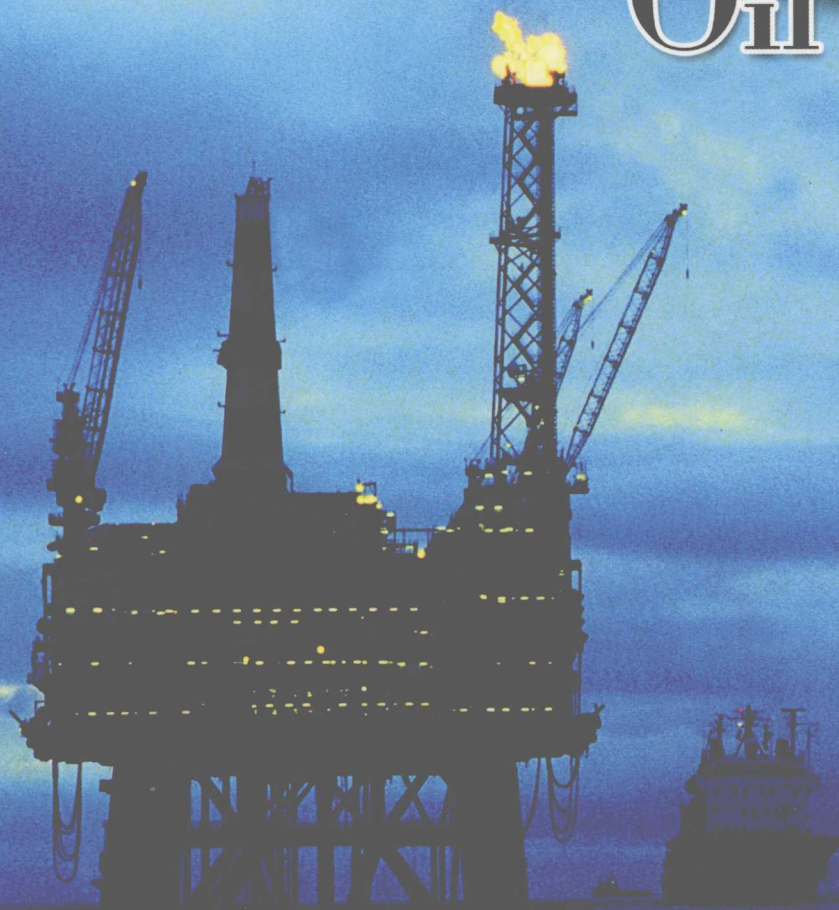


阅读空间 · 英汉双语主题阅读

石油的文化

Oil



中国教育学会
外语教学
专业委员会
推荐

中国电力出版社
www.sidf.com.cn

CENTURY
ORIENTAL 世纪东方

阅读空间 · 英汉双语主题阅读



石油的文化

Oil

李金涛 译

京权图字 01-2005-3186

图书在版编目 (CIP) 数据

石油的文化 / 美国凯勒斯出版公司编著; 李金涛译.

北京: 中国电力出版社, 2005.11

(阅读空间·英汉双语主题阅读)

书名原文: Oil

ISBN 7-5083-3920-7

I.石… II.①美…②李… III.英语-阅读教学-

高中-课外读物 IV.G634.413

中国版本图书馆 CIP 数据核字 (2005) 第 116007 号

Oil

Copyright © 2005 by Carus Publishing Company.

Chinese Translation Copyright © 2005 by China Electric Power Press

All rights reserved.

《阅读空间·英汉双语主题阅读》由美国北极星传媒有限公司授权出版,
北京行走出版社咨询有限公司策划。

石油的文化

原著: R. Anthony Kugler 等

翻 译: 李金涛
责任编辑: 王惠娟 李宝琳
出版发行: 中国电力出版社
社 址: 北京市西城区三里河路 6 号 (100044)
网 址: <http://www.sjdf.com.cn>
印 刷: 北京世艺印刷有限公司
开 本: 178 × 226
印 张: 3
字 数: 57 千字
版 次: 2006 年 1 月第 1 版, 2006 年 1 月第 1 次印刷
书 号: ISBN 7-5083-3920-7
定 价: 8.90 元

版权所有 翻印必究

如有印装质量问题, 出版社负责调换。联系电话: 010-62193493

Contents 目录

- 
- 2 **Editor's Message** 编辑手记
- 4 **Map — Where Does the World's Oil Come From?**
全球石油分布图
- 6 **Oil** 独特的石油
- 7 **In the Know** 先知为快
- 11 **Our Dependence on Oil** 我们对石油的依赖
- 16 **Through Time** 大事年表
- 18 **Fill'er Up! The History of the Gas Station**
加满油! 美国加油站的历史
- 22 **Is Oil Good for Africa?** 石油有益于非洲吗?
- 23 **Captain of Industry** 石油巨头
- 28 **Growing Fuel** “种植”燃料
- 32 **Oklahoma Oil Boom** 俄克拉何马州的石油繁荣
- 36 **Oil's Journey** 石油之旅
- 40 **Gib Morgan** 吉布·魔根
- 45 **Teacher's Guide & Activity** 教师指导与活动

除了水，再也没有什么物质能比石油对我们的世界产生更大的影响了。石油不仅为我们的车辆提供燃料，为我们的住宅供暖，而且还被制成我们身边许多以石油为原料的产品。从鞋底的橡胶到电脑的屏幕和键盘所使用的塑料——石油对我们文化的影响是巨大的。

石油以最简单的方式改变了我们的

交通和居住。美国——一个曾经依靠马车的国家，现在已是驾车族的乐园。随着汽车工业的发展，其他商业和产业也蓬勃发展。快餐业的驾车者（免下车）服务窗口和美国公路两旁的汽车旅馆为众多的驾驶员服务着。现在人们居住的地点更加远离工作的地点。

以石油为原料的各种材料影响了许多行业，从高科技到医疗科学。如果没

有石油，你可以想象医院在没有保育器帮助下救助早产婴儿的情形。

然而，石油的影响并不总是积极的。汽车产生的尾气污染和石油泄漏同样让我们付出了沉重的代价。

美国比世界上其他任何一个国家都消耗着更多的石油。美国极其依赖出口石油的几个中东国家，而那些地区动荡不安的局势影响着美国国内和世界各国

成品油的价格。

石油已经使沙特阿拉伯成为一个富有的国家。但对于像苏丹这样的国家而言，石油的发现并未使全体国民受益。一小撮人控制着石油带来的财富。

请你试着找出石油影响我们和世界的多种不同方式。



Arctic
Ocean

Greenland

Prudhoe
Bay

Pembina

Williston
Basin

NORTH
AMERICA

Pacific
Ocean

California

Permian
Basin

Atlantic
Ocean

Gulf Coast

Tampico-Tuxpan-
Chicontepec

Chiapas-Tabasco-
Campeche

Eastern Llanos


Lake
Maracaibo

Oriente

SOUTH
AMERICA

Campos
Basin

Where Does the World's Oil Come From? 全球石油分布图

 Major oil-producing region

0 1,500 3,000 miles
0 1,500 3,000 kilometers

San Jorge Basin

Magallanes Basin



OIL

by Donna O'Meara

独特的 石油



Do you ever use a ballpoint pen? Chances are that most of the materials it took to make that pen came from oil.

Today almost 100% of plastics are made from oil. Plastics made from oil are called petroleum-based plastics (PBPs). These plastics are not biodegradable, meaning that they do not break down naturally. If you throw a plastic bag into the ocean, chances are that 100 years from now it will still be floating around somewhere. Some scientists are looking into ways to make degradable plastics from natural sources such as corn. If we could develop plastics that biodegrade naturally, we could get rid of millions of tons of trash each year.



How many plastic items can you find in this picture?

你能指出图中有多少种物品是塑料制品吗?

你 使用过圆珠笔吗?

事实是, 用来制造圆珠笔的大部分材料都来自石油。

今天, 几乎百分之百的塑料都来自石油。由石油制成的塑料我们称之为石油基塑料 (PBPs), 这些塑料都是不可生物降解的, 那就意味着它们不会自然分解。如果你把这种塑料丢入大海, 100年后它很可能还漂浮在海上某处。科学家正在寻求利用诸如玉米等天然原料来制造可自然降解的塑料的方法。如果能开发出可以自然降解的塑料, 那每年我们就能清除掉数百万吨的垃圾。

By-product a secondary substance or material that results from the making of something else.

副产品 在生产或制造某物的过程中得到的次要的物质或材料。

Hopper a storage container for such items as grain or fuel, usually funnel-shaped.

给料漏斗 谷类或油类的一种储存容器, 通常为漏斗状。

Kerosene a highly flammable oil made from petroleum that was used to light lamps and cooking before electricity.

煤油 由石油制成的高度易燃油类。在电能出现前, 常常用来照明或者烧饭。

Titusville, Pennsylvania site of the first commercially successful oil well in the United States.

宾夕法尼亚州的塔斯维尔 美国第一口成功的商业化油井所在地。

Most of the oil we use every day is for fuel for our cars, airplanes, trucks, and other transportation vehicles. You may be surprised to learn how many everyday items you use come from oil.

Imagine walking through a normal house looking for items made with petroleum-based plastics: First, we notice the molding around the front door, the backing on the doormat, the furniture fabric, the plastic picture frames, the fibers that make up the carpet, the outside of the television, the black videotape covers and CDs — and don't forget the paint on the walls and ceiling.

Next, let's find the PBP products in the kitchen. We find the dish rack, the tray that separates the silverware, sponges, plastic reusable food containers, the entire inside of the refrigerator, parts of the dishwasher, the hose to the sprayer

我们每天所消耗掉的大部分石油都用来给汽车、飞机、卡车和其他交通工具提供燃料。但在了解到你日常使用的由石油制成的物品数量时，你会大吃一惊的。

设想你正步行穿过一栋普通的住宅并试图寻找PBP制成的东西：首先，我们会发现前门的装饰线条、门口蹭脚垫的背面、家具的某部分结构、塑料相框、制作地毯的纤维、电视机的外壳、录像带的黑色外壳和CD，还有墙壁和天花板的油漆。

接下来，让我们寻找厨房中的PBP物品。我们可以找到碗碟架、分隔银质餐具、海绵和可循环使用的塑



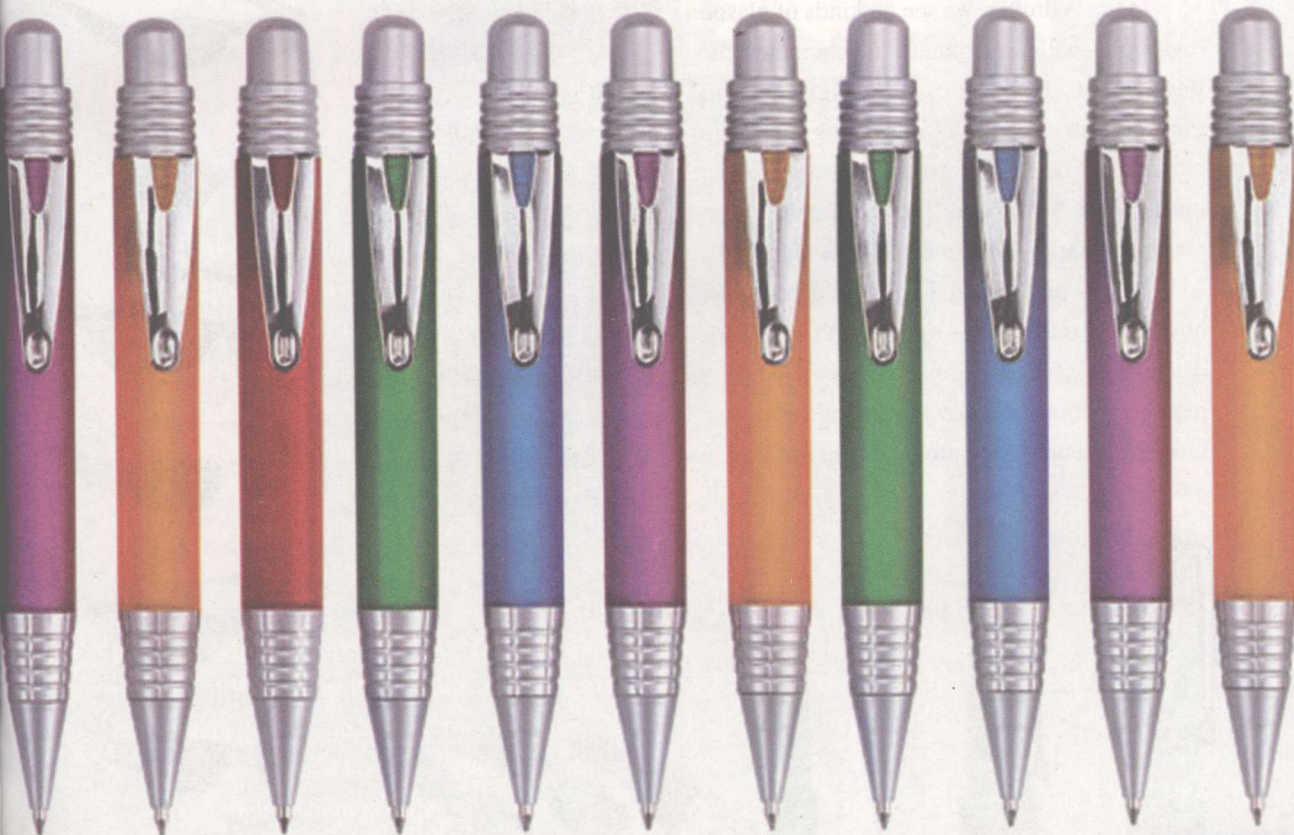
on the sink, the plastic washer in the faucet. Under the sink, we find plastic pipes. In the cabinets, we see plastic wrap to store foods, ice cube trays, and most of the electric coffeemaker and can opener. Don't forget the knobs on the stove, the trash can, the dog's food bowls and chew toys, water and soda bottles, the curtains, plastic grocery and trash bags, laundry detergent, dishwashing liquid, household cleaners, the little plastic trays that meat and vegetables come in from the store, and the bag around the loaf of bread.

What about the food itself? Well, it's not plastic, but when you go to the grocery store and pick up those giant red tomatoes and crisp green celery stalks, it may have been oil-based fertilizers

料食物容器的托盘、电冰箱的整个内部、洗碗机的某些部件、水槽喷雾器的水龙带、水龙头里的塑料垫圈。水槽下面，我们可以找到塑料管子。在橱柜里，我们发现了储存食物的塑料包装材料、制作冰块的托盘及电咖啡机的大多数零部件和启瓶器。不要忘记还有烤炉的把手、垃圾桶、狗食碗和咀嚼玩具、苏打水瓶、窗帘、塑料食品袋和垃圾袋、洗衣用的去污剂、洗碗液、家庭清洁剂、商店盛肉和蔬菜的小塑料托盘和装面包的塑料袋。

那食物本身呢？哦，食物不是由塑料制成的。但当你去食品店，拿起一个大个的红番茄或脆生而新鲜的绿芹菜梗时，它们可能是在由石油生产出的化肥和杀虫剂帮助下生长的。

让我们检查一下卫生间，我们发现了洗手





and pesticides that helped them grow.

Let's check out the bathroom. We spot the liquid soap and the soap container, the towels, the plastic floor tiles, shampoo and conditioner bottles, aspirin and medicine bottles, the puffy pink bath scrubber, the shower curtain, the molded bathtub, the toilet seat, hairbrushes and combs, toothbrushes, dental floss, lipstick, moisturizers, and even the stuff you put on your lips to prevent chapping — all made from oil.

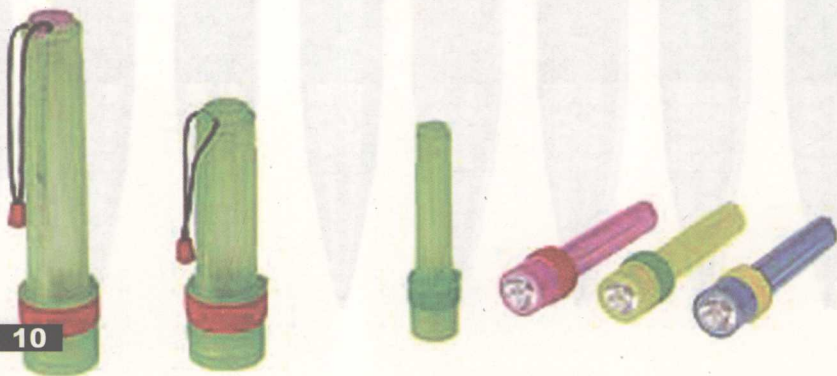
In the bedroom, we see all kinds of plastic toys, dolls, balls, and games; the computer; the phone; the alarm clock; the blankets and mattress; most of the clothes hanging in the closets and folded in the bureau drawers; the pen on the table by the bed; and the frames of the reading glasses — to name but a few things.

This is just a partial list to illustrate just how many of the things we use each and every day are made from oil. You might want to take a real walk around your own home and see what other petroleum-based products you can find.

液和肥皂盒、毛巾、塑料地板块，洗发液和护发素瓶子、阿司匹林瓶子和药瓶、粉红色的浴花、淋浴帘、浴缸、马桶坐便圈、发刷和梳子、牙刷和牙线、口红、滋润霜，甚至涂在嘴唇上用来防止皴裂的物质也是由石油制成的。

在卧室里，我们看到了各种塑料玩具、塑料玩偶、塑料球、塑料游戏器材、电脑、电话、闹钟、毛毯和床垫，大多数悬挂在橱柜里或叠放在衣柜中的衣服、床头柜上的笔、阅读眼镜的镜框——不胜枚举。

这只是我们日常使用的由石油制成的物品的一部分清单，你可能想要在自己房屋周围亲自走一走，并且寻找你所能够发现的其他PBP产品。



Our Dependence on Oil

by R. Anthony Kugler

我们对 石油 的依赖

If you live in the United States, chances are very good that you have ridden in a car within the past 24 hours. More than 300 million automobiles exist in this country, and all of them consume an increasingly limited and costly substance: petroleum, commonly known as oil. But oil does more than keep traffic moving on the highways. We also use it to heat and cool our homes in winter, to make products like plastics and pesticides, and to bring the food grown with the help of those pesticides to our supermarkets. Oil, in short, is responsible for many of the advances and conveniences we tend to take for granted — and for some of our most serious problems.

Although ancient peoples all over the world

如果你生活在美国，在过去的24小时里，你很可能刚驾驶过你的爱车。美国有3亿多辆汽车，它们都在消耗一种越来越有限并且昂贵的物质：汽油——就是人们所熟知的石油。石油除了能让各种交通工具奔驰在公路上，我们还在冬季用它来取暖，用它来制冷，来制造像塑料和农药这类产品。农药帮助粮食生长，粮食成熟后再运到超市。总之，石油为我们带来了我们早已习以为常的种种进步和便利，也给我们造成了一些严重的问题。

尽管，世界各地的先人们早就知道了存在于地表的少量石油层，但有时他们只把石油用作一种药物。直到1859年才出现了大规模的石油生产。那一年，埃德温·德雷克建造了一口油井，把蕴藏在宾夕法尼亚西部地下岩层的石

knew about small surface deposits of oil, sometimes using it as a medicine, it was not until 1859 that large-scale production became possible. That year, Edwin Drake built a well to bring to the surface the oil buried in the bedrock of western Pennsylvania. Drake's oil was in great demand almost immediately, for the country was in the early stages of a process called industrialization. Factories were springing up everywhere. The owners of those factories needed lubricants to prevent the metal parts in their machines from grinding together and wearing out. Before 1859, most lubricants were made from whale oil, but whales were already growing scarce. Petroleum proved a good substitute.

It was only with the production of the first automobiles around 1900, however, that oil began to assume the importance it has today. Most cars require two petroleum products: motor oil, to

油采到地上。不久德雷克的石油就大受欢迎。因为那时美国正处在工业化早期，到处工厂林立。工厂需要润滑剂来防止工厂里机器的金属部件挤压、磨损。1859年以前，大部分的润滑剂都由鲸油制成。但鲸鱼数量已经变得越来越小。结果表明石油是一种不错的替代品。

1900前后，正是随着第一批汽车的生产，石油才开始像今天这样发挥着巨大的作用。大多数的汽车需要两种石油产品：机油，用来润滑发动机；汽油，原油经过提炼，去除杂质后得到的产品。

美国快速增长的汽车群对于石油的需求是巨大的。然而石油的供给却捉襟见肘。全国各地涌现许多油田，尤其在路易斯安那州、得克萨斯州和俄克拉何马州。当某些油田还在继续生产油的时候，这种最容易获得的石油供给却已近枯竭。





lubricate the engine, and gasoline, produced when raw, or crude, oil is refined to remove impurities.

The appetite of America's fast-growing fleet of automobiles was enormous, and oil producers struggled to keep pace. Fields of oil-wells appeared around the country, particularly in Louisiana, Texas, and Oklahoma. While some of those fields continue to produce oil, the most easily reached supplies have been exhausted.

Most oil produced in this country today comes from expensive offshore wells or from the most remote regions of Alaska. It's not nearly enough. For decades, the United States has had to import most of its oil from other countries. Today Americans, who make up only about 5 percent of the world's population, consume between one third and one quarter of its oil.

Our reliance on imported oil is disturbing. Much of it comes from the politically troubled

今天，美国大多数的石油都来自高成本的海上油井或阿拉斯加最偏僻的地区。但这还是供不应求。数十年来，美国已经不得不从其他国家进口石油。现今，只占世界总人口5%的美国人，却消费着世界石油总产量的1/4~1/3。

我们对进口石油的依赖让人感到忧虑。大部分担忧来自陷入政治困境中的中东。许多观察家担心中东的冲突，包括伊拉克战争和巴以间旷日持久的争端会随时中断（出口到美国）石油的海上运输。

我们知道石油供给中断的经济效应是立竿见影和毁灭性的，因为以前曾发生过类似事件。1973年和1974年，几个石油出口国家——就是人们所熟悉的石油输出国组织，或称欧佩克——当时受控于几个敌视以色列的中东国家。它们大幅减少石油产量来抗议美国对以色列的支持。随着供给的减少，汽油价格飞涨。美国经历着

Middle East, and many observers are worried that the region's conflicts, including the war in Iraq and the long-standing dispute between Israelis and Palestinians, could disrupt shipments at any time.

We know that the economic effects of such an interruption would be immediate and devastating, because it has happened before. In 1973 and 1974, a group of oil exporters known as OPEC (Organization of Petroleum Exporting Countries), dominated at the time by several Middle East nations hostile to Israel, drastically reduced production to protest American support for that country. Gasoline prices rose sharply as supplies disappeared, and the United States experienced a prolonged recession, or serious economic downturn.

A reduction in oil production today would likely have even more serious effects, because the world's economies are now tied together much more closely. In this era of globalization, or worldwide economic cooperation, an interruption of oil supplies to just one nation would have a ripple effect around the world. Millions of people, from truck drivers to flight attendants to factory workers, could lose their jobs within days.

Economists are not the only ones troubled by our dependence on oil, however. Scientists are worried too. As they see it, the biggest problem with oil is pollution. Most people are aware now that the consumption of gasoline in cars and trucks releases many harmful pollutants into the air. One of these is carbon dioxide, identified by scientists as the major cause of global warming.

What is often forgotten, however, is that oil production generates pollution as well. The deep wells that pump oil out of the ground, for example, often leak, as do the pipelines and tanker ships that

一场持久的经济衰退或是严重的经济下滑。

今天,石油产量的减少可能会产生更严重的后果。因为世界的经济如今已更加紧密地联结在一起。在这个全球化或世界经济合作的时代,针对某个国家的石油供给的中断,会在世界范围内产生一种连带效应。数百万人,从卡车司机到空中乘务员到工厂工人都可能在几天内失业。

我们对石油的依赖不仅让经济学家们、也让科学家们忧心忡忡。因为他们发现石油引起的最严重的问题就是污染。大多数人都意识到汽车、卡车消耗掉的汽油释放出许多种有毒气体。其中之一便是二氧化碳,科学家已确定它是全球变暖的罪魁祸首。

然而人们经常忽略的是石油生产本身也能

