

UNIT

# 1

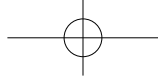
## Life and logic

### Passage A

#### Preview

Read the title of the passage. Then go through the following list of ideas. Check (✓) each one that could be part of the passage.

- 1 the function of critical thinking in education
- 2 the relationship between critical thinking and one's beliefs and actions
- 3 how to train students in the techniques of critical thinking
- 4 the important aspects of critical thinking
- 5 the bad effects of critical thinking



# Beyond critical thinking

- 1 Although “critical thinking” first gained its current significance as a mode of interpretation and evaluation to guide beliefs and actions in the 1940s, the term took off in education circles after Robert H. Ennis published “A Concept of Critical Thinking” in the *Harvard Educational Review* in 1962.
- 2 A common way to show that one has sharpened one’s critical thinking is to display an ability to see through or undermine statements made by (or beliefs held by) others. Thus, our best students are really good at one aspect of critical thinking – being critical. For many students today, being smart means being critical. To be able to show that Hegel’s concept of narrative **foreclosed**<sup>1</sup> the non-European, or that Butler’s **stance**<sup>2</sup> on **vulnerability**<sup>3</sup> contradicts her conception of **performativity**<sup>4</sup>, or that a **tenured**<sup>5</sup> professor has failed to account for his own “privilege” – these are marks of **sophistication**<sup>6</sup>, signs of one’s ability to participate fully in the academic tribe. But this participation, being entirely negative, is not only seriously unsatisfying; it is ultimately **counterproductive**<sup>7</sup>.
- 3 The skill at unmasking error, or simple intellectual **one-upmanship**<sup>8</sup>, is not completely without value, but we should be **wary**<sup>9</sup> of creating a class of self-satisfied **debunkers**<sup>10</sup> or, to use a currently fashionable word on campuses, people who like to “trouble” ideas. In overdeveloping the capacity to show how texts, institutions, or people fail to accomplish what they set out to do, we may be depriving students of the capacity to learn as much as possible from what they study. In a humanities culture in which being smart often means being a critical unmasker, our students may become too good at showing how things *don’t* make sense. That very skill may diminish their capacity to find or create meaning and direction in the books they read and the world in which they live. Once outside the university, our students continue to score points by displaying the critical **proWess**<sup>11</sup> for which they were rewarded in school. They wind up contributing to a cultural climate that has little tolerance for finding or making meaning, whose intellectuals and cultural commentators delight in being able to show that somebody else is not to be believed.
- 4 In training our students in the techniques of critical thinking, we may be giving them reasons to remain guarded – which can translate into reasons not to learn. The confident refusal to be affected by those with whom we disagree seems to have infected much of our cultural life: from politics to the press, from ivory-tower academic programs (no matter how multidisciplinary) to warring public intellectuals. As humanities teachers, however, we must find ways for our students to open themselves to the emotional and cognitive

1. foreclose *vt.* 排除, 排斥

2. stance *n.* 立场, 态度

3. vulnerability *n.* 脆弱性

4. performativity *n.* 表演性

5. tenured *adj.* 享有终身职位的

6. sophistication *n.* 高水平

7. counterproductive *adj.* 产生不良后果的

8. one-upmanship *n.* 胜人一筹

9. wary *adj.* 警惕的

10. debunker *n.* 揭穿真面目者

11. prowess *n.* 高超技艺



power of history and literature that might initially **rub them the wrong way**<sup>12</sup>, or just seem foreign. Critical thinking is **sterile**<sup>13</sup> without the capacity for **empathy**<sup>14</sup> and comprehension that stretches the self.

5 One of the crucial tasks of the humanities should be to help students cultivate the willingness and ability to learn from material they might otherwise reject or ignore. This material will often surprise students and sometimes upset them. Students seem to have learned that teaching evaluation committees take seriously the criticism that “the professor, or the material, made me uncomfortable.” This complaint is so toxic because being made uncomfortable may be a necessary component of an education in the humanities. Creating a humanistic culture that values the desire to learn from unexpected and uncomfortable sources as much as it values the critical faculties would be an important contribution to our academic and **civic**<sup>15</sup> life.

6 But the contemporary humanities should do more than supplement critical thinking with empathy and a desire to understand others from their own point of view. We should also supplement our strong critical engagement with cultural and social norms by developing modes of teaching that allow our students to enter in the **value-laden**<sup>16</sup> practices of a particular culture to understand better how these values are legitimated: How the values are lived as legitimate. Current thinking in the humanities is often strong at showing that values that are said to be shared are really imposed on more-vulnerable members of a particular group. Current thinking in the humanities is also good at showing the contextualization of norms, whether the context is generated by an anthropological, historical, or other disciplinary **matrix**<sup>17</sup>. But in both of these cases we ask our students to develop a critical distance from the context or culture they are studying.

7 It is my hope that humanists will continue offering criticism, making connections, and finding ways to acknowledge practices that seem at first opaque or even invisible. In supporting a transition from critical thinking to practical exploration, I am echoing a comment made by my undergraduate philosophy teacher Louis Mink, and echoed by my graduate mentor, Richard Rorty. Years before Richard Rorty deconstructed the idea of the “philosopher as referee”, Louis Mink suggested that critics “exchange the judge’s **wig**<sup>18</sup> for the guide’s cap”. I think we may say the same for humanists, who can, in his words, “show us details and patterns and relations which we would not have seen or heard for ourselves.”

8 My humanities teachers enriched my life by showing me details and patterns and relations. In so doing they also helped me to acquire tools that have energetically shaped my scholarship and my interactions with colleagues and students. It is my hope that as guides, not judges, we can show our students

12. rub sb. the wrong way 惹怒, 激怒某人

13. sterile *adj.* 无效果的

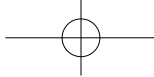
14. empathy *n.* 移情, 同感, 共鸣

15. civic *adj.* 公民的

16. laden *adj.* 充满……的

17. matrix *n.* 发源地, 摇篮

18. wig *n.* 假发



how to engage in the practice of exploring objects, norms, and values that inform diverse cultures. In doing so, students will develop the ability to converse with others about shaping the objects, norms, and values that will inform their own lives. They will develop the ability to add value to (and not merely criticize values in) whatever organizations in which they participate. They will often reject roads that others have taken, and they will sometimes chart new paths. But guided by the humanities, they will increase their ability to find together ways of living that have meaning and direction, illuminating paths immensely practical and sustaining.

(1,007 words)

### Notes

作者 Michael S. Roth 是卫斯理安大学的思想史学家和校长。本文为纪念卫斯理安大学人文学院成立 50 周年所做的演讲摘录。

**Robert H. Ennis:** 美国伊利诺伊大学教育学院的著名教授，主要从事批判性思维、科技哲学等领域的研究。

**Harvard Educational Review:** 《哈佛教育评论》，创刊于 1930 年，被公认为教育领域中具有相当影响的刊物，是有关教育思想的主要论坛。

**Hegel:** 黑格尔 (1770-1831)，德国古典唯心主义哲学家。

**Butler:** 全名 Judith Butler (朱迪斯·巴特勒)，美国著名的女性主义理论家，研究领域包括女性主义、酷儿理论、政治哲学、伦理学等。她提出“性”和“性别”是“没有原本、只有摹本的表演”，人们根据社会性别二元化的定势思维，通过教育和学习，不断“表演”，完善性别意识和行为，使自身合乎社会期待的身份。

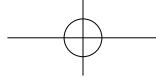
## Exercises

### Reading skills

#### 1 Learning vocabulary in context

Using the contextual clues in the text is a good way to understand unfamiliar words and phrases. Choose the best meaning for the underlined word or phrase in each of the following sentences.

- 1 Although “critical thinking” first gained its current significance as a mode of interpretation and evaluation to guide beliefs and actions in the 1940s, the term took off in education circles after Robert H. Ennis published “A Concept of Critical Thinking” in the *Harvard Educational Review* in 1962. (Para. 1)  
A flew up  
B became popular  
C became important  
D made sense

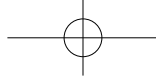


- 2 A common way to show that one has sharpened one's critical thinking is to display an ability to see through or undermine statements made by (or beliefs held by) others. (Para. 2)
- A made stronger  
B cut  
C improved  
D made clearer
- 3 They wind up contributing to a cultural climate that has little tolerance for finding or making meaning, ... (Para. 3)
- A be in an unpleasant situation or place after a lot has happened  
B bring an activity, meeting, etc. to an end  
C close down a company or organization  
D turn something around several times to make it move or start working
- 4 ... we must find ways for our students to open themselves to the emotional and cognitive power of history and literature that might initially rub them the wrong way, ... (Para. 4)
- A at the beginning  
B to a certain extent  
C probably  
D in the end
- 5 It is my hope that humanists will continue offering criticism, making connections, and finding ways to acknowledge practices that seem at first opaque or even invisible. (Para. 7)
- A not blocked by anything  
B not clear enough to see through  
C very different  
D happening at the right time to be successful

## 2 Drawing inferences

Authors don't always express all their thoughts directly. We may discover their implied meaning by using contextual clues, common sense, and our knowledge of the world, by connecting ideas and drawing conclusions. This process is called drawing inferences. Use the contextual clues in the passage to decide whether the statements are true (T) or false (F).

- \_\_\_\_\_ 1 "Critical thinking" is a special term used in education circles.
- \_\_\_\_\_ 2 If you are good at unmasking error, you are smart.
- \_\_\_\_\_ 3 According to the author, overdeveloping the skill at unmasking error is not good for the students.
- \_\_\_\_\_ 4 Practical exploration is more important than critical thinking in the education of humanities.
- \_\_\_\_\_ 5 Cultural and social norms can help students understand the values of a particular culture.

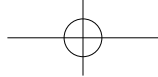


## Reading and discussion

**3** Discuss the following questions with your classmates.

- 1 Do you know anyone who is critical? Is it good or not to be critical?
- 2 Do you think the following attitudes can help you improve your thinking?
  - 1) I prefer being given the correct answers rather than figuring them out myself.
  - 2) I don't like to think a lot about my decisions as I rely only on gut feelings.
  - 3) I don't usually review the mistakes I have made.
  - 4) I don't like to be criticized.

And what do you think may be effective ways to improve your critical thinking ability?



# Passage B

## Preview

- 1 Read the title and the first paragraph of the passage. What virtues of a wandering mind may be talked about in the passage?
- 2 Read Paragraph 3. What is mind wandering? What is the relationship between mind wandering and daydreaming?

## Discovering the virtues of a wandering mind

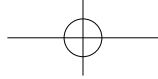
- 1 In the past, daydreaming was often considered a failure of mental discipline, or worse. But now that researchers have been analyzing those stray thoughts, they've found daydreaming to be remarkably common – and often quite useful. A wandering mind can protect you from immediate **perils**<sup>1</sup> and keep you on course toward long-term goals. Sometimes daydreaming is counterproductive, but sometimes it fosters creativity and helps you solve problems.
- 2 Consider, for instance, these three words: *eye*, *gown*, *basket*. Can you think of another word that relates to all three? If not, don't worry for now. By the time we get back to discussing the scientific significance of this puzzle, the answer might occur to you through the “**incubation**<sup>2</sup> effect” as your mind wanders from the text of this article – and, yes, your mind is probably going to wander, no matter how brilliant the rest of this column is.
- 3 Mind wandering, as psychologists define it, is a subcategory of daydreaming, which is the broad term for all stray thoughts and fantasies, including those moments you deliberately set aside to imagine yourself winning the **lottery**<sup>3</sup> or accepting the Nobel. But when you're trying to accomplish one thing and **lapse into**<sup>4</sup> “task-unrelated thoughts”, that's mind wandering.
- 4 During waking hours, people's minds seem to wander about 30 percent of the time, according to estimates by psychologists who have interrupted people throughout the day to ask what they're thinking. If you're driving down a straight, empty highway, your mind might be wandering three quarters of the time, according to two of the leading researchers, Jonathan Schooler and Jonathan Smallwood of the University of California, Santa Barbara.

1. peril *n.* 危险

2. incubation *n.* 孵化

3. lottery *n.* 彩票

4. lapse into 陷入



5. contemplate *vt.* 注视, 凝视

6. mull *vt.* 深思熟虑

7. evolutionary *adj.* 进化的

8. simulation *n.* 模仿, 模拟

9. get lost in the shuffle 因混乱而被忽略

10. miss out on 错过

11. dubious *adj.* 不一定好的

12. tailgate *vt.* 紧随……行驶

13. episode *n.* 片段

14. zone out 走神

15. jargon *n.* 行话

16. sporadically *adv.* 偶发地, 零星地

5 “People assume mind wandering is a bad thing, but if we couldn’t do it during a boring task, life would be horrible,” Dr. Smallwood says. “Imagine if you couldn’t escape mentally from a traffic jam.” You’d be stuck **contemplating**<sup>5</sup> the mass of idling cars, a mental exercise that is much less pleasant than dreaming about a beach and much less useful than **mulling**<sup>6</sup> what to do once you get off the road. There’s an **evolutionary**<sup>7</sup> advantage to the brain’s system of mind wandering, says Eric Klinger, a psychologist at the University of Minnesota and one of the pioneers of the field.

6 “While a person is occupied with one task, this system keeps the individual’s larger agenda fresher in mind,” Dr. Klinger writes in the *Handbook of Imagination and Mental Simulation*<sup>8</sup>. “It thus serves as a kind of reminder mechanism, thereby increasing the likelihood that the other goal pursuits will remain intact and not **get lost in the shuffle**<sup>9</sup> of pursuing many goals.”

7 Of course, it’s often hard to know which agenda is most evolutionarily adaptive at any moment. If, during a professor’s lecture, students start checking out peers of the opposite sex sitting nearby, are their brains **missing out on**<sup>10</sup> vital knowledge or working on the more important agenda of finding a mate? It depends on the lecture.

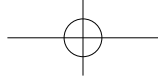
8 But mind wandering clearly seems to be a **dubious**<sup>11</sup> strategy, if, for example, you’re **tailgating**<sup>12</sup> a driver who suddenly brakes. Or, to cite activities that have actually been studied in the laboratory, when you’re sitting by yourself reading *War and Peace* or *Sense and Sensibility*.

9 If your mind is elsewhere while your eyes are scanning Tolstoy’s or Austen’s words, you’re wasting your own time. You’d be better off putting down the book and doing something more enjoyable or productive than “mindless reading”, as researchers call it.

10 Yet when people sit down in a laboratory with nothing on the agenda except to read a novel and report whenever their mind wanders, in the course of a half hour they typically report one to three **episodes**<sup>13</sup>. And those are just the lapses they themselves notice, thanks to their wandering brains being in a state of “meta-awareness”, as it’s called by Dr. Schooler. He and other researchers have also studied the many other occasions when readers aren’t aware of their own wandering minds, a condition known in the psychological literature as “**zoning out**”<sup>14</sup>. (For once, a good bit of technical **jargon**<sup>15</sup>.) When experimenters **sporadically**<sup>16</sup> interrupted people reading to ask if their minds were on the text at that moment, about 10 percent of the time people replied that their thoughts were elsewhere – but they hadn’t been aware of the wandering until being asked about it.

11 To measure mind wandering more directly, Dr. Schooler and two psychologists





at the University of Pittsburgh, Erik D. Reichle and Andrew Reineberg, used a machine that tracked the movements of people's eyes while reading *Sense and Sensibility* on a computer screen. By comparing the eye movements with the prose on the screen, the experimenters could tell if someone was slowing to understand complex phrases or simply scanning without comprehension. They found that when people's mind wandered, the episode could last as long as two minutes.

12 Where exactly does the mind go during those moments? By observing people at rest during brain scans, neuroscientists have identified a “**default**<sup>17</sup> network” that is active when people's minds are especially free to wander. When people do take up a task, the brain's executive network lights up to issue commands, and the default network is often suppressed.

17. default *adj.* 默认的

13 But during some episodes of mind wandering, both networks are firing simultaneously, according to a study led by Kalina Christoff of the University of British Columbia. Why both networks are active is up for debate. One school theorizes that the executive network is working to control the stray thoughts and put the mind back on task.

14 Another school of psychologists, which includes the Santa Barbara researchers, theorizes that both networks are working on agendas beyond the immediate task. That theory could help explain why studies have found that people **prone to**<sup>18</sup> mind wandering also score higher on tests of creativity, like the word-association puzzle mentioned earlier. Perhaps, by putting both of the brain networks to work simultaneously, these people are more likely to realize that the word that relates to *eye*, *gown* and *basket* is *ball*, as in *eyeball*, *ballgown*<sup>19</sup> and *basketball*.

18. prone to 倾向于

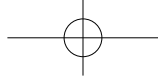
19. ballgown *n.* 晚礼服

15 To encourage this creative process, Dr. Schooler says, it may help if you go jogging, take a walk, do some knitting or just sit around **doodling**<sup>20</sup>, because relatively undemanding tasks seem to free your mind to wander productively. But you also want to be able to catch yourself at the Eureka moment.

20. doodle *vi.* 心不在焉地乱写  
乱画

16 “For creativity you need your mind to wander,” Dr. Schooler says, “but you also need to be able to notice that you're mind wandering and catch the idea when you have it. If Archimedes had come up with a solution in the bathtub but didn't notice he'd had the idea, what good would it have done him?”

(1,083 words)



### Notes

**Eureka moment:** “尤里卡时刻”，指那些灵光闪现、突发灵感的时刻。“尤里卡”，原是古希腊语，意思是“好啊！有办法啦！”古希腊学者阿基米德有一次在浴盆里洗澡，突然来了灵感，发现了他久未解决的计算浮力问题的办法，即阿基米德定律，因而惊喜地叫了一声“尤里卡”。

## Exercises

### Reading skills

#### 1 Understanding examples

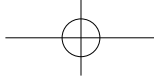
The author provides specific examples to help readers understand the arguments. Match the arguments to the examples which support them.

Argument	Example
1) _____ People’s minds seem to wander about 30 percent or even more of the waking time. (Para. 4)	<b>a</b> students checking out peers of the opposite sex during a professor’s lecture
2) _____ Life would be horrible if there is no mind wandering during a boring task. (Para. 5)	<b>b</b> driving down a straight, empty highway
3) _____ It’s often hard to know which agenda is most evolutionarily adaptive at any moment. (Para. 7)	<b>c</b> stuck in a traffic jam
4) _____ Mind wandering seems to be a dubious strategy. (Para. 8)	<b>d</b> the word-association puzzle
5) _____ Mind wandering may help score higher on tests of creativity. (Para.14)	<b>e</b> reading <i>War and Peace</i> or <i>Sense and Sensibility</i>

#### 2 Reading for details

Understanding the structure of the text can help you quickly locate and focus on the details. Read the passage carefully to find the details. Choose the best answer to each of the following questions.

- Which of the following is not true about mind wandering according to the passage?
  - It is task-unrelated thoughts.
  - It helps you escape from a traffic jam.
  - It encourages creativity.
  - It may be a bad thing sometimes.

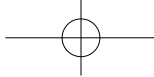


- 2 According to the passage, how much of the time your mind might be wandering if you spend four hours driving down a straight, empty highway?
- A One hour and 15 minutes.                      B Two hours.  
C Forty-five minutes.                              D Three hours.
- 3 People reading in a laboratory noticed their lapses because \_\_\_\_\_.
- A their brains were in a state of “meta-awareness”  
B they didn’t want to waste their own time  
C Tolstoy’s or Austen’s words were not interesting  
D they were absent-minded
- 4 When people’s mind wandered in reading, \_\_\_\_\_.
- A they put down the book and did something more enjoyable or productive instead  
B they could always notice the lapses  
C the eye movements would be much slower  
D only the default network in the brain was active
- 5 How can a wandering mind keep on course toward the goal according to one school of psychologists?
- A The executive network works to control the stray thoughts and put the mind back on task.  
B Both the default network and the executive network work on agendas beyond the immediate task.  
C Both the default network and the executive network fire simultaneously.  
D The brain’s executive network lights up to issue commands and suppresses the default network.

## Reading and discussion

**3** Discuss the following questions with your classmates.

- 1 Do you have any experience in which mind wandering helped solve problems?
- 2 Do you have any experience in which mind wandering is counterproductive?



# Passage C

## Preview

Read the title and scan the passage. Decide whether the following statements are true (T) or false (F).

- \_\_\_\_\_ 1 The passage is about how Nikola Tesla developed creative abilities.
- \_\_\_\_\_ 2 “Mind Lab” plays an important role in Tesla’s creativity.
- \_\_\_\_\_ 3 Tesla has been good at visualization from an early age.
- \_\_\_\_\_ 4 Tesla’s visualization skills need to be improved.
- \_\_\_\_\_ 5 A blind man achieved success by developing visualization abilities.

## Nikola Tesla’s creative thinking secrets – Free your creative energy the Tesla way!

- 1. streetwise *adj.* 善于在都市中生存的
- 2. savvy *n.* 实际知识, 了解
- 3. resurgence *n.* 复兴
- 4. resuscitate *v.* 使复苏, 使复兴
- 5. extrapolate *v.* 推断
- 6. prodigious *adj.* 使人印象深刻的, 惊人的
- 7. emulate *vt.* 模仿
- 8. unleash *vt.* 释放

- 1 Nikola Tesla is not as widely known as Thomas Edison. But those who know about him suggest that his genius for invention surpassed that of Edison. He lacked Edison’s **streetwise**<sup>1</sup> marketing **savvy**<sup>2</sup>, but his vision broke new ground on so many levels. Even today Tesla is enjoying a **resurgence**<sup>3</sup>, as environmentalists look back to his ideas for a free energy system and wonder what might have been, and what might still be **resuscitated**<sup>4</sup> to save the world.
- 2 This article on Nikola Tesla will not explore his history in any great depth. This article seeks only to **extrapolate**<sup>5</sup> from Tesla’s life some of the secrets to his **prodigious**<sup>6</sup> creative thinking. What enabled this giant of science and invention to brainstorm and develop ideas that are still being exploited and studied today, a century later? What can we **emulate**<sup>7</sup> from Nikola Tesla’s thinking style to **unleash**<sup>8</sup> our own super creative abilities?
- 3 *“I do not think there is any thrill that can go through the human heart like that felt by the inventor as he sees some creation of the brain unfolding to success ... Such emotions make a man forget food, sleep, friends, love, everything.”*  
— Nikola Tesla



4 Nikola Tesla had extraordinary visual thinking powers. When he got an idea for a new machine, he was able to “set it up” in his mind and leave it running to see how it would work. His capacity for this was so developed that the results that he got in his mind were incredibly accurate. This was **verified**<sup>9</sup> when it came to building **prototypes**<sup>10</sup> for the new machine. He would already know exactly how it would perform because of his “Mind Lab” experiments.

9. verify *vt.* 证明

10. prototype *n.* 样品, 模型

5 In his autobiography, Nikola Tesla describes how he was able to visualize a particular **apparatus**<sup>11</sup> and was then able to actually test run the apparatus, disassemble it and check for proper action and **wear**<sup>12</sup>! During the manufacturing phase of his inventions, he would work with all blueprints and **specifications**<sup>13</sup> in his head. The invention invariably assembled together without redesign and worked perfectly. Tesla slept one to two hours a day and worked continuously on his inventions and theories without benefit of ordinary relaxation or vacations. He could judge the dimension of an object to a hundredth of an inch and perform difficult computations in his head without benefit of **slide rule**<sup>14</sup> or mathematical tables.

11. apparatus *n.* 设备, 装置

12. wear *n.* 磨损

13. specification *n.* 规格

14. slide rule 计算尺

6 Far from an ivory-tower intellectual, Nikola Tesla was very much aware of the issues in the world around him, making it a point to render his ideas accessible to the general public by frequent contributions to the popular press, and to his field by numerous lectures and scientific papers.

7 Reading into his history, it seems that Nikola Tesla had strangely powerful visualization abilities from an early age. Perhaps there was some mental **aberration**<sup>15</sup> that lent him these abilities (there are suggestions that he had a form of **autism**<sup>16</sup> that may have contributed to his **savant**<sup>17</sup> abilities). For the rest of us, we need to develop our powers of visualization. As with most things, this is something that can be done quite systematically and which improves with time and effort. My strongest recommendation is to practice **image streaming**<sup>18</sup> and use a mind machine. Nothing opens the third eye of visualization as readily as using the visual thinking stream on a regular basis.

15. aberration *n.* 失常

16. autism *n.* 孤独症

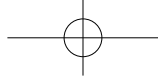
17. savant *n.* 天才白痴

18. image stream 图像流 (闭眼让思维任意流动, 然后把感知的信息描述出来)

8 One of the best ways I ever discovered for improving my visualization skills, was to simply sit in meditation and visualize a series of three-dimensional geometric shapes rotating in the mind space in front of me. For example, I would visualize a **translucent**<sup>19</sup> electric blue pyramid, and I would “look” at it from all angles. I was able to see through it and see the structure and changing perspective of its angles. When I had done that for a few minutes, I would then introduce an orange sphere inside the pyramid and try and hold those two images. I might replace the sphere with a pink diamond and then place a third figure into the picture, like a small yellow **cube**<sup>20</sup> inside the pink diamond or orange sphere. Maintaining three geometric shapes of different colors is hard to do for any length of time. Indeed to begin with you

19. translucent *adj.* 半透明的

20. cube *n.* 立方体



will struggle with one object. However a few minutes, regular practice at odd moments through the day will soon improve your ability to stay concentrated. Try it out. You can then progress to visualizing more complex things and situations. Tibetan Buddhists and **Hindu Yogis**<sup>21</sup> have incredibly complex visualization practices that involve visualizing vast **mandala**<sup>22</sup> images with different divine beings inhabiting them. These kind of practices often led to the **practitioner**<sup>23</sup> developing a photographic memory and powerful visual thinking skills (like Tesla) as well as “opening the third eye” for **psychic**<sup>24</sup> work.

- 21. Hindu Yogi 印度瑜伽师
- 22. mandala *n.* 曼荼罗 (某些东方宗教中代表宇宙的图形)
- 23. practitioner *n.* 从事者, 习艺者
- 24. psychic *adj.* 灵魂的, 心灵的

9 *“My method is different. I do not rush into actual work. When I get a new idea, I start at once building it up in my imagination, and make improvements and operate the device in my mind. When I have gone so far as to embody everything in my invention, every possible improvement I can think of, and when I see no fault anywhere, I put into concrete form the final product of my brain.”*

— Nikola Tesla

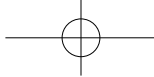
10 Here’s a great example of someone learning to develop extraordinary powers of visualization, like Tesla. Mark Tew, who’s been blind since birth, read a **braille**<sup>25</sup> version of the great book *Superlearning* in 1984 and realized it was just the thing he’d been searching for. He started practicing the accelerated learning techniques and before long his computer programming career just took off as he became the **go-to guy**<sup>26</sup> for **troubleshooting**<sup>27</sup>. His bosses made him the chief **debugger**<sup>28</sup> of all their software programs. Mark’s story features in the updated **sequel**<sup>29</sup> *Superlearning 2000*, where it says: “Using his new skills in relaxation training and visualization plus the slow **Baroque**<sup>30</sup> music that facilitates a connection to the subconscious mind, he found it easy to mentally picture an entire computer program. He could remember it and see it in his mind.”

(1,035 words)

- 25. braille *n.* 盲文
- 26. go-to guy 关键人物
- 27. troubleshoot *v.* 解决问题
- 28. debugger *n.* 程序调试员
- 29. sequel *n.* 续集, 续篇
- 30. Baroque *adj.* 巴洛克式的

### Notes

**Nikola Tesla:** 尼古拉·特斯拉 (1856-1943), 美籍著名发明家、物理学家、机械工程师和电机工程师, 被誉为“人类历史上最后一个科学先知”。



# Exercises

## Reading skills

### 1 Finding topic sentences

A well-organized paragraph supports or develops a single controlling idea, which is expressed in a sentence called the topic sentence. A topic sentence is generally followed by specific details to support and explain the main idea. The primary function of the topic sentence is to make it clear to the readers the main idea of the paragraph. Additionally, the topic sentence can be used to clarify the point or position the author wishes to take in that paragraph. Go through the passage and look for topic sentences of the following paragraphs.

Para. 4 \_\_\_\_\_  
\_\_\_\_\_

Para. 8 \_\_\_\_\_  
\_\_\_\_\_

Para. 9 \_\_\_\_\_  
\_\_\_\_\_

## Translation

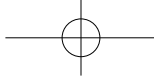
2 Translate the following sentences into Chinese. The sentences are underlined in the passage.

1 Even today Tesla is enjoying a resurgence, as environmentalists look back to his ideas for a free energy system and wonder what might have been, and what might still be resuscitated to save the world. (Para. 1)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2 I do not think there is any thrill that can go through the human heart like that felt by the inventor as he sees some creation of the brain unfolding to success ... (Para. 3)

\_\_\_\_\_  
\_\_\_\_\_



3 Far from an ivory-tower intellectual, Nikola Tesla was very much aware of the issues in the world around him, making it a point to render his ideas accessible to the general public by frequent contributions to the popular press, and to his field by numerous lectures and scientific papers. (Para. 6)

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4 However a few minutes regular practice at odd moments through the day will soon improve your ability to stay concentrated. (Para. 8)

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5 When I have gone so far as to embody everything in my invention, every possible improvement I can think of, and when I see no fault anywhere, I put into concrete form the final product of my brain. (Para. 9)

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