

# **Exercise 35**

It is their sensitive response to human circumstance that accounts for the persistence of certain universal ideas. Rabbi Meir, a second-century scholar, admonished his disciples to look not at the pitcher but at its contents because, he stated, "Many a new pitcher has been found to be full of old wine." Creative ideas not only produce their own instruments of survival as time and circumstances demand, but permit the substitution of new forms for old under the pressure of changed circumstances. For example, democracy, as an idea, originated in ancient Greece and was carried from there to Western Europe and the Americas. But it did not retain the ancient Greek form: it passed through several reforming processes and exists today in many countries. Democratic governments differ in form because democracy is in principle dynamic and has therefore responded to local needs. (141 words)

- 1. According to the passage, democracy is an example of
- (A) a human circumstance that has molded creative ideas
- (B) an instrument of survival that has altered its original form
- (C) an attribute of a creative idea that has allowed that idea to persist
- (D) a creative idea that has persisted because of its adaptability
- (E) a reforming process that has culminated in the creation of modern governments
- 2.The "new pitcher" mentioned in the passage is the equivalent of which of the following elements in the author's discussion of democracy?
- (A) Ancient Greece
- (B) The idea of democracy
- (C) A modern democratic government
- (D) A dynamic principle
- (E) The Greek form of democracy

阅读 1:参考翻译:



## 译文:

正是因为它们对人文环境敏感的反应,某些普遍性的理论才能长久地存在。Rabbi Meir, 二世纪的一个学者,告诫他的门徒,不要只看罐子,而要看其内容。他说,这是因为很多新的罐子装的却是陈酒。他用此说法强调形式和理论区别的重要性,也强调理念的完整表达比形式更为重要。

创造性的理念不仅在时间和环境的需求下造就了生存手段,也允许在多变的环境下以新的形式代替旧的形式。比如说民主,作为一种理念,发源于古希腊,后传入西欧、美洲。但它并没有保持古希腊的形式,经过几次改革的进程,现仍存于很多国家。民主政体形式上有所不同,因为民主在本质上是动态的,因此能适应地方性需要。

# 重点词汇:

admonish [ədməniʃ] v. 警告 disciple [di'saipl] n. 信徒,门徒,追随者 pitcher ['pitʃə] n. 大水罐, 壶; 瓶状物体 dynamic [dai'næmik] a. 动态的

# 重要背景:

民主的概念和形式:民主,democracy,demo=人,cracy=统治,控制。从这个意义出发,民主的内涵,几千年来从未变过,即人民统治,而非专制一人独裁。但是其具体表现形式却经历了极大的变化。民主政治最早产生于古希腊的城邦,表现为全体自由民的公民大会和经选举产生的执政官,以及民主的法律制度保障。现代社会的民主与此已有很大不同,而且各国的具体政治、法律制度相差很大,有议会制、总统制、君主立宪制等。但内涵是一样的。

# 文章结构:

结论解释型。

TS:首句。

#### Q1:

- 二D 正确。因其适应性而持久存在的一种创造性理念。
- A. 形成创造性理念的人文环境。显非。
- B. 改变了原始形式的生存工具。本文民主不指具体形式。
- C. 使创造性理念不断存在的一个特征。偏,民主只是一例。
- E. 现代政体的产生中达到顶点的改革进程。同 2。



### Q2:

在作者对民主的讨论中 L6 的"新罐"相当于哪一选项内容? 类比题,较简单,L6 的"罐子"指一种思想的载体——形式。

∴C 正确。现代民主政体。

A. 古希腊。

B. 民主的理念。

D. 动态原则。

E. 民主的希腊形式。

均显非。

Aided by the recent ability to analyze samples of air trapped in glaciers, scientists now have a clearer idea of the relationship between atmospheric composition and global temperature change over the past 160,000 years. In particular, determination of atmospheric composition during periods of glacial expansion and retreat (cooling and warming) is possible using data from the 2,000-meter Vostok ice core drilled in Antarctica. The technique involved is similar to that used in analyzing cores of marine sediments, where the ratio of the two common isotopes of oxygen, 180 and 160, accurately reflects past temperature changes. Isotopic analysis of oxygen in the Vostok core suggests mean global temperature fluctuations of up to 10 degrees centigrade over the past 160,000 years.

Data from the Vostok core also indicate that the amount of carbon dioxide has fluctuated with temperature over the same period: the higher the temperature, the higher the concentration of carbon dioxide and the lower the temperature, the lower the concentration. Although change in carbon dioxide content closely follows change in temperature during periods of deglaciation, it apparently lags behind temperature during periods of cooling. The correlation of carbon dioxide with temperature, of course, does not establish whether changes in atmospheric composition caused the warming and cooling trends or were caused by them.

The correlation between carbon dioxide and temperature throughout the Vostok record is consistent and predictable. The absolute temperature changes, however, are from 5 to 14 times greater than would be expected on the basis of carbon dioxide's own ability to



absorb infrared radiation, or radiant heat. This reaction suggests that, quite aside from changes in heat-trapping gases, commonly known as greenhouse gases, certain positive feedbacks are also amplifying the temperature change. Such feedbacks might involve ice on land and sea, clouds, or water vapor, which also absorb radiant heat.

Other data from the Vostok core show that methane gas also correlates closely with temperature and carbon dioxide. The methane concentration nearly doubled, for example, between the peak of the penultimate glacial period and the following interglacial period. Within the present interglacial period it has more than doubled in just the past 300 years and is rising rapidly. Although the concentration of atmospheric methane is more than two orders of magnitude lower than that of carbon dioxide, it cannot be ignored: the radiative properties of methane make it 20 times more effective, molecule for molecule, than carbon dioxide in absorbing radiant heat. On the basis of a simulation model that climatological researchers have developed, methane appears to have been about 25 percent as important as carbon dioxide in the warming that took place during the most recent glacial retreat 8,000 to 10,000 years ago. (445 words)

For the following question, consider each of the choices separately and select all that apply
3. The passage provides information to support which of the following statements about methane EXCEPT?

- A Methane is more effective than carbon dioxide in absorbing radiant heat.
- B The higher the concentration of carbon dioxide in the Earth's atmosphere; the lower the concentration of methane.
- C Most of the global warming that has occurred during the past 10 years has been associated with increased methane concentration.
- 4. According to the passage, which of the following statements best describes the relationship between carbon dioxide and global temperature?
- (A) Carbon dioxide levels change immediately in response to changes in temperature.



- (B) Carbon dioxide levels correlate with global temperature during cooling periods only.
- (C) Once carbon dioxide levels increase, they remain high regardless of changes in global temperature.
- (D)Carbon dioxide levels increase more quickly than global temperature does.
- (E) During cooling periods, carbon dioxide levels initially remain high and then decline.
- 5. It can be inferred from the passage that a long-term decrease in the concentration of carbon dioxide in the Earth's atmosphere would
- (A) increase methane concentration in the Earth's atmosphere
- (B) accompany a period of glaciation
- (C) encourage the formation of more oxygen isotopes in the Earth's atmosphere
- (D) promote the formation of more water in the Earth's global environment
- (E) increase the amount of infrared radiation absorbed by the Earth's atmosphere
- 6. The passage suggests that when the methane concentration in the Earth's atmosphere decreases, which of the following also happens?
- (A) Glaciers melt faster.
- (B) The concentration of carbon dioxide increases.
- (C) The mean global temperature decreases.
- (D) Carbon dioxide absorbs more radiant beat
- (E) More clouds form in the Earth's atmosphere



# 泽文:

近来科学家已能对封闭于冰川中的气体样品进行分析,凭此种能力,科学家现在对过去16万年中大气构成与全球气温变化的关系有了更清晰的了解。尤其是通过利用在南极东方站2000米深处冰心钻探得到的数据,对冰川扩张和消退(降、升温)期间的大气成分子以确定已经可能。此技术类似于研究海底沉积物的方法,在这一过程中,氧气两个同位素<sup>18</sup>○、<sup>16</sup>○的比值精确反映了温度变化。通过对东方站冰层中的氧气同位素的分析研究得出的结论意味着:全球平均气温于过去 16 万年内向上浮动了 10℃。

对东方站的调查还显示出在同一时期,CO<sub>2</sub> 含量也随温度变化而变:上升则增多,反之则减少。虽然冰消退期时 CO<sub>2</sub> 与温度变化联系密切,但在冰期,CO<sub>2</sub> 含量变化明显落后于温度。因此,CO<sub>2</sub> 与气温在东方站发生的关联并不能证实:到底是大气成分变化形成了冷暖变化还是相反,由冷暖变化所引起。

CO<sub>2</sub> 与气温在东方站的联系是恒定也是可预测的。可是,温度的绝对变化要比仅依据 CO<sub>2</sub> 本身吸收红外线辐射热量的能力所做预测还要大上 5~14 倍。这个现象证明,除了能吸收热量的气体——即通常所说"温室"气体——的变化之外,其他一些正反应机制也加重了温度的变化。这些机制包括陆冰、海冰、云以及水汽,它们也都吸收辐射热。

在东方站获取的其他事实又表明甲烷气体也与温度和 CO<sub>2</sub> 有紧密联系。甲烷浓度从上次冰期到后来间冰期近乎加倍。在如今的间冰期之内,甲烷浓度的增长度在过去 300 年多出两倍以上。虽然甲烷气体浓度比二氧化碳低两个数量级,但仍不能被忽视:甲烷的辐射特性使其在分子级别上比二氧化碳吸热能力大上 20 倍。一些气候学家开发了一模拟模型,显示甲烷在最近 8000~10000 年间的气候回暖中所起的作用恰好等于 CO<sub>2</sub> 的 25%。

### 重点词汇:

trap [træp] v. 将…封闭
glacier ['glæsjə] n. 冰河,冰川
glacial expansion and retreat 冰川扩张与消减,即冰期与间冰期
marine sediment 海底沉积物
isotope ['aisəutəup] n. 同位素

infrared radiation 红外辐射
greenhouse gas 温室气体(一般指二氧化碳)
penultimate [pinnltimit] a. 倒数第二的
climatological [iklaimə tələdzikl] a. 气候学的

#### 文章结构:

结论解释型;首句观点,后为三种例证(全和气温变化呈正关系)

TS: 首句;

Q3: 哪个文中没有提到?

A 选项 于文中 methane make it 20 times more effective, molecule for molecule, than carbon dioxide in absorbing radiant heat. 对应,BC 没有涉及,BC 选项正确。



Q4:

从文中看出下面哪项是把全球变暖与 $CO_2$ 含量关系表述得最好的: 定位,二段。

- A. 二氧化碳在温度变化后紧接着变化。反,L21~24,在冰期就落后于温度变化。
- B. 只在冰期二者才有关联。反,间冰期联系更紧密。
- C. 一旦 CO<sub>2</sub> 含量升高,会不管温度变化始终高着。反,虽然变化滞后,但仍会最终下降。
- D. CO<sub>2</sub> 含量升高远比温度升高得快。无此比较。
- E. 在冰期, CO<sub>2</sub> 含量先保持高,后减。正确。L21~24 的叙述。

Q5:

从文中得知二氧化碳浓度下降将会导致:

文章友好之处:三种能影响气温的机制全是正关系。

- ∴B 正确。将带来冰冻。即温度下降。
- A. 大气中甲烷增多得快。反。
- C. 将使氧气增加。无。
- D. 在地球形成更多的水域。无。
- E. 加快大气对红外线的吸收。反。

**Q6**:

文中提出,甲烷浓度减少,跟着会怎样: 和上題重复。

- ∴C 正确。全球变冷。
- A. 使冰迅速融化。反。
- B. CO2含量上升。反。
- D. CO。吸收更多的红外线。反。
- E. 大气中云量增加。反,云也和温度呈正关系。

The essential condition for the decay of the vacuum is the presence of an intense electric field. As a result of the decay of the vacuum, the space permeated by such a field can be said to acquire an electric charge, and it can be called a charged vacuum. The particles that materialize in the space make the charge manifest. An electric field of sufficient intensity to create a charged vacuum is likely to be found in only one place: in the immediate vicinity of a superheavy atomic nucleus, one with about twice as many protons as the heaviest natural nuclei known. A nucleus that large cannot be stable, but it might be possible to assemble one next to a vacuum for long enough to



observe the decay of the vacuum. (131 words)

- 7. The author's assertions concerning the conditions that lead to the decay of the vacuum would be most weakened if which of the following occurred?
- (A) Scientists created an electric field next to a vacuum, but found that the electric field was not intense enough to create a charged vacuum.
- (B) Scientists assembled a superheavy atomic nucleus next to a vacuum, but found that no virtual particles were created in the vacuum's region of space.
- (C) Scientists assembled a superheavy atomic nucleus next to a vacuum, but found that they could not then detect any real particles in the vacuum's region of space.
- (D)Scientists introduced a virtual electron and a virtual positron into a vacuum's region of space, but found that the vacuum did not then fluctuate.
- (E) Scientists introduced a real electron and a real positron into a vacuum's region of space, but found that the total energy of the space increased by the energy equivalent of the mass of the particles.

### 阅读 2:

Q7:逻辑链:The essential condition for the decay of the vacuum is the presence of an intense electric field.

the decay of the vacuum 的必要条件是:the presence of an intense electric field,想要结论不成立,必要条件不成立即可;

"An electric field of sufficient intensity to create a charged vacuum is likely to be found in only one place: in the immediate vicinity of a super heavy atomic nucleus"

告诉我们 an intense electric field 的必要条件是: in the immediate vicinity of a super heavy atomic nucleus,只需必要条件不成立,结论就不成立;

逻辑思路清楚以后,但发现选项里没有这样的选项,这是为什么呢?因为这道题的定位不在这一段…… 更好的定位在这段文章的上一段:In other words, under these conditions the vacuum is an unstable state and can decay into a state of lower energy; i.e., one in which real particles are created.



Historians have only recently begun to note the increase in demand for luxury goods and services that took place in eighteenth-century England. To answer the question of why consumers became so eager to buy, some historians have pointed to the ability of manufacturers to advertise in a relatively uncensored press. This, however, hardly seems a sufficient answer. McKendrick favors a Veblen model of conspicuous consumption stimulated by competition for status. The "middling sort" bought goods and services because they wanted to follow fashions set by the rich. Again, we may wonder whether this explanation is sufficient. Do not people enjoy buying things as a form of self-gratification? If so, consumerism could be seen as a product of the rise of new concepts of individualism and materialism, but not necessarily of the frenzy for conspicuous competition. (135 words)

8.In the paragraph, the author is primarily concerned with

- (A) contrasting two theses and offering a compromise
- (B) questioning two explanations and proposing a possible alternative to them.
- (C) paraphrasing the work of two historians and questioning their assumptions
- (D) examining two theories and endorsing one over the other
- (E) raising several questions but implying that they cannot be answered.
- 9. According to the passage, a Veblen model of conspicuous consumption has been used to
- (A) investigate the extent of the demand for luxury goods among social classes in eighteenth-century England
- (B) classify the kinds of luxury goods desired by eighteenth-century consumers
- (C) explain the motivation of eighteenth-century consumers to buy luxury goods
- (D) establish the extent to which the tastes of rich consumers were shaped by the middle classes in eighteenth-century England
- (E)compare luxury consumerism in eighteenthcentury England with such consumerism in the twentieth century



How can the hormone adrenaline that does not act directly on the brain have a regulatory effect on brain function? Recently, we tested the possibility that one of the hormone's actions outside the brain might be responsible. Since one consequence of adrenaline release in an animal is an increase in blood glucose levels, we examined the effects of glucose on memory in rats. We found that glucose injected immediately after training enhances memory tested the next day. Additional evidence was provided by negative findings: drugs called adrenergic antagonists, which block peripheral adrenaline receptors, disrupted adrenaline's ability to regulate memory but did not affect memory enhancements produced by glucose that was not stimulated by adrenaline. These results are as they should be if adrenaline affects memory modulation by increasing blood glucose levels. (131 words)

10. The author refers to the results of the experiment using adrenergic antagonists as "negative findings" most likely because the adrenergic antagonists

- (A) failed to disrupt adrenaline's effect on memory
- (B) did not affect glucose's ability to enhance memory.
- (C) did not block adrenaline's ability to increase blood glucose levels
- (D) only partially affected adrenaline's ability to enhance memory
- (E) disrupted both adrenaline's and glucose's effect on memory

#### 阅读1:参考译文:

# 译文:

历史学家只是最近才注意到 18 世纪英格兰发生的对奢侈品和服务需求的增长。

为回答为什么消费者购买力旺盛的问题,有些历史学家指出当时生产者可以在相对无限制的报刊上大做广告,不过这难以充分地解释。McKendrick 倾向于 Veblen 模式,即为显示身分而大肆消费。"中产者"进行消费想跟上富人的生活时尚。同样,我们也会怀疑该说法的有效性。人们就不会为自我满足而购买物品吗?如果这样,消费现象可被看作是个人自由和实利主义新观念增长的结果,而不是疯狂攀比竞争的表现。

- Q8. This, however, hardly seems a sufficient answer; Again, we may wonder whether this explanation is sufficient; 两处转折接连否定了之前的两种说法,提出自己的主张,答案 B;
- Q9. 文章的主题就是讨论购买奢侈品的动机,答案 C;



阅读 2:参考翻译:

# 9610-4-短

# 译文:

虽然众所周知肾上腺素这种荷尔蒙是用来控制记忆存储的,但它不会通过血液进入脑细胞。我们面临一个明显的悖论:即一种荷尔蒙不直接作用于大脑,却如何对大脑功能起着如此巨大的影响?

最近,我们对一种可能性进行了测验,即荷尔蒙在脑外的某种作用可能会对大脑起决定性作用。因为肾上腺素在一只动物体内释放的后果是血液中的葡萄糖含量有明显提高,我们便研究葡萄糖对老鼠记忆力产生的影响。我们发现,葡萄糖在记忆力训练测试后立即被注射,会提高被检测的老鼠第二天的记忆力。另外,从反面的发现提供的证据表明:一种被称为肾上腺素功能阻断剂(adrenergic antagonists)的能阻滞周边肾上腺素受体的药物,可扰乱肾上腺素控制记忆的功能但不能影响由肾上腺素以外的原因促成的葡萄糖所产生的增强记忆功能。该实验结果确证了肾上腺素是通过增加血液中葡萄糖的含量来影响记忆力的。

### 重点词子:

hormone ['ho:məun] n. 荷尔蒙, 激素 adrenaline [əˈdrenəlin] n. 肾上腺素 peripheral [pərifərəl] a. 边缘的, 外围的

### 重要背景:

肾上腺素:肾上腺髓质所产生的主要激素。当交感神经兴奋时,其分泌增加,进入血内,能使心率加速、血管收缩、血压升高、血糖增加、支气管和胃肠道平滑肌松弛、瞳孔扩大,这些作用和交感神经兴奋时在末梢释放的去甲肾上腺素基本相同,它们共同组成机体的交感一肾上腺系统性调节的化学因素。作为药物,主要用以抢救过敏性休克和某些心跳停止的急救,治疗支

气管哮喘的发作和延长局部麻醉的作用。口服无效,需注射或局部应用。

### Q10:

作者指出肾上腺素功能阻断剂做实验的结果作为消极的发现(L13),很有可能是因为:原文有明示,L13~17:一种被称为肾上腺素功能阻断剂(adrenergiv antagonists)能阻滞周边肾上腺素受体的药物,可扰乱肾上腺素控制的记忆的功能但不能影响由肾上腺素以外的原因促成的葡萄糖所产生的增强记忆功能。

- ∴B 正确。没有影响葡萄糖增强记忆力的能力。
- A. 未能使肾上腺素对记忆力的影响中断。不是肾上腺素影响记忆,见 TS。
- C. 没阻止肾上腺素增加葡萄糖含量的能力。反。
- D. 只是部分地影响肾上腺素增加记忆力的能力。不符。
- E. 使肾上腺素和葡萄糖对记忆的影响都中断了。同 A。