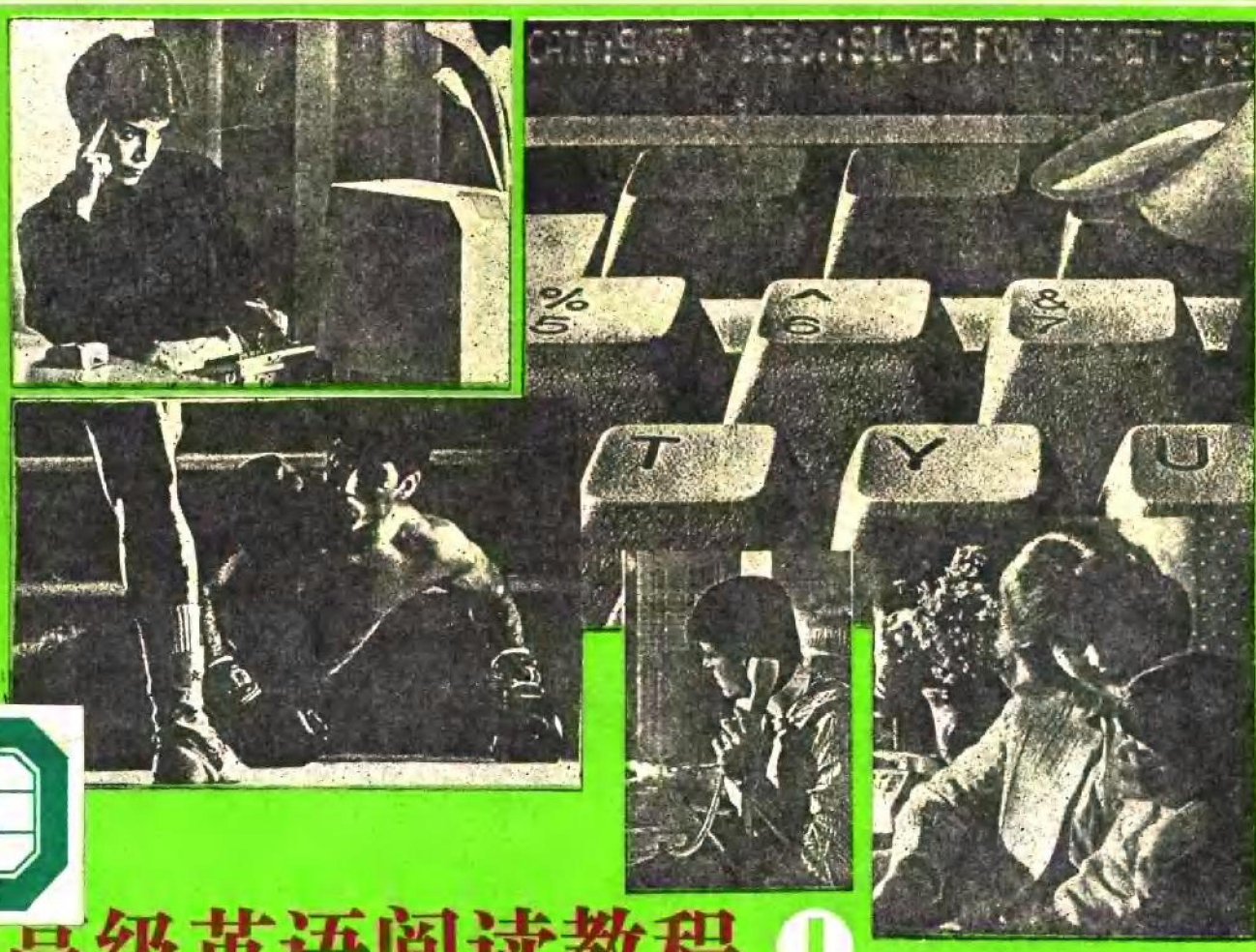
IMPROVING READING SKILLS

BOOK ONE

Students' Book

An Advanced English Reading Course for College Students



高级英语阅读教程 1

(学生用书) 〔美〕明尼苏达大学 Helen Jorstad 南开大学 汪士彬

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for
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内 容 提 要

本书是根据≪大学英语教学大纲≫的原则编写而成的，可供高等院校文、理、工各科高年级学生及研究生（相当大学英语五、六级）使用，也可作为报考EPT和TOFEL的学生提高英语阅读水平的教材。

全书分上、下两册，每册16单元，每单元由2～3篇题材相仿的课文组成，其中一篇为计时阅读材料。每两个单元设计一组“提高阅读能力”项目，系统阐述最新阅读理论与阅读技巧。

本书的突出特点是选材具有时代感。课文均选自近两年的美国报刊，有较强的知识性和趣味性。内容涉及人类学、计算机（在家庭及办公室的应用）、心理（初生儿、孪生、人格、母爱的作用）、旅游（游艇的卫生、纽约州半岛、芝加哥、北京）、生理（睡眠的作用）、体育（拳击手、花样滑冰明星夺取冠军的故事）等。文中提到的美国人的心理、观点、习俗、掌故，对我国学生了解美国文化背景很有帮助，有助于消除文化隔阂，增加知识面。本书所选文章语言规范、句子结构适宜，每单元后编有较详尽的文化背景注释。

本书的另一特点是练习丰富、实用，形式新颖、多变。本教材的练习设计旨在传授阅读技巧，使学习者能较快地提高阅读理解能力和阅读速度。第一册讲授的阅读方法有：掌握细节、抓主旨大意、注意语义连贯手段和如何组织篇章等。练习中用了较多的篇幅传授如何利用上下文及词缀猜测词意的方法。本教材讲究以学生为中心的学习方法，容易引发学习者的学习兴趣。

本书配有教师用书，除提供练习答案外，还编有较详细的文化背景注释及阅读进程和教学法的说明。

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南开大学 汪士彬

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前　言

《高级英语阅读教程》是在《大学英语教学大纲》的原则指导下，由美国明尼苏达大学海伦·乔斯塔德（Helen Jorstad）教授与南开大学大学外语教学部讲师汪士彬合作编写的，是向全国高等院校（包括大专）文理科、工科、农医科等高年级学生及就读大学英语的各类院校的研究生（相当英语大纲规定的五级与六级）提供的英语阅读教材，也可供外语院系二、三年级的学生使用。

本教材的学生用书为两册，每册编有16个单元，每单元有二至三篇阅读文章，其后配阅读理解练习及其他旨在提高学生阅读速度及理解能力的各类阅读技巧练习。每两个单元设计一组"提高阅读能力"项目，系统阐述最新阅读理论与阅读技巧，并配备相应的练习。

本教材的阅读文章均选自美英近两年出版的书刊、报纸、杂志、百科全书等权威性原版著作。选文内容广泛，包括科普知识、最新科技动态、生物趣闻、体坛明星以及反映英美国家风土人情和生活习俗等的文章。所选材料语言规范，内容活泼，通俗易懂，同时兼顾知识性、趣味性和科学性。对个别俚语、习语及背景知识等，每单元末尾都作了简要注释。学生可以从中学到规范的语言，增强语感，加深理解，得到语言美的享受。

本教材旨在帮助学生培养阅读技能，提高阅速度和理解水平，培养学生具有较强的阅读能力。为使本教材达到预期的教学效果，学生使用本书时应注意以下几个方面：

1. 必须克服长期养成的逐字阅读的习惯，否则，往往只能理解每个字，每句话的含义，却不知全段、全文所云何物。

2. 在阅读课文时，不必把英文翻译成中文，否则将大大地降低阅读速度，从而影响对阅读材料的全面理解。

3. 衡量使用本教材是否成功，不在于你比其他学生答对更多的问题或认识更多的单词，而在于你的理解能力和阅读速度是否比以前有所提高。

4. 由于各人的知识面不同，兴趣爱好各异，对题材的熟悉程度不尽相同，对阅读材料的理解必将因人而异。因此，每篇材料后的理解练习不是着眼于具体事件或细节，而是注重全文中心大意的理解。每篇文章的理解正确率应为70%。如果你的正确率高于70%，说明尚有潜力可挖，则可继续提高阅读速度；如果正确率低于50%，说明英语基本功不过硬，或是快速阅读方法不当，应加强阅读基本功训练，注意掌握正确的方法，在理解课文上下功夫。

考虑到学生的实际英语水平，课文后未附词汇表，而是编写了一组生词与词义相配的练习，通过英英词典了解和掌握新词。阅读课文遇到其它生词，则采用书中学到的有关阅读技巧，通过上下文猜测词义及用法。如阅读中确属必要，应多用英英词典，较少甚至不用英汉词典。

本书编写过程中，得到明尼苏达大学许多单位的大力支持。打字员卡西·泽曼克

(Cathy Zemke) 为书稿的完成做了大量的工作。在明尼苏达就读博士学位的研究生陈大兴也做了部分工作。在此，编者一并表示衷心感谢。

由于时间仓促，书中疏漏不妥之处在所难免，请读者批评指正。

编　者

1987 年 10 月

INTRODUCTION FOR STUDENTS

Modern science and technology are developing rapidly throughout the world. There is a worldwide knowledge explosion which makes it extremely important that students be able to read fast, with good comprehension.

Students trying to read a language that is not their native language have special problems caused by the fact that in many countries, including China, teaching methods emphasize intensive reading, in which analysis of individual words and structures is stressed. While such analysis may be helpful at early stages in learning to read English, at higher levels the habit of analyzing and translating texts into Chinese actually hinders students who should be developing ways to free themselves from English–Chinese dictionaries and concentrate on passage meaning rather than on sentence meaning.

It is the purpose of these books to help you develop the ability to read with less sentence analysis, dictionary use, and translation than you may now use. We hope you will develop new reading skills and attitudes which will help you as you read further in the humanities, social sciences, and technical fields.

THE MATERIALS:

The materials used in this book are authentic materials chosen from books, magazines, and newspapers as a representative sample of general written American English. We have chosen NOT to provide word lists or even a glossary. Instead, we have provided exercises which should help you to infer meanings of unknown words in various ways, using word families and the context in which a new word is found as clues for guessing its meaning in that context.

We hope that you will use an English–English dictionary when instructed to do so. Our exercises use the *Longman Dictionary of Contemporary English*. AT ALL TIMES YOU SHOULD TRY NOT TO USE AN ENGLISH–CHINESE DICTIONARY, WHETHER WORKING AT HOME OR IN CLASS.

Reading is a complex process for which you need to learn a variety of specific skills. You will also learn to choose which techniques to use depending on your reasons for reading.

Exercises generally are of three types: (1) those which concentrate mainly on word formation; (2) those which focus on passage comprehension, dealing with text organization; and (3) those which teach specific reading skills, such as fast reading. There are no grammar exercises like those which you may be used to using. At your level, you need more practice with actual reading skills, integrating what you already know about sentence structure with what you will be learning about passage structure and context.

A special focus section called "Building Reading Power" introduces every other unit. The purpose of this section is to help you learn to use a particular type of reading skill.

When you finish these materials, you should be ready to read independently with good speed

and comprehension.

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We also give special thanks to our typist, Cathy Zemke, who worked with skill and dedication to complete this manuscript, and Chen Daxing, a graduate student at the University of Minnesota, who tirelessly read and reread the manuscript. Without them, it would have been impossible to finish the task.

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Contents

BUILDING READING POWER I

PRE–READING CAN MAKE YOU A FASTER READER

Can you predict what a reading passage will be about? Learning to predict what reading materials will be about can be a great aid to comprehending what you read. If you take just a few minutes to "pre–read" an article, predicting its contents, you will be able to read more purposefully. You will know what to think about as you read.

One aid to prediction is the title. Another is "subtitles," the titles sometimes given to sections within an article. Look at the title and subtitles, if there are any, and try to guess what you *think* the article will be about.

Additional information for predicting what an article is about can come from very rapid SKIMMING of the contents. In skimming, you should glance very quickly over the first sentence, or several lines, of each paragraph. An English paragraph usually contains one main idea and several supporting details. The sentence containing the main idea is most frequently the first or the last sentence of the paragraph. You can train your eyes to look quickly through the beginning and end of each paragraph to find the main ideas. By skimming before you read, without stopping to read word by word, you can get a general idea of what the article is about, and you can then read it with better comprehension.

As you read, do not stop to look up any words in a dictionary. If you do not know a word, draw a line under it AND SKIP IT. When you come to the end of the paragraph, look back at the word and try to guess what it might mean in the context of that paragraph. Sometimes the meaning of the word cannot really be guessed accurately until a large section of the passage — or even the whole passage — has been read and understood. But more often, the context in which the word is found will make its meaning very clear.Then, if you wish, you can look the word up in your dictionary to double check your guess. You will be surprised at how accurate your guessing can become!

When you have finished your reading, do the first exercise after the passage, which will always be a MAIN IDEA exercise. If you have trouble, read the article, or parts of it, again. You will find that you can read it faster the second time than you did the first time. *You will have better general comprehension if you read the article over two or three times quickly than you will have if you read it once slowly.* In fact, you can build your speed and comprehension by systematically reading all the passages in this book quickly several times when they are assigned. This "repeated reading" technique will be very useful for building your reading speed.Practice pre–reading this short article, using techniques we have just examined. Begin by looking at the title and subtitle, and trying to guess what it will be about.

Remember to underline any words you do not know, without stopping to look them up.

ARE NO TWO SNOWFLAKES ALIKE?

About 600 cubic miles of snow cover the Northern Hemisphere, and in every cubic foot of the fluffy stuff there are about 18 million snow crystals. Considering that much more snow covers the entire earth and that snow has been falling for perhaps 2.5 billion years, it's hard to believe that every single snowflake ever created is different.

"That's a question I've worried about quite a lot," says Charles Knight, a physicist at the National Center for Atmospheric Research in Boulder, Colorado. "I'd answer by asking: How different is different? Certainly you could find two that are very similar."

Snowflakes Hard to Study

Of course, if a snowflake that fell on a corner of Antarctica a million years or so ago was identical to one that fell in your backyard yesterday, who would know? Determining whether it's even possible requires a knowledge of how snow crystals grow. And that, says Knight, is still somewhat up in the air.

Crystals, which fall individually or clump together to form snowflakes, are tough to study. Electron microscopes, for example, must operate in a vacuum. Put a snow crystal in a vacuum and poof! it's gone. And working at a temperature where snow feels comfortable usually means the scientist isn't. "We're a bit stymied," says Knight. "Almost nobody is working on this subject because of these problems."

The Answers Are Coming Slowly

But some of the basics have been worked out. Snow crystals are generally thought of as the intricately sculpted six–sided stars that adorn department store window displays and Christmas trees. But snow also comes in six–sided plates, hexagonal columns, needles, columns capped with stars, plate–capped columns that look like old–fashioned shirt studs, and a hodge–podge of irregular shapes. It all depends on the temperature of the cloud in which it's made.

Clouds are formed when a mass of warm air rises and cools, losing its ability to hold the water evaporated in it. The vapor condenses out of the air to form water droplets, which cool further into ice or remain as "supercooled" water. Other times the vapor condenses directly into ice crystals. If a cloud contains both ice crystals and drops of this "supercooled" water, a curious thing happens. The water droplet evaporates, and its vapor condenses onto the ice crystal. "It's like putting a cold can of beer next to a boiling teakettle," says Knight. "The vapor hits the can and condenses." In a cloud the vapor condenses directly into ice, and as more and more droplets evaporate and freeze, a snow crystal is born.

How the Snow Crystals Grow

A water molecule's structure and electrical charge usually make ice crystals freeze into the shape of hexagons. Most snow crystals grow along the planes of this six–sided symmetry, and the general shapes they take depend on the temperature. At temperatures between 32 and 27

degrees Fahrenheit, plates form; stars begin to form at 10 degrees, and at three degrees plates form again. A snow crystal's intricate detail arises from minute variations in temperature and humidity that it encounters whirling about a cloud during its 15–minute birth.

Scientists have grown snow crystals in laboratories and catalogued the various shapes they take at different temperatures. But while scientists know which type of snow crystal forms at a certain temperature, no one has been able to explain *why* the crystal takes the shape it does. "The structure of an ice crystal is well known," says Knight. "But the mystery is how the molecules are packed together at the surface, which is where crystal growth occurs."

Which leads to the question at hand. Is it possible for two snow crystals to be identical? Considering that more snow crystals have fallen on the Earth than there are stars in the galaxy, it might seem surprising that a particular pattern would not be repeated. But each crystal contains trillions and trillions of water molecules that can be arranged in many different ways, and so it is perhaps more surprising that anyone would think two snow crystals could be the same. "It's like asking why no two people look exactly alike," says Richard Sommerfeld, a geologist with the U.S. Forest Service. "The real question is: Why should they?"

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Can you now answer the question about why no two snowflakes are alike? There are certainly words which you did not know. But as you go back and look at the words you underlined, you can guess many of them correctly. As you continue this book, you will find many helpful ways to make your guesses more accurate. If you had trouble answering the question, reread the entire article very quickly. Then try again. You may need to read it several times before you can give a complete answer.

SUMMARY OF PRE–READING STEPS

1. Read the title of the article and the subtitles within it.

2. Try to guess what you think the article *might* be about. You might try this step with other students in your class. If you do, try writing on the blackboard words that you might expect to find in such an article, too.

3. Skim the article. Quickly glance over the first and last few lines of each paragraph, thinking about what the main idea of the article is.

Now you are ready to read the article. These hints will help you:

a. Read quickly, without stopping. When you come to a word you don't know, underline it and keep reading.

b. When you get to the end of the paragraph, read it again, fast, and see whether you can now guess the unknown word. If not, keep reading. Do not look up the word.

c. When you have finished a section of the article, or the whole article, look back at the italicized words, and try to guess their meaning from the context alone.

d. Try to do the comprehension exercise which follows the reading passage, or ask yourself if you know what the main ideas are.

e. If you cannot do so, re–read the entire article, again very quickly, and try again. You may need to repeat this step several times. Remember that comprehension is better when you read the article several times fast than when you read it once slowly. Do not be surprised, by the way, if the repeated readings become faster and faster! This is what you should expect.

f. Now look up any words which you still cannot guess.

Unit One

The Toolmakers

Part A: Tools Are Essential to Man

From Arctic wastes to fertile plains, from desert to tropical rain forest, human survival depends on skill at making tools. Tools help unlock the resources around us, and our evolution as a biological and cultural being forms the background to humans as toolmakers, capable of inhabiting the many different regions of the world in which they live.

There are few areas of our lives in which tools do not play a vital part. For our food we depend on such tools as ploughs, tractors and harvesting machinery; for our homes we depend on the machines that provide standardized materials for building; and for our possessions, from the simplest light bulb to a refrigerator, we depend on complex manufacturing machines and tools.

Even in education we depend on tools: pens to write with, printing presses to produce books and, increasingly, visual aids to learn with. Tools play a constant part in our daily life. For something as simple as a letter, which is itself a tool designed to inform and pass on ideas, we need tools to produce it and tools to make sure it goes where we intend.

Perhaps it is only within our personal thoughts that tools have no part to play, and yet even here we need them to express ourselves. In art, painting and sculpture; in literature, in music and the host of other media through which we express our creative natures, tools are vital to our success. For without a brush there could be no painting, and without an instrument there could be no music, only song.

There is a distinction to be made between making tools and using tools: it is by our skill in devising such a vast range of new tools and in making them that humans are exceptional. Other animals, such as sea *otters*, chimpanzees, Galapagos *finches* and a species of Egyptian *vulture*, also use tools. The California sea otter will bring a rock from the sea bed, rest it on his stomach and smash open a shellfish against it.

Chimpanzees will strip the leaves from a twig and poke it into a *termite* nest to extract the insects. But the element of planning and foresight involved is very slight.

By contrast, toolmaking in humans is based on precise observation of available materials.

Exercise I: MAIN IDEA

Which of the following statements best gives the main idea of Part A? Explain why you did not choose the other two statements.

1. Music and art are more important to man than work with tools.

2. Tools play a vital role in all areas of human life.

3. Tools are important in all areas of human life except in expression of creative ideas.

(Did you choose 2? It is the most complete statement about the main idea of Part A.)

Now *skim* Part B of the article, and try to predict what its contents will be about. Remember to read the title, and then glance rapidly at the first (and maybe the last) lines of each paragraph.

Go ahead now and read Part B. Do not stop to look up any words in a dictionary. If you don't know a word, just underline it and read on to the end of the paragraph. Then look back to see if you can guess what it means in that context. If not, continue reading to see if you can guess its meaning.

If a specific word is NOT AT ALL important to the meaning of the whole passage, you may just skip it for now. The exercises at the end of this text will help you with the words you already underlined.

Part B: Tools for Hunting Expand Man's Range

Humans readily change tools to suit the circumstances: once a basic knowledge of tool–making has been acquired it is a simple matter to make something more suitable for the job at hand. So early people made not only hand axes for chopping and *bludgeoning*, but also smaller knives and scraping tools with which to cut meat and *scrape* fat off the skins.

It is clear from *archaeology* that humans were able from very early in history to exploit a much wider range of food sources than other creatures. In particular they were frequently able to eat meat: the diet of apes is normally *vegetarian*, consisting of grass, leaves, and shoots. supplemented by insects and *grubs*. With tools such as spears, bows and stones thrown from *slings*, early humans were able to hunt larger animals. Spears and *nooses* could be used to catch birds and smaller animals, while fish could be taken with nets and traps set on the river bottoms. *Excavations* made at the living sites of early people have revealed bones from the animals that they ate, while also providing evidence of their ingenuity. Some of the bones found in the cave of Makapansgat in South Africa show signs of being deliberately broken and divided into types suitable for different purposes as tools. Tools also enabled humans to store food in specially made containers of wood or baskets, so that times of shortage could be lived through more easily.

Curiosity and cultural achievement alone cannot explain human development; without the right kind of biological background, we could not have succeeded so well. A chimpanzee, for example, is an intelligent and *inquisitive* creature, but he cannot tell another chimp of a good idea that has just occurred to him. Unlike humans, the chimpanzee has a very limited facility for language that can deal in abstract ideas and *speculative* thought.