



探索世界

TANSHI

江苏科学技术出版社

Exploring Our World

探索世界

(英汉对照科普读物)



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Introduction

People say that the age of exploration is past. Several centuries ago Vasco da Gama sailed round the world, the great Arab and Portuguese sailors found their way to Asia, and Columbus reached the American continent. These great adventures belong to the past. Today travel is not such an adventure for most travellers. When we start a journey we usually know where we are going and what we shall find there. ① The first explorers thought they might come to the end of a flat world and fall over the edge. We know that at the end of most journeys we shall find a city with cars and hotels waiting for us. ②

Yet there are still parts of the world where travel is not easy and where we do not know what lies before us. ③ The Arctic and Antarctic are still almost unknown. Many places are still hidden in deep jungle. There are places where men are beginning to travel—places which earlier explorers could only dream about. We can climb the highest mountains. We can dive to the bottom of the sea, deeper and deeper every year. We can creep further and further

into the caves and tunnels under the earth.

As long as there are unknown places on earth there will be men with the courage and curiosity to explore them.④ But today these explorers do not work alone. More often they are members of a team that works together. They are helped in many ways by scientists. Scientists and explorers work together, to understand the secrets of the world so that we can make better use of its treasures. Science helps explorers to go further and to understand the meaning of what they discover. Together they are advancing so quickly that in the future our age may be remembered as the greatest Age of Discovery.

Why do we make this search for more knowledge? Why do we explore dangerous places which can be useful to nobody — mountain tops and dark caves and endless miles of ice and snow? The answer was given once by a famous arctic explorer, Nansen.

The history of the human race is a continuous struggle from darkness towards light. It is therefore purposeless to discuss the use of knowledge.⑤ Man wants to know and when he ceases to do so he is no longer a man.

New Words and Expressions

单词*和短语

1. exploration [iɛksplɔ: 'reiʃən] n. 探索; 探险; 考察
2. continent ['kɒntinənt] n. 大陆, 陆地
3. Arctic ['ɑ:ktik] n. 北极, a. 北极的
4. Antarctic [æn'tɑ:ktik] n. 南极, a. 南极的
5. jungle ['dʒʌŋgl] n. 丛林, 密林
6. dive [daiv] n. & vi. 潜水. diver [daivə]
n. 潜水员
7. creep [kri:p] [p. & pp. crept] vi. 爬
8. cave [keiv] n. 洞, 穴
9. tunnel ['tʌnl] n. 山洞; 隧道; 地道
10. as long as 只要
11. so that 为了, 以便, 使得 (表示目的)
12. advance [əd'vɑ:ns] vi. 前进
13. so...that 如此...以至 (表示结果)

* 词性用英语缩写形式标出, 共分十类:

n. (名词; pl. 复数) v. (动词, 及物或不及物; vt. 及物动词; vi. 不及物动词; p. 动词过去式; pp. 过去分词) pron. (代词) num. (数词)
a. (形容词) ad. (副词) prep. (前置词) conj. (连接词) int. (感叹词)
art. (冠词)

14. endless [ˈendlis] a. 无穷的, 无边无际的
 15. human [ˈhju:mən] a. 人的, 人类的
 human race 人类
 16. continuous [kənˈtɪnjuəs] a. 连续的、不断的
 17. purposeless [ˈpə:pəsli:s] a. 无目的的, 没有意义的
 18. cease [si:s] v. 停止
 19. no longer = not any longer 不再, 已不

Notes

注 释

① When we start a journey we usually know where we are going and what we shall find there.

when ... journey 是时间状语从句。where...going 和 what ...there 是 know 的两个并列的宾语从句, 由连接词 and 连接。

② We know that at the end of most journeys we shall find a city with cars and hotels waiting for us.

at……至句末为宾语从句, 由连接词 that 与主句连接。在从句中, at the end of most journeys 作状语, with cars and hotels 是修饰 city 的定语。waiting for us 为现在分词短语, 作 cars and hotels 的定语。

③ Yet there are still parts of the world where travel is not easy and where we do not know what

lies before us.

where ... easy 和 where ... us 是两个并列的定语从句，由连接词 and 连接，都用来修饰 parts; what lies before us 为 know 的宾语从句。

④ As long as there are unknown places on earth there will be men with the courage and curiosity to explore them.

as long as ... earth 为条件状语从句; with ... curiosity 这一前置词短语是用来修饰 men 的定语。

⑤ It is therefore purposeless to discuss the use of knowledge.

It 为形式主语; 不定式短语 to discuss the use of knowledge 为真实主语。

译文

引言

人们说，探险的时代已经过去了。几世纪以前，瓦斯科·达·加马乘船环游世界，杰出的阿拉伯和葡萄牙的航海家们发现了通往亚洲的航道，哥伦布到达了美洲大陆。这些伟大的探险事业都是过去的事了。今天，对大多数旅游者来说，旅行不再是那样一种探险生涯了。在开始旅行时，我们一般就知道要到达的地方和在那里会看到些什么。最早的探险家们认为他们会走到平坦世界的尽头，并且会在世界的边缘掉下去。而我们现在知道在大多数旅途的终点会找到一座城市，城里有车辆和旅馆在等待着我们。

然而，世界上仍有一些地方是不容易到达的，我们也不知道那里呈现在我们面前的是什么。对于北极和南极，我们还几乎不了解。许多地方还隐藏在丛林深处。有些早期的探险家们只能梦游的地方，我们已开始去旅行了。我们能登上最高的山峰，潜入海底的深度一年深过一年，在地下钻的洞穴和隧道，也越钻越远了。

地球上只要有人迹未到过的地方，就会有勇敢、猎奇的人去探索。但是，今天这些探险家不再是单枪匹马地干了。他们往往成群结队，并肩工作，在许多方面还得到了科学家的帮助。科学家和探险家共同努力，揭示世界的奥秘，使我们能更好地利用世界的宝藏。科学有助于探险家更深入地工作，

并能帮助他们理解自己的发现所具有的意义。他们携手前进，其进展之快，也许将来会使我们的时代作为最伟大的“发现时代”而被人类所怀念。

我们为什么要寻找更多的知识呢？为什么要探索山巅、秘窟和渺无边际的冰天雪地——这些对谁也没有用处的危险地带呢？一位著名的北极探险家南森曾经回答过这个问题，他说：

人类的历史是一部连续的从黑暗到光明的斗争史。

因此，议论知识的用途是没有意义的。人类就是要求知，当他不这样做的时候，他就不成其为人类了。

I. To the Ends of the World

The ice and snow that cover the Arctic and the Antarctic—the North and South Poles—do not offer men a warm welcome. They promise nothing for the traveller except cold, suffering and danger. For many months of the year these places are in darkness, untouched by the sun. It is impossible to grow food or to keep warm. Everything that men need to keep alive must be brought from outside—food, drink, shelter and fuel.

The endless empty snow hills are strangely beautiful. But perfect smoothness deceives a new comer

As he travels, his feet sink deep into the snow. Suddenly the ground opens beneath him as the ice breaks apart into deep crevasses. The terrible cold goes far below freezing point. It freezes a man's breath, freezes his tears and freezes his hands or feet. Deadly frostbite means that a man may lose his hands or his feet, his ears or his nose.

When the sun shines it isn't very warm. But the bright sun shining on snow can make men blind. Without special warm clothes no one could live for a day in the polar lands. Wearing heavy boots and clothes, a man can only travel a few miles a day through the snow. The fierce winds and flying snow make him blind. If he loses sight of his friends he may never find them again. His footprints disappear under falling snow. The lost traveller moves blindly in circles until he falls and the snow covers him.① His cries cannot be heard above the roar of the wind.

Until this century few explorers dared to visit this dreadful place. Their journeys were short and dangerous. The only way to travel was on foot or in sledges pulled by strong dogs which are used to the cold. Dogs and men, however, could not carry all the supplies necessary for a long journey.② Real exploration of the polar lands only became possible when the aeroplane was invented. Now food and fuel can be brought

by air to expeditions as they travel across the snow. Planes can also be used to help explorers who are lost or hurt.

Other inventions also help polar explorers of today. Dogs are still necessary, but tractors can move faster over hard snow, and tractors can carry heavy supplies. There are also light-weight materials to make clothing and shelter which are light as well as warm. Perhaps the greatest invention of all for explorers is the radio. Now they can talk with the outside world. They do not feel so alone. The empty places become a little less terrible. Explorers can use the radio to call for help—though help cannot always arrive in time to save them.

So new inventions make travel in the polar lands a little easier. But an arctic journey is still a very dangerous adventure. Why do men risk their lives in such dreadful places? Curiosity draws them on. But another reason is that these icy places in the far north and the far south are important to us. For example, the polar ice has an effect on the weather in other parts of the world. Tides and earthquakes and volcanoes can all be studied at the Poles. Precious minerals which men need and may one day use lie under thousands of feet of ice.③ In the future there may be other uses for the world's coldest place.

Perhaps frozen food will be kept here. Then it can be kept until it is needed. Perhaps the world's fuel may come from oil now hidden under the ice. Atomic power houses could be built here.

As an example of many strange ideas, one scientist thinks that the floating mountains of ice called icebergs could be used to supply water for the great ports of the world. Icebergs are made of frozen fresh water. He thinks they could be pulled down to the big cities and used for water as they melt.

The exploration of the poles has advanced in this century. The North Pole was first reached in 1909 and the South Pole was reached in 1911. These expeditions were made by land. Then in 1926 the North Pole was twice reached by air. Since then there have been many visits by air. The North Pole has become well known.

Russian scientists have been very busy around the North Pole. In 1937 Ivan Papanin and three companions were dropped on a small, flat, floating island of ice, called an ice floe, near the North Pole. They carried food, fuel, shelter and scientific instruments. For nine months they lived on this ice floe, often in darkness and always in cold. As the ice floe floated slowly along they studied its movements. When summer came the ice floe reached warmer water and

began to melt. After travelling twelve hundred miles the ice floe was only a few yards wide. At the last possible moment Ivan Papanin called for help by radio. He and his companions were rescued by the ship *Taimyr*. They had carried out many useful experiments.

Another way to travel at the Poles was discovered many years ago. Ice, thousands of feet thick, floats on the polar seas. Beneath it is water. Could a submarine pass safely through this water under the ice? Was there an open way under the ice from one side of the North Pole to the other?

In 1931 a British scientist, Sir Hubert Wilkins, tried to find this way in a submarine which he called *Nautilus*. It was named after the famous submarine imagined by Jules Verne in his book *Twenty Thousand Leagues under the Sea*.^⑤ (Jules Verne imagined many scientific inventions long before the scientists really produced them.)

Wilkins had imagination too. He fixed special 'skis' on top of his submarine. With these he hoped to travel under the ice in the same way that a fly walks across the ceiling! But the submarine was badly damaged by ice and the expedition failed.

Twenty-seven years later science made it possible to try again.^⑥ In July 1958, an American

atomic-powered submarine left Honolulu. This submarine was also called the *Nautilus*. Of course its atomic-powered engine was far more powerful than Jules Verne had imagined. It also had dozens of instruments which were its 'eyes', 'ears' and 'fingers' for the dangerous journey.

Scientists believed that there was a deep crevasse under the ice through which a submarine could pass.⑦ On 1st August Captain Anderson of the *Nautilus* found the entrance to this crevasse and entered. From that moment his crew depended upon their instruments to find their way. They had instruments to measure the depth of the water. They had strong lights and television with which they could watch the ice above them and around them. Sometimes they nearly ran into icebergs. Sometimes the walls of the crevasse closed dangerously near them. If their atomic power had failed they would all have died. The ice above was thousands of feet thick and no submarine could break through. As they reached the North Pole their compasses failed. They were then in danger of being lost under the ice.

On 5th August the *Nautilus* successfully finished its journey. It reached the other side of the polar ice and came up into daylight again in the Greenland Ocean. A new way was now known to go from

Europe to America. It is possible that on day large submarines carrying goods may save thousands of miles by travelling underneath the ice.

Meanwhile, at the other end of the world, more great work was being done. This was an exciting experiment in which several nations joined. Scientific exploration is of interest to all countries. Scientists cannot increase their knowledge unless they work together. Sometimes a lot of work is wasted because their countries will not work together. So it was decided to have one year of studying our world together. A large number of countries agreed that they would work together in 1957—1958.

One of the places where they decided to work together was the Antarctic. Suddenly it became one of the busiest places in the world! Thousands of men set up thirty-six bases in the continent where they collected a lot of knowledge. The Americans set up a base at the South Pole itself. They called the expedition 'Operation Deep Freeze'. Hundreds of aeroplanes dropped all the men and equipment necessary to build a small town. Fifty years ago only a few men had ever seen the point on the map called the South Pole. They would not have believed it was possible for anyone to live in that dreadful place. But today it is an important scientific centre.