TPO 38 – 1 Microscopes
显微镜

Before microscopes were first used in the seventeenth century, no one knew that living organisms were composed of cells. The first microscopes were light microscopes, which work by passing visible light through a specimen. Glass lenses in the microscope bend the light to magnify the image of the specimen and project the image into the viewer's eye or onto photographic film. Light microscopes can magnify objects up to 1,000 times without causing blurriness.
在 17 世纪显微镜第一次投入使用之前，人们都不知道生物体是由细胞构成的。 第一代显微镜是光学显微镜，其工作原理是将可视光透过样本。 显微镜中的玻璃镜片通过弯曲光线将样本放大，并将样本的影像投进观察者的眼中或者感光胶片上。 光学显微镜能将物体放大 1000 倍而不会模糊。

Magnification, the increase in the apparent size of an object, is one important factor in microscopy. Also important is resolving power, a measure of the clarity of an image. Resolving power is the ability of an optical instrument to show two objects as separate. For example, what looks to the unaided eye like a single star in the sky may be resolved as two stars with the help of a telescope. Any optical device is limited by its resolving power. The light microscope cannot resolve detail finer than 0.2 micrometers, about the size of the smallest bacterium; consequently, no matter how many times its image of such a bacterium is magnified, the light microscope cannot show the details of the cell's internal structure.
将物体的外观尺寸放大是显微镜学的一个重要因素。 另一个重要因素是分辨率，即影像的清晰度。 分辨率使得光学仪器将两个物体区分开来。例如，天空中的星星，在肉眼看来是一颗，但借助望远镜观察之后会发现其实是两颗。 任何光学仪器都受到分辨率的制约。 光学显微镜不能够分辨小于 0.2 微米的细节，这相当于最小的细菌的大小；因此，不论这个细菌被放大了多少倍，光学显微镜都不能展现出细胞内部结构的细节。

From the year 1665, when English microscopist Robert Hooke discovered cells, until the middle of the twentieth century, biologists had only light microscopes for viewing cells. But they discovered a great deal, including the cells composing animal and plant tissues, microscopic organisms, and some of the structures within cells. By the mid-1800s, these discoveries led to the cell theory, which states that all living things are composed of cells and that all cells come from other cells.
从 1665 年英国显微镜学家 Robert Hooke 发现细胞到二十世纪中期，生物学家只能通过光学显微镜来观察细胞。 但是他们也发现了许多东西，包括组成动植物组织的细胞、微观生物体以及细胞内的一些结构。 直到 19 世纪中期，这些发现促成了细胞学说，声称所有的生命体都是由细胞构成的，而细胞又都是由另外一些细胞构成。

Our knowledge of cell structure took a giant leap forward as biologists began using the electron microscope in the 1950s. Instead of light, the electron microscope uses a beam of electrons and has a much higher resolving power than the light microscope. In fact, the most powerful modern electron microscopes can distinguish objects as small as 0.2 nanometers,

a thousandfold improvement over the light microscope. The period at the end of this sentence is about a million times bigger than an object 0.2 nanometers in diameter, which is the size of a large atom. Only under special conditions can electron microscopes detect individual atoms. However, cells, cellular organelles, and even molecules like DNA and protein are much larger than single atoms.
直到二十世纪 50 年代，由于电子显微镜的使用，我们对于细胞结构的了解实现了巨大飞跃。不再利用光线，电子显微镜利用的是电子束而且比光学显微镜具有更高的分辨率。 实际上，现代最先进的电子显微镜能够识别直径为 0.2 纳米的物体，比光学显微镜进步了成千倍。 在本句话末尾的那个句号在直径上比一个大一点的原子 0.2 纳米的直径大了一百万倍。 只有在特殊情况下电子显微镜才能发现原子。 但是，细胞、细胞器、甚至像 DNA 和蛋白质这样的分子都比单个的原子要大得多。

Biologists use the scanning electron microscope to study the detailed architecture of cell surfaces. It uses an electron beam to scan the surface of a cell or group of cells that have been coated with **metal**. The **metal** stops the beam from going through the cells. When the metal is hit by the beam, it emits electrons. The electrons are focused to form an image of the outside of the cells. The scanning electron microscope produces images that look three-dimensional.
生物学家使用扫描电子显微镜研究细胞表面的具体构造。细胞或者细胞群被覆盖上金属涂层。电子束扫描细胞的时候，金属涂层阻挡住电子束进入细胞内。 当电子束击中金属的时候，金属将电子发射出去。 因此，电子的聚集显示出了细胞的轮廓。 扫描电子显微镜的成像看起来是三维立体的。

批注 [1]: 这里有两句话，metal 的功能是哪一句里陈述的？
第一句引出 metal;
第二句陈述 metal 的功能；

The transmission electron microscope, on the other hand, is used to study the details of internal cell structure. Specimens are cut into extremely thin sections, and the transmission electron microscope aims an electron beam through a section, just as a light microscope aims a beam of light through a specimen. However, instead of lenses made of glass, the transmission electron microscope uses electromagnets as lenses, **as do** all electron microscopes. The electromagnets bend the electron beam to magnify and focus an image onto a viewing screen or photographic film.
另一方面，透射电子显微镜被用来研究细胞的内部结构。 样本被切割成极其薄的切片，透射电子显微镜将电子束穿透切片，正如光学显微镜将光束透过样本一样。 但是，与光学显微镜不同的是，它不是用玻璃作为镜片，而是使用电磁体作为镜片，正如所有的电子显微镜一样。电磁体弯曲了电子束去放大影像，并将影像投在观察屏上或感光胶片上。

批注 [2]: 翻译：和 all electron microscopes 一样。
考点提取：as do sth.
(和 xxx 一样)
Electron microscopes 包括:
Transmission electron microscope
Scanning electron microscope

Electron microscopes have truly revolutionized the study of cells and cell organelles. Nonetheless, they have not replaced the light microscope. One problem with electron microscopes is that they cannot be used to study living specimens because the specimen must be held in a vacuum chamber; that is, all the air and liquid must be removed. For a biologist studying a living process, such as the whirling movement of a bacterium, a light microscope equipped with a video camera might be better than either a scanning electron microscope or a transmission electron microscope. Thus, the light microscope remains a

useful tool, especially for studying living cells. The size of a cell often determines the type of microscope a biologist uses to study it.
电子显微镜的确彻底变革了对细胞和细胞器的研究。但是，它并没有取代光学显微镜的地位。电子显微镜的局限性之一是，它没法用来研究活的样本，因为样本必须保存在真空的空间里；也就是说，所有的空气和液体都必须被去除。 如果一个生物学家正在研究一个活体过程，比如一个细菌的旋动，装备有摄像机的光学显微镜就比扫描电子显微镜或透射电子显微镜好用了。因此，光学显微镜仍是一个有用的工具，尤其是研究活的细胞的时候。 细胞的大小经常决定了生物学家选用哪种显微镜来研究它。

TPO 38 – 2 The Racoon's Success
浣熊的成功

Raccoons have a vast transcontinental distribution, occurring throughout most of North America and Central America. They are found from southern Canada all the way to Panama, as well as on islands near coastal areas. They occur in each of the 49 states of the continental United States. Although raccoons are native only to the Western Hemisphere, they have been successfully transplanted to other parts of the globe.
浣熊有着横贯大陆的广泛分布，北美洲和中美洲的大部分都有他们的身影。 从加拿大的南部一直到巴拿马，以及在沿海地区的岛屿上都可以找到浣熊的足迹。 美国本土的 49 个州都有它们的分布。 尽管浣熊本来只存在于西半球，它们也成功迁移到了其他地方。

Following a decline to a relatively low population level in the 1930s, raccoons began to prosper following their 1943 breeding season. A rapid population surge continued throughout the 1940s, and high numbers have been sustained ever since. By the late 1980s, the number of raccoons in North America was estimated to be at least 15 to 20 times the number that existed during the 1930s. By now, their numbers have undoubtedly grown even more, as they have continued to expand into new habitats where they were once either rare or absent, such as sandy prairies, deserts, coastal marshes, and mountains. Their spread throughout the Rocky Mountain West is indicative of the fast pace at which they can exploit new environments. Despite significant numbers being harvested and having suffered occasional declines, typically because of disease, the raccoon has consistently maintained high population levels.
在二十世纪三十年代，浣熊的数量跌倒了一个相对低点，1943 年它们的繁殖季之后，浣熊的数量又开始发展壮大。 浣熊数量的快速增长贯穿了上世纪 40 年代始终，之后便一直维持着高位。 到上世纪 80 年代末，北美洲的浣熊数量至少是 30 年代数量的 15 到 20 倍。 到如今，浣熊的数量无疑又增长了很多，因为它们不断的扩展到新的栖息地，这些栖息地之前没有或者很少有浣熊的存在，比如，沙地草原、沙漠、沿海湿地以及山地。 它们在落基山西部的分布就是它们快速开拓新环境的典型示例。 尽管浣熊的数量收获了大幅增长，有时候会因为疾病有偶然性的下滑，浣熊的数量一直保持着较高水平。

Several factors explain the raccoon's dramatic increase in abundance and distribution. First, their success has been partially attributed to the growth of cities, as they often thrive in suburban and even urban settings. Furthermore, they have been deliberately introduced throughout the continent. Within the United States, they are commonly taken from one area to another, both legally and illegally, to restock hunting areas and, presumably, because people simply want them to be part of their local fauna. Their appearance and subsequent flourishing in Utah's Great Salt Lake valley within the last 40 years appears to be from such an introduction. As an example of the ease with which transplanted individuals can succeed, raccoons from Indiana (midwestern United States) have reportedly been able to flourish on islands off the coast of Alaska.
一些因素能够解释浣熊在数量和分布范围上的快速增长。 首先，它们的成功一部分归因于城市的发展，因为它们经常活跃在郊区甚至是城区。 此外，它们还被有意引入美洲大陆的各个

地方。 在美国内部，浣熊经常被从一个地方带到另一个地方，有些是合法的有些是非法的，它们被用来重建狩猎区，或者因为人们仅仅是希望浣熊成为当地动物种类的一部分。 过去的 40 年间它们在犹他州大盐湖谷底的出现和繁荣发展就是源于这种引入方式。 美国中西部的印第安纳州的浣熊能够在阿拉斯加海岸附近的小岛上繁荣兴旺，这正是迁移引入的一个很好的例子。

The raccoon's expansion in various areas may also be due to the spread of agriculture. Raccoons have been able to exploit crops, especially corn but also cereal grains, which have become dependable food sources for them. The expansion of agriculture, however, does not necessarily lead to rapid increases in their abundance. Farming in Kansas and eastern Colorado (central and western United States) proceeded rapidly in the 1870s and 1880s, but this was about 50 years before raccoons started to spread out from their major habitat, the wooded river bottomlands. They have also expanded into many areas lacking any agriculture other than grazing and into places without forests or permanent streams.
浣熊在不同地区的扩展分布也许也是因为农业的发展。 浣熊能够采摘农作物，尤其是玉米，也包括谷类，是浣熊的主要食物来源。 农业的扩张并不一定会引起浣熊数量的急剧增长。 十九世纪 70 年代至 80 年代，农业在堪萨斯州和科罗拉多州东部地区快速发展，但是直到 50 年后浣熊才从主要栖息地—长满树木的河流低地—开始向外扩张。 它们甚至也向只有牧场没有其他农业的地区扩张，或者进入没有树林或常年河流的地方。

Prior to Europeans settling and farming the Great Plains regionA vast grassland region in North America extending from central Canada south through the west central United States into Texas, raccoons probably were just found along its rivers and streams and in the wooded areas of its southeastern section.With the possible exception of the southern part of the province of Manitoba, their absence was notable throughout Canada. They first became more widely distributed in the southern part of Manitoba, and by the 1940s were abundant throughout its southeastern portion. In the 1950s their population swelled in Canada. The control of coyotes in the prairie region in the 1950s may have been a factor in raccoon expansion. If their numbers are sufficient, coyotes might be able to suppress raccoon populations (though little direct evidence supports this notion). By the 1960s the raccoon had become a major predator of the canvasback ducks nesting in southwestern Manitoba.
在欧洲人于大平原地区安家和耕作之前，浣熊在该地区的河流、溪流沿岸以及该地区的东南部树林里就已经存在了。除了马尼托巴省南部地区之外，整个加拿大都难以找到浣熊。刚开始它们只是在马尼托巴省南部分布更为广泛一些，直到二十世纪 40 年代，浣熊数量在该省东南部就已经相当可观了。 在二十世纪 50 年代，浣熊数量在加拿大快速上升。 二十世纪 50 年代平原地区丛林狼的控制也许是浣熊向外扩张的原因之一。 如果他们数量够多的话，丛林狼是可以控制浣熊数量的（尽管几乎很少有直接证据支持这一观点）。 到二十世纪 60 年代，浣熊成了马尼托巴省西南部的灰背野鸭的主要捕食者。

The extermination of the wolf from most of the contiguous United States may have been a critical factor in the raccoon's expansion and numerical increase. In the eighteenth century, when the wolf's range included almost all of North America, raccoons apparently were

abundant only in the deciduous forests of the East, Gulf Coast, and Great Lakes regions, though they also extended into the wooded bottomlands of the Midwest's major rivers. In such areas, their arboreal habits and the presence of hollow den trees should have offered some protection from wolves and other large predators. Even though raccoons may not have been a significant part of their diet, wolves surely would have tried to prey on those exposed in relatively treeless areas.

在相邻的美国，狼的灭绝或许是浣熊数量快速增长的关键因素。 在 18 世纪，当时狼分布于北美的绝大部分，而浣熊只在东部的落叶林中、墨西哥湾沿岸地区、五大湖区大量分布，虽然它们也向中西部主要河流沿线的树木繁茂的低地扩张。在这些地区，浣熊择木而居的习惯和中空树洞的存在，一定程度上保护了它们不被狼和其他大型捕食动物猎食。虽然浣熊不是它们的主要食物来源，在相对缺少树木保护的地方，狼还是会去捕食暴露在外的浣熊的。

TPO 38 – 3 Transgenic Plants
转基因植物

Genes from **virtually** any organism, from viruses to humans, can now be inserted into plants, creating what are known as transgenic plants. Now used in agriculture, there are approximately 109 million acres of transgenic crops grown worldwide, 68 percent of which are in the United States. The most common transgenic crops are soybeans, corn, cotton, and canola. **Most often**, these plants **either** contain a gene making them resistant to the **herbicide** glyphosate **or** they contain an **insect-resistant gene** that produces a protein called Bt toxin.★

virtually 英 [ˈvɜːtʃuəli] 美 [ˈvɜːrtʃuəli] adv. 事实上，几乎；实质上	**herbicide** 英 [ˈhɜːbɪsaɪd] 美 [ˈɜːrbɪsaɪd,ˈhɜːrbɪsaɪd] n. [农药] 除草剂
carnivore 英 [ˈkɑːnɪvɔː(r)] 美 [ˈkɑːrnɪvɔːr] n. [动] 食肉动物；食虫植物	**herbivore** 英 [ˈhɜːbɪvɔː(r)] 美 [ˈɜːrbɪvɔːr,ˈhɜːrbɪvɔːr] n. [动] 食草动物

批注 [3]: ★这段在说什么？
首先，引出主题，介绍一下transgenic；
然后，说了两个对象：herbicide & Bt toxin【出了个题】：（显然，以后遇到这种情况，就要特别留意，这个应该是后文的重点描述对象。）

现在几乎任何有机体，小到病毒大到人体的基因，都可以被移植到植物中，转基因植物就这样产生了。 这项技术现如今被运用于农业之中，世界上大约有 109,000,000 英亩的转基因农作物，其中 68%在美国。 最常见的转基因作物有大豆、玉米、棉花和油菜。 **通常情况下**，这些植物含有使其能够抵抗除草剂草甘膦的基因，或者含有能够抗虫的基因，这种基因会产生一种叫做芽孢杆菌毒蛋白的抗虫蛋白。

On the positive side, **proponents** of transgenic crops argue that these crops are environmentally friendly because they allow farmers to **use fewer and less noxious chemicals** for crop production. For example, a 21 percent reduction in the use of insecticide has been reported on Bt cotton (transgenic cotton that produces Bt toxin). In addition, when glyphosate is used to control weeds, other, more **persistent** herbicides do not need to be applied. ★

proponent (=**supporter**) 英 [prəˈpəʊnənt] 美 [prəˈpoʊnənt] n. 支持者；建议者；提出认证遗嘱者	persistent (= long lasting) 英 [pəˈsɪstənt] 美 [pərˈsɪstənt] adj. 执着的，坚持不懈的；持续的，反复出现的；（动植物某部位，如角、叶等）存留的，不落的

批注 [4]: ★这段在说什么？
首先，说优点，积极的一面；
然后，陈述具体的积极例子，出了道题。

从积极的方面来看，转基因农作物的支持者认为，因为使用的化学品更少并且毒性更小了，转基因农作物是更加环保的。 比如，抗虫棉花使得杀虫剂的使用减少了 21%。 此外，当草甘膦被用来除草的时候，其他更加持久的除草剂就无需使用了。

On the negative side, **opponents** of transgenic crops suggest that there are many questions that need to be answered before transgenic crops are grown on a large scale. One question deals with **the effects** that Bt plants have on nontarget organisms **such as** beneficial insects, worms, and birds that consume the genetically engineered crop. For example, **monarch** caterpillars feeding on milkweed plants near Bt cornfields will eat some corn pollen that has fallen on the milkweed leaves. Laboratory studies indicate that caterpillars can die from eating

Bt pollen. However, field tests indicate that Bt corn is not likely to harm monarchs. **Furthermore**, the application of pesticides (the alternative to growing Bt plants) has been demonstrated to cause widespread harm to nontarget insects. ★

opponent	**monarch**
英 [əˈpəʊnənt] 美 [əˈpoʊnənt] n. 对手；反对者；敌手 adj. 对立的；敌对的	英 [ˈmɒnək] 美 [ˈmɑːnərk,ˈmɑːnɑːrk] n. 君主，帝王；最高统治者

从消极的方面来看，转基因作物的反对者认为在转基因农作物大面积耕种之前，很多问题都要先弄清楚。 其中一个问题是，抗虫作物对于非目标生物体，例如吃了转基因作物的有益的昆虫、蠕虫和鸟类会产生什么影响。 比如，抗虫玉米地附近生长的斑蝶毛毛虫以马利筋草为食，有时他们吃的马利筋草上会有转基因玉米的花粉。 实验室研究表明，毛毛虫可能会因为吃了抗虫花粉而死亡。 但是，田间试验表明抗虫玉米不会对帝王斑蝶造成危害。 而且，杀虫剂的使用（抗虫作物的替代品）已被证实会对非目标昆虫造成大范围的危害。

批注 [5]: ★这段在说什么？
承接上一段，和上一段形成对比！
首先，说缺点，消极的一面；
然后，提出问题，根据问题举个例子【问题和例子对应的，出了2 个**题**】。

Another unanswered question is whether herbicide-resistant genes will move into the populations of weeds. Crop plants are sometimes grown in areas where weedy relatives also live. If the crop plants **hybridize** and reproduce with weedy relatives, then this herbicide-resistant gene will be **perpetuated** in the offspring. In this way, the resistant gene can make its way into the weed population. If this happens, a farmer can no longer use glyphosate, for example, to kill those weeds. This **scenario** is not likely to occur in many instances because there are no weedy relatives growing near the crop plant. However, in some cases, it may become a serious problem. For example, canola readily hybridizes with **mustard** weed species and could transfer its herbicide-resistant genes to those weeds. ★

hybridize	**perpetuate (=continued)**
英 [ˈhaɪbrɪdaɪz] 美 [ˈhaɪbrɪdaɪz] vt. 使杂交；混合生成 vi. 杂交；混合	英 [pəˈpetʃueɪt] 美 [pərˈpetʃueɪt] v. 使持续，使长存，使永久化（尤指不好的事物）
scenario 英 [səˈnɑːriəʊ] 美 [səˈnæriəʊ] n. 方案；情节；剧本；设想	**mustard** 英 [ˈmʌstəd] 美 [ˈmʌstərd] n. 芥末；芥菜；深黄色；强烈的兴趣

批注 [6]: ★这段在说什么？
根据第一句可知。继续上一段继续说问题！
首先，首句陈述问题；
然后，描述问题 – 现象 – 结果；再陈述一下实际情况【出了道**题**】。

另一个尚未得到解答的问题是，抗除草剂的基因是否会进入草里。 有时候，农作物生长的地方同样也长有草。如果农作物和草杂交，那么抗除草剂的基因会延续到杂交后代的基因中去。这样一来，抗除草剂基因也会存在于草的基因里。 如果这种事情发生了，农民将不能再使用草甘膦除草了。 这种情节在许多情况下是不会发生的，因为农作物的附近没有杂草。 但是，在一些情况下，这有可能成为一个严重的问题。 例如，油菜已经和芥末杂草杂交，并且有可能将抗除草剂基因转移到这些杂草中。

We know that **evolution** will occur when transgenic plants are grown on a large scale over a period of time. **Of special concern is** the development of insect populations resistant to the Bt toxin. This pesticide has been applied to plants for decades without the development of insect-resistant populations. However, transgenic Bt plants express the **toxin** in all tissues throughout the growing season. Therefore, all insects carrying genes that make them

susceptible to the toxin will die. That leaves only the genetically resistant insects alive to perpetuate the population. When these resistant insects mate, they will produce a high proportion of offspring capable of surviving in the presence of the Bt toxin. Farmers are attempting to slow the development of insect resistance in Bt crops by, for example, planting nontransgenic border rows to provide a **refuge** for susceptible insects. These insects may allow Bt **susceptibility** to remain in the population. ★

toxin 英 ['tɒksɪn] 美 ['tɑːksɪn] n. 毒素；毒质	**susceptible** 英 [sə'septəbl] 美 [sə'septəbl] **adj**. 易受影响的；易感动的；容许……的 n. 易得病的人
refuge 英 ['refjuːdʒ] 美 ['refjuːdʒ] n. 避难；避难所；庇护 vt. 给予…庇护；接纳…避难 vi. 避难；逃避	**susceptibility** 英 [sə,septə'bɪləti] 美 [sə,septə'bɪləti] **n.** 敏感性；感情；磁化系数

转基因植物经过一段时间的大规模种植之后会发生进化。 **尤其值得关注的是**，昆虫会不会对抗虫毒蛋白产生耐药性。 数十年来，杀虫剂用于农作物之上并没有使农作物产生抗虫性。 但是，转基因抗虫作物在生长期内将抗虫毒素传递到所有的细胞组织内。 因此，所有携带对抗虫毒素过敏的基因的虫子都会被毒死。 含有耐药基因的虫子则活下来负责延续物种。 当这些抗药虫子交配之后，它们会生出比例很高的**能够**抵抗抗虫毒蛋白的后代。 农民们试图减缓转基因作物的抗虫性，例如通过在农田边界种植非转基因作物，以此来向对抗虫毒蛋白敏感的昆虫提供避难场所。 这些昆虫会使得对抗虫毒蛋白的敏感性延续在虫子们之中。

Perhaps the most serious concern about the transgenic crop plants currently in use is that they encourage farmers to move farther away from sustainable agricultural farming practices, **meaning** ones that allow natural resources to continually regenerate over the long run. Transgenics, at least **superficially**, simplify farming by reducing the choices made by the manager. Planting a glyphosate-resistant crop **commits** a farmer to using that herbicide for the season, probably to the **exclusion** of all other herbicides and other weed-control practices. Farmers ~~*who use Bt transgenics*~~ may not feel **that** they need to follow through with **integrated pest-management practices** that use beneficial insects and timely applications of pesticides to control insect pests. A more **sustainable** approach would be to plant nontransgenic corn, monitor the fields throughout the growing season, and then apply a pesticide only if and when needed. ★

也许关于目前使用中的转基因农作物的最重要的担忧在于，它们使得农民脱离了**可持续的**农业耕种实践，可持续农业耕种意味着农业资源可以长期不断再生。 至少从表面上看来，转基因简化了农作物种植，因为它简化了管理方面的选择。 种植耐草甘膦的作物使得农民可以施用草甘膦，不用再考虑使用其他除草剂和其他除草方法。 种植抗虫转基因作物的农民不用自始至终为完善的害虫管理措施而担心，包括利用有益昆虫、及时喷洒农药。 更为**可持续的**做法是种植非转基因作物，在其生长期内及时监控，并且仅在需要的时候才喷洒农药。

批注 [7]: ★这段在说什么？
第一句交代了中心思想，全段中心句！（客观描述存在的问题）
首先，首句表达了这个技术的问题，然后陈述了问题的产生情况【出了个整个**概况题**】，（就是需要了解全段才能作对的题）；
然后，描述了针对这个问题的措施。

批注 [8]: **meaning**
用于进一步解释的。

批注 [9]: **commit**
英 [kə'mɪt] 美 [kə'mɪt]
•vt. 犯罪；把...交托给；指派...作战；使...承担义务；（公开地）表示意见
•vi. 忠于（某个人、机构等）；承诺

批注 [10]: **exclusion**
英 [ɪk'skluːʒn] 美 [ɪk'skluːʒn]
•n. 排除；排斥；驱逐；被排除在外的事物

批注 [11]: ★这段在说什么？
第一句交代了中心思想。
首先，首句表达了一个现象；
然后，分情况进一步解释这个现象。