

Exercise 13

Biologists have long maintained that two groups of pinnipeds, sea lions and walruses, are descended from a terrestrial bearlike animal, whereas the remaining group, seals, shares an ancestor with weasels. But the recent discovery of detailed similarities in the skeletal structure of the flippers in all three groups undermines the attempt to explain away superficial resemblance as due to convergent evolution—the independent development of similarities between unrelated groups in response to similar environmental pressures. Flippers may indeed be a necessary response to aquatic life, turtles, whales, and dugongs also have them. But the common detailed design found among the pinnipeds probably indicates a common ancestor. Moreover, walruses and seals drive themselves through the water with thrusts of their hind flippers, but sea lions use their front flippers. If anatomical similarity in the flippers resulted from similar environmental pressures, as posited by the convergent-evolution theory, one would expect walruses and seals, but not seals and sea lions, to have similar flippers. (162 words)

1. The author implies that which of the following was part of the long-standing view concerning pinnipeds?

- ☐ A Pinnipeds are all descended from a terrestrial bearlike animal.
- ☐ B Pinnipeds share a common ancestor with turtles, whales, and dugongs
- ☐ C Similarities among pinnipeds are due to their all having had to adapt to aquatic life.

2. The author implies which of the following about the fact that turtles, whales, and dugongs all have flippers?

- ☐ A It can be explained by the hypothesis that turtles, whales, and dugongs are very closely related.
- ☐ B It can be explained by the idea of convergent evolution.
- ☐ C It suggests that turtles, whales, and dugongs

evolved in separate parts of the world

oD It undermines the view that turtles, whales, and dugongs are all descended from terrestrial ancestors.

oE It is the primary difference between turtles, whales, and dugongs, on the one hand, and pinnipeds, on the other.

3. Select the sentence in the passage in which the author shows that the implication of the common view is contradicted by a new finding.

阅读 2:

上文第三句以趋同进化(**convergent evolution**)解释一种现象: 鳍足确实有可能是为了适应水中生活而作出的一个必要的反应; 龟、鲸鱼以及儒艮(**dugongs**)同样都长有鳍足。由句中的 **may** 可知这是一个让步: 这三种动物之间无亲缘关系但有相同结构, 肯定是相似环境造成的。有让步就有转折, 下一句的转折暗示新观点的出现: 但在鳍足亚目动物之间所发现的那种普遍的细致构造可能表明它们来自共同的祖先。针对老观点——鳍足亚目动物从两类不同动物进化而来, 给出新观点: 这些鳍足亚目动物并非从两类不同动物进化而来, 而是有共同祖先, 即从同一类动物进化而来。后文作补充说明, 否定趋同进化的解释。

Q1. Except 题:

A. “two groups of”不是所有;

B. 没提;

C. 定位 L7“**explain away superficial resemblance as due to convergent evolution—the independent development of similarities between unrelated groups in response to similar environmental pressures**”新的观点要排除掉的就是以前老的观点, 选 C;

Q2. 紧接着 **convergent evolution** 举得例子说的就是这个。选 B;

Q3. **But the recent discovery of detailed similarities in the skeletal structure of the flippers in all three groups undermines the attempt to explain away superficial resemblance as due to convergent evolution—the independent development of similarities between unrelated groups in response to similar environmental pressures.**

According to astronomer S.A. Phinney, kicking a rock hard enough to free it from Earth's gravity would require a meteorite capable of making a crater more than 60 miles across. Moreover, even if Earth rocks were freed by meteorite impact, Mars's orbit is much larger than Earth's, so Phinney estimates that the probability of these rocks hitting Mars is about one-tenth as great as that of Mars's rocks hitting Earth. To demonstrate this estimate, Phinney used a computer to calculate where 1,000 hypothetical particles would go if ejected from Earth in random

directions. He found that 17 of the 1,000 particles would hit Mars.

4. Which of the following, if true, would cast most doubt on Phinney's estimate of the probability of Earth rocks hitting Mars?

oA Rather than going in random directions, about 25 percent of all particles ejected from Earth go in the same direction into space.

oB Approximately 100 meteorites large enough to make a noticeable crater hit the Earth each year.

oC No rocks of Earth origin have been detected on Mars.

oD The velocity of rocks escaping from Earth's gravity is lower than the velocity of meteorites hitting the Earth.

oE No craters more than 60 miles across have been found on Mars.

阅读 1:

Q4: 质疑的对象是 Phinney's estimate of the probability of Earth rocks hitting Mars; 也就是, 地球的石头撞火星是火星的石头撞地球概率的十分之一, 这个是基于 17/1000 的概率地球的石头会撞上火星的模拟实验, 这个实验有基于一个前提假设: 所有的石头发射出去之后, 运行的方向是随机的。把这个逻辑链的任何一个地方取非都是一个质疑。A 是正确答案。

Present-day philosophers usually envision their discipline as an endeavor that has been, since antiquity, distinct from and superior to any particular intellectual discipline such as theology or science. The basis for this view, however, lies in a serious misinterpretation of the past, a projection of modern concerns onto past events. The idea of an autonomous discipline called —philosophy, distinct from and sitting in judgment on such pursuits as theology and science turns out, on close examination, to be of quite recent origin. When, in the seventeenth century, Descartes and Hobbes rejected medieval philosophy, they did not think of themselves, as modern philosophers do, as proposing a new and better philosophy, but rather as furthering —the warfare between science and theology. They were fighting, albeit discreetly, to open the intellectual world to the new science and to liberate intellectual life from ecclesiastical philosophy and envisioned their work as contributing to the growth, not of philosophy, but of research in mathematics and physics. This link between philosophical

interests and scientific practice persisted until the nineteenth century, when decline in ecclesiastical power over scholarship and changes in the nature of science provoked the final separation of philosophy from both.

25 The demarcation of philosophy from science was facilitated by the development in the early nineteenth century of a new notion, that philosophy's core interest should be epistemology, the general explanation of what it means to know something. Modern philosophers now

30 trace that notion back at least to Descartes and Spinoza, but it was not explicitly articulated until the late eighteenth century, by Kant, and did not become built into the structure of academic institutions and the standard self-descriptions of philosophy professors until the late nineteenth century. Without the idea of epistemology, the survival of philosophy in an age of modern science is hard to imagine. Metaphysics, philosophy's traditional

40 core—considered as the most general description of how the heavens and the earth are put together—had been rendered almost completely meaningless by the spectacular progress of physics. Kant, however, by focusing philosophy on the problem of knowledge, managed to replace metaphysics with epistemology, and

45 thus to transform the notion of philosophy as —queen of sciences into the new notion of philosophy as a separate, foundational discipline: philosophy became —primary no longer in the sense of —highest but in the sense of —underlying .

5. Which of the following best expresses the author's main point?

- oA Philosophy's overriding interest in basic human questions is a legacy primarily of the work of Kant.
- oB Philosophy was deeply involved in the seventeenth-century warfare between science and religion.
- oC The set of problems of primary importance to philosophers has remained relatively constant since antiquity.
- oD The status of philosophy as an independent intellectual pursuit is a relatively recent development.
- oE The role of philosophy in guiding intellectual speculation has gradually been usurped by science.

For the following question, consider each of the choices separately and select all that apply

6. The author of the passage implies which of the following in discussing the development of philosophy during the nineteenth century EXCEPT?

- ☐ A Nineteenth-century philosophy took science as its model for understanding the bases of knowledge.
- ☐ B Nineteenth-century philosophers carried out a program of investigation explicitly laid out by Descartes and Spinoza.
- ☐ C Kant had an overwhelming impact on the direction of nineteenth-century philosophy.

7. Select the sentence in the passage in which the author characterizes Descartes' support for the new science of the seventeenth century.

For the following question, consider each of the choices separately and select all that apply

8. With which of the following statements concerning the writing of history would the author of the passage be most likely to agree?

- ☐ A History should not be distorted by attributing present-day consciousness to historical figures.
- ☐ B History should be concerned with describing those aspects of the past that differ most from those of the present.
- ☐ C History should not emphasize the role played by ideas over the role played by individuals.

析：这篇是讲哲学史的文章，都是我很喜欢的人物，所以在这里简介一下

Descartes 笛卡尔:法国著名哲学家，主要哲学论著有《论方法》、《形而上学的沉思》、《哲学原理》。他的主要理论是二元论，即肯定灵魂和形体两个实体的存在。由于他本身就是个伟大的数学家，他相信科学最本质的真理可以用数学原理和方法来解释。他把变量引进了数学，将几何和代数结合起来，创立了解析几何。在物理上，他提出了著名的动量守恒的观点，用物质涡旋运动来说明太阳系的形成。

Hobbes 霍布斯 机械唯物论的代表者，著作有《论物体》等。

Spinoza 斯宾诺莎 唯物论和无神论的代表人物。由于犹太教出身，他详细研究和批判了圣经，论述了宗教的起源。在国家制度上，他坚持民主政体，推崇宗教、言论、思想自由。在伦理学上，他认为人的理性认识了自然的必然性，就能摆脱情感的奴役，获得自由。因此，自由就是按照人的自然本质区求得自我保存和个人利益。

Immanuel Kant 康德 他的主要著作有《纯粹理性批判》、《实践理性批判》、《判断力批判》。其体系

包括以先验论、二元知论和不可知论为基本特征的认识论，以及在此基础上的伦理学和美学等。他提出，数学命题和自然科学的基本原理都即是先天的又是综合的，即先天综合判断。他认为“思维无内容是空的，直观无概念是盲的”，只有将这二者结合起来，才能产生知识。他认为，认知能力共有三个层次，从感性开始，然后是知性，最后是理性；先天的感性形式是空间、实践，先天的知性形式是范畴，理性则是处于知性之上的最高一级的综合能力。

康德认为人们对空间、时间的性质是以人的感性形式印记的，并非事物自身的性质，即是现象而非物自体。从知识的形成看，知性的作用极为关键，知性是利用由自身所产生的纯概念把观念联系起来，构成判断。知性是主动下判断的能力，从根本上说是综合的活动，综合比分析更根本。人的理性是比知性更高一级的综合能力，是对经验进行最广泛的综合，理性是相对的，而不是绝对的。

Epistemology 认识论 研究人类的认识本质及其发展过程的哲学理论。其研究的主要内容包括认识的本质、结构，认识与客观实在的关系，认识的前提和基础，认识发生、发展的过程及其规律，认识的真理标准等。以对世界是否呢个为认识来划分，可分为可知论，不可知论，怀疑论。以认知的有效途径来划分，基本可以分为经验论和唯理论。前者强调人的感觉和悟性，后者强调客观理性，但具体到某人身上往往两者并存。

Q5. 主旨题，通篇讲的是当代哲学的建立和发展，正确答案 D；

Q6. nineteenth century 定位在第二段开头，

A. 没提这个事儿，貌似是十七世纪的事情；

B. L31“but it was not explicitly articulated until the late eighteenth century”

C. 这句话后面就是说 Kant 这个人的一些事迹了；

答案 AB

Q7. They were fighting, albeit discreetly, to open the intellectual world to the new science and to liberate intellectual life from ecclesiastical philosophy and envisioned their work as contributing to the growth, not of philosophy, but of research in mathematics and physics.

不要误选前一句话，因为题目问的是对笛卡尔 support 的描述，所以 fight, open the intellectual world 更合适。

Q8. 定位到 line 4: The basis for this view, however, lies in a serious misinterpretation of the past, a projection of modern concerns onto past events. 选 A；

Although recent years have seen substantial reductions in noxious pollutants from individual motor vehicles, the number of such vehicles has been steadily increasing. Consequently, more than 100 cities in the United States still have levels of carbon monoxide, particulate matter, and ozone (generated by photochemical reactions with hydrocarbons from vehicle exhaust) that exceed legally established limits.

9. Which of the following most closely parallels the situation described in the first sentence of the

passage?

OA Although a town reduces its public services in order to avoid a tax increase, the town's tax rate exceeds that of other towns in the surrounding area.

OB Although a state passes strict laws to limit the type of toxic material that can be disposed of in public landfills, illegal dumping continues to increase.

OC Although a town's citizens reduce their individual use of water, the town's water supplies continue to dwindle because of a steady increase in the total population of the town.

OD Although a country attempts to increase the sale of domestic goods by adding a tax to the price of imported goods, the sale of imported goods within the country continues to increase.

OE Although a country reduces the speed limit on its national highways, the number of fatalities caused by automobile accidents continues to increase.

阅读 2:

Q9: 类比的对象是“situation described in the first sentence”也就是“Although recent years have seen substantial reductions in noxious pollutants from individual motor vehicles, the number of such vehicles has been steadily increasing.”

说的个人量减少了，但是总数量上升的；正确答案选 C。

Hank Morgan, the hero of Mark Twain's *A Connecticut Yankee in King Arthur's Court*, is a nineteenth-century master mechanic who mysteriously awakening in sixth-century Britain, launches what he hopes will be a peaceful revolution to transform Arthurian Britain into an industrialized modern democracy. The novel, written as a spoof of Thomas Malory's *Morte d'Arthur*, a popular collection of fifteenth-century legends about sixth-century Britain, has been made into three upbeat movies and two musical comedies. None of these 10 translations to screen and stage, however, dramatize the anarchy at the conclusion of *A Connecticut Yankee*, which ends with the violent overthrow of Morgan's three-year-old progressive order and his return to the

nineteenth century, where he apparently commits suicide 15 after being labeled a lunatic for his incoherent babblings about drawbridges and battlements. The American public, although enjoying Twain's humor, evidently rejected his cynicism about technological advancement and change through peaceful revolution as antithetical to the United States doctrine of progress.

10. According to the passage, which of the following is a true statement about the reception of *A Connecticut Yankee in King Arthur's Court* by the American public?

- ☐ A The public had too strong a belief in the doctrine of progress to accept the cynicism demonstrated at the conclusion of Twain's novel.
- ☐ B Twain's novel received little public recognition until the work was adapted for motion pictures and plays.
- ☐ C Although the public enjoyed Twain's humor, his use of both sixth-century and nineteenth-century characters confused many people.
- ☐ D The public has continued to enjoy Twain's story, but the last part of the novel seems too violent to American minds.
- ☐ E Because of the cynicism at the end of the book, the public rejected Twain's work in favor of the work of Thomas Malory.

For the following question, consider each of the choices separately and select all that apply

11. It can be inferred from the passage that Mark Twain would most probably have believed in which of the following statements about societal change?

- ☐ A Technological advancements are limited in their ability to change society and will likely bring liabilities along with any potential benefits.
- ☐ B The belief in the unmitigated benefits of societal change is antithetical to the American doctrine of progress.
- ☐ C Technological advances and peaceful revolutions, although sometimes accompanied by unintended violence and resistance to societal change, eventually lead to a more progressive order.

12. The author uses the examples of "three upbeat movies and two musical comedies" (lines 9-10) primarily in order to demonstrate that

- ☐ A well-written novels like *A Connecticut Yankee in*

King Arthur's Court, regardless of their tone or theme,
can be translated to the stage and screen.

OB the American public has traditionally been
more interested in watching plays and movies
than in reading novels like A Connecticut
Yankee in King Arthur's Court

oC Twain's overall message in A Connecticut
Yankee in King Arthur's Court is one that
had a profound impact on the American public.

OD Twain's A Connecticut Yankee in King Arthur's
Court has been a more popular version of the
Arthurian legends than has Malory's Morte d'Arthur

OE A Connecticut Yankee in King Arthur's Court
has been accepted as an enjoyable and humorous tale
in versions that have omitted the anarchy at the
novel's conclusion

阅读 1:

Q10. 定位到 Line 16: "The American public, although enjoying Twain's humor, evidently rejected his cynicism about technological advancement and change through peaceful revolution as antithetical to the United States doctrine of progress."

永远让步转折，强调的是转折后的内容，让步内容可以没有，但是转折后的内容必须正确完整：

- A. 正确，完美的复述了转折后的内容；
- B. motion pictures and plays 新内容；
- C. sixth-century and nineteenth-century characters confused many people 新内容；
- D. too violent to American minds.新内容，
- E. rejected Twain's work in favor of the work of Thomas Malory.新内容

Q11. 这个要对小说人物的经历有个大概的认识：想 peaceful revolution to transform Arthurian Britain into an industrialized modern democracy, 但最后失败了，并且挺惨的。想证明这么干(an industrialized modern democracy) 注定是不行的；

- A. 正确；
- B. 注意这里问的是 Mark Twain 当时的想法；
- C. 说反了；

Q12. 个人感觉定位在 Line 9"None of these translations to screen and stage, however, (None of these) dramatize the anarchy at the conclusion of A Connecticut Yankee"加上括号的省略部分，E 选项就比较好选了。