



Technology 技术

Melvin Kranzberg (美) 著



外语教学与研究出版社

FOREIGN LANGUAGE TEACHING AND RESEARCH PRESS



Technology

技术

Melvin Kranzberg (美) 著
赵世人 译

外语教学与研究出版社
FOREIGN LANGUAGE TEACHING AND RESEARCH PRESS
北京 BEIJING

京权图字：01 - 2004 - 3098

© 2004 Marshall Cavendish Corporation

Published previously as part of *The Environment Encyclopedia*

© 2001 Marshall Cavendish Corporation, 99 White Plains Road,
Tarrytown, New York 10591

This edition is produced under license by Foreign Language
Teaching and Research Press 2004

图书在版编目(CIP)数据

技术 / (美) 克兰兹伯格 (Kranzberg, M.) 著; 赵世人译. — 北京: 外语教学与研究出版社, 2004. 12

ISBN 7 - 5600 - 4633 - 9

I. 技… II. ①克… ②赵… III. 英语—对照读物—英、汉
IV. H319.4: N

中国版本图书馆 CIP 数据核字 (2004) 第 131042 号

出 版 人: 李朋义

责任编辑: 余 军 何 卓

装帧设计: 潘振宇

出版发行: 外语教学与研究出版社

社 址: 北京市西三环北路 19 号 (100089)

网 址: <http://www.fltrp.com>

印 刷: 北京新丰印刷厂

开 本: 889 × 1194 1/64

印 张: 1

版 次: 2005 年 4 月第 1 版 2005 年 4 月第 1 次印刷

书 号: ISBN 7 - 5600 - 4633 - 9

定 价: 5.50 元

* * *

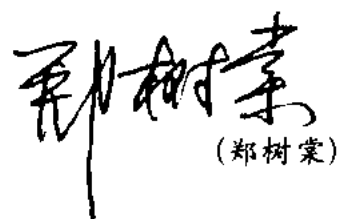
如有印刷、装订质量问题出版社负责调换

制售盗版必究 举报查实奖励

版权保护办公室举报电话: (010)88817519

序 言

英语学习，除了在课堂内下工夫外，课外的阅读也很重要。课外除了读文学类的文章，也要读一些非文学类的文章。这套“小书”就是非文学类的文章，涉及文学以外的许多领域和学科。每本书都由一两个相关的主题构成，图文并茂，融知识性和可读性于一体。这些“小书”谈到的很多东西都和我们的日常生活息息相关；更重要的是“小书”体现了人类要与自然和谐发展的思想，这与我们社会和时代的发展是吻合的。读一些这方面的书不仅有利于学生提高英语水平，拓宽自己的视野，也符合当今大学生要全面发展的要求。在“复合型”人才越来越受重视的今天，我很乐意向大学生朋友推荐这套“小书”。


(郑树棠)

《新视野大学英语》总主编
首届“国家级教学名师奖”获得者

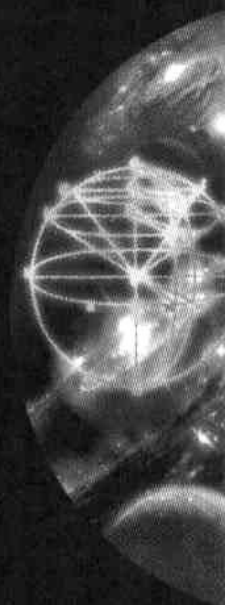
Introduction

The impact of human technologies on the natural environment began long before the industrial revolution and the refining of fossil fuels. Human uses of fire, all sorts of primitive tools, the invention of watermills and windmills, and the harnessing of animals for work each mark significant steps in human technological advancement with consequences for the environment.

CONTENTS

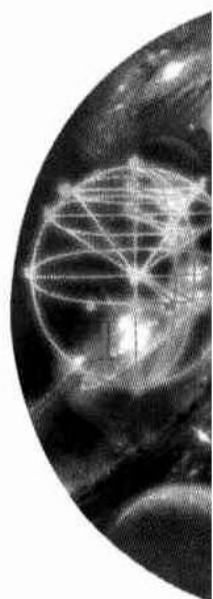
目录

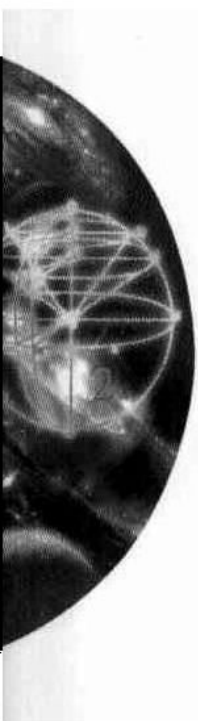
Technology.....	1
技术	
Agriculture.....	9
农业	
The Roman Empire.....	15
罗马帝国时期	
The Middle Ages in Europe.....	21
中世纪的欧洲	
The Renaissance and the Age of Exploration.....	30
文艺复兴和航行探险时期	
Industrialization.....	39
工业化	
Glossary.....	57
词汇表	



Technology 技术

Humans developed tools and technology to enable them to survive in a natural environment that was not always beneficent. While technology enabled humans to survive—and sometimes to control—the natural environment, the overuse or misuse of technology, especially as industrialization takes place, has sometimes had adverse or

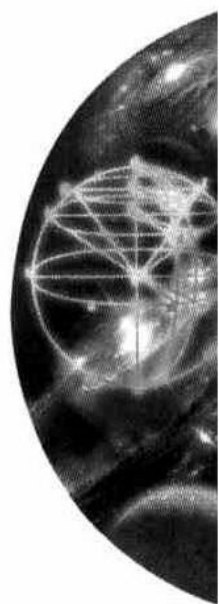




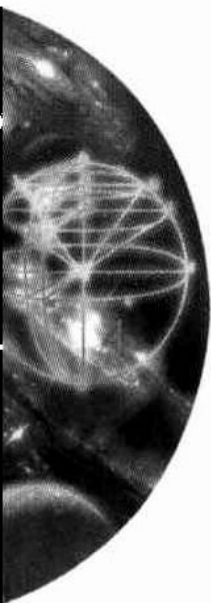
unanticipated effects on the natural environment. This has led some people to blame technology for many of the ills that today beset the total environment, posing a threat to humankind's future. However, there is no reason to believe that technology, if properly used, cannot undo its previous (and oftentimes unforeseen) damages and, in the process, restore the natural environment and also create a better world for the future of humanity.

人类之所以发展技术和工具，就是为了让自已能够在并非总是有利的自然环境中生存下去。技术虽然能帮助人类在自然环境中得以生存，有时甚至可以控制自然环境，但如果

技术被过度使用或滥用，特别是在工业化时代，有时就会对自然环境产生不利的或是预料不到的影响。于是，一些人就把今天有损整个环境、威胁人类未来发展的种种弊端归咎于技术本身。但是，如果技术被运用得当的话，就没有理由认为它不能消除此前（经常是不可预见的）对人类和环境造成的损害，并在应用过程中恢复自然环境，为人类的未来创造一个更加美好的世界。



Most anthropologists believe that technology, that is, the use of tools, enabled our ancestors to adjust to and

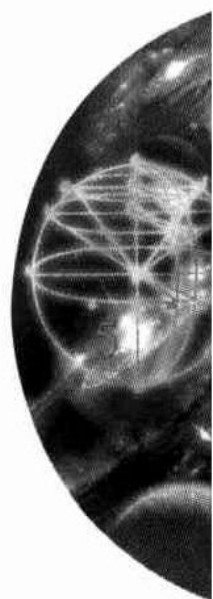


survive great changes in the natural environment, such as floods, earthquakes, volcanic explosions, and climatic changes. Humans, they point out, are too weak to cope with nature with only their hands and teeth, but tools serve as extensions of human hands and multipliers of human muscle power.

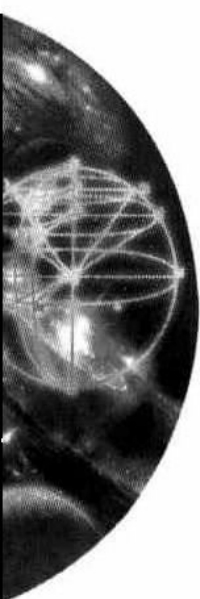
大多数人类学家都认为，技术，也就是运用工具，使我们的祖先适应了诸如洪水、地震、火山爆发和气候变迁等自然环境的巨变，并得以生存下来。他们指出，人类仅凭着自己的双手和牙齿是无力与自然作斗争的。但工具的运

用则延长了人类的双手，使人类的肌肉力量成倍增长。

As a result of their use of hand and mind to cope with nature and to shape it when necessary so that they could survive, humans and the natural world form part of a dynamic ecological system. According to its Greek root, ecology is the study of “houses.” While some ecologists limit their scientific research to the natural environment, the fact is that ecology, in accordance with its original meaning, must also include the social environment, the “household of humankind.” Humans, with the aid of technology, have created their own



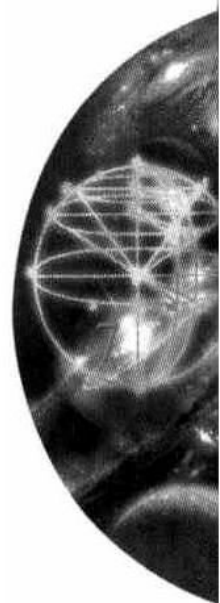
physical and social environment,
which has thus become part of the
larger ecological system.



在应对自然并在必要时改造自然的过程中，人类为了生存，手脑并用，与自然界形成了一个充满活力的生态系统。追溯其希腊语的词根含义可以发现，所谓生态学就是对“房屋”的研究。一些生态学家将他们的科学研究限定在自然环境方面，但事实上，按照它最初的意思，生态学的研究对象必须还包括社会环境，即“人类的家庭”。人类借助技术的力量，创造了自己的物质环境和社会

环境，这两者则成为更广阔的生态系统的组成部分。

How did the use of technology enable Homo sapiens to survive and then to develop complex civilizations? One of humanity's first great steps in controlling the natural environment was the conquest of fire. At first, food was cooked by holding it over the fire or putting it in the fire. The range of cooking and nutritional possibilities was enormously increased when suitable containers—pots and pans—could be made, making it possible to boil, stew, fry, and bake foods.



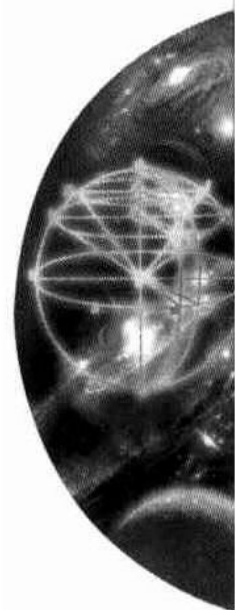


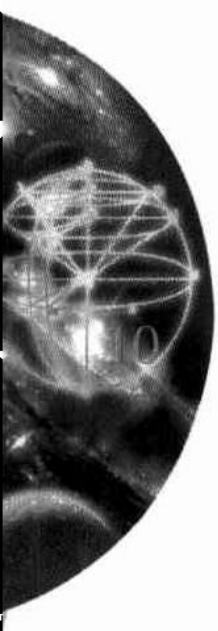
技术的应用是如何使“智人”（现代人的学名）得以生存，并发展出如此复杂多元的文明的呢？在控制自然界的过程中，人类最初迈出的一大步就是征服火。起先，人类手拿着食物，把它放在火上烤或放在火里烧。后来，人类制造出了合适的容器（炊具）后，可以通过煮、炖、煎、烤等多种方式烹制食物，由此扩大了食物范围，食物的营养价值也得到了极大的提升。

Agriculture

农业

As humankind advanced from the Stone Age into the Bronze Age, fire also made possible the use of metals for tools, weapons, and ornamentation. Long before using metals, however, humans had already initiated a whole new technology that changed their lifestyles and gave birth to civilized existence: agriculture.





Agriculture allowed humans to cooperate with nature to obtain food—and that required new and special tools, such as hoes to till the soil, sickles to reap grain, flails to thresh it, and querns to grind it.

随着人类从石器时代进入青铜器时代，火也使得利用金属打造工具、武器和装饰品成为可能。然而，在使用金属之前的很长一段时间里，人类早已发明了一种全新的技术，改变了他们原有的生活方式，开始了文明的生活，这就是农业。农业使人类与自然进行合作，从而获得食物，而这又需要新的特殊工具，如耕地用的锄头、收

割谷物用的镰刀、打谷用的连枷和碾米用的手推磨等。

Since people had to remain in one place to plant seeds and tend the crops, they could begin to accumulate goods and to build permanent shelters. At the same time, any surplus of foodstuffs could be exchanged for other goods. The Bronze and Iron Ages could not have occurred without the surplus of food grown by the agriculturists, because the metal deposits were found in uplands, not in the fertile valleys where food could be grown. So there was an exchange of foodstuffs for metal tools, and then for textiles, which became necessary

