科技英语的文体写作与翻译

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英汉对照

The Style, Writing & Trans Lation of EST
科技英语的文体写作与翻译

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Preface
前　　言

This bilingual book offers coverage on the style, writing and translation of EST (English for science and technology). It is intended to help science workers and college teachers and students use EST as a serviceable tool in their work and studies.

本书是关于科技英语的文体、写作与翻译的著述，用英汉两种语言撰写，目的是能够帮助科技工作者和大专院校师生，把科技英语作为一种很有用的工具，使其在科研、教学工作中对他们都大有裨益。

The first chapter is about the basic characteristics of EST style without in - depth investigation and study, because it is designed for the readers who can deal with EST reading, writing and translation effectively enough with that knowledge.

第一章论述科技英语的文体的基本特点，但没有进行深入的探讨，因为作者认为，以此浅薄的文体知识，读者就足以有效地从事科技英语的阅读、写作和翻译。

The second chapter involves some fundamental EST writing approaches and provides some sample writings of different types so that the readers will write better in EST while following the instructions and models.

第二章涉及科技英语写作的十分重要的一些方法,并提供了不同类型的一些范文,以便读者习作更好的科技英语作品。

The third chapter concerns some essential techniques of EST transla — tion from English into Chinese, not only discussing some translation theories but also offering a lot of example sentences. By familiarizing themselves with these principles and samples, the readers can handle EST translation skilfully, as a well — known saying goes 'Practice makes perfect'.

第三章概括了科技英语汉译的主要技巧,不仅在理论上进行了探讨,而且给出了大量的例句。正如一句著名的谚语所说"熟能生巧",读者熟悉了英译汉的这些原理和例句,就能够对这些技巧运用自如。

This book is mainly written, and finalized, by Mr Gao Yongzhao. Mr Cheng Yong revises the manuscript and writes parts of Chapter 3. Mr Yao Jianping is responsible for computer input and typesetting. Mr Wang Yongmin and Mr Guan Shouan supply some materials and do part of proofreading.

本书主要由高永照同志撰写，并最后审改定稿。程勇同志撰写了部分章节并对全书进行了一些修改和校对。姚建萍同志负责计算机录入和排版。王永民同志和管守安同志为本书提供了部分素材和参与部分校对工作。

　　We owe an acknowledgement to Dr Anne Denman and Dr Clayton Denman, the professors of Central Washington University, for reviewing and approving most portions of the English manuscript. Thanks also go to a number of people who have been helpful in furnishing us some sample materials, in particular, Wu Tao, Liang Dong, Zhang Zhanyun and Tian Yupeng, the faculty of Anhui University.

　　本书英文稿大部经美国中部华盛顿大学教授戴曼博士夫妇审定。对本书的创作给予过帮助的还有安徽大学教师吴涛、梁栋、张展云和田玉鹏等同志。作者还援引了平时教学中积累的从有关教科书中摘录的部分范文和例句。我们在此对他们表示衷心的感谢。

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1997 年 7 月 1 日

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Contents
目　　录

Chapter I   An Elementary Introduction to the Style of EST
第一章　科技英语的文体浅说

1.1. General Survey
概述

English for Science and Technology (abbreviated to EST), as the term suggests, is the English describing scientific and technical matters. It is an independent subject first established and developed in Britain in the middle of the 20th century, which has become a branch of English for Special Purposes. While studying and researching in the United States in the early 1990s, I found out that EST as an independent discipline was still something new to Americans, because they did not distinguish scientific and technical English strongly from other uses of English. But the fact remains that the EST research centres had been set up in Britain and some Western European countries by the 1980s, and they have extended their influences over the world. In

China, EST as an independent subject has been devel-
oped from 1980s.

　　科技英语,顾名思义,就是描述科技内容的英语。
作为一门独立的学科,它于二十世纪中期首先在英国
得以确立和发展,成为特殊用途英语的一个分支学科。
笔者九十年代初期在美国研修时发现,美国人对科技
英语这门学科仍很陌生,因为他们并不把科技英语明
显地区别于其它用途的英语。但是,事实仍然是,到八
十年代的时候,在英国及一些西欧国家成立了科技英
语研究中心,并且向世界扩展其影响。而在中国,科技
英语作为一门独立学科的发展,是二十世纪八十年代
以后的事情。

EST must inevitably evolve into an independent
discipline. With the rapid progress of world science and
technology, satellites have been launched into the space,
robots developed and applied, considerable progress
made in life science, and so forth. The scientific and
technical workers of various countries more and more
need a quick and convenient means of communication to
convey the latest information on science and technology
and to exchange news of achievements in a field of sci-
entific and technical research. Thus EST emerges as the
times require.

　　科技英语演化成一门独立的学科有其必然性。随
着世界科学技术的迅猛进步,卫星上了天,机器人得到
开发和运用,生命科学研究也取得了长足的进展,等

· 2 ·

等。各国科技工作者越来越需要一种快捷方便的交际工具来传递最新科技信息和交流科研成果。因此,科技英语就应运而生了。

EST is developed on the basis of general English. Therefore, whether in vocabulary or in grammar, it has no absolute bounds from essential English. But in the long process of the development of the language, EST has evolved features of its own in style, vocabulary and linguistic rules. It is certain that the study of these distinctive features will shed some light upon EST reading comprehension, writing and translation and will be very significant to the further development of EST.

科技英语是在普通英语的基础上发展起来的。因此,无论在词汇方面,还是在语法方面,它同基础英语没有绝对的界限。但是在语言发展的长期过程中,科技英语在文体、词汇和语言规律方面都逐渐形成了自己的特色。对这些明显的特色进行研究,肯定会对科技英语的阅读理解、写作与翻译提供某种启示,对科技英语的进一步发展肯定是很有意义的。

Compared with general English and literary English, EST possesses something both common and different in style, because style is, according to the definition by the well-known linguist Prof. Geoffrey N. Leech of Lancaster University of U. K., the ways of using a certain language by a certain person in a certain situation

for a certain purpose. So style is affected by various factors, either of geological setting, or of social background, or of discourse contents, or of individual character, or of time and occasion. For a long period of time, each linguistic circle has stuck to its own argument about the classification of style. In line with the scope of linguistic application, styles can be divided into spoken style and written style. In line with the formality of lingustic application, the foreign scholar Martin Joos suggests five varieties: frozen style, formal style, consultation style, casual style and intimate style. In line with the function of a language, styles can be classified into the informative style which includes science monographs, technical theses, commercial digests, etc.; the expressive style which includes poetry, novels, dramas, films, etc.; and the vocative style which includes advertising, slogans, etc. In theory and practice, there are still other classifications: daily conversation style, advertising style, news report style, Bible style, law style, technical style, and so on. The famous linguist Evelyn Hatch points out in his book "Discourse and Language Education" that from the rhetorical structure, styles can be distinguished into narration, description, procedure and argumentation, and from the contextual use, styles can be separated into formal written style and informational communicative style.

科技英语的文体,与普通英语和文学英语相比,既

有共性也有差异。因为根据英国兰开斯特大学著名语言学家杰弗里.李切教授下的定义,文体是某个人在某一环境中为了某种目的而使用某种语言的方式。所以影响文体的因素是多方面的,或是地理环境的,或是社会背景的,或是讲话内容的,或是个人特点的,或是时间场合的。长期以来,对于文体的分析,名家各派历来说法不一。根据语言运用的范围,人们通常将其分为二大类:口语文体和书面文体。根据语言使用的正式程度,外国学者马丁.朱斯又提出了五种变体:刻板语体,正式语体,咨询语体,随便语体和亲昵语体。根据语言的基本功能,又可分类为:信息文体(包括科学专著、技术论文、商业文摘等),寄情文体(包括诗歌、小说、戏剧、电影等)和鼓动文体(包括广告、标语口号等)。在理论上和实践中,还有人提出了日常会话文体,广告文体,新闻报导文体,圣经文体,法律文体,科技文体,等等。语言学家埃弗林.海切在《话语与语言教育》一书中指出,从修辞结构看,文体可分为:叙事体、描述体、程序体和议论体;从语言使用的场合看,文体可分为正式书面体和信息交流体。

Therefore, it is difficult to determine and classify the style of a discourse, not only because of the barriers of sectarian bias, but also because of the mutual overlapping of these styles, which is more important, since one style may contain another style. For example, spoken style may contain casual style and vocative style.

因此,要确定和划分一篇话语的文体往往是很难

的。这不仅是门户之见的障碍,而且更重要的是因为这些文体都是互相渗透的,一种文体中可能包含有另一种文体,例如,口语文体就可以包括随便文体和鼓动文体。

We can see, however, from the analysis of a great. deal of scientific and technical literature, that EST writers mainly employ formal written style and informational communicative style in their writings.

然而,从大量的科技英语文献资料的分析来看,科技英语作者运用语言的目的和风格主要体现为正式书面文体和信息交流文体。

1.2. The formal written style
正式书面文体

The formal written style employed by EST is first of all revealed through its use of vocabulary. In addition to specialized terms, a majority of the words and phrases in EST writings, including common words and semi-technical words, belong to the formal written style. Although they are also used in general English and literary English, yet they show up far less often than in EST. Semantically we can compare the use of the following words and expressions in EST, GE, and LE:

科技英语使用正式书面文体,首先表现在其使用的词汇方面。除掉科技专门术语外,科技英语中使用

的所有词语,包括普通词汇和半技术性词汇在内,大多属于正式书面语体的范畴,尽管这些词语在普通英语(GE)和文学英语(LE)中也使用,但是其出现的频率远不及科技英语。我们可以比较下面的单词和短语的语义(状态不佳,同意,挑剔,性能,破碎,喉,新手,强烈反对,令人满意的,技术,电视,结束,透明的,证实)在科技英语、普通英语和文学英语中的不同表达方式:

EST	GE	LE
be out of condition	be broken down	be out of kilter
concur	agree	see eye to eye
criticize the performance	knock the performance	carp at the performance
fracture	break	come to bits
larynx	throat	voice box
inexperienced operator	fresh hand	green hand
object strenuously	be strongly against	raise the roof
satisfactory	OK	up to the mark
technique	technical skill	know-how
television	TV	telly
terminate	end/finish	wind up
transparent	clear	lucid
verify	prove	bear out

Secondly, the formal written style is also manifested in linguistic rules. Grammatically the EST finds a wide use of the simple present tense, the passive voice, non-predicate verbs, logical attributes, nominalization, stative construction and various complex sentences (expressing time, reason, condition, concession, etc.). Generally speaking, EST sentences are longer with less varied patterns, and the relative pronouns 'that' and 'which' and impersonal pronoun 'it' are used more frequently, because in wellknit scientific and technical writings, it is necessary for writers to increase the restrictive and expanding elements of sentences in order to express meticulous thoughts and objective facts, often with the help of subordinate clauses introduced by 'that' and 'wich' and by more extensive use of 'it' patterns. As a result, the average length of sentences is increased, the sentence structures become more complicated and objectivity is strengthened. However, GE and LE can express things more freely, using fewer subordinate clauses introduced by 'that' and 'which', but more personal pronouns for repetition and substitution, which results in new sentences and expands topics. In accordance with the investigations made by Mr. Fany Mengzhi, 'that' and 'which' account only for 5% or so of the total number of pronouns in news reviews and novels, but they amount on average to 55. 1% in scientific and technical literature.