Two Basic Problems in the Study on Life Evolution

Ruiliang Ling

Happ Your Mart inShoukai Fumao Building, Beijing 100079, China

Keywords: IQ Judgment; Extreme Environment

Abstract: The skeletal muscle system is mysteriously linked to animal intelligence, which has been linked throughout the evolution of animals. Turtles are "long-lived" animals, polyps and planarians can still survive when cut into many small segments, and the resistance of prions is tens of hundreds of times than that of viruses, ...However, people are vulnerable to sickness, and human beings are "picky" in food and living environment ...In the final analysis, it is all a matter of living organisms' tolerance to extreme environments.

1. Judgement on Animal IQ.

1.1 Analysis of Basic Principles.

When it comes to judging the IQ of animals, the best way that is universally accepted is: the brain-to-body mass ratio. However, this method still has great shortcomings, many problems cannot be well explained, and even led to the absurd theory that "dolphin's IQ is equivalent to the IQ of primitive man 800,000 years ago". The judgement of IQ of animal intelligence is the most fundamental problem in the study of evolution of animals. If this problem is not well explained, the study of animal evolution will be very difficult.

The authors have long found that animal evolution is a process of gradual "complication" of the skeletal muscle system. The term "complexity" here refers to the complexity of types of skeletal muscle types and types of skeletal muscle fiber. The more complex the skeletal muscle system, the higher the IQ. The physiological basis of this theory is that the brain region associated with IQ is the most advanced organ in the body, namely, the center of consciousness. Skeletal muscles, on the other hand, are the lowest organ in the body, and the lowest organ is directly controlled by the highest organ, that is, conscious control.(Skin tissue is not simple, and corresponds to the lower viscera. Animals can live without skeletal muscles, but animals can't live without skin. The theory is proved to be with high accuracy, and it can explain many difficult problems very well. So it can be said that the evolution of animals is the evolution of IQ, and also the evolution of skeletal muscle system, and it can be said that it's the evolution of ways of movement.

1.2 Misunderstanding in Animal Evolution

(1) A protective layer on the body surface. As a direct result, skeletal muscle systems stagnate, or degenerate. Such as hedgehogs, porcupines, cartilaginous fish, buckfish, elderfish, shellfish, etc., and such animals are often relatively with low IQ. These animals should "take off the armor" and be exposed to the nature to improve the athletic ability to fight bravely, which is the correct way of evolution. This will lead to a more complex skeletal muscle system, which will lead to a higher IQ.

(2) Too easy to access to food. Carnivores have to struggle to get food, so the skeletal muscle system is relatively complex, and the intelligence is high; While, by contrast, herbivores do not have to struggle to get their food easily, so their skeletal muscle system is relatively simple and their IQ is low. In addition, the lowest bioIQs are those that use primary energy sources, such as light, such as plants.

(3) Try to fly. Flying simplifies the skeletal muscle system and diminishes intelligence. Such as birds, bats.

(4) Transformation from terrestrial habitat to aquatic habitat. It causes degeneration of the skeletal muscle system, especially the toes. Such as whales, etc.

(5) Blindly pursuing escape without the courage to fight back, which resulting in poor defense ability. Such as horses, donkeys.

1.3 Specific Analysis on Judgement of Animal IQ (Ranking)

(1) Terrestrial primates. Such animals walk upright on both feet and hunt with both hands, which is the most complex forms of movement.

(2) Arboreal primates. Arboreal is an advanced form of movement in general mammals.

(3) Cats and small arboreal mammals such as squirrels. Each has its advantages, the former has a retractable claw, the latter is completely arboreal. But overall, cats are more intelligent.

(4) Large felid (such as lions and leopards) that are capable of climbing trees. The reason why they rank after cats is because that the survival pressure is not as great as cats.

(5) Large felid (such as tigers) that are not capable of climbing trees. With more food or less competition, such animals failed to develop the capability to climb trees.

(6) Canine animals (such as wolves). Live in groups rather than hunting alone.

(7) Herbivorous mammals with certain self-defense ability. Such as sheep, cattle, deer.

(8) Herbivorous mammals with poor self-defense ability and strong running ability. Such as horses, donkeys.

(9) Ursiidae animals with poor athletic ability, but such animals have strong capability in "close combat and they are capable of climbing trees and swimming", which can make up for the lack of athletic ability to a certain extent.

(10) Terrestrial dinosaurs. A quadruped dinosaur is taller than a biped dinosaur, and a carnivorous dinosaur is taller than a herbivorous dinosaur.

(11) Specialized mammals such as whales, bats, hedgehogs, birds, and aquatic and flying dinosaurs. Each of them shows its own deficiency in movement.

(12) Common reptiles (such as crocodiles, lizards, and geckos), the following amphibians.

(13) Bony fishes. High pressure of survival, strong motor mobility, strong athletic ability.

(14) Cartilage fishes. Sharks with large body size have low survival pressure and poor locomotor mobility. Benthic cartilaginous fish have poor motor skills and lower IQ.

2. Study on Tolerance of Organisms to Extreme Environment

2.1 Basic Principles

When mentioning the tortoise, people will naturally think of its "longevity". It is true that turtles can live for a long time, but they spend most of their life in hibernation; Therefore, the turtle's "longevity" failed to be as we expected. Hibernation, in fact, is a very common phenomenon among the lower animals, and all the lower animals have the ability to hibernate to some extent; So there is nothing unique about the tortoise's longevity in the animalia, and there is nothing mysterious about the tortoise itself.

The author has found long ago that the lower the animal, the stronger the hibernation ability, but the shorter the life cycle. The higher the animal, the worse the hibernation ability, but the longer the life cycle.

What's more, the theory could be extended to apply the theory over a wider range of areas. The lower the form of life, the more tolerant it is to extreme environments. The higher the life form, the less tolerant it is to extreme environments. Here, the term "extreme environment" has a broader connotation.

2.2 Special Discussion

(1) Cochlea, a flat animal, is relatively primitive, so it has a strong "tolerance to extreme environment"; Cutting the planaria into several horizontal sections with a knife, and each section can grow into a complete planaria. Hydra, a coelenterate, are more primitive than planarians, so they have a greater "tolerance to extreme environments". The polyp can be cut into more small pieces and each piece will grow into a complete polyp.

(2) In light of the tolerance to hunger, the more primitive the life form, the stronger the tolerance to hunger. In the case of extreme nutrient deficiency, the living body chooses to slow down its metabolic rate or simply hibernate. For example, planarians and hydroids have a strong tolerance for starvation.

(3) In terms of evolution, the lower the life form is, the better its ability to adapt to the environment is. In other words, the lower the life form, the stronger the ability to evolve, and thus the shorter the evolutionary cycle required. For advanced animals, such as mammals and humans, the evolutionary ability is restrained and the time required to accomplish evolution is also greatly increased.

(4) Plants are the lower forms of life. Therefore, plants have strong adaptability to the environment, including tolerance to nutrient deficiency, tolerance to water shortage, tolerance to insufficient light, "hibernation" ability, tolerance to temperature fluctuations, tolerance to adverse physical and chemical environments, tolerance to microbial infection, etc.Plants can also be classified into higher plants and lower plants. Angiosperms are the highest plants with the highest metabolic rate. Next is gymnosperms, ferns.....The macroscopically visible fungi (along with mosses, lichens, etc.) are the lowest plants with the lowest metabolic rates, and therefore the most resilient plants.

(5) Microbes are the most primitive forms of life. Therefore, microbes are the most tolerant to extreme environments.

A. Among the microbial flora, the higher ones are microscopic fungi, and the lower are bacteria. Because bacteria are more primitive than microscopic fungi, bacteria are more tolerant to extreme environments than microscopic fungi. In real life, the disease caused by fungal infection is relatively seen, and the illness is easier to recover; The disease that causes by bacterial infection is frequently discovered in real life, and it is relatively difficult for the illness to be treated.

B. Viruses are more primitive than bacteria, so viruses are more tolerant to extreme environments than bacteria. But in modern science, virus is only treated as an infectious particle, not as a life form. In fact, the virus should be considered a form of life, which is a blindness in science. In real life, infections caused by viruses are far more widespread and more persistent than those caused by bacteria. Viruses are divided into DNA viruses and RNA viruses. RNA viruses are more primitive than DNA viruses, so infections caused by RNA viruses are more persistent than DNA viruses.

C. Prions, or infectious proteins, are more primitive than viruses, which is the blindness in science. Infections caused by prions are more stubborn than viruses, and the dose required to inactivate the prions is tens to hundreds of times greater than the dose needed to inactivate the viruses! What is certain is that if there is a life form that is more primitive than prions, it will be more persistent than prion infections.

(6)With regard to dinosaurs, modern science generally assumes that the asteroid impact at the end of the Cretaceous period caused their extinction. But in fact, dinosaurs are not very advanced animals, and they still have some tolerance to extreme environments, including the tolerance to lack of food, the tolerance to cold, and the ability to hibernate, especially the bipedal dinosaurs and the small dinosaurs. Therefore, the asteroid impact will not change the direction of biological evolution, it will only have some major impact on the evolution of life. One thing is certain, however, that an asteroid impact would have a serious and catastrophic effect on advanced mammals as well as humans.

(7) As the highest form of life, human beings have the worst tolerance to extreme environments, but human beings have the strongest vitality with a longer life cycle and a longer life span.

A. People have strict requirements on drinking water. Poor water quality is easy to make people to be sick. The ordinary animals have pretty low requirements on water quality.

B. People are picky in food, and in most cases, food need to be heated. The ordinary animals have a rough requirements on it.

C. The adaptability of human beings to ambient temperature fluctuations is very limited. The ordinary animals are more resilient to temperature fluctuations in the environment.

[D] People are more likely to get sick. Ordinary animals do not get sick easily.

(8) As far as an organism is concerned, its own tissues and organs are also classified into higher and lower levels. High-level tissues and organs have poor tolerance to extreme environments, while low-level tissues and organs have strong tolerance to extreme environments. As for people, the most advanced organ is the brain, so the brain has the worst tolerance to adverse environments, including fluctuations in ambient temperature, insufficient blood supply, lack of nutrients, lack of oxygen, tolerance to toxic environments, and tolerance to microorganisms. The lowest level of tissue and organ is skin, skeletal muscle (especially the latter), so skin and skeletal muscle are the most tolerant to adverse environment. When a person loses consciousness, the brain loses activity very quickly. However, due to the low level of internal organs, the activity can still maintain a certain time, so the internal organs can be used for transplantation at this time. Skin and skeletal muscle, being the lowest in grade, have the longest duration of activity.

References

[1] Zhu Peichun. Normal Human Anatomy.Beijing: People's Medical Publishing House, 1994, ISBN 7-117-02132-2

[2] Zhou Mengsheng. Biochemistry.Shanghai Scientific & Technical Publishers, ISBN7-5323-3833-9/Q.57(Class)

[3] Chen Renbiao, Sun Yueping, Ed.Fundamentals in cell and molecular biology -The 2nd Edition-Shanghai:Shanghai Scientific & Technical Publishers, 2003.9, ISBN 7-5323-7112-3

[4] Organic chemistry/Chen Hongchao (Editor-in-chief).- Beijing: Higher Education Press, 2001.12(2002 reprint) ISBN 7-04-010160-2

[5] Systematic Anatomy/Tong Xiaojie(Editor-in -chief).- Shanghai: Shanghai Scientific & Technical Publishers, 2010.8 Textbook for Adult Higher Education in Nursing. ISBN 978-7-578-0429-2

[6] Compiled by Chen Junhui, Zheng Ji. General Biochemistry. -The 4th Edition.- Beijing: Higher Education Press, 2007.6 (Reprinting in 2008) ISBN 978-7-04-020630-2

[7] Invertebrate Zoology/Ren Shuxian. The 2nd Edition.- Beijing: Peking University Press, 2007.7 ISBN 978-7-301-01301-4

[8] General Zoology/Liu Lingyun, Zheng Guangmei(Editor-in-chief)-The 3rd Edition.- Beijing: Higher Education Press, 1997(Reprinting in 2008). Textbook for Higher Education, ISBN 978-7-04-006008-9

[9] Shi Xueyun. Physiology.Shanghai Scientific & Technical Publishers, ISBN 7-5323-3705-7/R·1030

[10] Wei Min. Pathology.Shanghai Scientific & Technical Publishers, ISBN 7-5323-3707-3/R·1032