Lecture Two

(How to Read and Analyze a Passage: Examples)

本节课授课要点

- Long Passage
- Short Passage

Although numbers of animals in a given region may fluctuate from year to year, the fluctuations are often temporary and, over long periods, trivial. Scientists have advanced three theories of population control to account for this relative constancy.

The first theory attributes a relatively constant population to periodic climatic catastrophes that decimate populations with such frequency as to prevent them from exceeding some particular limit.

A second theory argues that population growth is primarily density-dependent—that is, the rate of growth of a population in a region decreases as the number of animals increases.

A third theory, proposed by Wynne-Edwards and termed "epideictic," argues that organisms have evolved a "code" in the form of social or epideictic behavior displays….

1. TW	constant population
2. kw1	climatic catastrophes
3. kw2	density-dependent
4. kw3	epideictic

Although numbers of animals in a given region may fluctuate from year to year, the fluctuations are often temporary and, over long periods, trivial. Scientists have advanced three theories of population control to account for this relative constancy.

The first theory attributes a relatively constant population to periodic climatic catastrophes that decimate populations with such frequency as to prevent them from exceeding some particular limit. In the case of small organisms with short life cycles, climatic changes need not be catastrophic: normal seasonal changes in photoperiod (daily amount of sunlight), for example, can govern population growth. This theory—the density-independent view—asserts that climatic factors exert the same regulatory effect on population regardless of the number of individuals in a region.

A second theory argues that population growth is primarily density-dependent—that is, the rate of growth of a population in a region decreases as the number of animals increases. The mechanisms that manage regulation may vary. For example, as numbers increase, the food supply would probably diminish, which would increase mortality. In addition, as Lotka and Volterra have shown, predators can find prey more easily in high-density populations. Other regulators include physiological control mechanisms: for example, Christian and Davis have demonstrated how the crowding that results from a rise in numbers may bring about hormonal changes in the pituitary and adrenal glands that in turn may regulate population by lowering sexual activity and inhibiting sexual maturation. There is evidence that these effects may persist for three generations in the absence of the original provocation. One challenge for density-dependent theorists is to develop models that would allow the precise prediction of the effects of crowding.

A third theory, proposed by Wynne-Edwards and termed “epideictic,” argues that organisms have evolved a “code” in the form of social or epideictic behavior displays, such as winter-roosting aggregations or group vocalizing; such codes provide organisms with information on population size in a region so that they can, if necessary, exercise reproductive restraint. However, Wynne-Edwards’ theory, linking animal social behavior and population control, has been challenged, with some justification, by several studies.

population control

Core

1.(fluctuate v.) constant

2. 1st: climatic (case: small) d-i.

3.2nd: d-d: g↓no↑.

Mechanisms (food; L.V predators;

CD crowding+/-)

4.3rd: W-E. “e”=code=social challenged+.

Function

1. tw’. tw.

2. kw1. a. cs.

3. kw2. kw2’.

x. y.

z. z+, z-.

4. kw3.

aw-.

1. The primary purpose of the passage is to

(A) argue against those scientists who maintain that animal populations tend to fluctuate

(B) compare and contrast the density-dependent and epideictic theories of population control

(C) provide example of some of the ways in which animals exercise reproductive restraint to control their own numbers

(D) suggests that theories of population control that concentrate on the social behavior of animals are more open to debate than are theories that do not

(E) summarize a number of scientific theories that attempt to explain why animal populations do not exceed certain limits

For Question 1

Although numbers of animals in a given region may fluctuate from year to year, the fluctuations are often temporary and, over long periods, trivial. Scientists have advanced three theories of population control to account for this relative constancy.

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2. It can be inferred from the passage that proponents of the density-dependent theory of population control have not yet been able to

(A) use their theory to explain the population growth of organisms with short life cycles

(B) reproduce the results of the study of Christian and Davis

(C) explain adequately why the numbers of a population can increase as the population's rate of growth decreases

(D) make sufficiently accurate predictions about the effects of crowding

(E) demonstrate how predator populations are themselves regulated

For Question 2

A second theory argues that population growth is primarily density-dependent—that is, the rate of growth of a population in a region decreases as the number of animals increases. … One challenge for density-dependent theorists is to develop models that would allow the precise prediction of the effects of crowding.

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3. Which of the following, if true, would best support the density-dependent theory of population control as it is described in the passage?

(A) As the number of foxes in Minnesota decrease, the growth rate of this population of foxes begins to increase.

(B) As the number of woodpeckers in Vermont decreases, the growth rate of this population of woodpeckers also begins to decrease.

(C) As the number of prairie dogs in Oklahoma increases, the growth rate of this population of prairie dogs also begins to increase.

(D) After the number of beavers in Tennessee decreases, the number of predators of these beavers begins to increase.

(E) After the number of eagles in Montana decreases, the food supply of this population of eagles also begins to decrease.

For Question 3

A second theory argues that population growth is primarily density-dependent—that is, the rate of growth of a population in a region decreases as the number of animals increases. The mechanisms that manage regulation may vary. For example …

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4. According to the Wynne-Edwards theory as it is described in the passage, epideictic behavior displays serve the function of

(A) determining roosting aggregations

(B) locating food

(C) attracting predators

(D) regulating sexual activity

(E) triggering hormonal changes

For Question 4

A third theory, proposed by Wynne-Edwards and termed “epideictic,” argues that organisms have evolved a “code” in the form of social or epideictic behavior displays, such as winter-roosting aggregations or group vocalizing; such codes provide organisms with information on population size in a region so that they can, if necessary, exercise reproductive restraint. However, Wynne-Edwards’ theory, linking animal social behavior and population control, has been challenged, with some justification, by several studies.

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考点分析

1. 主题: 首段

2. 态度: 3段末句

3. 逻辑支持：3段首句

4. 细节：4段首句

本节课授课要点

- Long Passage
- Short Passage

P1

In the seventeenth-century Florentine textile industry, women were employed primarily in low-paying, low-skill jobs. To explain this segregation of labor by gender, economists have relied on the useful theory of human capital. According to this theory, investment in human capital—the acquisition of difficult job-related skills—generally benefits individuals by making them eligible to engage in well-paid occupations. Women's role as child bearers, however, results in interruptions in their participation in the job market (as compared with men's) and thus reduces their opportunities to acquire training for highly skilled work. In addition, the human capital theory explains why there was a high concentration of women workers in certain low-skill jobs, such as weaving, but not in others, such as combing or carding, by positing that because of their primary responsibility in child rearing women took occupations that could be carried out in the home.

P2

There were, however, differences in pay scales that cannot be explained by the human capital theory. For example, male construction workers were paid significantly higher wage than female taffeta weavers. The wage difference between these two low-skill occupations stems from the segregation of labor by gender: because a limited number of occupations were open to women, there was a large supply of workers in their fields, and this "overcrowding" resulted in women receiving lower wages and men receiving higher wages.

segregation

Core

1. women: low-skill
2. economists: human-capital
   (3.4.w: interrupt.5.home)

1. × pay scale. (2. e.g. m>w.)
3.segregation: overcrowding

Function

1. phen/tw
   kw1
   a b c

2. aw-. x.
   kw2

1. The passage suggests that combing and carding differ from weaving in that combing and carding are

(A) low-skill jobs performed by primarily by women employees

(B) low-skill jobs that were not performed in the home

(C) low-skill jobs performed by both male and female employees

(D) high-skill jobs performed outside the home

(E) high-skill jobs performed by both male and female employees

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2. Which of the following, if true, would most weaken the explanation provided by the human capital theory for women's concentration in certain occupations in seventeenth-century Florence?

(A) Women were unlikely to work outside the home even in occupations whose hours were flexible enough to allow women to accommodate domestic tasks as well as paid labor.

(B) Parents were less likely to teach occupational skills to their daughters than they were to their sons.

(C) Women's participation in the Florentine paid labor force grew steadily throughout the sixteenth and seventeenth centuries.

(D) The vast majority of female weavers in the Florentine wool industry had children.

(E) Few women worked as weavers in the Florentine silk industry, which was devoted to making cloths that required a high degree of skill to produce.

For Question 2

According to this theory, investment in human capital—the acquisition of difficult job-related skills—generally benefits individuals by making them eligible to engage in well-paid occupations. Women's role as child bearers, however, results in interruptions in their participation in the job market (as compared with men's) and thus reduces their opportunities to acquire training for highly skilled work. In addition, the human capital theory explains why there was a high concentration of women workers in certain low-skill jobs, such as weaving, but not in others, such as combing or carding, by positing that because of their primary responsibility in child rearing women took occupations that could be carried out in the home.

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3. The author of the passage would be most likely to describe the explanation provided by the human capital theory for the high concentration of women in certain occupations in the seventeenth-century Florence textile industry as

(A) well founded though incomplete

(B) difficult to articulate

(C) plausible but poorly substantiated

(D) seriously flawed

(E) contrary to recent research

For Question 3

To explain this segregation of labor by gender, economists have relied on the useful theory of human capital.

There were, however, differences in pay scales that cannot be explained by the human capital theory.

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考点分析

1.1段末句对比/but not

2.1段末句取非

3.态度: +, -

回顾本节课授课要点

- Long Passage
- Short Passage

预告下节课授课要点

- 现象解释
- 新老观点
- 论点说明

The End