GRE 阅读小笔记 Exercise 5

The belief that art originates in intuitive rather than rational faculties was worked out historically and philosophically in the somewhat wearisome volumes of Benedetto Croce, who is usually considered the originator of a new aesthetic. Croce was, in fact, expressing a very old idea. Long before the Romantics stressed intuition and self-expression, the frenzy of inspiration was regarded as fundamental to art, but philosophers had always assumed it must be controlled by law and by the intellectual power of putting things into harmonious order. This general philosophic concept of art was supported by technical necessities. It was necessary to master certain laws and to use intellect in order to build Gothic cathedrals, or set up the stained glass windows of Chartres. When this bracing element of craftsmanship ceased to dominate artists' outlook, new technical elements had to be adopted to maintain the intellectual element in art. Such were linear perspective and anatomy. (156 words)

==========

6. The passage suggests that which of the following would most likely have occurred if linear perspective and anatomy had not come to influence artistic endeavor?

~~(A) The craftsmanship that shaped Gothic architecture would have continued to dominate artists' outlooks~~.

(B) Some other technical elements would have been adopted to discipline artistic inspiration.

(C) Intellectual control over artistic inspiration would not have influenced painting as it did architecture.

(D) The role of intuitive inspiration would not have remained fundamental to theories of artistic creation.

(E) The assumptions of aesthetic philosophers before Croce would have been invalidated.

7. Select the sentence in the passage that indicates a

traditional assumption of aesthetic philosophers.

8. The author mentions ―linear perspective and anatomy‖ in the last sentence in order to do which of the following ?
(A) Expand his argument to include painting as well as architecture
(B) Indicate his disagreement with Croce‘s theory of the origins of art
(C) Support his point that rational order of some kind has often seemed to discipline artistic inspiration
(D) Explain the rational elements in Gothic painting that corresponded to craftsmanship in Gothic architecture
(E) Show the increasing sophistication of artists after the Gothic period

==========

Nahuatl, like Greek and German, is a language that allows the formation of extensive compounds. By the combination of radicals or semantic elements, single compound words can express complex conceptual relations, often of an abstract universal character. The tlamatinime (―those who know‖) were able to use this rich stock of abstract terms to express the nuances of their thought. They also availed themselves of other forms of expression with metaphorical meaning, some probably original, some derived from Toltec coinages. Of these forms the most characteristic in Nahuatl is the juxtaposition of two words that, because they are synonyms, associated terms, or even contraries, complement each other to evoke one single idea. Used as metaphor, the juxtaposed terms connote specific or essential traits of the being they refer to, introducing a mode of poetry as an almost habitual form of expression. (140 words)

==========

9. According to the passage, some abstract universal ideas can be expressed in Nahuatl by
(A) taking away from a word any reference to particular instances
(B) removing a word from its associations with other words
(C) giving a word a new and opposite meaning

(D) putting various meaningful elements together in one word
(E) turning each word of a phrase into a poetic metaphor

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

10. It can be inferred solely from the information in the passage EXCEPT that

□~~A all abstract universal ideas are ideas of complex relations~~
□B some record or evidence of the thought of the tlamatinime exists
□C metaphors are always used in Nahuatl to express abstract conceptual relationships

OK, here are the answers!

阅读 1：

Q6：由 linear perspective and anatomy 定位至文章末尾，往前看至原文 line 16，“new technical elements had to be adopted to maintain the intellectual element in art. Such were linear perspective (linear perspective: 直线透视图) and anatomy. 通过 new technical elements had to be adopted 可以推知在那之前就有一些 technical elements 已经被采用。所以正确选项 B；

Q7:由 assumption & philosophers. 定位至 line 6， Long before the Romantics stressed intuition and self-expression, the frenzy of inspiration was regarded as fundamental to art, but philosophers had always assumed it must be controlled by law and by the intellectual power of putting things into harmonious order.

Q8：看到原文说了这么一句话：“It was necessary to master certain laws and to use intellect in order to build Gothic cathedrals, or set up the stained glass windows of Chartres. When this bracing element of craftsmanship ceased to dominate artists' outlook, new technical elements had to be adopted to maintain the intellectual element in art.”所以正确答案 C；

阅读 2：

Q9：由 abstract universal ideas 定位至 line5，再往前看到了 By the combination of radicals or semantic elements, single compound words can express complex conceptual relations，所以很明显，正确答案 D；

Q10：哪个是从原文找不到的，注意 except，这种题常常一不小心就选反了
解析：A 选项一上来就看到个 all，这种极端词汇哪能轻易用呢？于是乎抱着极大的怀疑感找到了 line5 的 often，所以 A 选项与原文不符，正确；

B 选项说的是有关于 t...那个东东的记录，看到第二段一上来在说些什么了吧，没有记录怎么能知道那么多关于 t...的东西，所以 B 可从原文推断，不选；

C 选项和 A 一样，are always used...所以有悖于原文，选； 关于该选项有个别书籍答案没有选，但是请注意，这是 OG 里面的原文，官方指南都选了，那当然要跟着权威一起选啦~~~

Many theories have been formulated to explain the role of grazers such as zooplankton in controlling the amount of planktonic algae (phytoplankton) in lakes. The first theories of such grazer control were merely based on observations of negative correlations between algal and zooplankton numbers. A low number of algal cells in the presence of a high number of grazers suggested, but did not prove, that the grazers had removed most of the algae. The converse observation, of the absence of grazers in areas of high phytoplankton concentration, led Hardy to propose his principle of animal exclusion, which hypothesized that phytoplankton produced a repellent that excluded grazers from regions of high phytoplankton concentration. This was the first suggestion of algal defenses against grazing.

Perhaps the fact that many of these first studies considered only algae of a size that could be collected in a net (net phytoplankton), a practice that overlooked the smaller phytoplankton (nannoplankton) that we now know grazers are most likely to feed on, led to a de-emphasis of the role of grazers in subsequent research. Increasingly, as in the individual studies of Lund, Round, and Reynolds, researchers began to stress the importance of environmental factors such as temperature, light, and water movements in controlling algal numbers. These environmental factors were amenable to field monitoring and to simulation in the laboratory. Grazing was believed to have some effect on algal numbers, especially after phytoplankton growth rates declined at the end of bloom periods, but grazing was considered a minor component of models that predicted algal population dynamics.

The potential magnitude of grazing pressure on freshwater phytoplankton has only recently been determined empirically. Studies by Hargrave and Geen estimated natural community grazing rates by measuring feeding rates of individual zooplankton species in the laboratory and then computing com-

munity grazing rates for field conditions using the known population density of grazers. The high estimates of grazing pressure postulated by these researchers were not fully accepted, however, until the 45 grazing rates of zooplankton were determined directly in the field, by means of new experimental techniques. Using a specially prepared feeding chamber, Haney was able to record zooplankton grazing rates in natural field conditions. In the periods of peak zooplankton 50 abundance, that is, in the late spring and in the summer, Haney recorded maximum daily community grazing rates, for nutrient-poor lakes and bog lakes, respectively, of 6.6 percent and 114 percent of daily phytoplankton production. Cladocerans had higher grazing rates than 55 copepods, usually accounting for 80 percent of the community grazing rate. These rates varied seasonally, reaching the lowest point in the winter and early spring. Haney‘s thorough research provides convincing field evidence that grazers can exert significant pressure on 60 phytoplankton population. (461 words)

==========

1. It can be inferred from the passage that the ―first theories‖ of grazer control mentioned in the first paragraph would have been more convincing if researchers had been able to

(A) observe high phytoplankton numbers under natural lake conditions

(B) discover negative correlations between algae and zooplankton numbers from their field research

(C) understand the central importance of environmental factors in controlling the growth rates of phytoplankton

(D) make verifiable correlations of cause and effect between zooplankton and phytoplankton numbers

(E) invent laboratory techniques that would have allowed them to bypass their field research concerning grazer control

2. Which of the following, if true, would call into question Hardy‘s principle of animal exclusion?

(A) Zooplankton are not the only organisms that are affected by phytoplankton repellents.

(B) Zooplankton exclusion is unrelated to phytoplankton population density.
(C) Zooplankton population density is higher during some parts of the year than during others.
(D) Net phytoplankton are more likely to exclude zooplankton than are nannoplankton.
(E) Phytoplankton numbers can be strongly affected by environmental factors.

For the following question, consider each of the choices separately and select all that apply
3. The author would be likely to agree with which of the following statements regarding the pressure of grazers on phytoplankton numbers?

□A Grazing pressure can vary according to the individual type of zooplankton.
□B Grazing pressure can be lower in nutrient-poor lakes than in bog lakes.
□C Grazing tends to exert about the same pressure as does temperature.
4. It can be inferred from the passage that one way in which many of the early researchers on grazer control could have improved their data would have been to
(A) emphasize the effects of temperature, rather than of light, on phytoplankton
(B) disregard nannoplankton in their analysis of phytoplankton numbers
(C) collect phytoplankton of all sizes before analyzing the extent of phytoplankton concentration
(D) recognize that phytoplankton other than net phytoplankton could be collected in a net
(E) understand the crucial significance of net phytoplankton in the diet of zooplankton

5. According to the passage, Hargrave and Geen did which of the following in their experiments?
(A) They compared the grazing rates of individual zooplankton species in the

laboratory with the natural grazing rates of these species.
(B) The hypothesized about the population density of grazers in natural habitats by using data concerning the population density of grazers in the laboratory.
(C) They estimated the community grazing rates of zooplankton in the laboratory by using data concerning the natural community grazing rates of zooplankton.
(D) They estimated the natural community grazing rates of zooplankton by using data concerning the known population density of phytoplankton.
(E) They estimated the natural community grazing rates of zooplankton by using laboratory data concerning the grazing rates of individual zooplankton species.

文章较长，先来个翻译。

科学家迄今已阐述了诸多理论,用以解释诸如浮游动物（zooplankton）一类的食草动物（grazer）在控制湖泊中浮游水藻（浮游植物，phytoplankton）数量这方面的作用。有关这种食草动物控制作用的最初理论，所依据的仅仅是对水藻数量的浮游动物数量间的负联系所作的观察。在存在大量食草动物的同时却只有少量的水藻花粉囊，这暗示出——但没能证明——食草动物已吞噬了大部分水藻。对相反情形的观察，即在浮游植物高度密集的区域食草动物荡然无存，致使哈代（Hardy）提出他那动物被驱逐的原理，该原理假设，浮游植物会制造出一种驱避物质（repellent），将食草动物从浮游植物高密集的区域驱赶出去。这是最早有关水藻抵御食草动物的吞噬所作出的暗示。

或许基于这一事实，即许多这些早期的研究仅仅考虑了一种其尺寸可用网兜收集起来的水藻（网浮游植物，net phytoplankton），而正是这一做法，忽略了我们现在所已知的食草动物最有可能赖以为生的较小浮游植物（纤浮游植物，nannoplankton），故而导致科学家在随后的研究中贬低食草动物的作用。正如在伦德、朗德、和雷诺兹（Lund，Round，and Reynolds）的单独研究中那样，科研人员开始越来越强调诸如温度光照、以及水的运动这类环境因素在控制水藻数量方面的重要性。这些环境因素可经受实地监测的检验和实验室内的模拟研究。食草动物的吞食据信会对水藻数量产生一定的影响，尤其是于开花期末期在浮游植物的生长率下降之后；但在那些预测水藻种群动态的模型中，食草动物的吞食视被作一个次要的组成部分。

浮游动物对生长在淡水中的浮游植物所产生的压力，其潜在强度只是在最近才得以通过经验主义的手段确定。由哈格雷夫（Hargrave）和吉恩（Geen）所进行的研究，对自然条件下的群落食草比例进行了估计，其手段是通过测量出实验室内单独的浮游动物种类的结食比例，然后利用已知的食草动物种群密度，计算出实地状况下的群落食草比例。然则，这两位科研人员所假设的食草压力的高估算，直到浮游动物的食草比率通过新的实验技术，直接牵头地获得确证之后，才获得充分的接受。凭借一种特殊准备的给食室，哈尼（Haney）得以记录下自然实地条件下浮游动物的食草比率。在浮游动物数量激增的高峰期，亦即在春季后期以及夏季，哈尼记录了最大程度上的每日群落食草比率，对于营养物不充足的湖和沼泽湖而言，分别为每日浮游植物繁殖量的 6.6%和 114%。枝角目动物（cladoceran）的食草比率要高于桡足亚纲动物（copepod），一般占群落食草比率的 80%。

这些比率会随季节而变化，在冬季和早春达到最低点。哈尼全面彻底的研究提供了令人信服的实地证据，证明食草动物确能对浮游植物的种群数量产生重大的压力。

Q1：由 first theory 定位到 line 4，文章提到，merely based on negative correlations，所以当题目问道怎样能 more convincing，那当然是 make verifiable correlations，选 D；

Q2：哪个让 H 的 theory 有问题？
解析：由 Hardy 定位到 line9-12，原文说 The converse observation, of the absence of grazers in areas of high phytoplankton concentration, led Hardy to propose his principle of animal exclusion。所以如果这个 high phytoplankton concentration 是与 exclusion 木有关系的，那么这个理论依据本身就有问题了，所以选 B；

Q3：regarding the pressure of grazers on phytoplankton numbers 作者同意那个？
解析：由 pressure 定位至第三段，再根据选项找到具体位置，A 由 individual 找到 line39，正确，B 由 nutrition bog 等词定位到 52-54，又百分比可知该选项正确。选 AB；

Q4：由 early researchers 定位到 para 2 段首句 first studies，得知应该考虑到 all sizes，所以选 C；

Q5：由 H & G 定位到 line37，选 E；

Since science tries to deal with reality, even the most
precise sciences normally work with more or less
imperfectly understood approximations toward which
Line scientists must maintain an appropriate skepticism. Thus,
5 for instance, it may come as a shock to mathematicians to
learn that the Schrodinger equation for the hydrogen atom
is not a literally correct description of this atom, but only
an approximation to a somewhat more correct equation
taking account of spin, magnetic dipole, and relativistic
10 effects; and that this corrected equation is itself only an
imperfect approximation to an infinite set of quantum
field-theoretical equations. Physicists, looking at the
original Schrodinger equation, learn to sense in it the
presence of many invisible terms in addition to the
15 differential terms visible, and this sense inspires an
entirely appropriate disregard for the purely technical
features of the equation. This very healthy skepticism is
foreign to the mathematical approach. Mathematics must
deal with well-defined situations. Thus, mathematicians
20 depend on an intellectual effort outside of mathematics
for the crucial specification of the approximation that

mathematics is to take literally. (177 words)
==========

11. According to the passage, scientists are skeptical toward their equations because scientists
(A) work to explain real, rather than theoretical or simplified, situations
(B) know that well-defined problems are often the most difficult to solve
(C) are unable to express their data in terms of multiple variables
(D) are unwilling to relax the axioms they have developed
(E) are unable to accept mathematical explanations of natural phenomena

12. The author implies that scientists develop a healthy skepticism because they are aware that
(A) mathematicians are better able to solve problems than are scientists
(B) changes in axiomatic propositions will inevitably undermine scientific arguments
(C) well-defined situations are necessary for the design of reliable experiments
(D) mathematical solutions can rarely be applied to real problems
(E) some factors in most situations must remain unknown

阅读 1：

Q1：由 skeptical 定位到 line 4，问原因，看到了文章第一个词 since，很直白的一句话 Since science tries to deal with reality，所以正确答案选 A；

Q2：由 healthy skeptism 定位到文章 line17，还是问原因，那么好的往前看哈，Physicists, looking at the original Schrodinger equation, learn to sense in it the presence of many invisible terms in addition to the differential terms visible，看到了什么么？有一些是 invisible 的，所以选 E；