

第六册  
Book Six

*Experiencing Diverse Cultures*  
*A British in America and China*

西北工业大学明德学院外语系 主编

体验多彩文化

——一个英国人在美国和中国的经历

主笔: Robert Jackson (英国)

总主编: 辛 柯

审校: 刘新民 王艾芬 田鹏森



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## 向中国学生推荐这套丛书

本书的作者 Robert G. Jackson (罗伯特·杰克逊) 先生出生在英国, 毕业于英国著名的利物浦大学, 后为英国壳牌公司高级技术专家和副总裁, 在美国工作和生活了 20 多年, 又在中国生活和工作了十几年。Jackson 先生曾因工作关系遍访世界 24 个国家, 阅历极其丰富。2000 ~ 2005 年, 罗伯特应邀为西北工业大学明德学院客座教授, 为学生讲授英美文化、高级写作、毕业论文写作等课程。在此期间, 罗伯特以其近半个世纪在多个国家的工作和生活阅历、渊博的知识与丰富的经验教授学生、指导青年教师。他虽 80 多岁的高龄, 却精力充沛、睿智机敏、逻辑思维清晰; 他具有惊人的记忆力, 做事有科学的态度, 有严谨、认真的工作作风; 他对同事谦和友善, 对学生和蔼可亲、循循善诱; 对事业认真、执著、吃苦耐劳。这一切, 深得我院学生和教师的热爱与敬仰, 也给我们留下了深刻的印象。

本套丛书是 Jackson 先生应邀为我院学生编写的阅读丛书。其内容丰富, 题材广泛, 涉及知识面非常广, 从人文历史、自然风貌, 到科技发展, 小到家庭宠物趣事, 大到世界和平和世界经济发展, 现实生活中的方方面面, 几乎无所不包。其中有作者的生平故事, 有几十年从事科技工作与研究的非凡历程, 有遍访几十个国家、进行跨文化交流的轶闻趣事。作为一名高级科技人员, 他对城市交通、环境污染、煤的气化、液体火箭推进剂的研究和发展以及野生动物保护, 都阐述了自己的体验和看法。他现在的妻子是中国人, 在中国工作和生活期间, 他目睹了中国的改革开放历程, 以一个友善的外国人的眼光看中国, 对中国在发展中存在的各种弊病提出了善意的建议, 对中国的进步与发展感到由衷的高兴, 对中国的光明前途充满了期待与信心。

本书的内容实际上是东西方文化碰撞的结果, 是作者丰富的人生阅历和渊博知识的反映, 也是他思想境界和人生价值观的反映。它首先表现了作者对故人、对故土、对祖国的热爱, 其一往情深, 缕缕思念, 溢于言表。其次表现了对异域文化, 特别是中国文化的理解与宽容; 对生命的关爱, 对环境的关注, 对大自然的热爱; 对文



## 外语专业英语系列丛书

明、教养、人类进步、科技发展、创造发明的欣喜与推崇；同时也反映了作者乐观向上的生活态度、精神与实践。阅读本书，无论是对做人、处世、从业都会有所帮助，也有利于学习外国文化，反省与弘扬中国文化。可以说，本套丛书读起来不仅有趣味性、知识性、可思性，而且有利于扩大知识面，提高整体素质。

从语言角度上讲，本书语言地道，词汇丰富，句式多样。在语言风格上，既有英国人特有的典雅、严肃与矜持，更不乏其通俗、幽默与诙谐。很多文章，由于作者自然、流利、得体的语言表达，读起来朗朗上口，不仅增长知识、学习语言，而且还是一种美的享受。

从理论上讲，外语学习涉及知识学习和技能训练。这是一个缓慢的累积和内化过程，其中包括语言学习和对目标与文化的体验过程，与其他学科的知识 and 技能学习一样，必须经过大量的、艰苦的实践。外语学习和母语学习一样，不能违背听、说、读、写这样一个自然学习顺序。听说永远是第一位的，所需实践量远远大于读写的实践量。但是，外语学习者在信息输入量方面，由于不能在一个真实的环境中依靠听地道的、真实的语言材料来获取大量的信息，只有通过大量阅读来弥补，特别是词汇量。虽然每一个词汇就是一个信息源，但是记单个的词汇没有实际作用，只有记句型和词的搭配，特别是动词的搭配，学习者才能从词的层面很快进入句子层面，从而进入篇章层面。英语专业和其他学科的大学生，在一定的学习阶段，有限的词汇量和对词语的运用能力成为进一步提高语言实用能力的主要障碍，特别是如何将被动词汇（认识的词汇）转为主动词汇（在说和写的过程中能够操作的词汇），如何在不同情境下，在不同文化环境中正确、得体地使用所学词语。

作为语言教师，我们一直寻求如何为学生提供比较理想的、可理解的语言输入，以培养学生有效的语言输入能力（听、读能力），并使其转化为较强的输出能力（说、写能力），最终获得正确、得体地使用所学语言的能力。要确保输出能力，首先要确



保大量的语言输入；其次，语言作为一种文化载体和交际工具，所输入的语言必须含有大量的文化信息，必须贴近现实生活并有一定的实用性，这样，学习者才感兴趣，才易于掌握。

大量实践是提高阅读能力和语言综合运用能力的唯一途径，只有大量实践才能把学到的词汇和语言知识转换成技能。在教材编写过程中，我们充分尊重语言学习这一规律并考虑到中国学生外语学习的特点，不仅编写了阅读理解问题，还为这套教材编写了翻译练习、讨论和写作练习，以便在大量阅读基础上把听、说、读、写、译有机地结合起来，从整体上提高学生的语言实用能力。

这套教材无论是语言输入量，知识涉及面，词汇覆盖面，语言的使用，或者是以读为主，结合听、说、写、译的练习，都基本满足了以上语言学习规律和中国学生学习英语的特点的要求。作为英语学习的阅读教材，除了内容新颖，语言地道，文笔流畅外，主要让学生通过一个外国人自身丰富的经历叙述，对许多异域文化，其中包括中国文化进行思考，扩大学生的知识面，词汇量。让学生通过阅读对西方文化有一个感性体验，从而能达到跨文化交际的目的。

这套教材作为泛读教材在两届学生中试用之后，根据教师和广大学生的要求，把原来每一册中的每个小故事根据非英语专业和英语专业学生的语言层次由作者本人写成简写本和原版本，我们再根据语言和内容难易程度编成六册。一至四册主要包括了作者的生平与经历；五、六册主要包括一些较复杂的科技文章。每册有 16 篇文章，每篇文章都是独立的故事，便于学生选择阅读；若用于教学，则利于教学安排。

我们希望学习者在阅读后能增长见识，对异域文化有较多的了解；能扩大词汇量，学会正确灵活使用词汇；能学到地道、恰当、得体的语言表达；能实实在在地提高英语语言的综合应用能力。同时也希望同一教材的不同难易程度的版本能够适合不同程度的学习者，使其语言能力特别是阅读能力得到提高。



西北大学出版社的编辑对本书的出版从编稿到反复校对，付出了巨大的心血，我们在此表示衷心的感谢。曾经在我院工作的樊恒夫老师也对本书的出版，特别是部分课文标题的翻译反复推敲，下了很大的工夫，在此我们也表示衷心的感谢。

西北工业大学外国语言文学系 辛柯

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# Unit 1

The Sentry

## Unit 1

### The Sentry

#### 内容简介

阿尔及利亚某工厂有一座燃烧废气的“火把烟囱”，被熊熊燃烧的火焰引来的昆虫和飞鸟，刹那间就成了空中“烧烤”。对于在附近执勤的哨兵而言，真是空中掉下个“馅饼”来。

#### Version 1

The flare stack<sup>1</sup> stood at the southwest corner of the plant site. This plant, built in Algeria<sup>2</sup>, was the first plant of its type in the world so, of course, the host government considered that every important part of it should be guarded.

To many, a flare stack would not be considered important, although it **held the essential purpose of** being the end of the line from where we, as plant operators, hoped nothing much would escape. We knew quite well that, in an **emergency**, it would be the **outlet**, to freedom, for the pressure, which would otherwise build up in the system.

Because, in such an event, the gases arriving at the outlet were very **flammable**, the flare must always be **alight**. When everything was working well the **flow** to the flare was so low that it often had to be kept burning slightly. So, like the host government, we thought the flare was important. It was lonely around the flare stack since, for the safety of other parts of the plant, it had to be in that **remote** corner but everyday, day and night, one sentry or another stood guard to do his duty for his country.

The day sentries, attentive at their post, could **relieve their boredom** (if a **disciplined** soldier is allowed to be bored) by watching the activities **taking place** in the plant or in the **terminal**, where one of the special **tankers** arrived every few days. At night, it was so different. Although the plant was lit along its roads, on the towers, the **vessels**, and the **pipe racks**, and along the **jetty**, the brightest light was the flare and when it was called into action it could be seen from a long distance

away.

The sentry, therefore, stood alone in this bright pool of light. But was he alone? Bright lights do not only light the sky and **draw attention from** all those that see them, they also attract **moths** and other flying insects. Such was the case with the flare.

So as the sentry stood at his post, the air above him **was filled with a mass of suicidal** insects. But the insects were not alone. Man knows well that bright lights attract insects and uses that knowledge as a means to **trap** them. The sentry soon found out that this knowledge was also known to a **species** of local bird.

He gained this knowledge, as he stood patiently and alone at his post, when suddenly, out of the sky above him, dropped a featherless bird. During the night, many others joined their first **adventurous** and hungry companions for nature had not designed the feathers of these birds to **range** too close to a flare stack.

The more **cautious** of the birds had their **fill** and returned to their **perches** unharmed, at least for that night, but those who travelled too close became the lunch of that sentry who gained a just and tasty reward for his duties. I learned this interesting fact when I, and some of my colleagues, decided one night, to **take a stroll around the facility**.

That was many years ago but I often wonder if there is still a sentry by that flare and does he, like his **predecessors**, have small birds for lunch each day?

*For those who want to know the whole story, and those who are advanced English learners, the complete version can be read below.*

## Version 2

The flare stack stood at the southwest corner of the plant site. The plant, built in Algeria, was the first plant of its type in the world, so, of course, the host government considered that every important part of it should be guarded.

To many, a flare stack would not be considered important, although it held the essential purpose of being the end of the line from where we, as plant operators, hoped nothing much would escape. We knew quite well that, in an emergency, it would be the outlet, to freedom, for the pressure, which would otherwise build up in the system.

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# Unit 1

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## Notes

1. flare stack: a vertical pipe at the top of which fuel can be burnt (燃烧废气的) 火把烟囱
2. Algeria: a country of northwest Africa bordering on the Mediterranean Sea 阿尔及利亚, 非洲西北部濒临地中海的国家。

## Exercises

### I. Comprehension Questions

1. What's the duty of a sentry?
  - A. To watch for birds.
  - B. To try to catch flying insects.
  - C. To act as a guard against intruders.
  - D. To light a flare if it should go out.
2. According to the author, was the night sentry alone? And why?
  - A. No, he had birds and insects for company.
  - B. No, he had the author and his friends who were out walking.
  - C. Yes, he had not taken a shower for 3 days.
  - D. Yes, because the flare was isolated.
3. What happened during the night?
  - A. Ships arrived at the jetty.
  - B. The author and his friends took a walk.
  - C. Featherless birds fell at his feet.
  - D. The flare lit up countryside.
4. What could the day sentry see?
  - A. People working.
  - B. Ships arriving at the jetty.
  - C. Birds flying round the flare.
  - D. The buildings of the town.
5. Can you describe the function of the flare stack?
  - A. To attract birds.
  - B. To make the plant look more magnificent.
  - C. In an emergency, to serve as an outlet for the whole system.
  - D. To light up the plant at night.

# Unit 1

6. What was the relationship between the sentry and the birds, the birds and the flying insects, and the insects and the flare?

- A. The burning stack attracted the insects at night and the birds, the insects attracted the hungry birds to the stack and the sentry was delighted to have those unlucky birds for lunch each day.
- B. Without the sentry, there would not be any birds and insects.
- C. Without the insects, there would not be any birds and sentry.
- D. The sentry, the birds and the insects were both important to the plant.

## II. Translation

1. The flare stack stood at the southwest corner of the plant site.
2. We knew quite well, in an emergency, it would be the outlet, to freedom, for the pressure, which would be otherwise build up in the system.
3. The brightest light was the flare and when it was called into action it could be seen from a long distance away.
4. During the night, many others joined their first adventurous and hungry companions for nature had not designed the feathers of these birds to range too close to a flare stack.
5. The more cautious of the birds had their fill and returned to their perches unharmed, at least for that night, but those who travelled too close became the lunch of that sentry who gained a just reward for his duties.
6. That was many years ago but I often wonder if there is still a sentry by that flare and does he, like his predecessors, have small birds for lunch each day?

## III. Topics for Discussion and Writing

1. According to the author, was the night sentry alone? And why?
2. What was the relationship between the sentry and the birds, the birds and the flying insects, and the insects and the flare?

## Unit 2

### Flame Speed

#### 内容简介

以每小时 3000 多公里速度飞行的航天飞机, 由于推进器密封盖的故障, 高温燃烧的火焰氢由于缺乏氧, 在不到一秒的瞬间由火箭的尾部冲向火箭的前端, 引发剧烈爆炸。这就是震惊世界的美国挑战者号航天飞机事件。作者由此回忆起学生时代关于火焰速度的一次难忘的物理实验课。

#### Version 1

When I was a student, we had a very good Professor of Mechanical Engineering. Every year he gave a lecture to the student body of the Engineering Faculty to **illustrate** various aspects of the science of engineering. The most fascinating of these was an experiment to show the effect of **oxygen deficiency** on the flame speed of **hydrogen**.

For this experiment Professor Scholes set up a whole **bench** full of glass **tubes** bent into almost every imaginable pattern. There were circles, U bends, some small and some quite large, **stretching** over as much as three metres, but I would imagine in total length maybe three times that. <sup>1</sup>

For his fuel the Professor used town gas, which at that time was **predominantly** hydrogen. At the right end of the bench the tubes ended in a narrower jet where the gas burnt with a mainly blue flame. At one end of the bench the tubes **terminated** in a small can with a push fit lid to which was **soldered** a metal tube for the gas and air connection. <sup>2</sup>

After explaining that a flame will always seek a source of oxygen and move faster as it becomes more difficult to find, he turned off the source of gas into the can. <sup>3</sup> Almost at once the flame began to move, from the jet, through the twists and turns of the glass tube towards the metal can at the other end.

At first the movement was very slow, but soon it became obvious that the flame was moving

# Unit 2

faster. As it neared the end it was moving so fast it became almost impossible to **distinguish**. Suddenly the silence was broken as the flame's arrival in the can was **heralded** by a loud bang and the sight of the lid **sealing** its end, flying away from the bench. <sup>4</sup>

The Professor was making the point that as it becomes starved of oxygen the flame speed of hydrogen **accelerates** until it reaches **detonation velocity** at which an explosion (or detonation) occurs. <sup>5</sup>

This experiment came vividly back into my mind many years later when I saw the Challenger<sup>6</sup> explode as it rose into the sky. A fault in a **booster rocket** seal has been accepted as the cause of the disaster. <sup>7</sup>

At that time the vehicle was travelling at more than 3,000 kilometres per hour and the flame passed from back to front in less than one second. No one, to the best of my knowledge, has ever explained how that could happen. <sup>8</sup> I am sure that my Professor, if he had still been alive, would have. Maybe he would even have set up his experiment again to show what happens when burning hydrogen is starved of oxygen.

*For those who want to know the whole story, and those who are advanced English learners, the complete version can be read below.*

## Version 2

When I was a student we had a very good Professor of Mechanical Engineering. Although he was also the senior professor of the Engineering School he was a very good teacher, always careful to explain whatever he was teaching.

Every year he gave a lecture to the student body of the Engineering Faculty, with many interesting **demonstrations**, to illustrate various aspects of the science of engineering. The most fascinating of these was an experiment to show the effect of oxygen deficiency on the flame speed of hydrogen.

For this experiment Professor Scholes had set up a whole bench full of glass tubes bent into almost every imaginable pattern. There were circles, U bends, some small and some quite large, stretching over as much as three metres, but I would imagine in total length maybe three times that.

For his fuel the Professor used town gas, which at that time was predominantly hydrogen. At the right end of the bench the tubes ended in a narrower jet where the gas burnt with a mainly blue

flame. At the other end of the bench the tubes terminated in a small can with a push fit lid to which was soldered a metal tube for the gas and air connection.

After explaining that a flame will always seek a source of oxygen and move faster as it becomes more difficult to find, he turned off the source of gas into the can. Almost at once the flame began to move, from the jet, through the twists and turns of the glass tube towards the metal can at the other end.

At first the movement was very slow, but soon it became obvious that the flame was moving faster. As it neared the end it was moving so fast it became almost impossible to distinguish. Suddenly the silence was broken as the flame's arrival in the can was heralded by a loud bang and the sight of the lid sealing its end, flying away from the bench.

This experiment came vividly back into my mind many years later when I saw the Challenger explode as it rose into the sky. A fault in a booster rocket seal has been accepted as the cause of the disaster. I have never, however, seen an explanation of how the flame, which first became visible near the back of the Challenger, moved to the front and the explosion occurred at the instant it arrived there.

At that time the vehicle was travelling at more than 3,000 kilometres per hour and the flame passed from back to front in less than one second. The speed of that flame must, therefore, have been very much higher. No one, to the best of my knowledge, has ever explained the speed of that flame. I am sure that my Professor, if he had still been alive, would have. Maybe he would even have set up his experiment again to show what happens when burning hydrogen is starved of oxygen.

## Notes

1. There were circles, U bends, some small and some quite large, stretching over as much as three metres, but I would imagine in total length maybe three times that. 有的是环形的, 有的是 U 形的, 有的大有的小。在试验台上延伸了足有 3 米长, 可我认为总长度也许是那的三倍。句中, stretching 是分词短语作状语。

2. At one end of the bench the tubes terminated in a small can with a push fit lid to which was soldered a metal tube for the gas and air connection. 在工作台的另一端, 这些试管的收尾处形状好似一个小罐, 压上盖子, 密闭合缝, 其上焊接有一金属管, 用以与煤气和空气的进气阀相连接。

本句中, "push fit lid", 是一个塞上去的盖子, 不透气 (tight fit), 开启时, 需用一个类似杠

杆的东西(lever). “to which” 引导定语从句, 因为 “the lid was soldered a metal to”, 所以用 to+which。

3. After explaining that a flame will always seek a source of oxygen and move faster as it becomes more difficult to find, he turned off the source of gas into the can. “after explaining that ...” 是主句的时间状语。“as it becomes more difficult to find” 是 “a flame will always seek a source of oxygen and move faster” 的状语。Scholes 教授说明了火焰总是朝着氧气源方向运动, 并且在氧气变得稀少, 火焰的运动速度加快之后, 立即关闭了罐子的进气阀, 几乎在同一时刻, 火焰开始快速移动, 从喷口开始, 穿过弯弯曲曲的试管, 一直抵达另一端的金属罐。

4. Suddenly the silence was broken as the flame's arrival in the can was heralded by a loud bang and the sight of the lid sealing its end, flying away from the bench. 句中的 as 引导时间状语从句, flying away from the bench 是分词短语, 修饰 the lid。

5. The Professor was making the point that as it becomes starved of oxygen the flame speed of hydrogen accelerates until it reaches detonation velocity at which an explosion (or detonation) occurs. 本句的主干是: The Professor was making the point that...; 在 that 从句中 the flame speed of hydrogen accelerates 主句部分带有由 as 和 until 引导的两个从句。

6. Challenger: 美国 “挑战者号” 航天飞船, 1986 年 2 月因技术故障在升空后数秒即发生了爆炸。

7. A fault in a booster rocket seal has been accepted as the cause of the disaster. “Be accepted” 是 “普遍认为” 的意思。助推火箭的密封圈出现的故障被认为是导致 “挑战者号” 航天飞机升空后爆炸的原因。

8. No one, to the best of my knowledge, has ever explained how that could happen. “to the best of my knowledge” 意思是: “就我所知”, 此短语在本句中作插入语。

9. I have never, however, seen an explanation of how the flame, which first became visible near the back of the Challenger, moved to the front and the explosion occurred at the instant it arrived there. 本句的主干是: I have never seen an explanation of...。 “which first became visible near the back of the Challenger” 为非限定性定语从句, 修饰 “the flame”。

## Exercises

### I. Comprehension Questions

1. What is the experiment as mentioned in the story?

A. How coal gas burns.

B. The flame speed of hydrogen.