



# 军事科技 英语教程

MILITARY SCIENCE ENGLISH

主编 堵海鹰 刘文俊



国防工业出版社  
National Defense Industry Press

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## 内 容 简 介

本教程是为了适应工程类人才培养的需要而编写的。该教程共分为 10 个单元,每个单元有 2 篇课文,涉及因特网、数字化、超导、战术、情报、雷达、电子战、航空兵、高科技背景下的现代战争等方面的内容。所选用的材料语言规范,具有时代性和知识性。每篇课文都配有生词、词组、句型讲解、课文注释和精心编排的练习。书后附有练习参考答案和课文参考译文。

本教程适用于工程类军事院校、普通高等院校修完 2 年基础阶段大学英语的学员、军内外科技工作者,以及有志于外军研究的广大读者。

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# 《军事科技英语教程》

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## 前 言

为了适应我国军事院校新的发展形势,满足新时期国家对军事人才培养的需要,解放军空军雷达学院组织英语、军事和电子工程等方面的专家编写了《军事科技英语教程》。

本教程共有10个单元,每个单元有2篇课文,涉及因特网、数字化、超导、战术、情报、雷达、电子战、航空兵、高科技背景下的现代战争等方面的内容。每篇课文都配有生词、词组、句型讲解、课文注释和精心编排的练习。课后练习旨在使学习者巩固所学的知识。为方便教学及自学,书后附有练习参考答案和课文参考译文。所选用的材料语言规范,具有时代性和知识性。本教程很好地衔接了基础英语和专业英语,为学习者从基础英语到专业英语提供了一个过渡性的学习材料。通过学习本教程,学习者可对科技英语的语言特点、高科技战争、现代空军、现代雷达预警技术、电子战等有一个基本的了解,并掌握相关的基础词汇,为在大学本科四年级或研究生阶段阅读英语科技原文资料和书籍打下良好的基础。

本书可作为工程类军事院校、普通高校修完2年基础阶段大学英语的学员的教材,也可供军内外科技工作者及有志于外军研究的广大读者阅读。

本教程是在理论研究的基础上,根据科技英语教学的实际情况,在空军雷达学院经过2001年至2005年,4年20个试点班的使用,不断总结经验,不断完善后出版的。

在此,我们衷心感谢空军雷达学院教务处、教保处、一系、二系及外语教研室对该教程出版工作的支持;感谢参加试点班教学的全体教官和学员;同时,感谢外交部王庆全同志、中国地质图书馆堵海燕副研究馆员和中国北方工业公司丁伟民同志在提供资料和审校工作中给予的大力协助。

由于编者水平有限,书中错误之处在所难免,恳请广大读者批评指正。

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编者

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# Unit One

## Text A



### Searching The Internet

Combining the skills of the librarian and the computer scientist may help organize the anarchy of the Internet.

—by Clifford Lynch<sup>1</sup>

One sometimes hears the Internet characterized as the world's library for the digital age. This description does not stand up under even casual examination. The Internet—and particularly its collection of multimedia resources known as the World Wide Web—was not designed to support the organized publication and retrieval of information, as libraries are<sup>2</sup>. It has evolved into what might be thought of as a chaotic repository for the collective output of the world's digital “printing presses.” This storehouse of information contains not only books and papers but raw scientific data, menus, meeting minutes, advertisements, video and audio recordings, and transcripts of interactive conversations. The ephemeral mixes everywhere with works of lasting importance<sup>3</sup>.

In short, the Net is not a digital library. But if it is to continue to grow and thrive as a new means of communication, something very much like traditional library services will be needed to organize, access and preserve networked information. Even then, the Net will not resemble a traditional library, because its contents are more widely dispersed than a standard collection. Consequently, the librarian's classification and selection skills must be complemented by the computer scientist's ability to automate the task of indexing and storing information. Only a synthesis of the differing perspectives brought by both professions will allow this new medium to remain viable<sup>4</sup>.

At the moment, computer technology bears most of the responsibility for organizing information on the Internet. In theory, software that automatically classifies and indexes collections of digital data can address the glut of information on the Net—and the inability of human indexers and bibliographers to cope with it<sup>5</sup>. Automating information access has the advantage of directly exploiting the rapidly dropping costs of com-



puters and avoiding the high expense and delays of human indexing.

But, as anyone who has ever sought information on the Web knows, these automated tools categorize information differently than people do. In one sense, the job performed by the various indexing and cataloguing tools known as search engines is highly democratic<sup>6</sup>. Machine-based approaches provide uniform and equal access to all the information on the Net. In practice, this electronic egalitarianism can prove a mixed blessing. Web “surfers” who type in a search request are often overwhelmed by thousands of responses. The search results frequently contain references to irrelevant Web sites<sup>7</sup> while leaving out others that hold important material.

### Crawling the Web

The nature of electronic indexing can be understood by examining the way Web search engines, such as Lycos or Digital Equipment Corporation's Alta Vista, construct indexes and find information requested by a user<sup>8</sup>. Periodically, they dispatch programs (sometimes referred to as Web crawlers, spiders or indexing robots) to every site they can identify on the Web—each site being a set of documents, called pages, that can be accessed over the network. The Web crawlers download and then examine these pages and extract indexing information that can be used to describe them. This process—details of which vary among search engines—may include simply locating most of the words that appear in Web pages or performing sophisticated analyses to identify key words and phrases. These data are then stored in the search engine's database, along with an address, termed a uniform resource locator (URL), that represents where the file resides. A user then deploys a browser, such as the familiar Netscape, to submit queries to the search engine's database. The query produces a list of Web resources, the URLs that can be clicked on to connect to the sites identified by the search.

Existing search engines service millions of queries a day. Yet it has become clear that they are less than ideal for retrieving an ever growing body of information on the Web. In contrast to human indexers, automated programs have difficulty identifying characteristics of a document such as its overall theme or its genre—whether it is a poem or a play, or even an advertisement.

The Web, moreover, still lacks standards that would facilitate automated indexing. As a result, documents on the Web are not structured so that programs can reliably extract the routine information that a human indexer might find through a cursory inspection: author, date of publication, length of text and subject matter (This information is known as metadata). A Web crawler might turn up the desired article authored by Jane Doe. But it might also find thousands of other articles in which such a common name is mentioned in the text or in a bibliographic reference.

Publishers sometimes abuse the indiscriminate character of automated indexing. A Web site can bias the selection process to attract attention to itself by repeating within a

document a word, such as “sex,” that is known to be queried often. The reason: a search engine will display first the URLs for the documents that mention a search term most frequently. In contrast, humans can easily see around simpleminded tricks.

The professional indexer can describe the components of individual pages of all sorts (from text to video) and can clarify how those parts fit together into a database of information. Civil War photographs, for example, might form part of a collection that also includes period music and soldier diaries. A human indexer can describe a site’s rules for the collection and retention of programs in, say, an archive that stores Macintosh software<sup>9</sup>. Analyses of a site’s purpose, history and policies are beyond the capabilities of crawler program.

Another drawback of automated indexing is that most search engines recognize text only. The intense interest in the Web, though, has come about because of the medium’s ability to display images, whether graphics or video clips<sup>10</sup>. Some research has moved forward toward finding colors or patterns within images (see box on next two pages). But no program can deduce the underlying meaning and cultural significance of an image (for example, that a group of men dining represents the Last Supper).

At the same time, the way information is structured on the Web is changing so that it often cannot be examined by Web crawlers<sup>11</sup>. Many Web pages are no longer static files that can be analyzed and indexed by such programs. In many cases, the information displayed in a document is computed by the Web site during a search in response to the user’s request. The site might assemble a map, a table and a text document from different areas of its database, a disparate collection of information that conforms to the user’s query. A newspaper’s Web site, for instance, might allow a reader to specify that only stories on the oil-equipment business be displayed in a personalized version of the paper. The database of stories from which this document is put together could not be searched by a Web crawler that visits the site.

A growing body of research has attempted to address some of the problems involved with automated classification methods. One approach seeks to attach metadata to files so that indexing systems can collect this information. The most advanced effort is the Dublin Core Metadata program and an affiliated endeavor, the Warwick Framework—the first named after a workshop in Dublin, Ohio, the other for a colloquy in Warwick, England. The workshops have defined a set of metadata elements that are simpler than those in traditional library cataloguing and have also created methods for incorporating them within pages on the Web.

Categorization of metadata might range from title or author to type of document (text or video, for instance). Either automated indexing software or humans may derive the metadata, which can then be attached to a Web page for retrieval by a crawler. Precise and detailed human annotations can provide a more in-depth characterization of a page than can an automated indexing program alone.

Where costs can be justified, human indexers have begun the laborious task of compiling bibliographies of some Web sites. The Yahoo database, a commercial venture, classifies sites by broad subject area. And a research project at the University of Michigan is one of several efforts to develop more formal descriptions of sites that contain material of scholarly interest.

### Not Just a Library

The extent to which either human classification skills or automated indexing and searching strategies are needed will depend on the people who use the Internet and on the business prospects for publishers<sup>12</sup>. For many communities of scholars, the model of an organized collection—a digital library—still remains relevant. For other groups, an uncontrolled, democratic medium may provide the best vehicle for information dissemination. Some users, from financial analysts to spies, want comprehensive access to raw databases of information, free of any controls or editing. For them, standard search engines provide real benefits because they forgo any selective filtering of data.

The diversity of materials on the Net goes far beyond the scope of the traditional library. A library does not provide quality rankings of the works in a collection. Because of the greater volume of networked information, Net users want guidance about where to spend the limited amount of time they have to research a subject. They may need to know the three “best” documents for a given purpose. They want this information without paying the costs of employing humans to critique the myriad Web sites. One solution that again calls for human involvement is to share judgments about what is worthwhile. Software-based rating systems have begun to let users describe the quality of particular Web sites (see “Filtering Information on the Internet,” by Paul Resnick, page 62).

Software tools search the Internet and also separate the good from the bad. New programs may be needed, though, to ease the burden of feeding the crawlers that repeatedly scan Web sites. Some Web site managers have reported that their computers are spending enormous amounts of time in providing crawlers with information to index, instead of servicing the people they hope to attract with their offerings.

To address this issue, Mike Schwartz and his colleagues at the University of Colorado at Boulder developed software, called Harvest, that lets a Web site compile indexing data for the pages it holds and to ship the information on request to the Web sites for the various search engines. In so doing, Harvest’s automated indexing program, or gatherer, can avoid having a Web crawler export the entire contents of a given site across the network.

Crawler programs bring a copy of each page back to their home sites to extract the terms that make up an index, a process that consumes a great deal of network capacity (bandwidth)<sup>13</sup>. The gatherer, instead, sends only a file of indexing terms. Moreover, it exports only information about those pages that have been altered since they were last

accessed, thus alleviating the load on the network and the computers tied to it.

Gatherers might also serve a different function. They may give publishers a framework to restrict the information that gets exported from their Web sites. This degree of control is needed because the Web has begun to evolve beyond a distribution medium for free information. Increasingly, it facilitates access to proprietary information that is furnished for a fee. This material may not be open for the perusal of Web crawlers. Gatherers, though, could distribute only the information that publishers wish to make available, such as links to summaries or samples of the information stored at a site.

As the Net matures, the decision to opt for a given information collection method will depend mostly on users. For which users will it then come to resemble a library, with a structured approach to building collections? And for whom will it remain anarchic, with access supplied by automated systems<sup>14</sup>?

Users willing to pay a fee to underwrite the work of authors, publishers, indexers and reviewers can sustain the tradition of the library<sup>15</sup>. In cases where information is furnished without charge or is advertiser supported, low-cost computer-based indexing will most likely dominate—the same unstructured environment that characterizes much of the contemporary Internet. Thus, social and economic issues, rather than technological ones, will exert the greatest influence in shaping the future of information retrieval on the Internet.

## New Words

**anarchy** [ˈænəki] *n.*

absence of government or control; disorder; confusion  
无政府状态, 无秩序, 混乱

**internet** [ˈintənət] [缩] *n.*

international net 国际互联网

**multimedia** [ˈmʌltiˈmi:djə] *adj.*

多种手段的, 多种方式的

**retrieval** [riˈtri:vəl] *n.*

act of finding and bringing in 寻回, 再获得, 检索

**evolve** [iˈvɒlv] *v.*

develop naturally and gradually 逐渐形成

**chaotic** [keiˈɒtik] *adj.*

in a state of chaos; completely disorganized 处于混乱状态的, 完全无秩序的

**repository** [riˈpɒzɪtəri] *n.*

place where things are stored or may be found, esp. a warehouse or museum 储藏或存放物品的处所, 尤指仓库、博物馆

**video** [ˈviðiəu] *n.*

recording or broadcasting of moving pictures, as distinct from sound, by using television 电视, 电视广播, 电视录像

**audio** [ˈɔ:diəu] *adj.*

of hearing or sound 听觉的, 声音的

**transcript** [ˈtrænskript] *n.*

written or recorded copy of what has been said or written 抄本, 文字本

<b>interactive</b> [,intər'æktiv] <i>adj.</i>	allowing a continuous two-way transfer of information between a computer and the person using it 交互式的, 人机对话的
<b>ephemeral</b> [i'femərəl] <i>adj.</i>	living, lasting, etc. for a very short time (生存、持续等)短暂的
<b>thrive</b> [θraiv] <i>v.</i>	grow or develop well and vigorously; prosper 茁壮成长, 蓬勃发展, 繁荣
<b>access</b> [ˈækses] <i>v.</i>	get information from or put information into (a computer file) 存取(计算机文件)
<b>network</b> [ˈnetwɜ:k] <i>n.</i>	网络系统
<b>disperse</b> [dis'pɜ:s] <i>v.</i>	(cause to) go in different directions; break up 散开, 消散, 驱散
<b>classification</b> [,klæsifi'keifən] <i>n.</i>	分类, 分级
<b>complement</b> [ˈkɒmpləmənt] <i>v.</i>	combine well (and of contrastingly) with (sth.) to form a whole 与(某事物)结合(相辅相成)
<b>automate</b> [ˈɔ:təmeit] <i>v.</i>	cause (sth.) to operate by automation 使(某事物)自动操作
<b>index</b> [ˈindeks] <i>v.</i>	make an index for sth. 为某事物编索引
<b>synthesis</b> [ˈsɪnθɪsɪs] <i>n.</i>	combining of separate parts, elements, etc. to form a complex whole 综合, 结合
<b>differ</b> [ˈdɪfə] <i>v.</i>	not be the same; be unlike 不同, 不像
<b>viable</b> [ˈvaɪəbl] <i>adj.</i>	able to exist; capable of surviving 能生存的, 能活下去的
<b>glut</b> [glʌt] <i>n.</i>	supply in excess of demand 过量供应
<b>inability</b> [ɪnə'bɪləti] <i>n.</i>	being unable; lack of power or means 无能力, 无力量
<b>indexer</b> [ɪn'deksə] <i>n.</i>	编索引的人
<b>bibliographer</b> [,bɪbli'ɒgrəfə] <i>n.</i>	书目提要编著人, 文献目录编著人
<b>categorize</b> [ˈkætɪgəraɪz] <i>vt.</i>	把……分类
<b>uniform</b> [ˈju:nɪfɔ:m] <i>adj.</i>	the same; not varying in form, quality, etc. 相同的, 一律的, 形式、性质等无变化的
<b>egalitarianism</b> [,i:ɡəli'tɛəriənɪzəm] <i>n.</i>	equality 平等
<b>overwhelm</b> [ˈəʊvə'welɪm] <i>vt.</i>	cause to feel confused or embarrassed; weigh down; submerge 使困窘, 压倒, 淹没
<b>periodically</b> [,piəri'ɒdɪkəli] <i>adv.</i>	occurring or appearing at regular intervals 定期地, 周期地
<b>extract</b> [ɪks'trækt] <i>vt.</i>	take or get out (usu. with effort or by force) 拔取, 拔出
<b>locate</b> [ləu'keɪt] <i>vt.</i>	discover, show, the position of 找出……的位置, 指出……的位置
<b>database</b> [ˈdeɪtəbeɪs] <i>n.</i>	数据库

<b>deploy</b> [diplɔɪ] <i>v.</i>	(cause to) spread out (使)展开
<b>browser</b> [br'auzə] <i>n.</i>	浏览器
<b>submit</b> [səb'mit] <i>v.</i>	put forward for opinion, discussion, decision, etc. (供作评论、讨论、决定等而)提出
<b>query</b> ['kwɪəri] <i>n.</i>	question, esp. one raising a doubt about the truth of sth. 问题(尤指对某事物真实性发生怀疑者)
<b>click</b> [klik] <i>vt.</i>	发出卡嗒一声,恰好吻合,一拍即合
<b>genre</b> [ʒɑ:ŋr] <i>n.</i>	kind, style 种类,式样
<b>standard</b> ['stændəd] <i>n.</i>	sth. used as a test or measure for weights, lengths, qualities or for the required degree of excellence 标准,基准,模范
<b>reliably</b> [ri'laɪəbli] <i>adv.</i>	可靠地,可依赖地
<b>cursory</b> ['kʌ:səri] <i>adj.</i>	(of working, reading etc.) quick, hurried, done without attention to details (工作、阅读等)匆促的,粗略的
<b>inspection</b> [in'spekʃən] <i>n.</i>	careful examination 检查,视察
<b>metadata</b> [metədeɪtə] <i>n.</i>	元数据
<b>indiscriminate</b> [,ɪndɪs'krɪmɪnɪt] <i>adj.</i>	acting, given without care or taste 不分清红皂白的,不加选择的
<b>bias</b> ['baɪəs] <i>vt.</i>	give a bias to, influence 使存偏见,使倾向一方
<b>simpleminded</b> ['sɪmpl'maɪndɪd] <i>adj.</i>	ingenuous, unsophisticated 头脑简单的
<b>clarify</b> ['klærɪfaɪ] <i>v.</i>	make or become clear, make free from impurities 澄清,使明白
<b>period</b> ['piəriəd] <i>n.</i>	乐段
<b>retention</b> [ri'tenʃən] <i>n.</i>	保持,保留
<b>archive</b> ['ɑ:kɑ:ɪv] <i>n.</i>	档案,档案保管处
<b>graphic</b> ['græfɪk] <i>adj.</i>	of writing, drawing and painting 书写的,绘画的
<b>clip</b> [klɪp] <i>n.</i>	剪辑
<b>deduce</b> [di'dju:s] <i>vt.</i>	arrive at (knowledge, a theory, etc.) by reasoning (from facts); reach a conclusion (根据事实)推论,得出结论
<b>static</b> ['stætɪk] <i>adj.</i>	at rest, in a state of balance 静止的,静态的
<b>disparate</b> ['dɪspərɪt] <i>adj.</i>	that cannot be compared in quality, amount, kind, etc. essentially different (性质、数量、种类等)不可比較的,根本不同的
<b>specify</b> ['spesɪfaɪ] <i>vt.</i>	mention definitely, give the name or details of 指定,载明,详述
<b>personalize</b> ['pɜ:sənəlaɪz] <i>vt.</i>	在物品上标出姓名(或记号)
<b>affiliate</b> [ə'fɪliet] <i>v.</i>	(常用被动语态)使附属
<b>endeavor</b> [ɪn'devə] <i>n.</i>	effort, attempt 努力,企图
<b>framework</b> ['freɪmwɜ:k] <i>n.</i>	框架,结构

<b>colloquy</b> [ˈkɒləkwɪ] <i>n.</i>	谈话,用对话体写的著作
<b>define</b> [diˈfaɪn] <i>vt.</i>	explain the meaning of 解释……的意义,下定义
<b>incorporate</b> [ɪnˈkɒrpəreɪt] <i>v.</i>	make, become, united in one body or group (使)结合,合并
<b>derive</b> [diˈraɪv] <i>v.</i>	get 得到
<b>annotation</b> [ˌænəʊˈteɪʃən] <i>n.</i>	note or comment 注释,注解
<b>in-depth</b> [ɪnˈdepθ] <i>adj.</i>	深入的,彻底的
<b>characterization</b> [ˌkærɪktəraɪˈzeɪʃən] <i>n.</i>	表示特性
<b>compile</b> [kəmˈpaɪl] <i>vt.</i>	collect (information) and arrange (in a book, list, etc.) 搜集(资料)并编辑(成书、表等),编辑
<b>venture</b> [ˈventʃə] <i>n.</i>	undertaking in which there is risk 冒险,冒险事业,商业冒险
<b>scholarly</b> [ˈskɒləli] <i>adj.</i>	having or showing much learning 有学问的
<b>prospect</b> [ˈprɒspekt] <i>n.</i>	(美)可能成为主顾的人
<b>dissemination</b> [diˌsemiˈneiʃən] <i>n.</i>	distributing or spreading widely (ideas, doctrines, etc.) 传播,散布(思想、教义等)
<b>forgo</b> [fɔːˈɡəʊ] <i>vt.</i>	do without; give up 摒绝,放弃
<b>diversity</b> [daɪˈvɜːsɪti] <i>n.</i>	the state of being diverse; variety 异样,不同
<b>ranking</b> [ˈræŋkɪŋ] <i>n.</i>	position in a scale, category or class 等级,阶层
<b>critique</b> [kriˈtiːk] <i>n.</i>	critical essay or review 批评的文字,评论
<b>myriad</b> [ˈmɪriəd] <i>n.</i>	very great number 极大数量
<b>rating</b> [ˈreɪtɪŋ] <i>n.</i>	class, classification 等级,类别,分类
<b>issue</b> [ˈɪʃuː] <i>n.</i>	question that arises for discussion 引起讨论的问题
<b>bandwidth</b> [ˈbændwɪðθ] <i>n.</i>	(频)带宽度,通带宽度
<b>alleviate</b> [əˈliːviət] <i>vt.</i>	make (pain, suffering) less or easier to bear 使(痛苦)减轻,使缓和
<b>restrict</b> [rɪsˈtrɪkt] <i>vt.</i>	limit; keep within limits 限制,约束
<b>distribution</b> [ˌdɪstrɪˈbjʊːʃən] <i>n.</i>	分配,分布,被分配或分布的状态
<b>increasingly</b> [ɪnˈkriːsɪŋli] <i>adv.</i>	more and more 逐渐地,渐增地
<b>proprietary</b> [prəˈpraɪətəri] <i>adj.</i>	owned or controlled by sb. ; held as property 独占的,专利的,所有的
<b>furnish</b> [ˈfɜːnɪʃ] <i>vt.</i>	supply or provide 供给
<b>perusal</b> [pəˈruːzəl] <i>n.</i>	act of reading carefully 细读
<b>given</b> [ˈɡɪvŋ] <i>adj.</i>	特定的,一定的
<b>will</b> [wɪl] <i>vt.</i>	意欲,决心要
<b>underwrite</b> [ˈʌndəraɪt] <i>vt.</i>	签名同意支付,同意负担……的费用
<b>reviewer</b> [riˈvjuːə] <i>n.</i>	评论者,书评作者
<b>sustain</b> [səsˈteɪn] <i>vt.</i>	keep up, maintain 支持,维持
<b>exert</b> [ɪgˈzɜːt] <i>vt.</i>	put forth, bring into use 发挥,运用

## Phrases and Expressions

characterize as...	具有……的特点
stand up	经得起……,站得住脚
cope with	竞争,对付,妥善处理
in one sense	在某种意义上说
Web site	网址
Web crawler	浏览器
indexing robot	浏览器
uniform resource locator (URL)	统一资源定位器
Web resources	网上资源
subject matter	题材,论题
come about	回答,响应
on request to	按……的要求

## Notes to the Text

1. 本文选自《科学美国》*Scientific American* (1997. 3)杂志。作者 Clifford Lynch, 致力于图书馆自动化研究。
2. The Internet—and particularly its collection of multimedia resources known as the World Wide Web—was not designed to support the organized publication and retrieval of information, as libraries are. 因特网——尤其是它那被称为全球信息网的多媒体资源库,并不像图书馆一样。它并不是为了储存有条有理的出版物以及检索信息而设计的。  
(1) World Wide Web 全球信息网,是因特网中发展最快的部分,简称 WWW 或 Web。  
(2) “as libraries are”是一个省略句,后面省略的部分是“designed to support the organized publication and retrieval of information”,这是一个状语从句。
3. The ephemeral mixes everywhere with works of lasting importance. 具有短暂用途的信息和具有长久保持价值的作品混杂在一起。  
本句的主语是 The ephemeral。ephemeral 是形容词“短暂的”,the ephemeral 起名词作用,表示“具有短暂用途的信息”。这和 the old 表示“老人”,the rich 表示“富人”是同一种用法。
4. Only a synthesis of the differing perspectives brought by both professions will allow this new medium to remain viable. 只有把这两种职业所具有的不同方面的技能结合起来,才能使这种新媒体生存下去。  
(1) 本句的主语部分是“Only a synthesis... both professions”,其中“of the differing perspectives”修饰“a synthesis”,而“brought by both professions”又修饰“the differing perspectives”。



(2) differing 是动词 differ 的现在分词形式, 此处起形容词作用, 和 different 同义, 修饰 perspectives。

5. In theory, software that automatically classifies and indexes collections of digital data can address the glut of information on the Net—and the inability of human indexers and bibliographers to cope with it. 从理论上说, 为数字数据集合自动分类和标引的软件能够为过量供应的信息在因特网上选址——这一点人类编目人员和标引人员就无能为力。

在主语从句“that automatically classifies and indexes collections of digital data”中, “classifies and indexes”是并列谓语, “collections of digital data”是宾语。

6. In one sense, the job performed by the various indexing and cataloguing tools known as search engines is highly democratic. 从某种意义上说, 这些被称做编索器的各种自动编索和分类的工具的做法非常民主。

(1) in one sense 也可写成 in a (some) sense, 表示“在某个意义上”, 比如: In a sense you're right in refusing to join that club. 在某种意义上, 你拒绝加入那个俱乐部是正确的。

(2) search engines 编索器, 用于电子编辑索引。

7. Web sites 网址。

8. The nature of electronic indexing can be understood by examining the way Web search engines, such as Lycos or Digital Equipment Corporation's Alta Vista, construct indexes and find information requested by a user. 通过考查 Lycos 或数字设备公司的 Alta Vista 等并研究它们建立索引和找到用户所要求的信息的方式, 我们可以了解电子编辑索引的性质。

本句的主句部分是“The nature of electronic indexing can be understood”, “by the way”作方式状语, 而其后的“Web search engines, ... by a user”是“the way”的定语从句, 在这个定语从句中, “Web search engines”是主语, “such as... Alta Vista”是插入语, 表示举例, “construct indexes”和“find information”是并列谓语, “requested by a user”是“information”的定语。

9. A human indexer can describe a site's rules for the collection and retention of programs in, say, an archive that stores Macintosh software. 人类编目员能够描述网址收集和保存程序的规则, 比如在存储 Macintosh 软件的文档里的程序。

句中的“say”是插入语, 表示下面是临时想起的一个例子。

10. The intense interest in the Web, though, has come about because of the medium's ability to display images, whether graphics or video clips. 然而, 因特网让人产生浓厚兴趣的地方在于它能够显示图像, 不管是图表还是录像剪辑。

本句的主语部分是“The intense interest in the Web”, 谓语部分是“has come about”, “though”表示本句和上句成转折关系。“because of... video clips”是原因状语, 其中“whether graphics or video clips”是“images”的同位语, 对其进行补充说明。

11. At the same time, the way information is structured on the Web is changing so that it often cannot be examined by Web crawlers. 同时, 信息在因特网上的构成方式在