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科技英汉互译教程

许卉艳　编著

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内容提要

本教材强调理论与实践相结合，选择与时俱进的新译例、语篇及练习。各章节的内容以英汉互译的形式编排，既前后照应、相互联系，又自成一体、各有侧重。

教材内容分为两部分：第一部分是对翻译的基本知识、原则标准及常用翻译方法的介绍与实践，其中涉及选词、组句、转换、融合、分译、增译、省略、顺译、逆译等实用技巧，还包括英汉两种语言在结构及表达特点方面的详细比较，以帮助学生在翻译过程中减少母语语言文化的负迁移，并配有相关的翻译实践练习；第二部分介绍了八种科技文体的特点及翻译方法与实践，如专利、版权、合同、协议、提案、报告、科技论文及会议文件。

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前 言

    《科技英汉互译教程》自 2005 年起作为中国矿业大学（北京）非英语专业研究生科技英语翻译课程的自编教材进行试用，经过近 9 年的使用、补充、修改，内容和体例得到不断的丰富和完善，融汇了笔者多年来关于翻译实践探索和研究的成果。

    本书集英汉、汉英翻译于一体，兼顾理论性和实用性；立足于英汉语言文化差异，介绍词句和科技语篇的翻译技巧和方法；按照由词句到段篇的次序来安排教学内容，符合学生的学习规律；对常用科技文体的介绍，可帮助学生了解英汉不同语篇的写作特点和翻译技巧，提高翻译效率，胜任各类翻译工作，从而满足社会对翻译人才的实际需求。

    本教材分翻译概要和科技文献翻译两大部分，共计 16 个单元。第一部分包括：翻译概述（如：翻译的起源、翻译历史、翻译的定义及分类、翻译的标准和过程、翻译原则、翻译与文化等）、汉英语言文化对比和各种英汉互译技巧介绍（如：选词择义，增益法，省略法，词性、句法成分和句子结构转换法，正反表达转换法，被动语态的翻译，从句和长句的翻译）。第二部分具体包括：科技文体的特点、翻译标准，以及八种科技文献的翻译，如专利、版权、合同、协议、提案、报告、科技论文及摘要、会议文件。

    本教材的特点如下：

    （1）系统介绍汉英语言文化对比知识，以帮助学生在翻译过程中克服母语语言文化的负迁移影响，从而形成地道、规范的目标语文本；

    （2）词句翻译和语篇翻译相结合，对比各种不同科技语体的写作特点、翻译标准及练习范本，有助于提高学生的综合翻译能力和语篇意识；

    （3）译例多出自笔者一手的翻译资料，内容实用多样、与时俱进，而翻译技巧的总结归纳多是笔者自己在多年的翻译实践中积累的独特翻译经验的结晶；

    （4）汉英和英汉互译的例子放在一起编排，不但便于互相比较分析、突出翻译技巧的应用，理论密切结合实践，还可以避免重复讲解，提高学生的学习兴趣和学

习效率。

本教材在撰写过程中参考了国内外相关书籍及文献资料，在此笔者特向相关作者表示感谢。同时还要感谢笔者所在学校中国矿业大学（北京）研究生院以及知识产权出版社编辑陈晶晶老师为本教材的顺利出版所给予的大力支持。

本书的读者对象为非英语专业研究生、高年级大学生和爱好翻译工作的其他外语学习者。

笔者水平有限，书中不当之处，望各位专家、读者不吝赐教，批评指正。

如有需要，可联系笔者，联系方式为：xuhuiyan1@126.com.

笔者于北京

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Unit 1   Introduction to Translation

1. Origin of Translation—*The Tower of Babel*

According to the *Old Testament*, after the Flood, the children of Noah had children, and their children had children. At that time, the whole earth was of one language, and of one speech. And it came to pass, as they journeyed from the east, that they found a plain in the land of Shinar, and they dwelt there. And they said one to another: "Go to, let us make brick, and burn them thoroughly." And they had brick for stone, and slime for mortar. And they said: "Go to, let us build us a city and a tower, whose top may reach unto heaven; and let us make us a name, lest we be scattered abroad upon the face of the whole earth." And the Lord came down to see the city and the tower, which the children of men builded. And the Lord said: "Behold, the people is one, and they have all one language; and this is what they begin to do: and now nothing will be restrained from them, which they have imagined to do. Go to, let us go down, and there confound their language, that they may not understand one another's speech." So the Lord scattered them abroad from thence upon the face of all the earth: and they left off to build the city. Therefore is the name of it called Babel, because the Lord did there confound the language of all the earth: and from thence did the Lord scatter them abroad upon the face of all the earth (King James Version).

Since then people speak different languages and live in different parts of the world. As a result, language becomes the first barrier for them to communicate with each other, and of course they can't build the tower and city. However, they have never stopped communicating and exchanging in language and culture, that is the role translation has played.

2. History of Translation

As a means of communication, translation plays an important role in human civilization. In the West, literary translation can be traced back to 300 BC; while in China, recorded translation activities are even earlier, dating from Zhou Dynasty (1100 BC).

Both China and the West take the translation of religious scriptures as the first, such as Buddhist Scriptures (sutra) in China, Bible in the West. In China, the translation of sutra was led by 安世高，支谦，释道安，鸠摩罗什，真谛，玄奘(The last three were great translators of sutra). The second is that of science works, which are originated by 徐光启，(whose famous translations with Italian missionary 利玛窦 are《几何原理/本》《测量法义》); the third is that of literary works, such as《巴黎茶花女遗事》《黑奴吁天录》(*Uncle Tom's Cabin*),《块肉余生记》(*David Copperfield*),《王子复仇记》(*Hamlet*) by 林纾/琴南,《毁灭》《死魂灵》by 鲁迅,《海燕》《高尔基论文选集》《托尔斯泰短篇小说集》by 瞿秋白; then the translation of philosophical ones, led by 严复, whose famous translations are《天演论》《原富》《法意》.

However, not until the recent centuries, especially by the end of the 19th century did systematic study of translation get under way. And the recent decades have seen rapid development in translation theories and translation activities both at home and abroad.

3. Nature and Scope of Translation

3.1 What is translation

1) In a narrow sense

Translation means to express the meaning of a certain text of a language by using another language, e. g. English—Chinese translation/Chinese—English translation (interlingual translation 语际翻译).

2) In a broad sense

Translation can also mean those kinds of translation between a dialect and the common language of a country, between one dialect and another dialect, between the old form and

the modern form of a language, like the translation between classical Chinese and modern Chinese. It also includes the transformation between signs or numbers and a language. That is, intralingual translation (语内翻译) and intersemiotic translation (符际翻译).

3.2 Three meanings of translation

Translating: the process to translate, the activity rather than the tangible object;

A translation: the product of the process of translating, i. e. the translated text;

Translation: the abstract concept which encompasses both the process of translating and the product of that process. (Roger T. Bell, 1995)

3.3 Definitions of translation

* Translating consists in reproducing in the receptor language the closest natural e-quivalent of the source language message, first in terms of meaning, and second in terms of style. (Eugene A. Nida & Charles R. Taber, 1969)

* Translating is the expression in another language (or target language) of what has been expressed in another, source language, preserving semantic and stylistic equivalences. (Roger T. Bell, 1991)

* Translation is the production of a functional TT maintaining relationship with a given ST that is specified according to the intended or demanded function of the TT. (Christiane Nord,1991)

* Translation is an acculturation process between different cultures. (André Lefevere, 1992)

* Translation is a procedure which leads from a written SLT to an optimally equivalent TLT and requires the syntactic, semantic and text-pragmatic comprehension by the translator of the original text. (Wolfram Wilss, 2001)

3.4 Is translation an art, a science or a craft/skill

Translation is first a science, which entails the knowledge and verification of the facts and the language that describe them—here, what is wrong, mistakes of truth, can be identified;

Secondly, it is a skill, which calls for appropriate language and acceptable usage;

Thirdly, an art, which distinguishes good writing from undistinguished writing and is

the creative, the intuitive, sometimes the inspired, level of translation;

Lastly, a matter of taste, where argument ceases, and preference are expressed, and the variety of meritorious translation is the reflection of individual differences. (Peter Newmark, 1988)

3.5 What is a good translation

Alexander F. Tytler (1791), the 18th century British translation theorist and professor at the University of Edinburgh, described a good translation—that in which the merit of the original work is so completely transfused into another language, as to be as distinctly apprehended, and as strongly felt, by a native of the country to which that language belongs, as it is by those who speak the language of the original work.

3.6 Translator's knowledge bases and skills

Five knowledge bases: Source Language (SL) knowledge, Target Language (TL) knowledge, text-type knowledge, domain knowledge and contrastive knowledge.

Two skills: decoding (reading) + encoding (writing)

3.7 Classifications of translation

Translation covers a very broad range and has different classifications.

In terms of linguistic signs: it contains intralingual translation, interlingual translation and intersemiotic translation.

In terms of languages: there are translation from native languages into foreign languages, and that from foreign languages into native languages.

In terms of the mode: we have oral interpretation (alternating interpretation, simultaneous interpretation, sight interpretation, *etc.*), written translation, and automatic translation (machine translation).

In terms of disposal: we have full-text/complete translation, abridged/partial translation or adapted translation, and variation translation.

In terms of materials to be translated: we have translation of literary texts (novels, poems, essays, dramas, literary criticism, *etc.*), translation of practical texts (official documents, contracts and agreements, notices, regulations, ads, letters, manual books, *etc.*), translation of scientific texts (academic works/articles, experiment reports/results, manual

books, *etc*.）, translation of political texts (works of social sciences, research reports, speeches, *etc*.）, and translation of journalistic texts (news reports, news features, news correspondences, editorials, *etc*.）.

4. Principles or Criteria of Translation

4.1 Alexander Tytler（1790）: three laws of translation

* It should give a complete transcript of the ideas of the original work.
* The style and manner of writing should be of the same character with that of the original.
* The translation should have all the ease of original composition.

4.2 Yan Fu（1898）: triple principle of "xin, da, ya"

Faithfulness/accuracy (full and complete conveying or transmission of the original content or thought), expressiveness/smoothness (the version must be clear and flowing without any grammatical mistakes or confused sense and logic), and elegance (the use of classical Chinese before the Han Dynasty).

According to Nida（2001）, the three principles of faithfulness, expressiveness and elegance should be understood not as competitive but as additive factors: faithful equivalence in meaning, expressive clarity of form, and attractive elegance that makes a text a pleasure to read.

4.3 Two commonly-accepted criteria

Faithfulness/accuracy（忠实/准确）and smoothness（通顺/流畅）.
* Be faithful to the original content/meaning/views, original author's emotions and feelings, the original form and style.
* Be easy and readable in rendering, namely forceful, clear and idiomatic expression in the target language, free from stiff formula and mechanical copying from dictionaries.

5. Translation Process

Translating is a complex and fascinating task. In fact, I. A. Richard (1953) has claimed that it is probably the most complex type of event in the history of cosmos.

The process of translation consists of three phases: comprehension, expression and check. Here we just focus on the first two stages.

5.1 Comprehension

There are two famous sayings: "You know a word by the company it keeps." " No context, no text." Therefore, it is very necessary for translators to understand the word meaning through linguistic context and background knowledge.

Translate the following sentences or analyze the sentence structure:

(1) He saw a friend in me.

(2) She cried her eyes out.

(3) The girl soon laid the table.

(4) His fury was exaggerated.

(5) We searched him to no purpose.

(6) From life to death is man's reach.

(7) "He was really a miser." "And how!"

(8) I won't do it to save my life.

(9) Let any man come; I am his man.

(10) Theory is something but practice is everything.

(11) In learning English, grammar is not everything.

(12) "What do you think of Tom?" "Oh, he has nothing in him."

(13) I have read your articles. I expected to meet an older man.

(14) When she and he met again, each had been married to another.

(15) Dear, dear! All flesh is grass.

(16) And to think that I and these noble d'Urberwilles were one flesh all the time.

(17) But the master of the house was his mother. She was twice the man her son was, they said.

(18) The approach to the management of foreign exchange reserves by central bankers

varies across the globe, ranging from a policy of benign neglect to detailed and highly mathematical calculations of alternative moves to reduce risk and increase profitability.

世界各国央行行长们对自由兑换外汇储备的管理方法各不相同，有的国家对外汇管理采取某些宽松政策，有的国家则采取详细计算各种外汇储备的方式，以便减少风险和提高收益。

5.2　Expression

There are two main methods: literal translation and free translation.

1）Literal translation

Literal translation means "not to alter the original words and sentences", but "to keep the sentiments and style of the original". For example:

crocodile's tears 鳄鱼的眼泪　　　　armed to the teeth 武装到牙齿

to add fuel to the fire 火上加油　　　to fish in troubled water 混水摸鱼

a gentlemen's agreement 君子协定　　to break the record 打破纪录

2）Free translation

Free translation is used mainly to convey the meaning and spirit of the original without trying to reproduce its sentence patterns or figures of speech, i. e. "得意忘形". For example:

at sixes and sevens 乱七八糟　　　　in two minds 三心二意

in threes and fours 三五成行　　　　in one or two words 三言两语

one in a thousand 百里挑一　　　　　It rains cats and dogs 大雨滂沱

Translate the following sentences or choose a better version:

（1）Will a duck swim?

（2）They parted enemies.

（3）Justice has long arms.

（4）Last night I heard him driving his pigs to market.

（5）The talk about raising taxes was a red flag to many voters.

（6）She knew I knew and she knew if she got funny I'd either ruin the romance or make her marry him, so she was very friendly.

（A）她知道我知道她和他的事，她也明白她要是跟我过不去，破坏或成全他们全在我的一念之间，所以她对我很客气。

（B）她很了解我，我很了解她；要是她遭遇困难，我得牺牲我们的浪漫，让她同他结婚，因为她待我太好了。

3）Literal translation and free translation

At the word or phrase level, we do have 100 percent literal translation or free translation, but at sentence level and beyond, it is quite common to see the combination of both literal translation and free translation.

Let's look at the following examples:

（1）Some officials often pay lip-service to education but don't work for better schools.

一些官员们经常口惠而实不至，口口声声说支持教育，却又不肯为改善学校条件做一些实际工作。

（2）During summer vacation, many college students are couch potatoes who like popping cold drinks and relaxing in front of their wide-screen high definition television sets.

暑假期间，许多大学生喜欢窝在沙发里长时间地看电视，一边手拿冰镇饮料，一边轻松地欣赏宽屏幕上的高清电视节目。

（3）The splitting of the atom was first used in warfare, but after Hiroshima and Nagasaki a grand effort began to provide electricity "too cheap to meter," freeing the world from its dependence on fossil fuels.

原子核裂变技术首先被用于战争，但是继广岛和长崎原子弹事件之后，这一伟大的发明便用来为人类提供"物美价廉"的电力，让世界摆脱对化石燃料的依赖。

6. Translation and Culture: Foreignization and Domestication

Translation and culture are inseparable. In fact, translation is a cross-lingual, cross-cultural and cross-social activity. "Domesticating translation" and "foreignizing translation" are two strategies coined by Lawrence Venuti (1995) to deal with cultural elements in translating. The former (target culture-oriented) refers to a transparent, fluent style adopted in order to minimize the strangeness of the foreign text for target language readers, while the latter (source culture-oriented) designates the type of translation "deliberately breaks

target conventions by retaining something of the foreignness of the original". The key difference between them is whether we keep the foreignness or not. The most famous representatives of each school are Nida and Venuti.

Let's look at the translation of "谋事在人，成事在天". Which one is foreignization? Which one is domestication?

> Man proposes, <u>God</u> disposes. (By David Hawkes)
>
> Man proposes, <u>Heaven</u> disposes. (By Yang Xianyi)

For another example, the translation of 东风 and 西风:

> 相见时难别亦难，东风无力百花残。
>
> ——李商隐《无题》

English Version:

> It's difficult for us to meet and hard to part;
>
> The east wind is too weak to revive flowers dead.
>
> ——许渊冲译（选自《中诗英韵探胜》）

> It's a warm wind, the west wind, full of bird's cries;
>
> I never hear the west wind but tears are in my eyes,
>
> For it comes from the west lands, the old brown hill,
>
> And April's in the west wind, and daffodils.
>
> ——John Mansfield, *Ode to the West Wind*

Chinese Version:

> 这是暖风哟，西风哟，充满了小鸟的歌唱；
>
> 我每一次听到了西风，就不禁泪水哟盈眶。
>
> 因为它来自那西土，那苍老而暗黄的山峦，
>
> 西风吹来了四月，也吹来了水仙。
>
> ——余光中译

7. Translation Techniques

Translation techniques to be dealt with in the following units are: diction, addition, omission, conversion, negation, rendering of passive voice, rendering of subordinate clauses and that of long sentences.

Discussion

1. Is translation important or not? Any examples to support your idea?

2. What's your opinion on the principles or criteria of translation?

3. How do you understand literal translation and free translation?

Unit 2 Comparisons between Chinese and English Language

1. Language Features

1.1 Analytic and synthetic language

Chinese is an analytic language with less inflections: no fixed part of speech, no inflections in different tenses, voices, moods of a verb. And phrases and sentences are formed according to word order and empty words, such as 学习政治, 政治学习; 克服困难, 困难问题. Here the parts of speech of 学习, 政治, 困难 are determined by their word order, context and logic. However, English is both analytic and synthetic language with rich inflections: inflections in persona, tense, voice, mood, tone and non-predicate form (infinitive, participle) for a verb; single or plural form for a noun; comparative form for an adjective or an adverb. Phrases and sentences are formed according to word order and auxiliaries. Therefore, when rendering into Chinese, we need change the parts of speech or add words to express different inflections in English. For example:

(1) His being neglected by the host added his uneasiness.

主人的冷遇使他更加不舒服。

(2) Oxford has, or had till yesterday, fewer students than the University of Toronto.

无论现在还是过去，牛津的在校学生数都比多伦多大学少得多。

(3) They told me that Professor Liu would have been teaching here for twenty years by this winter.

他们告诉我说，到今年冬天刘教授在这里教书就要满二十年了。

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