晨风策划

Graduate English for the 21st Century

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21世纪研究生英语

EXTENSIVE READING II

阅读与欣赏 2

本册主编 师新民　牛亚军

西安交通大学出版社
XI'AN JIAOTONG UNIVERSITY PRESS

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西安交通大学出版社

XI'AN JIAOTONG UNIVERSITY PRESS

内容提要

《阅读与欣赏》是"21世纪研究生英语"系列教材的主干教材之一，是根据国家教育部(原国家教委)颁发的《非英语专业研究生英语(第一外语)教学大纲》的要求所编写的泛读教材，共分3册。1,2册供硕士阶段使用；第3册供博士阶段使用。

本教程1、2册各由16个单元组成。每单元又分成A,B两篇内容相关的课文。为方便学习，每课给出了生词表、音标、中文词义、课文注释和练习题。另外，课文的平均长度为1600字左右，每篇课文末尾均注明该课文的字数，便于读者掌握和检测阅读速度。

图书在版编目(CIP)数据

21世纪研究生英语.阅读与欣赏.2/杜瑞清主编；师新民，牛亚军分册主编.—西安：西安交通大学出版社，2004.8
ISBN 7-5605-1875-3

Ⅰ.2... Ⅱ.①杜...②师...③牛... Ⅲ.英语-阅读教学-研究生-教材 Ⅳ.H31

中国版本图书馆CIP数据核字(2004)第074633号

书　　名	阅读与欣赏2
本册主编	师新民　牛亚军
出版发行	西安交通大学出版社
地　　址	西安市兴庆南路25号(邮编：710049)
电　　话	(029) 82668315　82669096(总编办) (029) 82668357　82667874(发行部)
印　　刷	西安建筑科技大学印刷厂
字　　数	288千字
开　　本	727mm×960mm　1/16
印　　张	16
版　　次	2004年8月第1版　2005年7月第2次印刷
书　　号	ISBN 7-5605-1875-3/H·438
定　　价	22.00元

总序

进入21世纪,我国的研究生教育有了蓬勃的发展。随着社会信息化和经济全球化趋势的发展,研究生英语教学成为研究生培养和教育的一个重要环节。懂专业、会外语的高层次人才是我国未来社会经济发展和国家创新体制的核心力量。那么,怎样使研究生英语教学适应我国21世纪对高层次人才培养的要求,是研究生英语教学改革和创新的关键。"21世纪研究生英语"(Graduate English for the 21st Century) 就是为了适应这一新形势而编写的系列教材。

"21世纪研究生英语"系列教材的编写依据是国家教育部(原国家教委)公布的《非英语专业研究生英语(第一外语)教学大纲》(以下简称《大纲》)。但是,考虑到该《大纲》公布已有十年,教材编写时在词汇量等方面有所超越,并根据发展的需要有一定的超前性和前瞻性。另外,《全国大学英语教学基本要求(课程标准)》已正式推出,本系列教材顺应大学英语教学的新变化,充分考虑了研究生英语教学与大学英语教学之间的过渡和衔接。

"21世纪研究生英语"系列教材具有以下特点:

1. 21世纪是信息时代和知识经济时代,其主要特征是信息瞬息万变,知识更新加快。这使教育发生了革命性变化,使教育职能从传授知识转变为培养人发现知识、处理知识、更新知识和创新知识的能力。面对信息时代和知识经济时代的英语教学,也从传授语言知识转变为培养学生搜寻、接受和处理英语信息的能力。"21世纪研究生英语"系列教材是一套系统、全面体现21世纪对高级人才培养需求的研究生英语教材,把培养和提高研究生的语言综合应用能力放在第一位,同时也重视研究生的语言知识和技能的培养。

2. "21世纪研究生英语"系列教材是一套

开放性、立体式的现代化教材，包括纸质教材、电子光盘和网络课件，以适应现代信息技术条件下研究生英语自主学习的新需求，缓解快速增长的研究生发展规模与研究生英语教师短缺的矛盾，也能够使研究生在专业课和外语学习时间上有更大的弹性。

3. “21世纪研究生英语”系列教材的编写吸收了当代语言学和教学理论研究的最新成果，同时结合了教学的实际情况。《大纲》明确指出：“硕士生英语教学应提倡从实际出发，博采众长，讲究实效，并在加强理论研究和不断实践总结的基础上，努力探索和建立适合我国国情的硕士生英语教学体系”。因此，“21世纪研究生英语”系列教材在教学理论方面走的是综合创新之路。

从研究生学习英语的“需求分析”来看，研究生学习英语主要是考虑以后的学术研究和社会工作的需要。随着我国对外开放的日益扩大、国际交流的日益频繁和科学技术的飞速发展，这种需要更加迫切。根据这一“需求分析”和当前语言教学理论研究折衷化的发展趋势，“21世纪研究生英语”系列教材编写将学术英语(阅读)和交际性相结合，正确处理读、写、译、听、说的关系，读写与听说并重，全面培养和提高研究生的英语综合能力。因此，“21世纪研究生英语”系列教材采取的主题化(Topic-based Approach)教材编写思路和一体化(Whole Language Approach)课程设置的教学模式，以实现培养学习者综合应用能力的目标。这不仅符合研究生英语学习的实际需要(学术研究)，也顺应了英语教学理论发展的新趋势。

4. “21世纪研究生英语”系列教材语言材料新颖，题材广泛。教材以最新的语言材料为主，也收录了一些经典名著，力求让学生接触到“原汁原味”的语言材料，所选材料包括文学、历史、地理、政治、法律和科普知识，内容反映多学科发展的前沿信息和有关英语国家的文化和背景知识，语言材料有实用性、趣味性和可思性，以激发和调动研究生学习的积极性，提高教学效果。同时，语言材料难易搭配，以利于教学中选择使用，但每一册书、每一套教程的整体难度都循序渐进，形成“坡面”效应。

5. “21 世纪研究生英语”系列教材练习紧扣课文，以课文为中心，按照帕默提出的“滚雪球”原则，使在课文中出现的单词、句法和意念功能起到巩固作用。通过练习，让学生做到温故而知新。所设计的练习形式多样，既有口头的、又有笔头的；既有培养听、说、读、写、译单项技能的，又有培养综合技能的；既有以培养语言正确性为目标的，又有以培养语言流利性为目标的；既有结对活动和小组活动，又有全班活动；既有指导性学习，又有无指导性学习等等。

“21 世纪研究生英语”系列教材构成体系：

“21 世纪研究生英语”系列教材的编写以大学英语四级为起点，分为硕士生和博士生两个层次。这样，硕士阶段的英语学习与大学本科阶段的英语学习相衔接，博士阶段的英语学习与硕士阶段的英语学习相衔接，构成一个系统的有机体系。

本系列教材根据《大纲》的培养目标和目前各校研究生英语课程设置分为四大类：

1.《综合教程》包括 2 册教材和 2 册教师用书，供硕士阶段使用。该教程的核心是课文和练习，主要是提高英语的运用能力。每册有课文 12 单元，安排在第一和第二学期，教学时间为一年。教材均配有由美籍专家朗读的录音光盘。

2.《阅读与欣赏》包括 2 册，供硕士阶段使用，每册安排 16 单元，主要是通过大量阅读培养学生熟练地获取信息的能力，提高人文综合素质。

3.《听说教程》包括 2 册，供硕士阶段使用，每册安排 16 个单元，以听力训练和口语训练为主，听说比例为 3:2，教材后附有答案和录音原文，并配有由美籍专家朗读的录音光盘。

4.《实用写作教程》和《翻译教程》，供硕士或博士使用，主要介绍写作和翻译的技巧及提供写作和翻译实践。写译能力是研究生阶段重要的训练项目之一，是实用性很强的基本技能。

“21 世纪研究生英语”系列教材可供非英语专业的硕士研究生和博士研究生使用，

也可供工程硕士、教育硕士、法律硕士、研究生课程进修班等专业硕士学位研究生使用。

“21世纪研究生英语”系列教材由陕西省人民政府学位委员会办公室和陕西省研究生外语教学研究会组织，由西安地区多所高校有丰富研究生英语教学经验的教师通力合作编写。陕西省学位办孙朝、杨俊利同志为教材的编写和出版做了大量工作。西安交通大学出版社对教材的编写和出版投入很大的力量，给予了大力支持。同时，该系列教材的编写也得到了陕西省教育厅领导、各研究生培养单位领导和广大研究生英语教师的支持。对此，我们全体编写人员表示衷心的感谢。

另外，我们在编写教材过程中，参考了一些国外的图书、报刊、杂志和网站文章，在此向原作者表示感谢。

“21世纪研究生英语”系列教材的编写是一项开创性工作。由于我们经验不足、水平有限，不足、甚至错误之处在所难免，希望广大师生和读者在使用中提出宝贵意见和建议，使本系列教材在今后的修订中得到进一步的提高和完善。

主编 杜瑞清

2005年初夏于古城西安

前言

《阅读与欣赏》是根据国家教育部(原国家教委)颁发的《非英语专业研究生英语(第一外语)教学大纲》的要求所编写的泛读教材,适用于高等院校文、理、工、农、林、医等各学科的硕士研究生,本科高年级学生以及相当程度的英语自学者使用。本教材选材语言规范、通俗易懂、文笔流畅。

本套教程共分3册。1,2册供硕士阶段使用;第3册供博士阶段使用。同时,这3册教程亦可作为英语爱好者扩大阅读与欣赏范围、扩充英语词汇、自我提高的辅助教材。

本教程1,2册各由16个单元组成。每单元又分成A,B两篇内容相关的课文。为方便学习,每课给出了生词表、音标、中文词义、课文注释和练习题。以适应研究生不同层次的需要。每篇课文后的练习题的前半部分是测试读者理解能力的选择与正误判断题;后半部分是调动读者思辨与口头、笔头表达能力的讨论题。第3册除比前两册多两单元外,整体编排与之相同。

本教程不仅考虑到了学生主要通过本书的学习,能够熟练地提高获取信息的能力,进一步扩大英语词汇量,提高英语水平和人文综合素质;同时,又注意到了选材中内容突出其思辨性,即培养学生对事物看法应具有全新的思维模式。为此,课文均选自近年来英美主要报刊,内容涉及世界范围内的热点问题及社会生活的各主要方面,并加入西方作者介绍中国文化的原文作品。

本教程在传统练习题的基础上,加入思考练习题。所谈话题或与课文内容相关或引申。其目的在于发散读者的思维,改变以往外语学习中外语与母语割裂开来的弊病,希望两种语言相辅相成,相互借鉴,加深对于两种语言的异同之处之了解,促进外语学习的提高。话题讨论与中国的社会生活紧密相连,同时,此类练习题亦将阅读与口头和笔头表达相联系。

总之,本套教程的编写在某种程度上是一次大胆的尝试,欢迎广大师生对本教材提出批评和建议。

编 者

2005年7月

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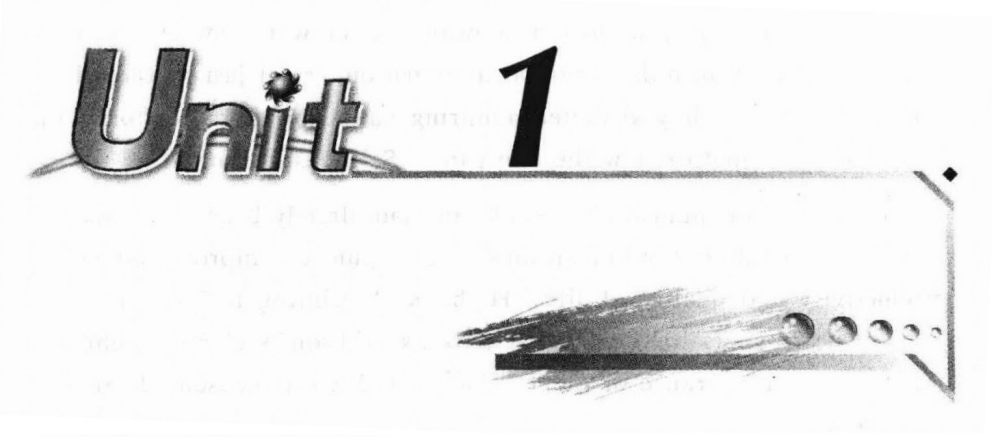

Text A
Century of Surprise

by Edward Tenner

Browse through an album of old photographs, and you will find that Americans at the end of the 19th century look anything but modern. Men were still sporting top hats and bowlers, while women were decked out in long dresses and elaborate bonnets. Many new buildings of that era now also seem like relics from the past. Twentieth-century world's fairs presented visions of the future, yet the showpieces constructed for the fairs in Chicago (1893) and St. Louis (1904) still followed classical traditions taught in the leading architectural schools of the previous century.

But appearances can be misleading. Our great-grandparents were people surprisingly like us. They were excited over all the new advances in technology and science and eager to embrace what the next century could offer. They saw stunning surprises, just as their descendants did, but our generation should not forget how much of our "modern" way of life they already had.

Some of the world's greatest examples of engineering-structures that are still in active use—were built over a hundred years ago. The Brooklyn

Bridge and parts of the Boston subway system were late-19th-century creations. American mills continue to churn out[1] steel just as they did a century ago when they attracted admiring (and horrified) visitors from abroad who wanted to view the latest in U.S. industrial might.

In 1900 a communications revolution had already been underway for twenty years, and new inventions had begun to improve American productivity and quality of life. High-speed printing and cheap paper brought newspapers to the poorest citizens. Edison's electric light was changing the appearance of public places, and a few households already had telephones.

Men and women of the turn of the century thought they knew what the future held, believing that the next great innovations would merely be extensions of the rapid technological changes they saw around them. The American Press Association interviewed prominent Americans about their predictions for the next 100 years in a newspaper series that built on popular excitement for the 1893 World's Columbian Exposition in Chicago. Among the politicians, poets, and business leaders who offered their visions of the future was John Wanamaker, a Philadelphia department store owner and the postmaster general of the United States from 1888 to 1893. Wanamaker forecast not merely expansion of conventional service over the next century, but also electrical communication over a national network that would eventually replace most business letters.

Despite these insights, huge surprises awaited even the most technologically savvy prophets of the last century. No one in the 1890s could have predicted the long-term effect of major advancements in three areas: automotive vehicles, medicine, and microelectronics. Inventions or innovations in these fields have changed our lives and will continue to affect us well into the next century.

Automotive Vehicles

Automobiles were familiar to people of the late 19th century.

European engineers pioneered gasoline-powered vehicles as replacements for horses and carriages, but these new inventions were intended primarily for prosperous users. None of the American leaders who were asked for their predictions in 1893 envisioned a national road network; they did not realize there was a hidden demand.

The American industrialist Henry Ford seized this opportunity. He began manufacturing an affordable automobile that freed its owners from the inconvenience of timetables and the expense of caring for horses. When Ford introduced a moving assembly line in 1913, it was not a complete innovation; late 19th-century manufacturers had already begun rearranging their plants for more efficient production. What proved sensational were the size and output of Ford's factories. Even Soviet leaders imported American engineers and architects to create Communist versions of the vast industrial complex that Ford had developed at his River Rouge plant in Dearborn, Michigan.

Well before Ford's Model T, drivers of automobiles had started to change public spaces. Urban dwellers, and especially children at play, had long used city streets for much of their outdoor activity. As automobile traffic increased and intruded on local streets, residents of some New York neighborhoods began to stone passing cars. Child safety campaigns soon gave the streets to the motorists. As new roads made automobile travel easier, public transportation, which many users considered uncomfortable and inconvenient, began to decline.

The automobile also industrialized agriculture. Henry Ford, who had grown up in the country, built his Model T not only to handle bumpy rural roads, but also to power many farm machines. Ford and other manufacturers eventually began to make gasoline-fueled tractors that displaced horses. This new equipment, in combination with other scientific innovations such as chemical fertilizer and hybrid seeds[2], allowed farmers to increase their production greatly, but farmers' expenses and debts also increased. These changes contributed to a sharp reduction in the number of small family farms, which in 1900 were still a

foundation of American society.

Medicine

Doctors were among the first automobile users, but there were many more far-reaching surprises in the field of medicine. If the American leaders surveyed in 1893 expected a medical revolution, they said almost nothing about it. In their predictions, they were far more concerned with public sanitation in the future and its impact on the standard of living. Some of their visions were on the mark[3]: many historians of medicine believe that cleaner water, proper waste disposal, and a better diet (due, in part, to mechanized agriculture and transportation) contributed even more to good health than medical advances.

Yet other medical discoveries of the 20th century and their consequences would have astonished the people of 1893. Only two years later, in 1895, Wilhelm Conrad Roentgen, a German physicist, discovered X rays. Even more importantly, another German, Paul Ehrlich, determined the proper dosage of antitoxin serums[4] to fight against diphtheria, a common and deadly disease. By 1910 Ehrlich had found the first "magic bullet," a chemical (Salvarsan) that destroyed a number of infectious organisms without harming healthy tissue.

Doctors of the 19th century had never been able to target diseases, although they understood the importance of sterilization. Their 20th-century successors eventually built up an arsenal of drugs. Along with public health measures, these drugs appeared to put an end to cholera, yellow fever, malaria, and most other epidemic diseases that had ravaged the population in previous centuries. Penicillin, isolated in the 1930s and mass-produced during World War II, seemed to announce the permanent conquest of infectious illness.

Around mid-century came the biggest biological surprise of all—the discovery in 1953 of the structure of deoxyribonucleic acid[5] (DNA)—a genetic material that is found within the cells of all living things. Researchers continue to explore the power of genetic engineering to alter

genetic makeup and increase resistance to disease or enhance plant and animal production. This revolution is not yet apparent in most medical practice, except in genetic counseling and the production of certain drugs, but new forms of therapy will soon be possible. The crucial biomedical project at the end of the 20th century is the mapping of the human genome, deciphering the entire genetic blueprint of a human being—an effort that has been compared to the exploration of the American West in the last century. One leading researcher, Eric Lander, has likened it to Dmitry Mendeleyev's periodic table of the elements (final version, 1871), which was not only a discovery, but a framework for generations of future discoveries.

Unfortunately the medical revolution has produced fewer preventive measures than treatments. Doctors have discovered no magic bullets against obesity, alcoholism, and smoking. Excessive prescription of antibiotics and failure to complete courses of treatment after symptoms end have helped breed bacteria that can resist drugs, making inappropriate use of medication a worldwide risk.

Microelectronics

The third area of surprising discoveries in the 20th century was microprocessors. Information technology had certainly captured popular attention by the turn of the century. In 1900 the public was already excited about new means of communication. Visionaries were predicting distribution of news, music, and even sermons by telephone. Some believed that phonograph records would replace books. One French science fiction writer even campaigned to build arrays of powerful lights as a signal to extraterrestrials.

Calculating and computing machinery were also flourishing in 1900. What no one of that era anticipated was the advent of compact, cheap computing power that resulted from a series of innovations that quickly supplanted one another. Vacuum tubes, transistors, and finally integrated circuits, or microchips, created an electronics revolution within a half century. The first chips were developed in 1958 using the common

substance silicon as a semiconductor. In the early 1960s Gordon Moore, a founder of Intel Corporation and pioneer in the development of integrated electronics technology, made the now-celebrated prediction that the power of chips would double every two years. Within 30 years, one chip would be doing the work of millions of transistors.

These chips made possible the construction of the first personal computers in the late 1970s. By the 1980s small business and home computers requiring no programming experience were available. Chips also replaced mechanical parts in almost every kind of device, from coffeemakers to automobiles.

Integrated circuits have hidden costs. Mechanical devices such as manual typewriters needed periodic cleaning and adjustment, but they could last for decades. Tubes in older radios and television sets could be replaced individually. Newer types of equipment such as digital camcorders built with integrated circuits are less likely to fail, but if they do fail, they may require costly repairs. And systems controlled by microprocessors need reliable, high-quality sources of electrical power, sources that are still unavailable in much of the world.

The skills required for mechanical design and repair have been lost as demand for them shrinks. Even doctors may be less effective as listeners and observers because many now rely heavily on the results of scans and tests made possible by integrated circuits.

End of the 20th Century

During the 20th century, we have made our technological choices slowly, over decades. Very soon we will be able to accomplish even more radical changes, altering the appearance not only of poodles and peonies, but of our own children through genetic engineering. We will be able to select from a wealth of information on our computers, but we will also have to decide which older data we should convert to new electronic formats and which we abandon to extinction. We will feel more independent, but we will also be more exposed to failures. The 20th