National Park and Mount Teide (the third tallest volcano in the world), make it a major tourist destination. The islands have a subtropical climate, with long warm summers and moderately warm winters.

## 7 the Canary Islands and the biggest plane crash in history

On March 27, 1977, two Boeing 747 passenger aircraft – Pan Am (泛美航空) flight 1736 originating in Los Angeles and KLM Royal Dutch Airlines (荷兰皇家航空) flight 4805, a charter from Amsterdam – collided on a fog-shrouded runway at Tenerife airport in the Canary Islands. With a total of 583 fatalities, the crash is the worst accident in aviation history.

The chain of events leading up to the crash began earlier in the day at another airport in the Canary Islands, the Gran Canaria Airport. A militant separatist group set off a small bomb at the Gran Canaria Airport, causing the authorities to close that field. Many aircraft were diverted to the much-smaller Tenerife airport (among them were KLM flight 4805 and Pan Am flight 1736), where air traffic controllers were forced to park many of the airplanes on the taxiway (滑行道), thereby blocking it. While authorities waited to reopen Gran Canaria, a dense fog developed at Tenerife, greatly reducing its visibility. When Gran Canaria finally reopened, the parked airplanes at Tenerife were directed to take off. But due to the fog and several misunderstandings in the ensuing communication, the KLM flight attempted to take off while the Pan Am flight was still on the runway. The resulting collision destroyed both aircraft, killing all 248 aboard the KLM flight and 335 of 396 aboard the Pan Am flight.

## 8 Sunk cost fallacy (沉没成本谬误)

Sunk costs are costs which have already been incurred and cannot be recovered. The sunk cost fallacy is a mistake in reasoning in which you consider the sunk costs of an activity (instead of the future costs) when you decide whether you should continue the activity or not. For example:

- I've put everything I have into this business. If I stop now, all that time and money will be lost! I can't stop now!
- I've spent five long years at this crappy company, and I'm so close to getting a

promotion, so I'm not giving up now.

- I'm three years through my college career, and if I accept this amazing job now, all that time will be lost.
- I've spent a year renovating this house, and if I sell it before it's done, all my effort will be wasted.

Normally, if there is no hope for success in the future from an investment, then the fact that one has already lost a bundle should lead one to the conclusion that the rational thing to do is to withdraw from the project. To continue to invest in a hopeless project is irrational. Such behavior may be a pathetic attempt to delay having to face the consequences of one's poor judgment. The irrationality is a way to save face, to appear to be knowledgeable, when in fact one is acting foolishly.

## Detailed study of the text

1 **Orthodox** views prize intelligence and intellectual **rigor** highly in the modern **realm** of universities and tech industry jobs. (Para. 1)

**Meaning:** Intelligence and the ability to think logically have long been regarded as important qualities in modern universities and in jobs related to the technology industry.

★ **orthodox:** *a.* accepted by most people as the correct or usual idea or practice 传统的; 公认的; 通常的

*This new treatment is much more successful than the orthodox treatment.* 这种新的治疗方法比传统方法要成功得多。

★ **rigor:** *n.* [U] the quality of being thorough and careful 缜密; 仔细; 严密

*The research team used several techniques to enhance the rigor of the analysis.* 研究小组用了几个办法提高分析的严密性。

★ **realm:** *n.* [C]

1) (*fml.*) a particular area of knowledge,

experience, interest, etc. 领域; 范围  
*In the realm of physics, Albert Einstein was a genius.* 在物理学领域, 阿尔伯特·爱因斯坦是个天才。

2) (*mainly literary*) a country ruled by a king or queen 王国

*The king had worked hard to keep his realm from war.* 国王努力使其国家远离战争。

2 One of the underlying assumptions of this value system is that smart people, **by virtue of** what they've learned, will **formulate** better decisions. (Para. 1)

**Meaning:** One of the basic beliefs leading to this value system is that smart people are able to make better decisions because of the knowledge they have acquired.

★ **by virtue of:** because of; as a result of 因为; 由于; 凭借

*By virtue of his work, he has access to a tremendous amount of the latest data available in this field.* 由于工作原因, 他有机会接触这一领域可以得到的大量的最新数据。

★ **formulate:** *vt.* develop a plan, system, or proposal, etc. carefully, thinking about all of its details 构想, 制定(计划、制度、建议等)  
*To win the war, they had to formulate new strategies.* 为赢得战争, 他们不得不制定新的战略。

3 Yet psychologists who study human decision-making processes have uncovered cognitive biases common to all people, regardless of intelligence, that can lead to poor decisions in experts and **laymen** alike. (Para. 1)

**Meaning:** Yet psychologists who study how human beings make decisions have discovered some biased judgment patterns that are common to all people, no matter how high or low their intelligence is. These biased judgment patterns can cause people, both those who know well about a particular subject and those who know little about it, to make poor decisions.

★ **layman:** *n.* [C] sb. who is not trained to a high or professional standard in a particular subject 门外汉; 外行

*Because the audience had no medical background, the speaker was extra careful to explain these complex issues in layman's terms.* 由于听众没有医学背景, 所以演讲人特别注意以外行人的语言来解释这些复杂的问题。

4 Understanding how and in what situations they occur can give you an awareness of your own limitations and allow you to **factor** them **into** your decision-making. (Para. 2)

**Meaning:** Understanding how and under what circumstances these biased judgment patterns happen can make you recognize your own limitations and help you to be conscious of them when you make your own decisions.

★ **factor sth. into sth.:** include a particular amount or factor when you calculate sth. 把...计入; 把...考虑在内

*Now it has become more popular for people to factor calories into their food choices.* 现在人们在选择食物时把热量考虑在内已变得更加普遍了。

5 Through this people **attribute** the failures of others **to** character flaws and their own to mere circumstance, **subconsciously** considering their own characters to be **stainless**. (Para. 3)

**Meaning:** With this bias, people tend to think that the failures of others are caused by the weaknesses in their characters, and the failures of their own simply by an unfavorable environment. They subconsciously believe that their own characters are perfect.

★ **attribute sth. to sb. / sth.:** believe that sth. is the result of a particular situation, event, or person's actions 把...归因于

*The company attributed the loss to higher material and labor costs.* 公司把亏损归因于原料及劳动力成本的上涨。

★ **subconsciously:** *ad.* relating to thoughts or feelings that you have but do not think about, or do not realize you have (思维或感情) 下意识地, 潜意识地

*I knew subconsciously that it was wrong to let Frank finish the project all by himself.* 我潜意识里知道让弗兰克独自完成这个项目是错误的。

★ **stainless:** *a.*

1) not spoiled by anything immoral or dishonest 无污点的; 无瑕疵的; 清白的

*Before the recent political scandal, his reputation had been stainless.* 在最近的政治丑闻发生之前, 他的名声是很清白的。

2) made of a type of steel that does not rust 不锈钢的

*Stainless steel appliances have been the bestseller for several years.* 不锈钢制的家用电器已畅销好几年了。

6 “Jenkins lost his job because of his **incompetence**; I lost mine because of the recession.” (Para. 3)

**Meaning:** Jenkins lost his job because of his inability to do his job well; I lost mine because of the bad economy.

★ **incompetence:** *n.* [U] lack of skill or ability to do sth. correctly or well 无能力; 不胜任; 不称职

*There were some lawyers in this small city who were notorious for their incompetence.* 这个小城有些律师由于不称职而臭名昭著。

7 It also leads us to attribute our own success to our qualifications, discounting luck, while seeing others' success as the product of mere luck. (Para. 3)

**Meaning:** It also causes us to believe that our own success is a result of our qualifications rather than that of luck, while regarding others' success as the result of sheer luck.

8 **In other words**, we typically demand more **accountability** from others than we do from ourselves. (Para. 4)

**Meaning:** To put it another way, we often expect other people to take more responsibility for what they do than we expect from ourselves.

★ **in other words:** expressed in a different way; that is to say 换句话说; 也就是说

*His wife is my daughter, in other words, I am his mother-in-law.* 他妻子是我女儿, 换句话说, 我是他的岳母。

★ **accountability:** *n.* [U] responsibility to sb. or for some activity 负有责任; 问责性

*Correcting errors results in additional learning and promotes accountability in the classroom.* 纠错可以促进学习, 提高课堂责任心。

9 Not only does this lead to **petty** judgments about other people, it also leads to faulty risk assessment when you assume that certain bad things only happen to others. (Para. 4)

**Meaning:** Not only does this cause you to judge other people in a narrow-minded way, but it also causes you to make wrong predictions about potential risks if you think that certain bad things only happen to others.

★ **petty:** *a.*

1) unkind and caring too much about small unimportant details 小心眼的; 心胸狭窄的; 只关注琐事的

*Our work is to help others rise above petty jealousies and encourage them to be their own best selves.* 我们的工作帮助别人克服小心眼的嫉妒心理, 鼓励他们成为最好的自己。

2) (of a problem, detail, etc.) small and unimportant (问题、细节等) 小的, 琐碎的, 不重要的

*Our deficit problems seem petty when compared to those of people who never have enough to eat.* 与那些从来连饭都吃不饱的人的问题相比, 我们的赤字问题显得微不足道。

10 This one has two parts. First, we tend to gather and rely upon information that only confirms our existing views. Second, we avoid or **veto** things

that **refute** our pre-existing **hypotheses**. (Para. 5)

**Meaning:** This bias consists of two parts. First, we usually gather and rely on information that supports the views already formed in our mind. Second, we avoid or refuse to consider information that challenges our beliefs.

★ **veto:** *vt.*

- 1) refuse to accept a particular plan or suggestion 不同意, 反对 (某个计划或建议)  
*She wanted to move out of the family home, but her parents quickly vetoed that idea.* 她想离家到外面去住, 但她父母立即表示反对这个想法。
- 2) refuse to give official permission to sth., esp. sth. that other people or organizations have agreed 否决 (尤指他人或其他组织已赞同之事)  
*The environmental agency has the power to veto the decision to promote the sales of cars with diesel engines.* 环保机构有权否决这项扩大柴油汽车销售的决定。

★ **refute:** *vt.*

- 1) prove that a statement or idea is not correct 驳倒, 反驳 (陈述或观点)  
*One of the best ways to prove or refute a point is to cite examples from historical facts or your own experiences.* 证明或反驳某一观点的最好方法之一是用历史事实或自己的亲身经历举证。
- 2) say that a statement is not true or accurate without giving proof; deny 驳斥; 否认  
*I utterly refute the suggestion that I let my sympathy for animals influence my judgment of people who eat meat.* 我坚决驳斥这一说法, 即认为我对动物的同情心影响了我对吃肉者的判断。

★ **hypothesis:** *n.*

[C] (*pl.* hypotheses) an idea that attempts to explain sth. but has not yet been tested or proved to be correct 假设; 假说  
*This hypothesis was not supported by the findings of the study.* 这一假说没有得到研究结果的支持。

11 For example, imagine that you suspect your computer has been **hacked**. Every time it **stalls** or has a little error, you assume that it was **triggered** by a **hacker** and that your suspicions are valid. (Para. 6)

**Meaning:** For example, imagine that you think your computer system has been accessed illegally by someone else. Every time it stops working or experiences a small problem, you would think that it was caused by a hacker, and you feel certain about what you think.

★ **hack:** *v.*

- 1) use a computer to connect to sb. else's computer secretly and often illegally, so that you can find or change information on it 非法侵入 (他人的计算机系统)  
*He says he can hack into the most sophisticated computer system.* 他说他连最复杂的计算机系统也能侵入。
- 2) cut sth. in a rough way, with a lot of energy, or many times 劈; 砍  
*The travelers had no choice but to hack a trail in the jungle wilderness.* 旅行者别无选择, 只好在丛林荒野中劈出一条小径。

★ **stall:**

*v.* (of an engine or vehicle) suddenly stop working because there is not enough power or speed to keep it going (使) (发动机或车辆) 停止运转, 熄火  
*I could have driven the car away from the scene, but the engine stalled, and then wouldn't restart.* 我本来是能够把车驶离现场的, 但发动机熄火了, 然后再也无法启动。  
*vi. (informal.)* deliberately delay because you are not ready to do sth., answer questions, etc. 故意拖延  
*He stalled as long as he could and then he answered, "No."* 他故意尽量拖延时间, 然后回答说, “不”。  
*vt. (informal.)* make sb. wait or stop sth. from happening until you are ready 拖住; 拖延  
*He stalled the police for 10 minutes so that his brother could get away.* 他把警察拖住了十分钟, 使他弟弟得以逃走。

★ **trigger:**

*vt.* make sth. happen very quickly 使发生；引发；激发

*Earthquakes can trigger landslides and cause flooding and tsunamis.* 地震能够引起滑坡，造成洪水和海啸。

*n.* [C] the part of a gun that you pull with your finger to fire it (枪的) 扳机

*In the science fiction movie, the hero pulled the trigger and killed the monster.* 在这部科幻电影里，那位英雄扣动扳机杀死了怪兽。

★ **hacker:** *n.* [C] sb. who uses a computer to connect to other people's computers secretly and often illegally, so that they can find or change information 非法侵入他人计算机者；黑客

*We should use passwords that are difficult for hackers to figure out.* 我们应该使用黑客们难以破解的密码。

- 12 This bias **plays an** especially big role in rivalries between two opposing views. Each side **partitions** their own beliefs in a logic-proof **loop**, and claims their opponent is failing to recognize valid points. (Para. 6)

**Meaning:** This bias plays an especially important role when two views are totally different and are competing with each other for support. Each side will separate their own beliefs completely from the other's, claiming that their beliefs are based on solid logical reasoning, and that their opponent is not being able to identify the valid conclusions.

★ **play a role in (doing) sth.:** participate in sth. in a specific way 在某事中起某种作用

*Parks play a big role in making a city desirable for both locals and visitors.* 公园在使当地居民和参观者对城市都感到称心这一方面起着很大的作用。

★ **rivalry:** *n.* [C, U] a situation in which people, teams, businesses, etc. compete with one another 竞争；对抗

*As the rivalry between the two railroad lines continued, they lowered their prices to attract customers.* 随着两条铁路线之间竞争的持续，他们都降低了票价以吸引顾客。

★ **partition:**

*vt.* (*usu. passive*) divide a room or vehicle with a partition 用阻隔物隔开 (房间或交通工具)

*This area here will be partitioned off to form my private office.* 这块地方将被隔开做我的私人办公室。

*n.* [C] a wall, screen, or piece of glass used to separate one area from another in a room or vehicle (房间或交通工具的) 阻隔物，隔板，隔墙

*A partition separated the rear of the truck from the front, hiding the driver from sight.* 一块隔板将卡车前后部隔开，使我们看不见司机。

★ **loop:**

*n.* [C] a round shape or curve made by a line curling back toward itself 环形；圈

*Sam had removed his belt from his pants and was making a loop to put around the dog's neck.* 山姆已经从裤子上解下了腰带，正在做成圆环套在狗脖子上。

*v.* make a round shape or make sth. into a round shape (使) 成圈 (或环)；把...打成环

*She tried to loop the wire around a nail.* 她试着把电线环绕在钉子上。

- 13 **Outwitting** confirmation bias therefore requires exploring both sides of an argument with equal diligence. (Para. 6)

**Meaning:** Therefore, to be able to use your intelligence to overcome the confirmation bias requires you to analyze both sides of an argument with equal efforts.

★ **outwit:** *vt.* gain an advantage over sb. using tricks or clever plans 智胜；以计谋击败

*The famous movie star managed to outwit the media and keep his wedding details secret.* 那位著名影星设法骗过了媒体，使婚礼细节得以保密。

- 14 Similar to confirmation bias is the **overconfidence** bias. (Para. 7)

**Meaning:** The overconfidence bias is similar to confirmation bias.

**Note** There is an inversion in the structure of the sentence for the purpose of emphasis.

★ **overconfidence**: *n.* [U] total certainty about sth. 过分自信

*The teacher reminded us to guard against overconfidence and to carefully check our homework assignments before we turn them in.* 老师提醒我们要提防过度自信，交作业前要仔细检查。

15 **In reality**, people's confidence vastly exceeds the accuracy of those judgments. (Para. 7)

**Meaning:** In actual fact, people's confidence is too high, far greater than their chance of making correct judgments.

★ **in reality**: in actual fact (used to say that sth. is different from what people think) 事实上; 实际上  
*The solution seemed simple, but in reality it was almost impossible to make it happen.* 这个办法看似简单，但实际上几乎是不可能实现的。

16 This bias most frequently **comes into play** in areas where someone has no direct evidence and must make a guess – estimating how many people are in a crowded **plaza**, for example, or how likely it will rain. (Para. 7)

**Meaning:** This bias is found to be working most frequently in circumstances where someone has no reliable evidence and therefore has to make a guess, for example, guessing how many people are in a crowded shopping area, or how likely it will rain.

★ **come into play**: start to happen or have an effect 开始发生作用; 开始起作用  
*Underneath the surface of this seemingly easy decision, there were so many other details that came into play.* 在这一看似简单的决定的外表之下，有许多其他细节都起了作用。

★ **plaza**: *n.* [C]

1) (*mainly AmE*) an area in a city where there are several shops and businesses (城市的) 购物中心, 商业区  
*The plaza, when completed, will offer more than just a place for shopping.* 这个商业区完工后，所提供的将不仅是一个购物场所。

2) a large open area with a hard surface in a city or town (市镇的) 广场

*There is a large plaza at the entrance to the amusement park.* 在游乐园的入口处有一个大广场。

17 To make matters worse, even when people are aware of overconfidence bias, they will still tend to **overstate** the chances that they are correct. (Para. 7)

**Meaning:** What is worse is that even when people are conscious of overconfidence bias, they will still tend to overestimate the correctness of their guesses and predictions.

★ **overstate**: *v.* (*fml.*) talk about sth. in a way that makes it seem more important, impressive, or severe than it really is 把...讲得过分; 过分强调; 夸大

*People sometimes overstate their height and lie about their age in order to get a particular job.* 为了得到某一特定工作，人们有时会夸大自己的身高，谎报自己的年龄。

18 Confidence is no **prophet** and is best used together with available evidence. (Para. 7)

**Meaning:** Confidence alone does not enable you to make correct predictions; it plays the greatest role only when used together with evidence that you can find.

★ **prophet**: *n.* [C]

1) sb. who claims that they know what will happen in the future 预言者  
*We think you had more wisdom than to listen to a false prophet.* 我们认为你有思想，不会去听一个伪预言者的话。

2) a man who people in the Christian, Jewish, or Muslim religion believe has been sent by God to lead them and teach them their religious beliefs (基督教、犹太教或伊斯兰教的) 先知, 神使  
*To examine the origin of Islam, we must get to know the prophet of Islam, Mohammad.* 研究伊斯兰教的起源，我们必须要知道伊斯兰教

的先知穆罕默德。

19 When witnesses are called to **testify** in a court trial, the confidence in their **testimony** is measured along with and against the evidence at hand. (Para. 7)

**Meaning:** When witnesses are called upon to make statements in a court of law of what they know about a case, the confidence in what they say is measured by how it is similar to or different from any evidence that already has been collected.

★ **testify:** *v.*

- 1) make a statement about sth. you saw, know, or experienced, usu. in a court of law (通常指在法庭上) 作证, 证明  
*He is the only person who can testify in this case.* 他是这起案件中唯一能够出庭作证的人。
- 2) provide evidence that sth. exists or is true 证明; 证实  
*As any doctor can testify, people do not change their eating and sleeping habits easily.* 正如任何医生都能证明的那样, 人们改变自己的饮食和睡眠习惯并不容易。

★ **testimony:** *n.*

- 1) [C, U] a formal statement about sth. that you saw, know, or experienced, usu. given in a court of law (法庭上作的) 证词  
*In court, the eyewitness presented his testimony to help prove that the policeman was innocent.* 在法庭上, 目击者陈述了证词, 帮助证明警察无罪。
- 2) [sing., U] evidence that sth. exists or is true 证据; 证明  
*The pyramids are testimony to the ancient Egyptians' engineering skills and architectural wisdom.* 金字塔是古埃及人工程技艺及建筑智慧的明证。

20 The availability bias is also related to errors in **estimation**, **in that** we tend to estimate what outcome is more likely by how easily we can **recount** an example from memory. (Para. 8)

**Meaning:** The availability bias can also lead to errors in estimation. This is because we usually make guesses about what result will probably appear by using an example we can most easily think of from our memory.

★ **estimation:** *n.*

- 1) [C] a calculation of the value, size, amount, etc. of sth. (对价值、大小、数量等的) 估计  
*Their estimation was highly inaccurate, and the project required much more money than had been anticipated by them.* 他们的估计很不准确, 该项目需要的资金比他们预计的要多得多。
- 2) [sing.] a judgment or opinion about sb. or sth. 判断; 评价; 看法  
*In my estimation, this is a different form of mental illness that is far more dangerous than mild depression.* 在我看来, 这是一种不同形式的精神疾病, 比轻度忧郁症要危险得多。

★ **in that:** for the reason that 因为; 由于

*Market competition is good in that it tends to keep prices down.* 市场竞争是好事, 因为它往往会使价格下降。

★ **recount:**

*vt. (fml.)* say what happened 叙述

*Two people watching an event can remember it and recount it differently.* 两个看同一场比赛的人对比赛的记忆和叙述会不一样。

*n.* [C] an occasion when sth. is counted again, esp. the votes in an election 重新计算; (尤指) 重点选票

*The election met international standards and a recount of the votes is unnecessary.* 选举符合国际标准, 不必重新计算选票。

21 Since the **retention** and **retrieval** of memories is biased toward vivid, sensational, or emotionally charged examples, decisions based on them can often lead to strange, inaccurate conclusions. (Para. 8)

**Meaning:** Since people tend to keep in mind and recall from memory examples that are vivid, unusual, or very emotional, decisions based on these examples can also result in strange and wrong conclusions.

★ **retention:** *n.* [U] (*fml.*)

- 1) the act of keeping or storing sth. 保存; 存放  
*A fundamental part of this curriculum is the learning and retention of skills in making handicrafts.* 这一课程表的基本内容是学习和保持制作手工艺品的技能。
- 2) the ability to keep workers or customers from leaving a company, or students from leaving a school 保留; 留住  
*These companies are actively seeking effective approaches for retention of employees.* 这些公司正在积极寻求留住员工的有效方法。

★ **retrieval:** *n.* [U]

- 1) the process of getting sth. back that was lost or not in its usual place 重新找回; 收回; 取回  
*The retrieval of excess materials is the focus of their work.* 收回剩余材料是他们工作的重点。
- 2) (*computing*) the process of getting back information stored inside a computer in order to use it again 检索  
*These databases offer retrieval of articles that cite the works of a specific author.* 这些数据库可以检索那些引用某一特定作者著作的文章。

22 Likewise some people might stop going out at night for fear of **assault** or **rape**. (Para. 9)

**Meaning:** Similarly, some people might never again go out at night because they are afraid of getting violent physical or sexual attacks.

★ **assault:**

*n.* [C, U]

- 1) a physical attack on sb., or the crime of physically attacking sb. 人身攻击; 侵犯人身罪  
*The man had no criminal history before the assault charge.* 在受到该项侵犯人身罪指控之前, 此人没有犯罪前科。
- 2) a strong spoken or written criticism of sb. else's ideas, plans, etc. 抨击  
*Flight attendants are frequently the target of verbal assaults from passengers.* 空乘员时常遭到乘客的言辞攻击。

*vt.* attack sb. violently 暴力攻击; 袭击

*After being assaulted with a deadly weapon, Nick was traumatized for the rest of his life.*

遭到致命的武器袭击之后, 尼克的余生饱受精神创伤。

★ **rape:**

*n.*

- 1) [C, U] the crime of forcing sb. to have sex by using violence 强奸 (罪)  
*He was found guilty of rape, but was only sentenced to five years in prison.* 他被判犯了强奸罪, 但刑期只有五年。
- 2) [sing.] destruction of sth., esp. the environment 破坏, 糟蹋 (尤指对环境)  
*We are not against the use of wood, but we are against the rape of the forests.* 我们不反对使用木材, 但我们反对随意糟蹋森林。

*vt.* force sb. to have sex by using violence 强奸

*During the war, women were being raped and families were being torn apart.* 战争期间, 妇女遭强奸, 家庭被离散。

23 **Repelling** the availability bias calls for an **empirical** approach to a particular decision, one not based on the **obscured** reality of vivid memory. (Para. 10)

**Meaning:** To avoid the effect of the availability bias, you must consider evidence based on experience and observation when you make a decision, rather than on a clearly remembered example that is often not true in reality.

★ **repel:** *vt.*

- 1) keep sth. or sb. away from you 驱除  
*If not washed or soaked by rain, this spray will repel insects for a week or longer.* 如果不遭雨水冲刷或浸泡, 这种喷剂驱除昆虫的效果可持续一周或一周以上。
- 2) (of sth.) make sb. feel so unpleasant that they want to avoid it 使厌恶; 使反感  
*His way of speaking repels me.* 他说话的方式让我反感。

★ **call for:**

- 1) make sth. necessary or suitable 需要; 使有必要  
*Desperate times call for desperate measures.* 非常时期必须采取非常措施。

2) say publicly that sth. must be done 呼吁; 要求  
*The residents of the city call for all the highly polluting factories to be shut down.* 该城市居民呼吁关闭所有高污染工厂。

★ **empirical:** *a.* based on real experience or scientific experiments rather than on theory 经验主义的; 以科学实验为根据的

*It is very difficult to make such a conclusion without empirical research.* 要做这样的结论, 没有实证研究是很难的。

★ **obscure:**

*vt.*

1) make sth. difficult to understand 使难解; 搞混; 使变模糊

*The data they presented looked very promising, which obscured the fact that crime was increasing in this area.* 他们呈报的数据看上去很乐观, 掩盖了该地区犯罪不断上升这一事实。

2) cover sth. so that it cannot be seen; hide 遮掩; 遮蔽

*The heavy fog obscured his vision; he couldn't see much of the road ahead of him.* 大雾挡住了他的视线, 他看不太清前面的路。

*a.*

1) not known about or not well known 不知晓的; 无名的

*The origins of many of today's cultural customs are obscure.* 很多当代文化习俗的起源都无从知晓。

2) not clearly expressed or not easy to understand 晦涩的; 费解的

*Their obscure language and technical jargon interfered with clear communication.* 他们晦涩的语言及技术行话妨碍了清晰交流。

24 If there is a low **incidence** of disaster, like only one out of 100,000 plane landings results in a crash, it is safe to fly to the Canary Islands. If one out of one million people who go out is assaulted, it is safe to go out at night. (Para. 10)

**Meaning:** If the occurrence of disaster is rare, say, only one out of 100,000 plane landings ends in a crash, then it is still safe to fly to the Canary Islands. If one out of one million people who go out at night is physically or sexually attacked, then it is still safe to go out at night.

★ **incidence:** *n.* [C, usu. sing.] (*fml.*) the number of times sth. happens, esp. crime, disease, etc. (尤指犯罪、疾病等的) 发生率

*The incidence of heart attacks is highest in the first few hours after waking up.* 心脏病的发病率在睡醒后的几小时里是最高的。

25 The sunk cost fallacy has a **periodic** application and was first identified by economists. (Para. 11)

**Meaning:** The sunk cost fallacy happens regularly. It was first recognized by economists.

★ **periodic:** *a.* (*only before noun*) happening regularly though not frequently 阶段性的; 定期的  
*There are periodic reports on the state of their nation's environment.* 关于他们国家的环境状况有定期报告。

26 A good example of how it works is the **casino slot machine**. (Para. 11)

**Meaning:** The slot machine in a casino provides a good example for us to learn how this fallacy works.

★ **casino:** *n.* [C] a place where people risk money in the hope of winning more 赌场  
*His father ran a casino in Las Vegas.* 他父亲在拉斯维加斯经营一家赌场。

★ **slot:** *n.* [C]

1) a long narrow hole that you can fit sth. into (可投入东西的) 狭长孔, 狭槽

*He put his ATM card into the slot and withdrew some money from his account.* 他把自动柜员机卡放入卡槽, 从账户里取了些钱。

- 2) a time during a series of events when it is arranged that sth. will happen (在一系列事件中为某事安排的) 时间, 空档  
*We kept circling the airport waiting for a landing slot.* 我们一直在机场盘旋, 等待降落时间。

★ **slot machine:** [C]

- 1) a machine that you can put money into in order to play a game 吃角子老虎机; 投币式自动赌博机  
*He spent \$100 playing a slot machine last night.* 他昨晚花了100美元玩老虎机。
- 2) a machine that you put money into in order to buy things such as drinks or chocolate; vending machine 投币式自动售货机  
*There is a slot machine beside the registration desk.* 登记台旁边有台自动售货机。

- 27 Gamblers with a high **threshold** for risk put money into a slot machine hoping for a big return, but with each pull of the lever they lose some money **playing the odds**. (Para. 11)

**Meaning:** Gamblers who engage themselves into highly risky situations put money into a slot machine, expecting to get big amounts of money back. But each time they pull the lever on the machine, they lose some money trying their luck.

★ **threshold:** *n.* [C]

- 1) the level at which sth. starts to happen or have an effect (某事开始发生或产生效果的) 起始点, 限度  
*Although both parents worked, their family income was well below the poverty threshold.* 虽然父母两人都工作, 但他们的家庭收入却大大低于贫困线。
- 2) the entrance to a room or building, or the area of floor or ground at the entrance 门口; 门槛  
*She was a bit shy and hesitated on the threshold of the drawing room.* 她有点害羞, 于是在客厅门口犹豫了一下。

**Note** The word “threshold” is often used in the expression “on the threshold of sth.,” which means “at the beginning of a new and important event or development 在(重要事件)的开端”。

*This nation stands on the threshold of a new era of great achievement.* 这个国家正在开启一个创造伟大成就的新时代。

★ **play the odds:** take risks; try one’s luck 冒险; 碰运气

*Although they knew that they would lose money, they decided to have fun at the casino and played the odds.* 虽然他们知道自己会输钱, 但还是决定在赌场里玩一玩, 碰碰运气。

- 28 If they have been pulling the lever many times **in a row** without success, they might decide that they had better keep spending money at the machine, or they will have wasted everything they already put in. (Para. 11)

**Meaning:** If they have been pulling the lever many times continuously but without succeeding even once, they might think that they should stick to it and keep spending money trying their luck. Otherwise, the money and time they have spent before will be wasted.

★ **in a row:** happening in a number of times, one after the other 连续地

*The company’s share price has fallen for three days in a row.* 这家公司的股价已连续三天下跌。

- 29 The truth is that every pull of the lever has the same winning probability of nearly one in a **trillion**, regardless of how much money has been put in before – the previous plays were sunk costs. (Para. 12)

**Meaning:** The truth is that no matter how much money they have put into the slot machine before, every time they pull the lever, their chance of winning the game remains extremely small; so, the costs they paid in their previous tries were sunk costs.

★ **trillion:** *num.*

- 1) a very large number or amount of sth. 极多；大量；无数

*Trillions of dollars have been lost in this economic crisis.* 无数的金钱已经在这场经济危机中丧失了。

- 2) the number 1,000,000,000,000 万亿

*The budget deficit for the current year is now approaching \$1.5 trillion.* 今年的预算赤字正在逼近1.5万亿美元。

30 In everyday life this can lead people to stay in damaging situations because of how much they have already put in, **stuck on** the **erroneous** belief that the value of that time or energy they have invested will **decay** or disappear if they leave. (Para. 13)

**Meaning:** In everyday life, this can cause people to stay in harmful situations because of the large amounts of time, energy, or money they have already put in. They are unable to get themselves out of the wrong belief that the value of the time or energy they have already invested will become less or disappear if they stop playing the game.

★ **be / get stuck on sth.:** be unable to solve a problem and continue working 被…困住；被…难住

*If I did get stuck on a problem, I'd ask a classmate for help.* 如果我确实被问题难住了，我会去找同学帮忙。

★ **erroneous:** *a. (fml.)* not correct 错误的

*Do you think she is erroneous in leaving her parents' home and living on her own?* 你认为她离开父母的家独自居住是错误的吗？

★ **decay:**

*vi.*

- 1) become gradually worse in quality, or weaker in power or influence (品质) 变糟；(权力或影响) 衰退，衰败

*The economy of that country began to decay in the late 1990s.* 20世纪90年代末，那个国家的经济开始衰退。

- 2) (of the condition of a building, an area, etc.)

gradually become worse because it has not been looked after (建筑、地区等) 逐渐破败，逐渐衰败

*With no funds to restore these historic buildings, they are being allowed to decay.* 由于没有资金修复，这些历史建筑一直在破败下去。

*v.* be gradually destroyed as a result of a natural process of change, or destroy sth. in this way (使) 腐烂；(使) 腐败

*The cabbage has already started to decay. We have to throw it away.* 卷心菜已开始腐烂，我们必须把它扔了。

31 While there are still more biases, the key to avoiding them remains the same: When a decision matters, it is best to rely on **watertight** logic and a careful examination of the evidence and to remain aware that what seems like good intuition is always **subject to** errors of judgment. (Para. 14)

**Meaning:** Although there are still more biases, the key to avoiding them remains unchanged: When you make an important decision, it is always best to rely on sound logic and a careful analysis of the evidence and to keep in mind that what seems to be good at first can often lead to errors of judgment.

★ **watertight:** *a.*

- 1) (of an argument, plan, etc.) made very carefully so that people cannot find any mistakes in it (论点、计划等) 严密的，无懈可击的

*He considered every possible detail and made a watertight decision.* 他考虑了每一个可能的细节，作出了一个周全的决定。

- 2) (of a container, roof, door, etc.) made carefully so that water cannot get in or out (容器、屋顶、门等) 不透水的，防水的，水密的  
*Though the ship had watertight doors, they were not in good condition. Consequently, some of the cargo was damaged by too much moisture.* 这艘船虽然有防水门，但是门的状况不太好，所以有些货物由于太潮湿而被损坏了。

★ subject to sth.:

- 1) likely to experience sth. or to be affected by sth. 易经受…的; 易受…影响的

*These numbers are for planning purposes only, and they are subject to change.* 这些数字只是为了做规划用的, 很可能发生变化。

- 2) depending on whether sth. happens 取决于…的; 有待于…的

*The funding for expanding the distance learning program is subject to approval by the Board of Education.* 扩大远程教育课程所需的拨款有待教育委员会批准。

## Collocation

This unit gives an account of the reasons why smart people can make illogical judgments and bad decisions. A lot of times, people are cognitively biased, based on their previous experience or their seemingly plausible logic. College students apparently fall into this category because they often subconsciously consider themselves well educated and analytically trained.

Though the two texts are very different in terms of writing styles, the collocations are in line with the unit theme such as *distort the truth*, *analytical thinker*, and *valid point*. To familiarize students with the selected collocations from this unit, the teacher may involve students in a matching exercise using the collocation pairs provided below. The words can be simply listed on the board or passed out as a worksheet, whichever is more convenient to the teacher. Students are supposed to draw lines to form possible collocations they came across from the reading texts.

**Text A:** *lighten the mood, distort the truth, analytical thinker, tremendous intellectual*

**Text B:** *underlying assumptions, cognitive biases, subconsciously consider, demand accountability, logic-proof loop, valid points, vastly exceed, available evidence, inaccurate conclusions, low incidence, winning probability, erroneous belief, watertight logic*

# PART II KEY TO EXERCISES

## Section A

### Pre-reading activities

#### 1

- |     |     |     |     |
|-----|-----|-----|-----|
| 1 F | 2 T | 3 T | 4 F |
| 5 F | 6 T | 7 U | 8 U |

#### 2

- 1 Reasoning skills deal with the process of getting from a problem to a solution or a conclusion. By improving your reasoning skills, you can improve your success in doing things. Specifically, strong reasoning skills can help you to:
- improve the quality and validity of your own arguments;
  - improve your ability to assess the quality and validity of others' arguments;
  - make more logical decisions;
  - solve problems more efficiently and effectively.

To give a specific example, every day you have to make various decisions, and yet even some simple decisions like deciding what to wear when you're getting dressed in the morning require some reasoning skills. When you decide what to wear, you take many factors into consideration – the weather forecast, the current temperature, your plans for the day (where you are going, what you will do, and whom you will meet), your comfort level, and so on. In real life, you need to face decisions that are much more

difficult than choosing what to wear. So, it is really important to have strong reasoning skills.

- 2 The factors below are usually important for a logical conclusion:
  - critical thinking skills;
  - facts;
  - evidence;
  - sound reasoning process, etc.

## Reading comprehension

### Understanding the text

1

- 1 The deal between them is that the narrator gives Rob his leather jacket, and Rob, in exchange, gives the narrator his girlfriend. They make the deal because they want to get something from each other: Rob is crazy about fashion, and he wants to own the narrator's fashionable leather jacket; the narrator longs to have a beautiful girlfriend, and Rob's girlfriend is beautiful.
- 2 He thinks a beautiful and well-spoken girlfriend will assist him to land a job and achieve success in an elite law company.
- 3 The narrator feels this way because he can't stop thinking that his purpose of dating Polly is not for romance but for improving her intelligence, and he can't let Polly know his plan.
- 4 The narrator decides to teach Polly logic because he believes logic is essential to clear thinking. By teaching Polly logic, he can make her intelligent.
- 5 When the narrator teaches her logic, Polly responds either shortly with "Cool", "Great", "I like that idea", or simply with nodding or blinking without saying anything. These responses give us an impression that Polly is a nice but rather simple-minded girl.
- 6 Yes. He is only too successful in teaching Polly logic because in the end when he asks Polly to be his girlfriend, Polly refuses his request by applying all the logical fallacies he has taught her.
- 7 Because he wants to make one more attempt to

win Polly as his girlfriend by asking her to forget what he has taught her.

- 8 The end of the story is ironic because Polly turns out to be smarter than the narrator. First, she is able to refute all his arguments as logical fallacies. Then, she discloses that she and Rob have played a trick on him. The narrator has been too smart for his own good.

### Critical thinking

2

- 1 In my opinion, all the three characters are complex. The following are my descriptions about them.

#### The narrator:

- Smart: He is an excellent law student and knows a lot about logic.
- Sophisticated: He believes a beautiful and intelligent girlfriend will benefit him in his future career.
- Arrogant and self-conceited: He thinks highly of himself but badly of his roommate.
- Over-confident: He thinks the girl will surely choose him rather than Rob.
- Stupid and simple-minded: He knows nothing about what can happen in real life.

#### Rob:

- Fashionable and cool: He loves fashion and cares a lot about his appearance.
- Dishonest: He plays a trick on the narrator to get his leather jacket.
- Clever: He is able to get what he wants without losing anything.

#### Polly:

- Beautiful and nice: She is pretty and easy to be with.
  - Shallow: She chooses Rob simply because he is fashionable.
  - Smart: She learns quickly and is full of wit when refusing to be the narrator's girlfriend.
- 2 The story itself includes the fallacy "Dicto Simpliciter". The narrator assumes that all girls would be happy to date a boy whose future

is somewhat guaranteed. Therefore, Polly, a beautiful and wealthy young girl, would certainly fall in love with him – “an ingenious student” and “a man with an assured future”, rather than Rob – “a muscular idiot”. However, to the narrator’s surprise and disappointment, Polly chooses Rob in the end because Rob is fashionable and cool.

- 3
- Love is blind. It is ridiculous to use logic to deal with love.
  - Smart people sometimes can make wrong judgments.
  - Smart people are sometimes too arrogant and confident.
  - Smart people may fall victims to their own smartness.
- 4
- Yes. Because not only would teaching logic in school help minimize the overwhelming number of fallacious assertions, but also would serve as an excellent precursor to higher mathematics and help make other courses such as geometry and calculus less of a mystery to most students.
  - No. Because logic can be learned through other subjects such as math, philosophy, reading, etc. It’s not necessary to offer a special course about it.
- 5
- Yes, certainly. Actually, logical fallacies are very common in our everyday life. I myself commit logical fallacies very often, too. For example, when I first met my roommate in college, I felt very surprised when he told me he didn’t like noodles. I asked, “People in the north of China like eating noodles. You are from the north, why don’t you like noodles?” Here I committed the logical fallacy “Dicto Simpliciter”. I falsely asserted that all people in the north should like noodles, and there should be no exception to this premise.

## Language focus

### Words in use

3

- |                |              |           |
|----------------|--------------|-----------|
| 1 crumbled     | 2 discern    | 3 surpass |
| 4 shrewd       | 5 conversion | 6 distort |
| 7 radiant      | 8 ingenious  | 9 stumped |
| 10 proposition |              |           |

### Word building

4

Words learned	New words formed
---------------	------------------

<i>-cy</i>	
delicate	<i>delicacy</i>
bankrupt	<i>bankruptcy</i>
accountant	<i>accountancy</i>
secret	<i>secrecy</i>
vacant	<i>vacancy</i>
urgent	<i>urgency</i>
<i>-ic</i>	
atmosphere	<i>atmospheric</i>
magnetic	<i>magnet</i>
metal	<i>metallic</i>
<i>-y</i>	
gloomy	<i>gloom</i>
guilty	<i>guilt</i>
master	<i>mastery</i>

5

- |                |               |              |
|----------------|---------------|--------------|
| 1 bankruptcies | 2 atmospheric | 3 delicacies |
| 4 urgency      | 5 accountancy | 6 gloom      |
| 7 magnet       | 8 metallic    | 9 mastery    |
| 10 vacancy     | 11 guilt      | 12 secrecy   |

### Banked cloze

6

- |     |     |     |     |      |
|-----|-----|-----|-----|------|
| 1 C | 2 I | 3 A | 4 O | 5 F  |
| 6 H | 7 M | 8 K | 9 J | 10 D |

## Expressions in use

7

- |                      |                           |
|----------------------|---------------------------|
| 1 were dripping with | 2 in exchange for         |
| 3 flared up          | 4 make an analogy between |
| 5 set a date for     | 6 make ... out of         |
| 7 made a pact        | 8 had appealed to         |

## Structure analysis and writing

### Structured writing

8

I had my most embarrassing experience when I was in the second year of college. During that period of time, I often liked to chat with my friends by passing notes in class. My bitter story happened one Tuesday morning, when our English teacher was busy writing on the blackboard, trying to teach us, in her monotonous voice, the difference between “tolerable” and “tolerant”.

The teacher was hard-working, but I really wanted to share my good mood with my best friend, Tony. Therefore, I picked up my pen and wrote on a slip of paper, “Hey, I want to tell you something that will make you really envious of me,” and then I passed the slip to him. He quickly opened it and read it. Being too curious, he wasted no time writing on the note some words and passed it back. “What is it? Tell me immediately!” he asked. “Sally just gave me her cell phone number.” I responded. I could not wait to see his jealous face.

However, when he got my note, an unexpected thing happened. The note was grabbed by another hand. To my shock, the teacher was standing in front of Tony. She read the note in her hand loudly and looked sternly around the whole class. “Who passed the note to Tony? Who was so lucky to get Sally’s phone number?” She asked. All the class started to whisper, and I vaguely heard them talking about who started the passing of the note. My face turned red, and my heart beat quickly. Of course, those who sat around me knew I was the culprit.

They looked at me, giggling quietly. Meanwhile, Sally blushed a deep crimson and looked very angry. She glared at me as if to say, “I am going to kill you.”

I did not stand up to admit I was the offender, but I felt so embarrassed that I really wished that there had been a place for me to hide myself. After the incident, I did not dare to pass notes in class anymore.

## Translation

9

亚里士多德是古希腊的哲学家和科学家。他的作品涵盖了许多学科，包括物理学、生物学、动物学、逻辑学、伦理学、诗歌、戏剧、音乐、语言学、政治和政府，构成了第一个综合的西方哲学体系。亚里士多德是第一个将人类的知识领域划分为不同学科的人，如数学，生物学和伦理学。他相信人所有的观念和所有的知识在根本上都是基于感知能力。他对自然科学的看法构成了他许多作品的基础。他几乎对他所处时期的每一个人类知识领域都作出了贡献。他的作品包含了人们所知的最早的关于逻辑的正式研究，即使在今天，亚里士多德哲学所涵盖的方方面面仍是学术研究的重要课题。他的哲学对所有的西方哲学理论的发展有着经久不衰的影响。在去世2,300多年后，亚里士多德仍是最有影响力的哲学家和科学家之一。

10

The Doctrine of the Mean is the core of Confucianism. The so-called “mean” by Confucius doesn’t mean “compromise” but a “moderate” and “just-right” way when understanding and handling objective things. Confucius advocated that this thought should not only be treated as a way to understand and deal with things but also be integrated into one’s daily conduct to make it a virtue through self-cultivation and training. The Doctrine of the Mean is not only the core of Confucianism but also an important component of traditional Chinese culture. From the time it came into being to the present, it has played an invaluable role in the construction of national

spirit, the transmission of national wisdom, and the development of national culture.

## Section B

### Reading skills

1

- 1 This text is mainly about the reasons why smart people make poor decisions or do strange things.
- 2 The text mentions five cognitive biases which usually cause smart people to make bad decisions: the fundamental attribution error, the confirmation bias, the overconfidence bias, the availability bias, and the sunk cost fallacy.
- 3 When we make a decision, we can avoid being affected by various types of cognitive biases by relying on sound logic and a careful examination of the evidence and by remaining aware that what seems to be good intuition can easily result in errors of judgment.

### Reading comprehension

#### Understanding the text

2

- |     |     |     |     |
|-----|-----|-----|-----|
| 1 C | 2 A | 3 B | 4 D |
| 5 B | 6 D | 7 C | 8 A |

#### Critical thinking

3

- 1 Yes, certainly. For example, last summer, I dropped in a clothing store in Nanjing Road and found a dress with a fashionable style and really good price. I bought the dress and liked it very much. Because of this happy experience, this year I decided to go to the store again. I

bought another fashionable dress and happily paid the price asked by the salesgirl. I believed I had got another good bargain. But later, to my disappointment, I found the price I had paid was actually much higher than in other stores. I made the wrong decision owing to my overconfidence.

To avoid such cognitive biases, we should:

- Improve our thinking process. Think carefully and critically. Avoid making unqualified generalizations or jumping to conclusions.
  - Learn from our past mistakes. Avoid being affected by the same cognitive bias again and again.
- 2 • Yes. There are several reasons:
    - Experts are people who have gained a lot more knowledge in a particular field.
    - Experts have more skills and experience in that field.
    - Experts have access to a significant amount of evidence, so they are more likely to give valid opinions.
  - No. There are several reasons:
    - Experts could have biased opinions toward a specific issue.
    - Not everyone is perfect, and experts do make mistakes.
    - The assumption that “He is an expert, so what he says is true” is just a fallacy.
    - Experts might be completely clueless about subjects they know nothing about.
    - We need to think critically about other people’s opinions.
  - 3 • People are smart in different ways because there are different types of intelligence, such as:
    - verbal (linguistic) intelligence;
    - numerical intelligence;
    - spatial intelligence;
    - interpersonal intelligence.
  - To me, people can be smart in similar ways because smart people have many common qualities. For example, they are all willing to learn and can learn quickly. They are all highly curious, and keen to solve problems. They never readily accept whatever seems

“normal” but always question the status quo and seek to change things. We can safely say that smart people are actually quite alike.

- 4 I agree with the saying, because being smart does not simply mean the ability to learn facts. It includes many other abilities, such as the ability to analyze, the ability to think abstractly, the ability to reason, the ability to generalize, the ability to solve problems, the ability to communicate, etc.
- 5 • In my opinion, intelligence is mainly determined by genes that one inherits from his parents. Though environment has a role to play, it can only work on a smaller scale. Many stories have proved that if one's genes are not good enough, no matter what favorable environment he is exposed to, he will not be able to learn as quickly as those whose genes are good. Yet, to be able to learn quickly is crucial to the development of intelligence.
- To me, intelligence seems to be mainly determined by environment, rather than by genes. Children who are well-nurtured, that is, those who have more life experiences, who read more, learn more and travel more, can usually get much higher scores in intelligence tests, which, as we know, are important indications of their intelligence. So, environment really has an important role to play.

## Language focus

### Words in use

4

- |              |             |              |
|--------------|-------------|--------------|
| 1 triggering | 2 obscure   | 3 hypothesis |
| 4 formulate  | 5 threshold | 6 incidence  |
| 7 refute     | 8 realm     | 9 decay      |
| 10 testimony |             |              |

### Expressions in use

5

- |                                  |                |
|----------------------------------|----------------|
| 1 play the odds                  | 2 subject to   |
| 3 attributes / attributed ... to |                |
| 4 be factored into               | 5 call for     |
| 6 By virtue of                   | 7 get stuck on |
| 8 come into play                 |                |

### Sentence structure

6

- 1 The time has come for a broad international effort to integrate China into the global economy.
- 2 The time has come for us to recognize that traditional art forms presented in traditional venues cannot compete with objects produced by popular culture.
- 3 The time has come for considering the policy of conserving these material resources on which the permanent prosperity of our country must depend.

7

- 1 These reports differ from his earlier work in that they offer solutions to public pension problems.
- 2 These forums are unique in that they provide a venue for those with varying perspectives to have an open and honest dialog.
- 3 Social support has been found to act as a stress reducer in that it protects people in crisis from both physical and psychological problems.

## Collocation

### Warm-up

- |                |             |           |
|----------------|-------------|-----------|
| 1 intellectual | 2 lighten   | 3 demands |
| 4 winning      | 5 erroneous | 6 vastly  |

8

- |                |              |              |
|----------------|--------------|--------------|
| 1 available    | 2 erroneous  | 3 valid      |
| 4 intellectual | 5 lightening | 6 inaccurate |

- 7 winning      8 distort      9 logic-proof  
10 tremendous    11 watertight    12 cognitive

## Unit project

### Objectives

- Acquaint students with more types of logical fallacies and help them understand how common logical fallacies are in their lives.
- Increase students' knowledge about logic and improve their logical thinking ability.
- Improve students' analytical ability and writing skills.

### Teaching tips

- 1 Make sure students complete the project with high quality.
  - Allow students a week to work on the project, considering that the project involves several complicated steps and some difficult fallacy names.
  - Emphasize to students that you will ask the class to vote for the best presentation in the end.
- 2 Make sure students work actively with their group.
  - Divide students into groups of four or five. Allow students to form groups by themselves.
  - Nominate one student in each group to be the group leader. Ask the group leader to organize the whole group work.
- 3 Make sure students write an effective group report.
  - Ask students to make sure the data in their writing are valid.
  - Ask students to include in their writing not only their findings about the fallacies but also their analysis of the examples so that their presentations can be more convincing.
- 4 For the meaning of each logical fallacy in the list, you can refer to "Background information" of Text A, Unit 1, in the Teacher's Book.

# PART III

## READING

## PASSAGE

## TRANSLATION

### 课文 A

#### 爱情与逻辑：谬误的故事

- 1 在我和室友罗伯的交易成功之后，我和波莉有了第一次约会。那一年校园里每个人都有件皮夹克，而罗伯是校足球队员中唯一一个没有皮夹克的，他一想到这个就受不了，于是他和我达成了一项协议，用他的女友换取我的夹克。他可不那么聪明，而他的女友波莉也不太精明。
- 2 但她漂亮而且富有，也没有把头发染成奇怪的颜色或是化很浓的妆。她拥有合适的家庭背景，足以胜任一名坚忍而睿智的律师的女友。如果我能够让我所申请的顶尖律师事务所看到我身边伴随着一位光彩照人、谈吐优雅的另一半，我就很有可能在竞聘中以微弱优势获胜。
- 3 “光彩照人”，她已经是了。而我也能施予她足够多的“智慧之珠”，让她变得“谈吐优雅”。
- 4 在一起外出度过了美好的一天之后，我驱车来到了高速公路旁一座小山上一棵古老的大橡树下。我的想法有些怪异。而这个地方能够俯瞰灯火灿烂的城区，我觉得它会使人的心情变轻松。我们呆在车子里，我调低了音响并把脚从刹车上挪开。“我们要谈些什么？”她问道。
- 5 “逻辑学。”
- 6 “好酷啊，”她一边嚼着口香糖一边说。

- 7 “逻辑学的原理,”我说道,“即清晰思考的主要原则。逻辑上出现的问题会歪曲事实,其中有些还很普遍。我们先来看看一种叫做‘绝对判断’的逻辑谬误。”
- 8 “好啊,”她表示同意。
- 9 “‘绝对判断’是指在证据不足的情况下所作出的推断。比方说:运动是有益的,所以每个人都应该运动。”
- 10 她点头表示赞同。
- 11 我看得出她没弄明白。“波莉,”我解释说,“这个推断太过简单化了。如果你有心脏病或者超级肥胖症什么的,运动就变得有害而不是有益。所以你应该说,运动对大多数人来说是有益的。”
- 12 “接下来是‘草率结论’。这似乎不言自明,对吧?仔细听好了:你不会说法语,罗伯也不会说法语,那么这所学校里好像是没有人会说法语。”
- 13 “是吗?”波莉吃惊地说。“没有人吗?”
- 14 “这也是一种逻辑谬误,”我说,“这一结论太草率了,因为能够支持这一结论的例证太少了。”
- 15 她似乎学得很开心,而我也可以放心地说我的计划在稳步推进中。我把她送回家,并且定下了下一次约会交谈的日子。
- 16 第二天晚上,坐在那棵橡树下,我说:“今天晚上我们要谈的第一个逻辑谬误叫‘文不对题’。”
- 17 她高兴地点了点头。
- 18 “听好了,”我说,“有个人去申请工作,当老板问他有什么应聘资格时,他说他有六个孩子要抚养。”
- 19 “哇,这太可怕了,太可怕了,”她哽咽着轻声说道。
- 20 “对,是挺可怕的,”我表示赞同地说,“但这不是理由。这个人根本没有回答老板的问题,而只是在博取老板的同情,这就是‘文不对题’。”
- 21 她眨着眼睛,仍在竭力地忍住眼泪。
- 22 “接下来”,我小心地说,“我们来讨论‘错误类比’。举个例子:学生考试时应该允许看课本,因为外科医生在做手术时可以看X光片。”
- 23 “我喜欢这个主意,”她说。
- 24 “波莉,”我抱怨道,“别打岔,这一推论是错误的。医生们不是在参加考试以检查他们学到了多少,而学生却是。他们的情况完全不同,你不能将他们作类比。”
- 25 “我仍然认为这是一个好主意,”波莉说。
- 26 经过五个夜晚的辛勤努力,我竟然真的将波莉打造成了一个逻辑行家,她总算能够分析思考了。现在应该是时候让我们的关系从学术向浪漫发展了。
- 27 “波莉,”当我们又一次坐在那棵橡树下时我对她说,“今晚我们不讨论逻辑谬误了。”
- 28 “哦?”她回答说,有一点失望。
- 29 我赞许地对她笑了笑,说:“我们在一起已经度过了五个晚上,相互之间挺合得来,我们是蛮相配的一对。”
- 30 “草率结论,”波莉伶俐地说,“或者是按一般人的说法,这个结论有些不成熟,你不这样认为吗?”
- 31 我被逗得笑了起来,她功课还真学得不错,大大超过了我的预期。“亲爱的,”我开口说,同时宽容地拍了拍她的手,“五次约会已经够多了,毕竟你不需要吃掉整个蛋糕才知道它是不是好吃。”
- 32 “错误类比,”波莉立即回应。“你的前提是约会就如同吃东西。可你不是蛋糕,你是个男孩。”
- 33 我又笑了笑,不过不觉得那么有趣了,同时还不能表露出我害怕她学得太好了。再错几步我可就无法挽回了。我决定改变策略,转而尝试奉承她的办法。

- 34 “波莉，我爱你。请答应做我的女朋友，没有你我什么也不是。”
- 35 “文不对题，”她说。
- 36 “你还真是能在遇到逻辑谬误时一一辨别它们了，”我说，心里的希望已经开始动摇。“不过不要对它们太死板，我是说这都是些学术的东西。你知道，学校里学的东西和实际生活根本没有什么联系。”
- 37 “绝对判断，”她说道，“而且，你自己教的东西应该自己身体力行。”
- 38 我一下跳了起来，怒火中烧，“你到底愿不愿意做我的女朋友？”
- 39 “我不愿意，”她答道。
- 40 “为什么？”我追问道。
- 41 “我对另一位求爱者更感兴趣——罗伯和我重归于好了。”
- 42 我极力地保持着平静，说道：“你怎么会甩了我而选择罗伯？看看我，一个聪明过人的学生，一个不同凡响的学者，一个前途无量的人。再看看罗伯，一个肌肉发达的蠢材，一个有了上顿没下顿的家伙。你是否能给我一个充足的理由，为什么要选择跟他？”
- 43 “喔，这是什么假设啊！为了让像你这样聪明的人能够明白，我这么说吧，”波莉反驳道，声音里充满了讽刺，“事情的真相是——我喜欢罗伯穿皮衣。是我让他同意你们的协议的，这样他就能拥有你的夹克！”

## 课文 B

### 聪明人为何会做蠢事？

- 1 传统观念将智力和思维的缜密性看作现代大学领域和科技产业工作的重要素质。这一价值体系所隐含的前提是，聪明人借助自己丰富的学识会作出更高明的决定。在大多数情况下，确实如此。但是，研究人类决策过程的心理学家们却发现了每个人身上都常见的

“认知偏差”。不管智力水平如何，这些认知偏差都会引导人们作出错误的决定，不论他们是专家还是门外汉。

- 2 好在这些偏差是可以避免的。只要知道这些偏差如何在何种情况下发生，你就能意识到自身的缺陷，并在决策过程中考虑到这些因素的影响。
- 3 最常见的偏差之一就是通常所说的“基本归因错误”。犯这种错误的人会将别人的失败归因于性格缺陷，而将自己的失败仅仅归因于周遭环境，潜意识中认为自己的性格是完美无瑕的。“詹金斯丢掉了工作是因为他能力太差，我丢掉了工作则是因为经济衰退。”同样，这种偏差也会让我们将自己的成功归功于自身素质而不是运气，而将别人的成功仅仅看作是运气使然。
- 4 换句话说，我们通常要求别人承担更多的责任，而不是自己。这不仅导致我们心胸狭窄地对别人进行评价，也会由于假定某种坏事只会发生在别人身上而致使我们做出错误的风险评判。举一个例子，你可能会毫无根据地假定自己的房子会升值，哪怕周围百分之九十的房子都已经贬值了，因为你总认为自己的能力更强。
- 5 “确定性偏差”有时会和“基本归因错误”一并出现。这种偏差包含两部分：第一，我们往往只收集且只依赖对我们的已有观点起支持作用的信息；第二，我们回避或否认那些与自己之前所持的假设相左的信息。
- 6 比如说，假设你怀疑自己的电脑受到了黑客攻击，那么它每次死机或出个小错，你都会认定是由黑客引起的，而且你认定自己的怀疑正确无误。这种偏差在两种敌对观点的对抗中会起到尤其重要的作用。每一方都会把自己的观点隔离出来，认为其在逻辑上无懈可击，并声称他们的对手忽略了某些要点。所以，要克服“确定性偏差”，就要以同样的努力认真探究论点的正反两面。

- 7 与“确定性偏差”相类似的是“过度自信偏差”。在一个理想的世界，当我们百分之百地确信某件事时，我们就百分之百地正确；当我们百分之八十地确信某件事时，我们就百分之八十地正确，以此类推。但在

现实中，人们的信心却大大超过了其判断的准确度。在一个人缺乏直接证据而必须要作出某种猜测的情况下，这一偏差就最有可能起作用，比如，估计一个拥挤的购物广场有多少人，或下雨的可能性有多大。更糟糕的是，即使人们意识到自己有过度自信的偏差，他们还是会高估自己的正确率。光靠自信是无法进行准确预测的，只有在切实证据的基础上，自信才能发挥最大的作用。当法庭传唤目击者出庭作证时，对他们证词的信任度是通过已经获取的相符或相反的证据来度量的。

- 8 与估计失误相关的还有“可得性偏差”，因为我们常常会凭借回忆某一例证的难易程度来推测哪种结果更可能出现。由于记忆的留存和重拾会因为事件的生动与否、震撼程度和情感触动程度的不同而产生偏差，那么，基于这些记忆所作出的决定也往往会是奇怪或不准确的结论。
- 9 在具体行为中，这种偏差可能会使某人取消比如前往加那利群岛的行程，因为有报道说，史上最惨重的空难就发生在那里。同样，人们也可能因惧怕遭到人身侵犯或者强暴而不敢再在晚上出门。
- 10 要排除“可得性偏差”，就必须在作某一具体决定时，以实证方法所取得的证据为依据，而不是以与现实不太相符的某个鲜明的记忆为依据。如果灾难的发生率很低，比如飞机着陆过程中坠毁的可能性只有十万分之一，那么飞往加那利群岛就仍是安全的。如果人们外出只有百万分之一的几率遭到人身侵犯，那么夜晚出行也就仍是安全的。
- 11 “沉没成本谬误”也时有发生，它最初是由经济学家发现的。其作用机理最好的例证就是赌场老虎机。赌徒们冒着高风险，把钱投入老虎机，期望能够得到很大的回报，但随着一次次拉动拉杆，他们也一次次把钱赌输了。如果他们多次连续拉动拉杆而没有一次成功，他们可能会决定最好还是继续把钱投入老虎机，否则他们之前投入的成本就悉数浪费了。
- 12 而事实是，不论他们之前投入了多少钱，每一次拉动拉杆的成功几率都同样是极小的——之前投入的那些即为沉没成本。

13 在日常生活中，这种谬误会导致人们由于顾及之前所投入的成本，而持续停留在损失的状态中，同时困顿于一种错误的观念，即他们害怕自己一旦离开，之前所投入的时间和精力就会贬值或付诸东流。而最明智的办法则是，要充分认识沉没成本谬误导致的结果，离开糟糕的境况，不论之前已投入了多少。

14 尽管还有其他更多的偏差，避免这些偏差的关键其实都一样：当涉及重要决策时，最好是依靠严密的逻辑并仔细审查证据；同时，要保持警惕，那些看上去良好的直觉总是很容易导致判断失误。