

Exercise 34

Only an effective collaboration between filmmakers and art historians can create films that will enhance viewers' perceptions of art. Filmmakers need to resist the impulse to move the camera quickly from detail to detail for fear of boring the viewer, to frame the image for the sake of drama alone, to add music for fear of silence. Filmmakers are aware that an art object demands concentration and, at the same time, are concerned that it may not be compelling enough—and so they hope to provide relief by interposing "real" scenes that bear only a tangential relationship to the subject. But a work of art needs to be explored on its own terms. On the other hand, art historians need to trust that one can indicate and analyze, not solely with words, but also by directing the viewer's gaze. The specialized written language of art history needs to be relinquished or at least tempered for the screen. (158 words)

1. The passage suggests that a filmmaker desiring to enhance viewers' perceptions of art should do which of the following?

- (A) Rely on the precise language of art history when developing scripts for films on art.
- (B) Rely on dramatic narrative and music to set a film's tone and style.
- (C) Recognize that a work of art by itself can be compelling enough to hold a viewer's attention
- (D) Depend more strongly on narration instead of camera movements to guide the viewer's gaze.
- (E) Emphasize the social and the historical contexts within which works of art have been created.

2. According to the passage, art historians desiring to work with filmmakers to enhance the public's appreciation of art need to acknowledge which of the following?

- (A) The art historian's role in the creation of a film on art is likely to be a relatively minor one.
- (B) Film provides an ideal opportunity to acquaint viewers with a wide range of issues that relate incidentally to a work of art.
- (C) An in-depth analysis of a work of art is not an appropriate topic for a film on art.
- (D) Although silence may be an appropriate back-

ground when viewing a work of art in a museum, it is inappropriate in a film.

(E) Film can use nonverbal means to achieve some of the same results that a spoken or written discourse can achieve.

阅读 1 :

Q1:文章的意思就是说你的摄像机运动和音乐要少一点, not compelling 说的就是这些东西要 not impule , 要用 art 本身的力量和观众的 gaze 来说明问题, 所以正确答案 C ;

Q2 : 文中说 art historians need to trust that one can indicate and analyze, not solely with words, but also by directing the viewer's gaze. 所以正确答案 E;

As people age, their cells become less efficient and less able to replace damaged components. At the same time their tissues stiffen. For example, the lungs and the heart muscle expand less successfully, the blood vessels become increasingly rigid, and the ligaments and tendons tighten.

Few investigators would attribute such diverse effects to a single cause. Nevertheless, researchers have discovered that a process long known to discolor and toughen foods may also contribute to age- related impairment of both cells and tissues. That process is nonenzymatic glycosylation, whereby glucose becomes attached to proteins without the aid of enzymes. When enzymes attach glucose to proteins (enzymatic glycosylation), they do so at a specific site on a specific protein molecule for a specific purpose. In contrast, the nonenzymatic process adds glucose haphazardly to any of several sites along any available peptide chain within a protein molecule.

This nonenzymatic glycosylation of certain proteins has been understood by food chemists for decades, although few biologists recognized until recently that the same steps could take place in the body. Nonenzymatic glycosylation begins when an aldehyde group (CHO) of glucose and an amino group (NH₂) of a protein are attracted to each other. The molecules combine, forming what is called a Schiff base within the protein. This combination is unstable and quickly rearranges itself into a stabler, but still reversible, substance known as an Amadori product.

If a given protein persists in the body for months or years, some of its Amadori products slowly dehydrate and rearrange themselves yet again, into new glucose-derived structures.

These can combine with various kinds of molecules to form irreversible structures named advanced glycosylation end products (AGE's). Most AGE's are yellowish brown and fluorescent and have specific spectrographic properties. More important for the body, many are also able to cross-link adjacent proteins, particularly ones that give structure to tissues and organs. Although no one has yet satisfactorily described the origin of all such bridges between proteins, many investigators agree that extensive cross-linking of proteins probably contributes to the stiffening and loss of elasticity characteristic of aging tissues.

In an attempt to link this process with the development of cataracts (the browning and clouding of the lens of the eye as people age), researchers studied the effect of glucose on solutions of purified crystallin, the major protein in the lens of the eye. Glucose-free solutions remained clear, but solutions with glucose caused the proteins to form clusters, suggesting that the molecules had become cross-linked. The clusters diffracted light, making the solution opaque. The researchers also discovered that the pigmented cross-links in human cataracts have the brownish color and fluorescence characteristic of AGE's. These data suggest that nonenzymatic glycosylation of lens crystallins may contribute to cataract formation. (454 words)

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

3. According to the passage, which of the following is NOT characteristic of enzymatic glycosylation of proteins?

- A Proteins affected by the process are made unstable.
- B Glucose attachment impairs and stiffens tissues.
- C Glucose is attached to proteins for specific purposes.

4. According to the passage, which of the following statements is true of Amadori products in proteins?

- (A) They are more plentiful in a dehydrated environment.
- (B) They are created through enzymatic glycosylation.
- (C) They are composed entirely of glucose molecules.
- (D) They are derived from Schiff bases.
- (E) They are derived from AGE's

5. Which of the following best describes the function of the third paragraph of the passage?

- (A) It offers evidence that contradicts the findings described in the first two paragraphs.
- (B) It presents a specific example of the process discussed in the first two paragraphs.
- (C) It explains a problem that the researchers mentioned in the second paragraph have yet to solve.
- (D) It evaluates the research discoveries described in the previous paragraph.
- (E) It begins a detailed description of the process introduced in the previous two paragraphs.

6. The passage suggests that which of the following would be LEAST important in determining whether nonenzymatic glycosylation is likely to have taken place in the proteins of a particular tissue?

- (A) The likelihood that the tissue has been exposed to free glucose
- (B) The color and spectrographic properties of structures within the tissue.
- (C) The amount of time that the proteins in the tissue have persisted in the body
- (D) The number of amino groups within the proteins in the tissue
- (E) The degree of elasticity that the tissue exhibits

参考翻译：

参考译文

生物化学：无酶催化糖基化作用可能引起身体组织的损伤

当人们进入老年时，身体上的细胞取代受损部位变得更加无效、更加无能取代受损组织。同时，身体组织硬化了。例如，心肺肌肉扩张能力较差，血管变得越来越僵硬，韧带和肌腱也是这样。

科研人员很少会把这种结果归之于单一的原因。然而，科研人员发现一种早已为人们熟知使食物变色变硬的过程也可能引起与老年有关的细胞损伤和组织损伤的结果。那样的过程叫做无酶催化糖基化的作用。葡萄糖通过这种作用不经酶的帮助直接附着于蛋白质。当酶使葡萄糖附着于蛋白质（这叫做酶糖基化作用）时，酶是在特定蛋白质分子上，在特定的部位中为特定目的而这样起作用的。对比之下，无酶催化过程随机地把葡萄糖加入沿蛋白质分子中任何可利用的肽链的任何几个部位上。

某些蛋白质的这种无酶催化糖基化作用几十年来已为食物化学家所熟知，虽然直到最近，大多数生物学家才确认同样的步骤可能在体内发生。当葡萄糖的乙醛基（CHO）同蛋白质的氨基（NH₂）相互吸引，无酶催化糖基化作用就开始了。这些分子相结合，组成称为蛋白质中的席夫碱物质。这种结合是不稳定的，很快重新组合成较稳定的、但仍然可逆转的物质，称为阿莫多利生成物。

如果上述的蛋白质成年累月在体内存留，这种蛋白质的阿莫多利生成物慢慢脱水，再次重新组合成新的由葡萄糖形成的结构。这些结构能够同各种分子相结合，形成不可逆转的结构，称为高级糖基化终端生成物（AGE's）。多数高级糖基化终端生成物是棕黄色，发荧光的，有特定光谱仪的特性。对于身体更为重要的是许多高级糖基化终端生成物也能同邻近的蛋白质交叉连接，尤其是同那些形成组织结构和器官结构的蛋白质交叉连接。虽然还不能令人满意地描述蛋白质之间所有这些搭链连接的起因。许多科研工作者一致的意见是蛋白质之间的广泛的交叉连接也许会引起老年身体组织的僵化和缺乏弹性。

科研人员试图把这种过程同白内障的发生（老年眼球晶体呈现棕色变得混浊）联系起来，研究了葡萄糖对眼球晶体中主要的蛋白质——净化的结晶溶液的作用。不受葡萄糖作用的溶液保持清澈，混入葡萄糖的溶液使蛋白质聚集成簇。这表明蛋白质分子已呈交叉连接状态。蛋白质簇使

光波发生衍射，结果使溶液不透明。这些科研人员也发现人类白内障染色的交叉连接呈现高级糖基化终端生成物（AGE's）特有的棕色和荧光。这些资料表明眼球晶体结晶的无酶催化糖基化作用可能引起白内障的形成。

Q3. 定位在：

When enzymes attach glucose to proteins (enzymatic glycosylation), they do so at a specific site on a specific protein molecule for a specific purpose ;

对应 C，其他两个选项文章没提，答案 AB；

Q4. The molecules combine, forming what is called a Schiff base within the protein.

This combination is unstable and quickly rearranges itself into a stabler, but still reversible, substance known as an Amadori product. 所以答案 D；

Q5. 详细叙述了 Nonenzymatic glycosylation 的过程，答案 E；

Q6. Nonenzymatic glycosylation begins when an aldehyde group (CHO) of glucose and an amino group (NH₂) of a protein are attracted to each other 只是提了，但是没有说数量，所以是 D；

A 中 the tissue has been exposed to free glucose 实际上就是 glycosylation，不能说没有关系；

7. It takes a particular talent to be a successful business manager. Business courses can help people to solve management problems, but such courses can do so

only for those people with managerial talent. Such people should take business courses to acquire ideas that they can subsequently use to good advantage if management problems happen to arise.

If the statements above are true, which of the following must also be true on the basis of them?

- (A) People who are helped by business courses in solving management problems also have managerial talent.
- (B) People who are already skilled at solving management problems are unlikely to benefit from business courses.
- (C) Most ideas that are used successfully in solving management problems are those acquired in business courses.
- (D) People who lack managerial talent are more likely to take business courses than are people who have managerial talent.
- (E) Those people who have never taken business courses are unable to solve management problems when such problems arise.

阅读 2 :

只有具有天赋，才能上课；天赋是上课的前提假设（必要条件），上课是天赋的充分条件；

文章结论是：那些都应该来上课；若想让上课成立，那么其前提假设必须成立，即那些上课人必须要有天赋，答案 A；

The age at which young children begin to make moral discriminations about harmful actions committed against themselves or others has been the focus of recent research into the moral development of children. Until recently, child psychologists supported pioneer developmentalist Jean Piaget in his hypothesis that because of their immaturity, children under age seven do not take into account the intentions of a person committing accidental or deliberate harm, but rather simply assign punishment for transgressions on the basis of the magnitude of the negative consequences caused. However, in recent research, Keasey found that six- year-old children not only distinguish between accidental and intentional harm, but also judge intentional harm as naughtier, regardless of the amount of damage produced. Both of these findings seem to indicate that children, at an earlier age than Piaget claimed, advance into the second stage of moral development, moral autonomy, in which they accept social rules but view them as

more arbitrary than do children in the first stage. (163 words)

8. According to the passage, Piaget and Keasey would not have agreed on which of the following points?

- (A) The kinds of excuses children give for harmful acts they commit
- (B) The age at which children begin to discriminate between intentional and unintentional harm
- (C) The intentions children have in perpetrating harm
- (D) The circumstances under which children punish harmful acts
- (E) The justifications children recognize for mitigating punishment for harmful acts

9. According to the passage, Keasey's findings support which of the following conclusions about six-year-old children?

- (A) They have the ability to make autonomous moral judgments.
- (B) They regard moral absolutism as a threat to their moral autonomy.
- (C) They do not understand the concept of public duty.
- (D) They accept moral judgment made by their peers more easily than do older children.
- (E) They make arbitrary moral judgments.

As of the late 1980's, neither theorists nor large-scale computer climate models could accurately predict whether cloud systems would help or hurt a warming globe. Some studies suggested that a four percent increase in stratocumulus clouds over the ocean could compensate for a doubling in atmospheric carbon dioxide, preventing a potentially disastrous planetwide temperature increase. On the other hand, an increase in cirrus clouds could increase global warming.

That clouds represented the weakest element in climate models was illustrated by a study of fourteen such models. Comparing climate forecasts for a world with double the current amount of carbon dioxide, researchers found that the models agreed quite well if clouds were not included. But when clouds were incorporated, a wide range of forecasts was produced.

(125 words)

10. Select the sentence that indicates one reason the fourteen models described in the passage failed to agree.

阅读 1: 参考翻译:

参考译文

儿童心理学:当前关于儿童道德发展阶段的研究

幼童开始对施加于自己或他人的有害行为进行道德辨别的年龄是最近儿童道德发展研究的焦点。直到最近,儿童心理学家仍然支持发展心理学家、日内瓦心理学派创始人琼·皮亚杰提出的假说:七岁以下的儿童,由于不成熟,并不考虑犯意外或故意伤害行为的人的意图,而相反,简单地根

据所造成消极后果的大小,对过失给予惩罚。根据皮亚杰的观点,七岁以下的儿童处在道德发展的第一阶段,以道德的绝对标准(权威制定的规则必须遵守)和逼近的公正原则(违反规则,要给予惩罚)为特征。在幼童成熟以前,他们的道德判断完全根据过失的后果,而不是根据过失的原因。然而,基塞在最近的研究中发现:六岁的儿童不但能区分意外和有意的伤害行为,而且断定有意伤害行为更坏,不管所造成损失的大小。这两个发现似乎表明:儿童比皮亚杰所主张的年龄要早些进入道德发展的第二阶段,即道德自主标准阶段。在这个阶段中,儿童接受社会规则,但对社会规则看得不如第一阶段那样绝对。

阅读 2: 参考翻译:

气候学:云层系统对气温的影响

直到 20 世纪 80 年代末期,不论是理论家还是大规模计算机气候模型都不能准确预测云层系统是否会有助于或有害于正在变暖的地球。有些研究表明,海洋上空增长 4% 的层积云可能抵消大气中二氧化碳的成倍增长,阻止可能是全球范围的灾难性的气温增高。而另一方面,卷云的增长可能提高全球的气温。

云层体现气候模型研究中最不充分的因素,这种情况为 14 种这样的模型研究所显示。比较对地球当前二氧化碳量增加一倍的气候预报,研究工作者发现:如果云层这个因素不包括在内,所有这些模型的结论非常一致。但是,当云层的因素包括在内,产生的预报变动幅度就很大。由于这种种差异使所有这些模型不够准确,科学家不能轻而易举地预测地球气候会怎样迅速地发生变化,也不能指出哪些地区会面临更加灰尘弥漫的旱灾或更破坏性的季风。

BA

Q8,由首句“The age at which young children begin to make moral discriminations about harmful actions committed against themselves or others has been the focus of recent research into the moral development of children.” + “children under age seven” + “six-year-old children”, 不选年龄就不知道选什么了

Q9, 最后一句“advance into the second stage of moral development, moral autonomy” autonomy 是选项 A autonomous 的词性转换

Q10 “But when clouds were incorporated, a wide range of forecasts was produced”, 一个 but 与上句的 agree quite well 相反,意思跃然纸上。