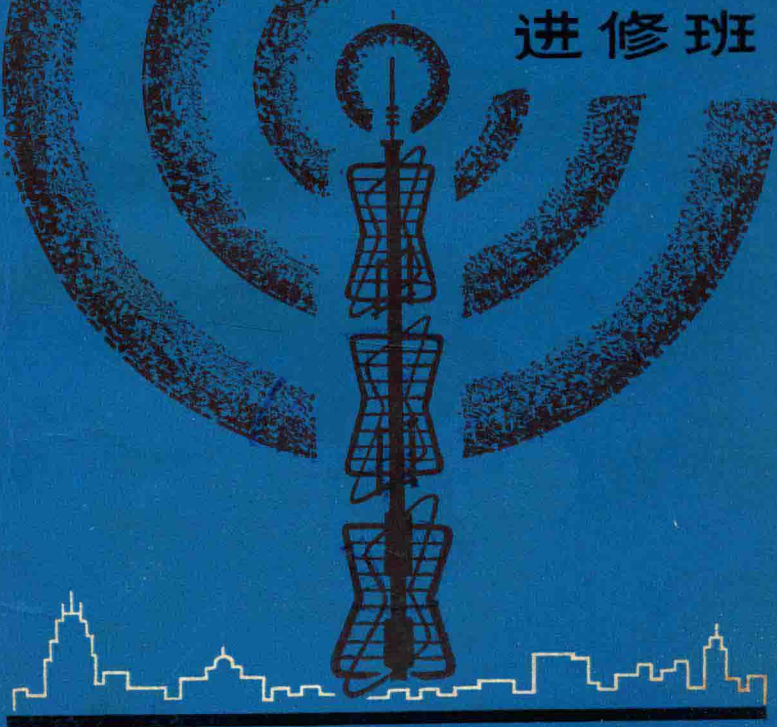


上海市业余外语广播讲座

新编 英语

English

进修班



上海外语教育出版社

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前 言

一、本书是上海人民广播电台业余外语广播讲座第四期英语进修班教材，在词汇与语言深浅程度上与英语广播讲座中级班教材衔接。

二、为了帮助学完中级班的学员初步掌握阅读英语科技书籍与进行会话的能力，正课文采用对话形式，补充课文采用短文形式，内容包括科学家传记、宇宙飞行、科学幻想等。

三、本书由我系唐振邦编写，罗勤生、胡世标、干仪凤审校。由于编审者水平有限，存在问题一定不少，希望同志们批评指正。

上海师范学院外语系

1980年9月

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Lesson I The First Meeting

Li: I'm very glad to get acquainted with you, Mr. Smith.

Smith: So am I, Mr. Li.

Li: Your presence here in our factory will be a great help to us.

Smith: I hope I'll not disappoint you. As you are the general manager of this factory, I'll often turn to you for instructions and guidance.

Li: It will be my greatest pleasure to be of any help to you. Mr. Smith, you are a specialist in electronics. Will you be so kind as to tell me something about the development of this science?

Smith: Electronics is a vast field. Electronic discovery, research, and invention goes back to ancient Greece.

Li: It might be more interesting for us to talk about things of our own time. Will you please give me some information on the vacuum and solid-state phases of the science?

Smith: Well, let's first review the pioneering experiments, investigations, theories, and hardware of vacuum electronics.

Li: The vacuum tube is indeed a marvellous device. With its help scientists were able for the first time

in history to control almost instantly the flight of millions of electrons with a very small amount of energy. But the solid-state devices, which came later, have shown themselves to be even more fascinating.

Smith: That's right. By 1940 electronics customers were demanding more from their equipment than these vacuum tubes could provide. They wanted more sophisticated devices and circuits that should be simpler, smaller, cheaper and more reliable.

Li: This demand led to the beginning of a new phase in electronics, didn't it?

Smith: Yes. In 1948 the point-contact transistor was invented, but today we have also the junction transistor, the silicon controlled rectifier, the integrated circuit, the laser and holography.

Li: It's really wonderful that so much has been accomplished in so short a time.

Smith: By the way, I wonder where you learned to speak English so well, Mr. Li.

Li: I learned to speak English at a conversation class in the English department of a college in Shanghai.

Smith: No doubt that class must have been of tremendous benefit to you.

Li: There we used to practise English conversation on topics chosen by the teacher. We never spoke

to each other in Chinese in the class.

Smith: That's wonderful. You couldn't have done better.

Li: But, as a matter of fact, my English is still very poor. I often feel quite at a loss when people speak to me in English very fast.

Smith: I often hear people complain to me about their knowledge of English. It seems to me that the better one knows English the more dissatisfied he becomes with his knowledge of it.

Li: That's true. When I first learned to speak a little English I felt as proud as a peacock.

Smith: You felt humbler as you got along, didn't you?

Li: Yes. When one gets humbler, he is actually making headway with his lessons. Now, Mr. Smith, shall we go and see the factory?

Smith: All right. It will be a great pleasure to visit all the departments of your factory and get acquainted with my Chinese colleagues.

New Words and Expressions

1. acquaint [ə'kweint] *v.* 使认识, 使了解
2. presence ['prezns] *n.* 存在; 出席; 在场
3. disappoint [ˌdisə'pɔɪnt] *v.* 使失望
4. manager ['mænidʒə] *n.* 经理; 管理人
5. instruction [in'strʌkʃən] *n.* 指示, 指导, 训练
6. guidance ['gaɪdəns] *n.* 指引, 引导

7. specialist ['speʃəlist] *n.* 专家
8. electronics [ilek'trɒniks] *n.* 电子学
9. discovery [dis'kʌvəri] *n.* 发现
10. research [ri'sə:tʃ] *n.* 研究
11. Greece [gri:s] *n.* 希腊
12. information [,infə'meiʃən] *n.* 消息, 情报
13. vacuum ['vækjuəm] *n.* 真空
14. solid-state ['sɒlɪd-'steɪt] *a.* 固态的
15. phase [feɪz] *n.* 阶段; 相
16. pioneer [,paɪə'niə] *n.* 先驱者 *v.* 开辟, 倡导
17. investigation [in'vesti'geɪʃən] *n.* 调查
18. theory ['θiəri] *n.* 理论, 学说
19. hardware ['hɑ:dweə] *n.* 硬件; 五金
20. tube [tju:b] *n.* 管子
21. marvellous ['mɑ:vɪləs] *a.* 奇异的
22. device [di'vaɪs] *n.* 器件; 设备; 装置
23. control [kən'trəʊl] *n., v.* 控制
24. instantly ['ɪnstəntli] *ad.* 立即, 即刻
25. electron [i'lektrɒn] *n.* 电子
26. energy ['enədʒi] *n.* 能, 能量; 精力
27. fascinating ['fæsineɪtɪŋ] *a.* 迷人的
28. customer ['kʌstəmə] *n.* 顾客
29. demand [di'mɑ:nd] *v., n.* 要求
30. equipment [i'kwɪpmənt] *n.* 设备, 装备
31. provide [prə'vaɪd] *v.* 提供, 供给
32. sophisticated [sə'fɪstɪkeɪtɪd] *a.* 高级的, 尖端的;
老于世故的

33. circuit ['sə:kit] *n.* 电路
34. reliable [ri'laɪəbl] *a.* 可靠的
35. contact ['kɒntækt] *n.* 接触
36. junction ['dʒʌŋkʃən] *n.* 接合, 连接; 结
37. silicon ['silikən] *n.* 硅, 矽
38. rectifier ['rektifaɪə] *n.* 整流器
39. integrate ['ɪntɪgreɪt] *v.* 使成一体; 集成
40. laser ['leɪzə] *n.* 激光; 激光器
41. holography [hə'ləgrəfi] *n.* 全息摄影术
42. accomplish [ə'kɒmplɪʃ] *v.* 完成
43. by the way 顺便说
44. department [di'pɑ:tmənt] *n.* 部门; 系
45. doubt [daʊt] *v., n.* 怀疑
no doubt 无疑地
46. tremendous [tri'mendəs] *a.* 极大的; 可怕的
47. benefit ['benɪfɪt] *n.* 好处, 利益
48. topic ['tɒpɪk] *n.* 主题, 题目; 话题
49. as a matter of fact 事实上, 其实
50. loss [lɒs] *n.* 损失; 丧失
at a loss 困惑, 不知所措
51. complain [kəm'pleɪn] *v.* 埋怨; 诉苦
52. dissatisfy [dis'sætɪsfaɪ] *v.* 使不满
53. peacock ['pi:kɒk] *n.* 雄孔雀; 孔雀
54. humble ['hʌmbl] *a.* 谦卑的
55. get along 进展; 相处融洽; 生活
56. headway ['hedwei] *n.* 前进, 进展
57. colleague ['kɒli:g] *n.* 同事; 同僚

Notes

1. I'm very glad to get acquainted with you, Mr. Smith.

史密斯先生，我很高兴和你相识。

这句话表示讲话的人和对方刚彼此认识。如果要表示在讲这句话之前已经认识，就应该使用动词不定式短语 *to get acquainted* 的完成时态。例如：

I'm very glad *to have got acquainted* with so many Chinese scientists when I was in Shanghai.

我很高兴在上海的时候能够结识这么多中国科学家。

在上面的句子中联系动词 *am* 表示说话的人现在很高兴。如果要表示过去很高兴就应该使用 *was*；要表示将来就应该使用 *shall* (或 *will*)。例如：

I *was* glad to get acquainted with him.

我(当时)和他相识感到很高兴。

I *was* glad to have got acquainted with him.

我(当时)因为和他已经认识而感到很高兴。

I'll *be* glad to get acquainted with him.

我将很高兴和他相识。

2. With its help scientists were able for the first time in history to control almost instantly the flight of millions of electrons with a very small amount of energy.

靠着它的帮助科学家们在历史上首次能够以极小的能量几乎立即控制千百万个电子的飞行。

{ *have* } been able 或 { *were* } able 后面接动词不定式含有经过努力终于能够做成某事的意思。例如：
{ *has* } { *was* }

不定式含有经过努力终于能够做成某事的意思。例如：

He *was able* to climb to the top of the mountain.
他终于能够攀登山顶。

He *has been able* to invent a few electronic devices.
他曾经(经过努力)发明了好几种电子器件。

再进一步比较 could 与 $\left. \begin{array}{l} \text{was} \\ \text{were} \end{array} \right\}$ able 的用法:

He *could* enter a university, but he preferred to stay in the factory.

当时他能够进入一所大学,但他宁愿留在厂里。

By studying hard he *was able* to enter a university.
他靠着努力学习终于能进入一所大学。

3. No doubt that class must have been of tremendous benefit to you.

无疑那个班对你一定有过很大的益处。

must 后面接完成时态表示对过去事情的推测。如果要表示对现在事情的推测,应该用一般时态。例如:

She *must be* sick, for she is so pale.

她一定有病,因为她面色这样苍白。

She *must have been* sick last week, for she 'didn't come to school.

她上星期一定生病,因为她没有来校上课。

4. You *couldn't* have done better.

你们做得再好不过了。

情态动词 can 和 could 后面接动词原形,都可以用来表示现在的可能性。如果要表示过去的可能性,那末它们后面的动词应该用完成时态。试比较:

That { can } not be true. 那不可能是真实的。
{ could } (指现在)

That { ^{can} } not *have been* true. 那不可能是真实的。
 { _{could} } (指过去)

使用 **could** 时, 说话的语气比较婉转。 **can** 和 **could** 一般还用来表示能力或许可。例如:

He *can* walk as fast as a young man.

他能够和青年人走得一样快。

Can } I smoke in here? 我可以在这儿吸烟
Could }

Supplementary Reading Material

The Vacuum Tube and The Transistor

The vacuum tube, now called the electron tube, appeared first in 1904, and by 1930 was being widely used in radio receivers. Developments during the next ten years were rapid, and electronic equipment using vacuum tubes was coming into common use by the start of World War II. Progress continued at even higher speed during the war.

In 1948 the first transistor came into the world. It was at once clear that in this newly invented device lay the future of the science of electronics. Rapid development followed with the achievement of great successes. It is really wonderful that so much has been accomplished

in so short a period. But the field is wide, and much research remains to be carried out.

Exercises

I 把括弧内的动词写成所需的形式:

1. He must (leave) shanghai already.
2. The machine can't work. Something must (be) wrong with it.
3. I left my dictionary here on the desk and now it's gone. Someone must (borrow) it.
4. It must (be) very late when he returned home, for I was already fast asleep.
5. The work must (be) very difficult, for he spent the whole afternoon doing it.

II 说明下列句中使用 can, could, was able 等的理由:

1. He *can* carry the box easily.
2. I *cannot* swim so well.
3. He *will be able* to speak English in one year.
4. I *have not been able* to accomplish the task.
5. You *can* do it tomorrow.
6. If I had a dictionary, I *could* help you to translate this book.
7. He *could* see everything in that room through the window.
8. He *could* not lift the load, so I helped him.
9. It *cannot* be a mistake.
10. It *couldn't* be a mistake.

11. *It couldn't have been a mistake.* (注意: 是否可以用 *cannot have been*?)
12. He *could* not have failed to pass the examination.
13. *Could* he really have meant it?
14. Who *could* have done it?
15. He *was able* to overcome that difficulty.
16. Anybody *can* make such mistakes.
17. They *can't* be both ill at the same time.
18. That *could* be the car we are waiting for.
19. *Could* I ask you a question?
20. I *could* never play the piano.

II 把下列句子译成英语:

1. 最后我们终于完成了那项实验。
2. 那个消息不可能是真实的。
3. 他现在一定已经回英国去了。
4. 我们收集到了这么许多有用的情报心中很高兴。
5. 他一定感到非常失望因为我们没有把那情报供给他。
6. 我们很难过没有能够见到那位大科学家。
7. 你来得越早越好。
8. 他从来没有对他的工作说过抱怨的话。

Lesson II Control and Automation

Liu: I'm sorry not to have heard your lecture. I was away from Shanghai on some urgent business.

Smith: There was really nothing new in my talk.

Liu: Could you tell me what it was about?

Smith: The basic principles of control and automation.

Liu: Oh, that's a fascinating topic. I really wish that I had attended your lecture. Then I would have learned what the word automation actually means. It seems that this word has different meanings to different people.

Smith: Yes. To some it means only the automatic operation of machines doing different jobs, to others it means the completely - automatic factory.

Liu: But what do you think it really implies?

Smith: To me it is little more than a new name for an old idea and implies the replacement of the human element in production by automatic machinery. Full automation implies the operation of a complete production unit with little or no human intervention.

Liu: Your view is correct. As far as the mere replacement of the human element in industry is concerned, automation is not a new development at all. Semi-automatic machines have been