



科技英语自修读本

毛志祥 编著 第二册

华中理工大学出版社

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毛志祥 编著

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前 言

学习英语通常要求掌握英语的语音、词汇和语法，在此基础上，进一步研究翻译法，以便使用英语这个工具学习国外的先进科学技术，为四化服务。本书就是根据这一精神来编写的。

全书共分两册：第一册以突出介绍语法为要旨，并通过课文、词汇研究、练习等各个环节来积累词汇、掌握语法，为学好英语打下良好基础；第二册是在第一册的基础上继续扩大语言知识，以突出介绍英译汉的翻译法为要旨，对英语的各大词类及长难句的译法进行了比较系统的探讨，力求使读者能掌握一定的翻译技巧，为阅读和翻译英语资料创造良好条件。

本书是学习英语的综合材料，书中各部分相互配合，构成整体。可供具有大学及中学英语水平的同志自学科英语之用。

承黄甲年副教授校阅了本书的全部书稿，并提出了许多宝贵意见，又承华中工学院校友毛炼成同志对该书英语部分作了校阅，在此一并表示感谢。

由于编者水平有限，缺点和错误在所难免，请批评指正。

编 者

1985.11.于华工

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Lesson One

Text: The First Men to Fly

Word study: reach, catch, watch

翻译法: 翻译概论

Text

The First Men to Fly

1 Men always wanted to fly. They knew how to make kites hundreds of years ago. Kites could stay in the air for many hours. "If birds and kites can stay up in the air, perhaps we can," they thought. ①

2 At first, they made wings like birds. Then they jumped off ② high buildings and tried to fly. Many men did this but they all failed to fly.

3 They crashed to the ground. Some were killed and some were badly hurt. After many failures they stopped trying to fly with wings. Then two brothers tried another way. Can you guess which way? They tried balloons. "Hot air is lighter than colder air," they said. "That is why hot air goes upwards. If we fill a balloon with hot air, it will go upwards." ③

4 They built a balloon. It was made of thin cloth and paper. ④ They lit a fire beneath it. Up into the air it went! ⑤ It reached a height of 1800 metres. Then the

air inside the balloon became cool and it came slowly down and gently rested on the ground.

5 A few months later the brothers sent up another balloon. This time there was a basket hanging underneath it. In the basket there were three animals, a sheep, a duck and a hen. The balloon travelled through the air to a place two and a half kilometres away. Then it came down safely to earth.

6 Now it was time for men to fly ! In October 1783, the brothers' another balloon went up. This time a man went with it. The balloon did not rise very far. It went only to twenty-five metres. It was tied to the ground by a rope. A month later two men went up in a balloon full of hot air. This time there was no rope ! A great crowd of people watched. The balloon rose to a height of 900 metres. The wind blew it along for nine kilometres. Then it came gently back to earth. Men had travelled through the air for the first time!

7 Other men filled balloon with a gas called hydrogen. Balloons filled with this gas were able to travel long distances. But the men in the baskets underneath could not steer them. They went where the wind took them.

8 Later, balloons were made in the shape of a cigar. These were called airships. They had engines to drive them along, and they could be steered a little. But they were still blown about by the wind. The hydrogen gas was dangerous, too. It caught fire very easily. There

were many accidents and many people died. At last they stopped making airships.

New Words and Expressions

1. kite [kait] *n.* 风筝
2. crash [kræʃ] *vi.* 碰撞, 坠落, 撞坏
3. failure ['feiljə] *n.* 失败, 事故
4. guess [ges] *vt.* 推测, 猜测
5. upwards ['ʌpwədz] *ad.* 在上面, 向上头
6. light [lait] *v.* (-ed或lit[lit]) 点, 点燃, 照亮
7. beneath [bi'ni:θ] *prep.* 在...的下方, 在...之下
8. reach [ri:tʃ] *vt.* 到达, 达到
9. cool [ku:l] *a. v.* 凉的, (使) 冷却
10. underneath[,ʌndə'ni:θ] *prep.* 在...下面, 在...底下
11. safely ['seifli] *ad.* 安全地, 可靠地
12. crowd [kraud] *n.* 人群, 群众
13. hydrogen ['haidridʒən] *n.* 氢
14. steer [stiə] *vt.* 驾驶, 操纵, 控制
15. cigar [si'gɑ:] *n.* 雪茄烟
16. airship ['æʃɪp] *n.* 飞艇
17. engine ['endʒɪn] *n.* 发动机, 引擎
18. catch [kætʃ] (caught) *vt.* 燃着, 发火, 捕, 捉
19. accident ['æksɪdənt] *n.* 事故

Notes to the Text

①本句为直接引语, 因强调直接引语内容, 而将“某人说”置

于该引语之后。句中第二个情态动词can后面省略了动词原形及其从属词stay up in the air。

②off: 这里用作介词。如:

Ripe apples are beginning to fall off the trees.
成熟的苹果开始从树上落下来了。

③句中 (be) made of表示制造的东西是原材料的物理变化, 如:

The desk is made of wood.

书桌是木头制成的。

如果表示制造的东西是原材料的化学变化, 则用be made from, 如:

Gas is made from coal.

煤气由煤制成。

句中thin cloth and paper (薄布和纸)表示泛指这种材料, 不用复数, 前面也不必加冠词。

④Up into the air it went! 是倒装句。句中词组up into the air置于句首, 是为强调它, 突出它。这样使形象生动, 语言表达手法多样化。

【参考译文】 第一课 第一批飞行者

1 过去, 人们一直在向往着飞翔。几百年以前人们就知道怎样制作风筝了。风筝能一连几小时留在天空中。人们想道: “既然鸟和风筝能呆在天空中, 或许我们也能吧”。

2 最初, 人们制作象鸟一样的翅膀。然后, 他们从高层建筑物上跳下来, 试图飞起来。许多人这样做了, 但是都没有成功。

3 他们摔在地上, 有的死了, 有的受了重伤。经过许多次的失败以后, 人们不再企图利用翅膀来飞行了。后来, 有两个兄

第尝试用另一种方法来飞行。你能猜得出是哪一种方法吗？他们用气球做试验。他们说：“热空气比冷空气轻，因而热空气会向上升。如果我们用热空气装满一只气球。它就会升起。”

4 他们造了一只气球，这是用薄布和纸做的。在气球的下面点了火后，果然气球升上了天空，达到1,800米的高度！不久，气球内的空气变冷了，它就慢慢下降，轻轻地落到地面上。

5 几个月以后，兄弟俩放升了另一只气球。这一次，在气球下面悬挂了一只篮子。在篮子里放了三只动物：一只羊，一只鸭和一只母鸡。这只气球在天空中飞到了2.5公里以外的一个地方，随后安全着陆。

6 人飞上天空的时刻终于来了！1783年10月，两兄弟的另一只气球升上了天。这一次，气球载运了一个人，可是飞得不高，只上升了25米，因为气球被一根绳子拴在地面上。隔了一个月，有两个人乘着一只充满了热空气的气球飞上了天空。这一次没有绳子了！一大群人瞧着。气球升到900米的高度。风把它吹着跑了9公里后，就轻轻地回到了地面。这是人们第一次在天空中旅行！

7 有的人用一种叫氢的气体充满气球。装满了这种气体的气球可以飞行较长的距离。但是，在下面的吊篮里的人无法操纵气球，只能随风飘荡。

8 之后，气球被制成雪茄烟的形状，称为飞艇。飞艇有发动机驱动，并且可以稍微操纵航向。但是，飞艇仍然听任风来摆布，而且，氢有危险性，非常容易着火。曾经有过许多次事故，死了不少人。最后，停止了飞艇的制造。

Word Study

1/ reach

a. *vt.*

1) 达到

1. Average grain output per mu has reached 1,300 jin.

平均亩产量达到了1300斤。

2. Many items have reached advanced world levels in quality and performance.

许多产品在质量和性能上达到了世界先进水平。

2) 到达, 抵达

1. The delegation reached Beijing by special plane on February 17.

代表团于2月17日乘专机到达北京。

2. Finally they reached its main peak 4,300 metres above sea-level.

最后他们到达海拔4,300米的主峰。

3) 达成, 得出

1. This is the conclusion they reached.

这就是他们得出的结论。

2. We've got to reach an agreement about this question.

对这问题我们一定要达成协议。

b. *vi.* 伸向, 达到 (多远)

1. The park reached as far as the river.

这座公园一直连到江边。

2. How far does the new road reach?

这条新公路有多长?

3. The noise of the Diesel engine reached to the

street.

柴油机的噪声传到街上。

△ reach for 竭力想得到

The boy stood on tiptoe and reached for the map on the wall.

男孩踮着脚，伸出手去拿墙上的地图。

△ reach out 伸出

Everybody tried to reach out to those affected by the recent earthquake.

人人都努力向最近受到地震灾害的人们伸出援助之手。

2/ catch vt.

1) 抓住，捉住，接住

1. He caught my hand and held it lightly.

他抓住我的手紧紧握住。

2. I threw the ball to him and he caught it.

我将球抛给他，他接住了。

2) 赶上，搭上

1. We must go at once to catch our train.

我们必须立刻起程赶去上火车。

2. They caught us before we reached town.

我们还没到达城里，他们就赶上我们了。

3) 染上(疾病)

1. Be careful, you may catch cold.

小心点，你可能会着凉的。

2. If you have already had the disease, probably

you won't catch it again.

如果你有这个病，或许不会再染上了。

△ catch fire 着火

1. As the wood is wet, it won't catch fire.

木头是湿的，点不着。

2. Straw catches fire easily.

稻草很容易着火。

△ catch up with 赶上，追上

1. Only by learning what is advanced can we catch up with and surpass the advanced.

只有学习先进的东西才能赶上和超过先进。

2. We'll spare no effort to catch up with the advanced industrial countries.

我们将竭尽全力赶上先进的工业国家。

3. China, in fact, has caught up with and surpassed the world advanced levels in many respects.

事实上中国已经在许多方面赶上和超过了世界先进水平。

3/ watch 看，瞧，注视

a) vt.

1) 跟名词或代词

1. We visited a naval unit at Qingdao and watched an excellent naval display.

我们在青岛参观了一个海军部队，观看了一次精彩的海军表演。

2. Here visitors can watch the sky through a 130mm. refracting telescope.

在这里，参观的人可以通过一只130毫米的折射望远镜观看天象。

2) 跟带现在分词的复合结构

1. The boy liked to watch the boats being loaded and unloaded.

这男孩爱看轮船装卸货物。

2. We watched the airplane descending.

我们曾看过飞机降落。

3) 跟其他复合结构

1. He watched the TV-set carried out of the room.

他看着电视机从房里搬了出去。

2. Helpless, we watched a whole season's labour and half a year's food destroyed.

我们眼睁睁地看着整整一季度的劳动和半年的粮食给毁掉了。

b) vi.

1. We cannot just watch with folded arms.

我们不能袖手旁观。

2. He remained silent during the scene and merely watched.

在那事情发生期间他一言不发而仅仅看着。

c) n. 表

1. I have a watch. 我有一只表。

2. This watch is yours. 这只表是你的。

△ watch out (for) 当心, 提防

Watch out for cars when you cross the road.

过马路时当心车辆!

△ watch over 照看, 看守

A nurse sat by watching over him.

一位护士坐在旁边照看他。

翻译法：翻译概论

一、翻译的意义：

由于世界各民族使用不同语言，要达到相互交流思想的目的，就必须通过翻译这一手段来完成。英语是当代广泛使用的语言之一，科学技术的论文、著作，很多都是用英语发表的。为了加速我国“四化”建设，研究科技英语的译法，理所当然地受到普遍的重视。本书的任务之一是在研究扩大英语知识的同时，分课探讨英译汉的一些翻译技巧。

二、翻译的标准

追溯翻译史，严复曾提出过翻译标准应是“信、达、雅”。“信”就是忠实于原文，“达”就是表达要清楚，“雅”就是文字要古雅。在相当长的时期内曾被奉为不可动摇的准则。但“五四”运动以后通俗的白话文推广了，要求“雅”的势头就大为减弱，甚至也就渐渐不提了。后来鲁迅又提出了“信”和“顺”的两条标准。“信”就是忠实于原文，把原文的意义确切地翻译过来，不增不减。“顺”就是译文语言通顺流畅，符合现代汉语的规范。

科技作品，文体结构严密，逻辑性强，个人认为应该遵循“信、顺”的标准，即译文内容准确完整，语言简洁规范。

试比较下列英译汉的例子：

1. Air is also compressible, which means that it is more compressed, or denser nearer the ground.

空气也是可以压缩的，这意味着，越近地面，空气越受压缩，或其密度就越大。