

EGAP

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通用学术英语 读写教程

主编 杨媛媛

Comprehensive Courses

on General Academic English



国防工业出版社
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General Academic English

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前言

Preface



在全球化与高等教育国际化的背景下,我国大学生的英语水平迅速提高,学术英语逐渐成为高校大学英语教学的主要内容。学术英语可细分为通用学术英语(EGAP)和专门学术英语(ES-AP)。前者主要训练学生各学科通用的学术口语交流能力和学术书面交流能力,如听讲座、做笔记、报告展示、撰写文献综述和课程论文、参加学术讨论等能力。后者是以某一特定学科领域(如金融、法律、工程、医学等)为内容的英语教学,但主要注重这一学科的特定语言(如词汇、句法、篇章、体裁)和工作场所的交流技能。这些学术英语技能是每个大学生必须掌握的。本书以语言学理论和教学法理论为编写理念,采用读写结合的方式,将英语基础技能与学术技能有机结合,并将功能语法(Functional Grammar)引入学术英语语篇解读,对英语文章的体裁做了系统的划分,从社会功能的角度对其语言特点的学术性进行了系统解析,旨在有效提高学生对学术英语各类文体文章的理解能力和效率。

本书的主要特色体现在以下几个方面:

(1) 将学术论文写作与各类文体写作的学术性形成有效联系,循序渐进地提高学生的通用学术英语读写能力。

(2) 以真实、典型的学术语篇为教学材料,采用自上而下、读写结合的教学方法,以达到培养学生学术英语素养的目的。

(3) 对话篇层次的解构与理解既是语言教学过程,又是认知能力和学术素养培养过程,是连接基础英语和专业英语的必要桥梁。

(4) 在掌握各种核心语篇的基础上,逐步帮助学生提高阅读和写作能力,掌握学术英语写作的语言特征与规范,最终使其具备阅读本专业英语文献的能力和达到用英语进行学术论文写作的目的。

本书得到了上海工程技术大学教材建设项目(编号:j201421003)的支持。在此,向所有在本书编写过程中给予关心和帮助的人士表示衷心的感谢。

由于编者水平有限,书中难免存在疏漏之处,恳请广大读者不吝赐教。

编者

2016年1月

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第1章



学术英语语言特征

1.1 学术英语语言风格

学术英语广泛应用于学术研究、学术论文、学术报告以及其他正式或非正式的学术交流场合,其重要性和地位也引起了科研工作者、教师、学生以及出版商的广泛关注。学术英语有其自身的修辞学和语篇学特征,如何将其范式与应用教授给学生,是一个备受关注的课题。

随着国际学术交流的日益发展,高校学生会遇到各种不同的英文学术写作。而这些写作究其本质有两个共同点:(1)随着学习的深入,写作任务会越来越具有挑战性;(2)需用规范的学术性语言进行表述。综合而言,学术英语的语言特征与规范,可以从以下几个方面来详细解析。

1.1.1 读者与写作目的

在写文章之前,首先要考虑目标读者的知识面与接受能力。就大多数学生而言,其所撰写的学术文章,如论文、报告等的读者是授课老师或专业教授。该读者群具有相当的专业知识,对文章

的专业性和语言的规范性要求较高。因此,学生对于读者的身份和预期要有很好的了解,力求使文章符合目标受众的要求。

Task 1

Read the first few paragraphs of the following two texts. For whom were they written? What aspects of each text helped you decide the audience? In what kind of publication would you expect to find these texts?

Text A

People have been pulling freshwater out of the oceans for centuries using technologies that involve evaporation, which leaves the salts and other unwanted constituents behind. Salty source water is heated to speed evaporation, and the evaporated water is then trapped and distilled. This process works well but requires large quantities of heat energy, and costs have been far too high for nearly all but the wealthiest nations, such as Kuwait and Saudi Arabia. (One exception is the island of Curacao in the Netherlands Antilles, which has provided continuous municipal supplies using desalination since 1928.) To make the process more affordable, modern distillation plans recycle heat from the evaporation step.

A potentially cheaper technology called membrane desalination may expand the role of desalination worldwide, which today accounts for less than 0.2 percent of the water withdrawn from natural sources. Membrane desalination relies on reverse osmosis—a process in which a thin, semipermeable membrane is placed between a volume of saltwater and a volume of freshwater. The water on the salty side is highly pressurized to drive water molecules, but not salt and other impurities, to

the pure side. In essence, this process pushes freshwater out of saltwater.

Text B

Reverse osmosis (RO) membrane systems are often used for seawater and brackish water desalination. The systems are typically installed as a network of modules that must be designed to meet the technical, environmental, and economic requirements of the separation process. The complete optimization of an RO network includes the optimal design of both the individual module structure and the network configuration. For a given application, the choice and design of particular module geometry depends on a number of factors, including ease and cost of module manufacture, energy efficiency, fouling tendency, required recovery, and capital cost of auxiliary equipment. With suitable transport equations to predict the physical performance of the membrane module, it should be possible to obtain an optimal module structure for any given application.

以上两篇文章均选自公开发表的刊物。两篇文章的学术词汇的使用量以及背景知识介绍的详细程度都有所不同,且对 reverse osmosis 这一概念做了不同的解释。这是因为,第一篇文章里,作者针对的是对本领域知识不太熟悉的读者,对背景知识以及 reverse osmosis 这一概念做了较详尽的介绍;而第二篇文章,目标读者群是本领域的专业人员,故较少涉及背景知识介绍,语言也更加精练,并运用了较多的学术词汇。

Task 2

In each of the texts in Task 1, can you identify sentences that define reverse osmosis? Consider how these definitions differ. Now write a short definition of a term in your field for two different audiences: One

will be graduate students in a totally unrelated field, while the other consists of the fellow students in your own graduate program. Exchange your definitions with a partner and discuss how your definitions differ.

这里要强调的是,如果目标读者是专业知识较少的群体,那么作者写作目的通常是教育性、科普性的,如教科书等。如果目标读者是该领域科研人员,那么作者写作目的通常在于体现自己的专业性与智力成果,如学术论文等。

1.1.2 结构与风格

除了撰写毕业论文与学术期刊论文之外,学生在学习研究阶段还需完成各种不同类型的学术英语写作任务,如商务信函、各种类型的说明文(exposition)、社科类小论文(essay)、各种调研和研究报告及学术场合的演示(presentation)等。上述各类体裁(genre)的文章都有其固有的结构和语法特征。即使短篇的学术写作也有其固有结构。下面以国外大学录取通知书为例,对固有结构(organization and pattern)这一概念进行剖析。

以下是一封录取通知书:

Dear Ms. Wong:

Thank you for your interest in our university. Acknowledgement

On behalf of the Dean of the Graduate School, I congratulate you on being accepted to the program in Automobile Engineering to Good news

being study at the master level. This letter is your official authorization to register for Fall 20XX. As a reflection of the importance the Graduate School places on the ability of its students to communicate effectively, the

Graduate School requires all new students Administrative details whose native language is not English to have their English evaluated. Specific details for this procedure are given in the enclosed information packet.

We look forward to welcoming you to Michigan State University and wish you success in your academic career.

Welcoming close

Sincerely,

下面是拒绝信,请找出它的结构:

Task 3

Read the bad-news letter and label the four parts.

Preparation for bad news bad news close acknowledgment

Dear Mr. Lee:

Thank you for your interest in the graduate program in Automobile Engineering. We have now finished our rigorous review process for Fall 20XX applications. We received an unusually high number of applications for the Fall term and we unfortunately had to limit the number we could accept. While your background is impressive, I regret to inform you that your application to the program has not been accepted. Given your excellent qualifications, I trust you will be able to pursue your academic interests elsewhere and wish you luck in your further endeavors.

Sincerely,

可以看出,录取信和拒绝信的结构不同,录取与否的消息出现的位置也不一样。原因在于,录取信的作者希望内容继续下去,因为还有后续细节要交待,而拒绝信的作者其实是希望结束内容的。

任何一种学术场合的英文写作都有其特定的结构,除了章节、

段落这些外部结构,此处主要讨论的是内部结构。根据写作目的和内在逻辑关系,构建文章内部结构的方法还有很多,本书后面的章节将给予详细介绍。这里,对一些常用的结构类型加以介绍。

学术英语写作中常用的一种结构类型为问题—方案式(problem-solution pattern),通常由四个部分构成:

- (1) 对场景的描述 (Description of the situation);
- (2) 发现问题 (Identification of the problem);
- (3) 对解决方案的描述 (Description of the solution);
- (4) 对事件的评价 (Evaluation of the solution)。

Task 4

Draw boxes around and label the four parts of this problem-solution text. The first part has been done for you. After marking up the text, answer the questions that follow.

1. Description if a situation

For over 20 years now biologists have been alarmed that certain populations of amphibians have been declining. These declines have occurred both in areas populated by humans as well as areas seemingly undisturbed by people. However, offering clear proof of the declining numbers of amphibians has been difficult because in most cases there is no reliable data on past population sizes with which to compare recent numbers. Moreover, it is not entirely clear whether the declines are actually part of a natural fluctuation in populations arising from droughts or a scarcity of food. To address this problem biologists are changing the way that they observe amphibian populations. One good documentation method involves counting species over the course of several years and under a variety of climatic conditions. This method should yield reliable data that will help researchers understand the extent to which am-

phibian populations are in danger and begin to determine what can be done to stem the decline in populations.

How serious does the problem seem to be? How does the writer evaluate the solution? What do you think of the solution? What is one major problem being worked on in your field of study?

此外,其他的结构类型还包括:

比较与对比 (comparison and contrast), 因果关系 (cause and effect), 可以是一个原因对多种结果,也可以是多个原因导致一个结果,以及分类 (classification) 等。

下面是一个具体的例子:

“Earthquake effects on underground structures can be grouped into two categories: (1) ground shaking and (2) ground failure such as liquefaction, fault displacement, and slope instability”.

在语言风格方面,学术英语较为正式和规范,与日常口语有较大区别。而且不同领域的学术英语写作具体要求也有所差别。例如,在哲学类的文章中,缩写 (e. g. don't) 是不被广泛接受的。但另一方面,一些被认为不太正式的表达方式,如 but, I, 等等也进入了学术英语写作的领域,使得语言的学术性这一课题变得愈发复杂。

在不同学术场合下,语言的学术性程度也有所不同。根据美国密西根大学口头学术英语语料库 (Michigan Corpus of Spoken Academic English MICASE) 的研究结果,学术演讲的正式程度要低于书面的学术语篇。具体例子可以在该库 <http://www.hti.umich.edu/m/micase/> 地址找到。

Task 5

Find and make a copy of one or two articles in your field that you think are well written. The articles do not necessarily have to be written

by native speakers of English. Bring the article(s) to class so that you may compare some of our general suggestions about academic writing style with writing conventions in your field.

1.2 学术英语语言规范

学术英语的语言特征是较为复杂的话题,因为语言本身也是在不断演变的。但其总体的特点仍然可以把握,显著特征之一是对词汇的选择更加正式。

1.2.1 词汇转换

英语中同一概念可以通过不同的词汇来表达。就动词而言,通常是在动词短语,即动词+冠词(verb+particle)或者动词+介词短语(verb+preposition)和单独动词(single verb)之间选择,且这类单独动词往往来源于拉丁语。在讲座及日常交流中,通常较多地使用动词+介词短语的组合;而在正式的书面英语中,则常用单独动词。例如:

According to some biologists, coming up with clear proof of the decreasing numbers of frogs has been difficult. (less formal style)

According to some biologists, offering clear proof of the decreasing numbers of frogs has been difficult. (academic style)

Task 6

Choose a verb from the list that reduces the informality of the sentence. Note that you may need to add tense to the verb from the list that reduce.

Review maintain develop cause eliminate

Reach determine investigate decrease constitute

- a. Scientists are *looking into* innovative ways to combat AIDS.
- b. The purpose of this paper is to try to *figure out* what is lacking in our current understanding of corrosion and corrosion protection in concrete.
- c. Rice and aquatic products *make up* a major part of the diet of the people in the Mekong Delta, Vietnam.
- d. Worldwide consumption of pesticides has *gone up to* 2.6 million metric tons.
- e. The number of mature female green turtles that return to their primary nesting beach has *gone down* from 1,280 ten years ago to 145 today.
- f. Researchers have *come up with* a number of models to describe the effect of certain beverages on dental enamel erosion.
- g. AIDS researchers have *run into* a variety of unexpected problems in their efforts to develop a vaccine.
- h. Recent studies on car scrapping have *brought up* the important question as to whether CO2 emissions can be significantly reduced.
- i. Problems with this policy *showed up* soon after its implementation.
- j. In the past five years many studies have *looked at* the effect of different grassland management practices.

从以上例句可以发现,动词词组的意思较为笼统,搭配范围十分宽泛;而单独动词(single verb)不仅更加正式,也使得意思表达更为精准。

Task 7

Which of the italicized words would be more suitable for an aca-

demic paper? Can you think of additional alternatives?

- a. Crash test dummies are *really important for/ an integral part of* automotive crash tests.
- b. In Hong Kong there is one cell phone for *just about/nearly* every two people.
- c. There has been *a lot of/considerable* interest in how background sounds such as music affect an individual's ability to concentrate.
- d. We *got/obtained* encouraging results using structural bamboo rather than timber.
- e. Consumer interest in electronic billing and payment is *getting bigger and bigger/increasing*.

1.2.2 书面语言

除了词汇,学术英语的语言使用还有以下非常明显的特征和规范,需要加以注意。

1. 时态

时态是个比较复杂的问题,虽然有一般的规则,但在实际使用时往往很难把握。总体而言,在同一段落中要避免时态跳跃。最常用的时态是一般现在时,有时也用一般过去时或一般将来时。当 In recent years 作时间状语时,通常要用完成时。

In recent years, Peter and coworkers **have concluded that** many so-called cationic polymerizations do not proceed through intermediates of an ionic nature.

2. 标点

英文中一句话结束要用句号。注意避免使用过长的句子。这与汉语中常用逗号的习惯不同。