

Level 4

Modern English

Reading and Writing



现代英语

(第二版) 第四级

读与写

《现代英语》修订组



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MODERN ENGLISH

for University Students

现代英语

(第2版)

Reading and Writing

读 与 写

Student's Book



(京)112号



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再 版 前 言

《现代英语》(*Modern English*)系国家教委批准,由中国高等教育出版社与英国麦克米伦出版公司合作编写出版的英语教材,主要供我国高等院校非英语专业的各科学学生学习英语使用。这是我国首次与国外合作编写出版大学教材,是英语国家的语言优势与国内大学英语教学经验的结合。这一中外文化交流项目,为国内外语言界、教育界和新闻界所瞩目。

《现代英语》的编写,以现行的《大学英语教学大纲》为指导原则,从国内大学英语教学情况出发,解放思想,在肯定和继承国内大学英语教学行之有效的经验的同时,积极借鉴和引进国外语言学和语言教学的新思想、新理论和新方法。这主要表现在三个方面:

第一, 阅读教学从 TALO 向 TAVI 转变

国外语言界提出了阅读教学中的两个重要概念,即文章作为语言实体(Text as Linguistic Object,简称TALO)与文章作为传递信息的载体(Text as Vehicle of Information,简称TAVI)。前者表示,阅读材料是用以教授语言知识(语音、词汇、语法等)的形式,后者则表示,阅读材料是传递信息的媒介。因此,在教学实践中,如何处理这两者的关系,便直接影响着教学方法、教学目的和教学效果。在相当长的一个时期内,由于多方面的局限,国内的阅读教学在很大程度上停留在TALO的水平上,体现为以词汇、语法为主线,教师为中心,过多强调了语言知识的传授,却往往忽略了阅读文章所表达的信息。我国英语教学中,甚至在学生毕业后的工作实践中,阅读速度慢、阅读能力较弱这一普遍现象,是与上述的传统教学思想和方法有不可分隔的关系的。须知,人类当前所处的时代是“信息爆炸”的高科技时代,正是在这种形势下,产生了阅读教学从TALO向TAVI转变的观念。这就要求在教学中,不仅要重视语言形式,而且要十分重视通过语言形式所表达出的信息,进而培养学生通过阅读课文获取信息和表达信息的能力。《现代英语》的编写,正是基于英语阅读教学的这一变革,在选材上,打破以语法为纲的框框,选用多题材、多体裁的真实的(authentic)语言材料,使课文内容知识性强,信息量丰富,从而为学生接触真实的语言材料,获取信息创造良好的条件。

第二, 语言操练从 Usage 向 Use 转变

英国语言学家H. G. Widdowson 区别了Usage和Use两个不同的概念,指出Usage是语言形式的一个成分,即“用法”,而Use则是语言交际体系中的一个成分,即“使用”。任何一种语言形式都具有这两种属性,也就是说,用作解释某一语言现象的例证和其自身在交际场合中的使用。语言教学应从Usage向Use转变。这一理论反映在教材中,突出的一点就是练习的设计。迄今国内的传统英语教材中,在练习设计上,较为注重语法。因此,对语言形式进行的操练,往往是孤立的,或缺乏语境的,多停留在Usage的水平上,不是对课文句子的简单模仿,便是机械性的套用,因而显得呆板单调,难以达到巩固、掌握和使用的目的。《现代英语》的编写,发挥中外专家、教师的各自优势、充分合作,在练习设计上既着眼于语言形式,又注重语言形式的具体运用,精心设计和安排了形式活泼的练习。例如课前阅读(Before Reading),在国内现行大学英语教材中,则是首次使用。即使是对一些传统语法项目的练习设计,也力求激发学生的兴趣和动力。使用过《现代英语》的师生几乎都有一个深刻感觉,认为这套教材的练习独具风格,不再是课文的陪衬,在

某种程度上可以说是课文内涵的延伸,课文与练习两者自然而紧密地融为一体,相辅相成。

第三,运用语言交际的原则,培养学生的交际的能力

语言是交际的工具,语言教学的最终目的是培养学生能以书面的或口头的方式进行交际的能力。现行的文理科和理工科两个《大纲》都明确地将这一原则定为教学宗旨。《现代英语》编写的指导思想植根于现代语言学对语言交际理论的研究,注重发展语言技能,大力培养学生的交际能力,即运用语言技能,获取和表达信息。同时,《现代英语》努力体现《大纲》的原则、规定和要求。在交际能力的培养方面,根据国内大学英语教学的现状,把培养学生具有“较强的阅读能力”作为首要目标,同时培养“一定的听和译的能力和初步的写和说的能力”。

《现代英语》为推广先进的教学理论和方法,推动我国大学英语教学的改革、提高教学质量,为促进国内大学英语教材的建设都起了积极的作用,并以其独特的内容和风貌受到了国内师生的喜爱。

然而,由于《现代英语》是中外首次合作编写出版的教材,难免会存在这样那样的问题,加之第一版主要采取“他编我审”的方式,因此具有较大的局限性。通过四年多的课堂实践,暴露出某些不足之处,主要是有些内容偏专偏难,超出了国内学生当前的接受能力,这突出地反映在《泛读》和《听与说》教材中,有的文章趣味性较欠缺,有的生词量过大;课序安排也不尽如人意,等等,加之配套辅助材料的编写和出版未能跟上等诸多因素,造成使用上的困难。但是,广大师生和读者对《现代英语》给予了客观的和应有的评价,认为尽管存在着若干缺陷,它仍不失为一套学习现代英语的较好教材,因而迫切希望能尽快修订,弥补存在的不足之处,使之为我国大学英语教学更好地发挥作用。

经过多方努力和两年多的准备,《现代英语》1-4级的修订工作已顺利完成。现在,第2版终于和大家见面了。这次修订总结了第1版的经验和教训,采纳了广大师生的意见,顾及中外文化的客观差异,完全立足于国内,着眼于国内大学英语教学的实际需要,由中外英语专家和教师共同参与。修订的宗旨是:注重能力的培养,体现语言共核,增强趣味性,加大信息量,力图使《现代英语》成为一套大学文、理、工各科均为适用的通用教材。具体各书的修订情况是:

《读与写》(Reading and Writing) 首先,对选材和课序分别进行了充实和调整,增加人文社科方面的一般性文章,较之第1版有了大幅度的变化。以第1、2级为例,第1级只保留了第1版的第2、3和4等3课,对第1版的第5、7和11等3课重新换了课文和练习,另外新选编了《交通灯的来历》、《手势语》、《埃米琳·潘克赫斯特(人物传记)》、《美国人》和《教育新方法》等5课,同时选入第1版第2级的《从牛到纸币》一课。第2级也仅保留了第1版的5课,即第1、2(改名为《母亲和孩子》)、3、4(改名为《土地和人口》)和12等课,对第1版的第7课更换了课文和练习,新选编了《世界上最富有的人》、《英国民族》、《记忆力:为什么我们记得...为什么我们忘记》、《地震与火山》(全新课文和练习)等4课,同时分别将第1版第3级《一个孩子眼中的世界》和第4级《空气船》两课选入。对于所保留下来的课文,在篇幅或内容上都进行了程度不同的增删和修改。如此调整和修改,不仅增强了文章的可读性和可接受性,而且使课与课之间、级与级之间的梯度更加科学合理,符合由浅入深、循序渐进的原则。其次,用计算机对生词出现率和词汇量加以严格的控制,解决了生词量过大和超纲词汇较多的问题。这一点在

《泛读》和《听与说》教材中尤为明显。最后,在练习设计上,本着继承第1版的成功之处和创新的原理,对每一项练习都审慎地予以考虑、改写,直至重新设计,加强了词汇(如动词短语、搭配等)和写作方面的练习,使写作练习成为有指导的写作,严格从句子水平开始,逐步过渡到段落水平上。

《泛读》(Extensive Reading) 每单元的内容主题基本上同《读与写》的相应课配合,以使词汇有一定的复现率。每单元分为三篇难易度不同的文章,力求体现区分度,每篇均配以适量的练习,其中第三篇可供练习快速阅读之用。为了使用方便,第2版的《泛读》将A、B两册合为一册。

《听与说》(Listening and Speaking) 每单元的内容原则上也配合《读与写》,听力材料的生词出现率控制在最低限度,练习形式较之第1级更加生动活泼,注意安排了信息转换性质的练习。录音语速严格按照《大纲》的规定,由英美人士朗读,为学生熟悉不同的英美发音创造条件。

需要说明的是,根据广大师生的要求,在以上各教材中的练习设计上,注意与大学英语考试(College English Test)挂钩。

《教参》(Teacher's Guide) 除提供练习答案之外,还编写了《读与写》每单元课文的简介(Introduction),并尽可能提供背景资料、语音和语言难点、语篇分析、教学建议和教学方法等多项内容,以有助于教师备课。

考虑到国内大学英语教学的实际需要,而《现代英语》基本教材一时又尚难予以满足这一情况,高等教育出版社将另行组织国内力量编写和出版相应的配套辅助教材,其中包括《教师教学参考手册》和《学生练习册》等,这样做无疑将为使用《现代英语》提供更大的方便。

尽管这次修订尽了很大努力,但由于时间仓促,仍难做到尽如人意。我们将不断进取,不断提高,有所创造,有所前进。

《现代英语》这一中外文化合作项目,得到了英国已故首相 Harold Macmillan 勋爵和中国国内有关部门各级领导的极大关怀。这里,要特别提到英国麦克米伦出版公司 Adrian Soar 先生、Terrance Creed 先生、Yiu Hei Kan 先生、Kate Garratte 女士;中国高等教育出版社社长祖振铨先生和总编辑杨陵康先生。由于他们的热情关心、大力支持和悉心指导,保证了本书编写和修订工作的顺利进行。

我们感谢所有为《现代英语》的出版而付出辛勤劳动的中外各方面的人们。

《现代英语》在编写和修订过程中,得到了许多院校、师生及其他方面人士的关心、支持和帮助。我们特别感谢北京外国语学院、东南大学、重庆大学、西安交通大学、湖北工学院、陕西机械学院、天津轻工业学院、哈尔滨建筑工程学院、南京邮电学院、中国药科大学和郑州粮食学院等院校的大力支持,并要感谢杨惠中、周献桃、赵明瑜、王保清、徐承钟、唐启金、谢叔寒和王志纯等专家和教授的通力合作。我们尤其要感谢全国大学外语教材编审委员会理工科英语教材编审组副组长韩其顺教授的热心指导。正是这些单位和个人给予《现代英语》的积极支持,无论是批评还是建议,促成了这次修订。如果说《现代英语》第2版能得以问世并有所改进的话,那么必然是与所有关心、爱护、支持这套教材的院校、单位和人士分不开的。值此新版问世之际,我们谨向他们表示衷心的感谢,并热诚希望广大读者继续对《现代英语》提出宝贵意见。

先后参加审稿会的还有：包家珍、孙桂香、李五全、周建平、柳明淮、贾莉、谭荣璋等，在此一并鸣谢。

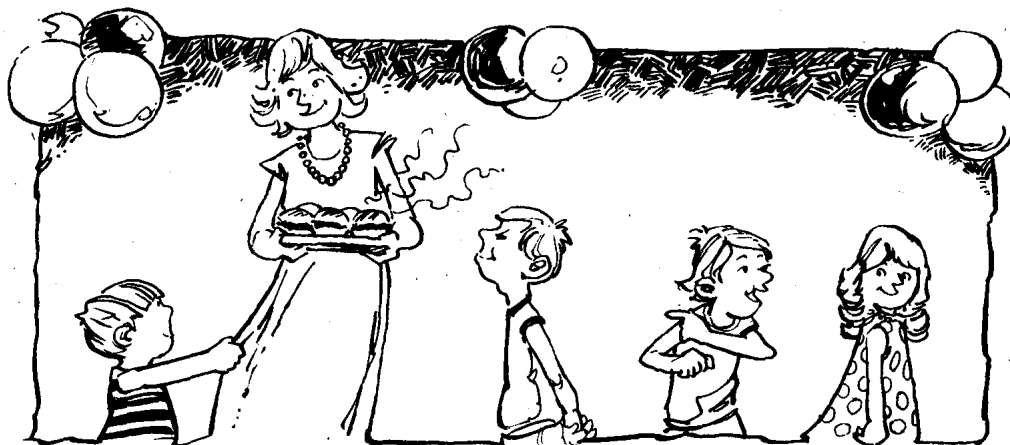
参加本书修订工作的，英方有：Nicholas Sampson、John Owen、Deborah Veness、Patrick Goldsmith、Donald Watson；中方有：罗信群、曹根望、邹长征、李霄翔。

《现代英语》修订组

1990年4月于北京

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UNIT 1

BEFORE READING

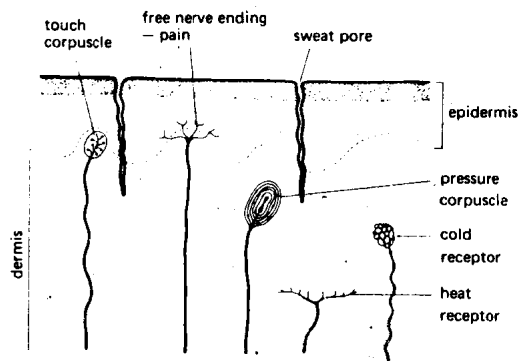
1 Before reading the text , think about the following questions . Discuss them in groups .

- 1 Would it be a good thing to have much more sensitive hearing?
- 2 Which do you think is the least useful of the human senses?
- 3 Which senses do you think it might be useful to have in addition to the ones we have already?

SENSES

Para 1 In their search for knowledge of the outside world, living things have learned to respond to a very great number of stimuli. Many organisms are sensitive to light, or other forms of electromagnetic radiation, and many are also sensitive to mechanical stimuli. For example, organisms frequently respond to vibrations such as sounds, as well as to touch, sustained pressure, acceleration and gravity. Knowledge of the watercontent of the atmosphere is potentially useful, while an awareness of temperature helps animals avoid dangerous extremes of heat or cold. Sensing the Earth's magnetic field provides clues that assist with navigation. Electrical fields are also full of information. Some fish find their way in dark water by detecting movements in an electrical field that they themselves create. Others locate their food by sensing the electrical activity caused by the muscles of the creatures they are hunting. Organisms must also keep track of events taking place inside their own bodies. Damage to the body is registered as 'pain', and an important group of mechanoreceptors regulate body movements by responding to the internal state of their muscles. Other internal receptors maintain a constant check on the composition of the blood and other body fluids.

Para 2 What determines the sharpness of the senses? At first sight, it may seem an advantage to be as sensitive as possible, but acute sensitivity would be an expensive luxury for many animals and it could sometimes be a disadvantage. If human beings had an improved sensitivity to touch, for example, it might make it unpleasant for us to touch many things, while the background noise from our environment might get in the way if we had a sharpened sense of hearing. In these cases, greater sensitivity is obviously not an advantage.



Receptors in human skin

Para 3 Senses are often clearly intended to respond only to a narrow range of stimuli. Perhaps animals would be overloaded if they were universally sensitive. The senses are rather like filters; they register inputs that are of particular interest, while rejecting others. For example, our eyes are only sensitive to a narrow section of the total range of electromagnetic waves — the part we call visible light. By contrast, many animals, such as certain birds and insects, see ultraviolet waves — waves which are totally invisible to the human eye, and others can detect infrared radiation. Similar limitations attend our perception of sound. Some of our fellow creatures have different concerns and have developed a range of hearing which helps them the most. Many small mammals, for example, communicate via a range of very high-pitched whistles and pips — ultrasound — while some birds may hear natural infrasounds, and use them in navigation. *sh v b, sh b*

Para 4 It may occasionally pay an animal to ignore certain types of information completely. Octopuses, squid and their relatives have no sense of hearing at all, a rather strange defect in these otherwise very advanced creatures. Some scientists believe that their deafness may help them resist the animals that hunt them, such as toothed whales, which are thought to attack them with intensely loud sounds. No squid could escape the explosive power of a whale at close range, but deafness may protect them when these animals are a little way off, and give them the opportunity to escape.

Para 5 A sense that must be very sharp in many organisms is the sense of time. Many creatures must time reproduction or migration to occur at certain times of the year, and in the cooler regions of the world they usually keep track of the changing seasons by observing the length of the day. In mammals, a part of the brain called the pineal gland plays an important part in this process. The gland produces a certain substance, but only at night — it is controlled by information sent from the eyes. The amount of this substance in the blood is therefore related to the length of the days, and gives the rest of the body a chemical signal. Certain other creatures sense the length of day with an additional sense organ in the brain. Birds have such an organ which, remarkable though it may seem, responds to light that filters through the feathers and bone.

Para 6 Plants are also influenced by the length of day, especially in reproduction. For some species, short days start the plant flowering, while for others long days are required. However, it is the length of the dark phase of the daily cycle that seems to be the critical factor, because short interruptions at night with bright light will

disturb the normal response.

Para 7 So, as we can see, each organism develops the senses that it requires,
55 and the range of senses goes far beyond the five that we traditionally recognize.

SKIMMING

2 Decide which of the following headings best corresponds with each of the paragraphs in the passage.

- A Filtering out information
- B A sense of time
- C An immense range of senses
- D How sharp should senses be?
- E Plants and time
- F Conclusion
- G Ignoring information

**COMPRE-
HENSION**

3 Read the passage again and then answer the following questions by choosing the best alternative.

1 Living things have learnt to respond to stimuli because

- A organisms are sensitive to light.
- ~~B~~ they explore the outside world.
- ~~C~~ they want to avoid danger.
- D there are a great number of stimuli.

2 Which of the following is NOT mentioned as a sensory ability in animals?

- ~~A~~ Being aware of danger through the sense of smell.
- B Finding their way.
- C Detecting movements in an electrical field.
- D Locating food.

3 It can be concluded from the first paragraph that

- ~~A~~ organisms must also know what is taking place inside their own bodies.
- B organisms respond to what is outside and inside their bodies.

- C organisms' receptors protect their bodies from damage.
 - D pain inside the body can be understood as the internal state of muscles.
- 4 Concerning the sharpness of the senses.
- A people have not yet determined exactly what it is.
 - B its advantages are outweighed by its disadvantages.
 - ☒ C greater sensitivity would make us uncomfortable.
 - D greater sensitivity is neither an advantage nor a disadvantage.
- 5 From the passage, we know that
- A senses do not respond to every input.
 - ☒ B senses have a narrow range.
 - C animals have more senses than human beings.
 - D animals' senses are overloaded with information.
- 6 'It may occasionally pay an animal to ignore certain types of information completely' (ll. 36-37) means
- A an animal may be made deaf occasionally.
 - B an animal will want to ignore certain sounds occasionally.
 - ☒ C that occasionally people like to pay attention to the animal that can ignore certain types of sound.
 - D that occasionally it is a good thing for an animal to hear nothing.
- 7 Which of the following is true of the squid?
- A Because of a defect in its hearing, the squid is not an advanced creature.
 - ☒ B Despite a strange defect in hearing, the squid is an advanced creature.
 - C The squid can always protect itself from the whales' intensely loud sound with its deafness.
 - D The advantage of the squid's deafness is that it is able to escape from whales at close range.
- 8 Birds' sense of time depends on
- ☒ A the pineal gland.

- ~~B~~ a substance in the blood.
 C their eyes.
 D none of the above.
- 9 In plant reproduction,
 A daylight is the most important factor.
 B dark periods seem to be more important than periods of daylight.
 C short nights will disturb the plants' normal response.
~~D~~ some plants need more time than others for flowering to occur.
- 10 What does the passage concern itself with mainly?
 A Animals' sense of time is very important.
 B Animals develop a wide variety of senses for survival.
 C A narrow range of senses is required for survival.
~~D~~ Living things have their own special sense requirements.

COMPRE- HENSION

4 Decide whether the following statements are true or false.

- | | |
|---|----------------|
| 1 The senses of all creatures are about the same as ours. | T F |
| 2 It is an advantage to be as sensitive as possible. | T F |
| 3 Our eyes are not sensitive to most of the total range of electromagnetic waves. | T F |
| 4 Toothed whales are deaf. | T F |
| 5 Time is the least important sense in all creatures. | T F |
| 6 Birds can perceive light through their skulls. | T F |
| 7 The pineal gland plays a part in keeping track of time. | T F |
| 8 Plants also require a pineal gland. | T F |

VOCABULARY 5 (a) Find words or expressions in the passage that mean approximately the same as the following.

Para 1 : furthest possible degree

indications

finding the way

sense organs *receptors*

Para 2 : an unnecessary refinement

sounds around you which you are not trying to
listen to

Para 3 : designed

to everything

at high frequency

Para 4 : flaw

withstand

extremely

Para 5 : journey from one region to another *migration*
most important point

(b) Now use the words you have found to fill the gaps in these sentences. You may need to change the form of some of them slightly.

- 1 He was either happy or sad; he tended to go to _____.
- 2 The creature had _____ that were sensitive to ultraviolet light.
- 3 Bats emit very _____ sounds.
- 4 One important _____ to be considered was the high inflation rate.
- 5 There were absolutely no _____ as to who might have done it.
- 6 There was so much _____ on the tape recording that you couldn't hear much of the actual conversation at all.
- 7 Many species of animal have a special ability for _____.
- 8 He felt that a ten-speed gear on a bicycle was an unnecessary _____.
- 9 It was hard for them to _____ the force of of his argument.

- 10 The _____ of the monarch butterfly, which flies from Canada to Mexico, is a remarkable journey.
- 11 This was not _____ to be used as a toy.
- 12 He went red and then white. He was obviously _____ angry.
- 13 The theory of relativity is almost _____ accepted.
- 14 Everyone held their breath. This was the most _____ moment.
- 15 Everyone has _____, but they seem to have more than most people.

(c) Choose the most suitable completion for each of the following sentences.

- 1 The police searched the apartment but found no _____.
- A clue
B factor
C excuse
D identify
- 2 His house was _____ in the heart of the city.
- A remained
B located
C existed
D erecting
- 3 They lived in the woods and lost all _____ of time.
- A connection
B association
C track
D trance
- 4 Economic factors _____ the progress which a society can make.
- A consume

- B confirm
- C demonstrate
- D determine

5 When machines were invented, human society entered a new _____ .

- A phase
- B phrase
- C pride
- D prime

6 _____ , the goal for which he had fought seemed impossible to achieve.

- A In sight
- B At first sight
- C Out of sight
- D By sight

7 No insult was _____ by his remark.

- A intended
- B contended
- C extended
- D attended

8 In spite of the difficulties , she _____ our offer of help.

- A projected
- B registered
- C rejected
- D refined

9 It _____ us to keep ourselves well informed of the modern development of science and technology .

- A takes
- B makes
- C holds
- D pays