

HAIPHONG PRIVATE UNIVERSITY
FOREIGN LANGUAGES DEPARTMENT



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GRADUATION PAPER

**A STUDY ON THE TRANSLATION OF TECHNICAL TERMS FROM
ENGLISH INTO VIETNAMESE**

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Class: NA 1001

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BỘ GIÁO DỤC VÀ ĐÀO TẠO
TRƯỜNG ĐẠI HỌC DÂN LẬP HẢI PHÒNG

Nhiệm vụ đề tài tốt nghiệp

Sinh viên:.....Mã số:.....

Lớp:.....Ngành:.....

Tên đề tài :.....

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Nhiệm vụ đề tài

1. Nội dung và các yêu cầu cần giải quyết trong nhiệm vụ đề tài tốt nghiệp (về lý luận, thực tiễn, các số liệu cần tính toán và các bản vẽ).

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2. Các số liệu cần thiết để thiết kế, tính toán.

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3. Địa điểm thực tập tốt nghiệp.

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CÁN BỘ HƯỚNG DẪN ĐỀ TÀI

Người hướng dẫn thứ nhất:

Họ và tên:.....

Học hàm, học vị:.....

Cơ quan công tác:.....

Nội dung hướng dẫn:.....

Người hướng dẫn thứ hai:

Họ và tên:.....

Học hàm, học vị:.....

Cơ quan công tác:.....

Nội dung hướng dẫn:.....

Đề tài tốt nghiệp được giao ngày 12 tháng 04 năm 2010

Yêu cầu phải hoàn thành xong trước ngày 10 tháng 07 năm 2010

Đã nhận nhiệm vụ ĐTTN

Đã giao nhiệm vụ ĐTTN

Sinh viên

Người hướng dẫn

Hải Phòng, ngày tháng năm 2010

HIỆU TRƯỞNG

GS.TS. NGUYỄN Trần Hữu Nghị

PHẦN NHẬN XÉT TÓM TẮT CỦA CÁN BỘ HƯỚNG DẪN

1. Tinh thần thái độ của sinh viên trong quá trình làm đề tài tốt nghiệp:

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2. Đánh giá chất lượng của khóa luận (so với nội dung yêu cầu đã đề ra trong nhiệm vụ Đ.T. T.N trên các mặt lý luận, thực tiễn, tính toán số liệu...):

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3. Cho điểm của cán bộ hướng dẫn (ghi bằng cả số và chữ):

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Hải Phòng, ngày tháng năm 2010

Cán bộ hướng dẫn

(họ tên và chữ ký)

NHẬN XÉT ĐÁNH GIÁ
CỦA NGƯỜI CHẤM PHẢN BIỆN ĐỀ TÀI TỐT NGHIỆP

1. Đánh giá chất lượng đề tài tốt nghiệp về mặt thu thập và phân tích tài liệu, số liệu ban đầu, giá trị lý luận và thực tiễn của đề tài.

2. Cho điểm của người chấm phản biện :

(Điểm ghi bằng số và chữ)

Ngày.....tháng.....năm 2010

Người chấm phản biện

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PART I

INTRODUCTION

I. Rationale

As we all know that English is increasingly becoming the international language and communication, most fields use foreign languages especially English. However, each field has own terms. To understand these terms is not easy else. Translators sometimes have difficulties in translating and expressing. Technical field is one of fields used English much more. Almost equipments, machines or assembly lines are instructed by English. It is difficult to operate, install and repair equipment exactly.

Translating technical texts is quite difficult, it requires translators to translate specialized terms exactly. So, translators have a deeply knowledge in technical field. In technical texts, there are some loan terms orginated from Latin, it is not restricted clearly between the terminology and the general words because of its polysemantic.

For the students who studying English, especially students of scientific and technology, it is difficult to study technical English. With complex construction such as passive voice, impersonal of verbs, sometimes we can see the sentences has not prediction or subject. To help English students and technical students understand technical terms clearly and translate these terms exactly, I choose this topic in my graduation.

II. Research restriction and application.

During the time of my research, I have met many technical terms. It actually benefits me in life and probably contributes to my decision in the career in the future. Due to the limitation of timeframe and knowledge, in this graduation paper, I can only introduce the translation of the technical terms in the electrical engineering which deals with the design , frabrication and

operation of electronic devices and system. Besides, some terms of technical fields will be displayed in the glossary.

My research can be valuable for the teachers and students of Foreign Languages Department. Moreover, it may be also an useful reference document to whom is studying in the electrical engineering and is working at the electric power plants.

III. Methods of the study

All the presentations and analyses of this graduation paper are based on materials collected from different sources. All the publications such as books, works of research are used as the source of providing theoretical background for my study. Methods which are deployed to collect material include: reading and collecting material from books, internet; consulting supervisor; and the help of friends....

IV. Design of the study

This study consists of three parts:

Part I is an introduction which includes rationale, research restriction and application, methods of study.

Part II is the development and is also the most important part.

It has three main chapters:

Chapter 1 The theoretical background.

Chapter 2 Some strategies in translating technical terminology

Chapter 3 The translation of technical terms into Vietnamese

Part III. Is the conclusion of the whole study

PART II:

DEVELOPMENT

Chapter 1: Theoretical background

1. Translation

1.1. Definition

There are many ways to define translation. Herein after is some typical definitions:

Translation is the replacement of a representation of a text in one language by a representation of an equivalent text in a second language.(Roger T.Bell).

Translation is rendering a written text into another language in a way that the author intended the text.(Bui Tien Bao- Hanoi National University).

Translation is the interpreting of the meaning of a text and the subsequent production of an equivalent text, like wise called a “**translation**” that communicates the same message in another language. The text to be translated is called the “**source text**”, and the language that it is to translate into is called the “target language”; the final product is sometimes called the “target text”.(by [http:// en.wikipedia.org/wiki/translation](http://en.wikipedia.org/wiki/translation))

Translation is the process of changing something that is written or spoken into another language. (By Advanced Oxford Dictionary)

Translation is an act of communication which attempts to relay, across cultural and linguistic boundaries, another act of communication. Hatim and Mason (1997;1)

1.2. Definition of equivalence in translation.

Equivalence-oriented translation is a procedure which replicates the same situation as in the original, whilst using completely different wording. (Vinery and Darbelnet)

Translation equivalence exists between forms in a source language and a target language if their meaning matches. In other words, translation equivalence should answer the question “What do the speakers of this language actually say to express the desired meaning?” (Wayne Leman worldpress.com)

Equivalence, when applied to the issue of translation, is an abstract concept and actually refers to the equivalence relationship between the source text and the target text. (Asian Social Science (CCSE))

1.3 Types of translation

Translation can be divided into 8 types as follows:

Word-to-word translation

This is often demonstrated as interlinear translation, with the TL immediately below the SL words. The SL word-order is preserved and the words translated singly by their most common meaning, out of context.

Literal translation

The SL grammatical construction is converted to the nearest TL equivalents but the lexical words are again translated singly, out of context.

Faithful translation

A faithful translation attempts to reproduce the precise contextual meaning of the original within the constraints of the TL grammatical structures

Semantic translation

Semantic translation differs from faithful translation only in as far as it must take more account of the aesthetic value of the SL text, compromising on “meaning” where appropriate so that no assonance, word-play or repetition jars in finished version.

Free translation

Free translation reproduces the matter without the manner, or the content without the form of the original. The advantage of this type of translation is that the text in TL sounds more natural. On the contrary, the disadvantage is that translating is too casual to understand the original because of its freedom.

Adaption

This is the “freest” form of translation. It is used mainly for plays and themes... The SL culture is converted into the TL culture and is rewritten.

Idiomatic translation

Idiomatic translation reproduces the “message” of the original but tends to distort nuances of meaning by preferring colloquialisms and the idiom where these do not exist in the original.

Communicative translation

Communicative translation attempts to render the exact contextual meaning of the original in such a way that both content and language are readily acceptable and comprehensible to the readership.

2. Translation in ESP

2.1 Definition of ESP

There is a great number of definitions of ESP because people have given different emphases to the variety of elements. One may hold that the age of the learners is a main factor, but another argues that the purpose of the learners is the most important one. Thus, the definition of ESP may be grouped into three categories focussing on age, time, and purpose.

The first element is the time available. Fitzjohn Robinson (1980;9) notes that:

“The very concept of “Special purpose” implies that foreign language study is a subsidiary contribution to another, main interest, and that there will normally be pressure to achieve the required level of linguistics competence in the minimum of time”.

The second important factor is that of age. Most learners of ESP are adults or near adults. This is obvious when English for Occupational Purposes is considered. This type of ESP is for people who are in jobs or about to take up employment.

“The number of people wanting to learn English for Specific Purposes is spiralling. By and large these people have been students in tertiary education, and adults”. Robinson (1980;9).

The third factor is the learner’s purposes. This is the most important element of ESP, so Brumfit (1997;71) states that

“First, it is clear that an ESP course is directly concerned with the purposes for which learners need English, purposes which are usually expressed in functional terms. ESP thus fits firmly within the general movement towards “communicative” teaching of the last decade or so”.

This definition implies two things : (1) the broad meaning of the terms “purposes”, and (2) the method of teaching/ learning for these purposes.

ESP is an approach to language teaching in which all decision as to content and method are based on the learner’s reason for learning. Hutchinson (1987;19).

ESP is the abbreviation for English for Specific Purpose. It is defined in the other ways. Some people described ESP as simply being the teaching of English for any purpose that could be specified. Others, however, were more precise, describing it as the teaching of English used in academic studies or the teaching of English for vocational or professional purposes.

Tony Dudley-Evans, co-editor of the ESP Journal gives an extended definition of ESP in terms of 'absolute' and 'variable' characteristics (see below).

Definition of ESP Dudley-Evans (1997)

Absolute Characteristics

1. ESP is defined to meet specific needs of the learners
2. ESP makes use of underlying methodology and activities of the discipline it serves.
3. ESP is centered on the language appropriate to these activities in terms of grammar, lexis, register, study skills, discourse and genre.

Variable Characteristics

- 1.ESP may be related to or designed for specific disciplines
2. ESP may use, in specific teaching situations, a different methodology from that of General English
3. ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be for learners at secondary school level

4. ESP is generally designed for intermediate or advanced students.
5. Most ESP courses assume some basic knowledge of the language systems

2.2 Types of ESP

There are numerous definitions of ESP. Similarly, there are many ways of classifying ESP course.

Mackay and Mountford (1987;2) suggest three kind of ESP:

Occupational requirement, e.g for international telephone operators, civil air pilots.

Vocational training programmes, e.g for hotel and catering staff, technical trades.

Academic or professional study, e.g. engineering, medicine, law.

The language used by air traffic controllers or by waiters are examples of English as a restricted language. Mackay and Mountford (1978) clearly illustrate the difference between restricted language and language with this statement: "... the language of international air-traffic control could be regarded as 'special', in the sense that the repertoire required by the controller is strictly limited and can be accurately determined situationally, as might be the linguistic needs of a dining-room waiter or air-hostess. However, such restricted repertoires are not languages, just as a tourist phrase book is not grammar. Knowing a restricted 'language' would not allow the speaker to communicate effectively in novel situation, or in contexts outside the vocational environment. The second type of ESP identified by Carter (1983) is English for Academic and Occupational Purposes. In the 'Tree of ELT' Hutchinson & Waters (1987), ESP is broken down into three branches:

- a) English for Science and Technology (EST)
- b) English for Business and Economics (EBE)
- c) English for Social Studies (ESS)

Each of these subject areas is further divided into two branches:

- + English for Academic Purposes (EAP)
- + English for Occupational Purposes(EOP).

An example of EOP for the EST branch is 'English for Technicians' whereas an example of EAP for the EST branch is 'English for Medical Studies'.

The third and final type of ESP identified by Carter (1983) is English with specific topics. Carter notes that it is only here where emphasis shifts from purpose to topic. This type of ESP is uniquely concerned with anticipated future English needs of, for example, scientists requiring English for postgraduate reading studies, attending conferences or working in foreign institutions.

According to the types of ESP above, technical terms belongs to English for Science and technology (EST).

2.3 Definition of technical translation

Sofer (1991) as follow distinguishes technical translation from literal translation “the main division in the translation field is between literary and technical translation”. According to him, literal translation covers such areas as fictions, poetry, drama and humanities in general and is done by writers of the same kinds is the TL, or at least by translators with the required literary attitude. Meanwhile, technical translation is done by much greater number of practitioners and is an ever-going and expanding field with excellent opportunities

Newmark (1981) differently distinguishes technical translation from institutional translation: “technical translation is one part of specialized translation, institutional translation, the area of politics, commerce, finance, goverment ...etc ...is the other”. He goes on suggesting that technical

translation is potentially non-cultural and universal because benefits of technology are not confined to one speech community

The terms in technical translation, therefore, should be translated. On the contrary, institutional translation is cultural, so, in principle, the terms are transferred unless they are connected with international organization. These two authors, though having different approaches to technical translation they both knew it as specialized translation with its essential element “specialized terms”

2.4 Translation of technical terms

In the scientific technical texts are usually used amount of scientific terms, it means that terminology express the scientific concepts. It is not restricted clearly between the terminology and the general words because of its polysemantic.

When translating these terms into Vietnamese, the translator use many loanwords orginated from Latin.

In some technical guide books, we meet a lot of paragraghs in which words and phrases often list numbers, technical report. These words and phrases were set up follow the model, the specialist terminology set up follow the lexical model.

Chapter 2: Some strategies in translating technical terminology

Definition of terminology.

Up to now there are various definitions of terminology by many linguists.

In the Russian Encyclopedia (1976) terminology is defined as “a word or a combination of words that denotes the concept precisely and its relationship with other concepts in specific area. Terminology is a specialized and restricted expression on things, phenomena, characteristics, and the relationship in a specific profession”

Terminology is a word or combination of words that is used in science, technology, politics, art... and it has a specific meaning, denotes precise concepts and names of the above-mentioned scientific areas

Nguyen Van Tu (1960;176)

Terms are specialist words used within a scientific field, a professional or any technological field

Do Huu Chau (1998)

Terminology is a section of special lexis of a language. It consists of fixed words and groups of words which are accurate names of concepts and subjects belonging to different specialized fields of human being

Nguyen Thien Giap (1981)

Terms are words and compound words that are used in specific contexts. Not to be confused with "terms" in colloquial usages, the shortened form of technical terms (or terms of art) which are defined within a discipline or specific field

([http://en.wikipedia.org/wiki/Term_\(language\)](http://en.wikipedia.org/wiki/Term_(language)))

The creation of terminology

According to the International Standardization Organization (ISO, 1988), the following factors of essential consideration in the creation of terminology are:

Firstly, terms must be persistently show typical features of the concept they denote so as to bring about the exact reference. In addition, they need to be economical to avoid giving rise to homonymy. Besides, terms should be lexically systematic and conform to the phonological and morphological rules of the language. Furthermore, terms should follow the common rules of word-formation of the language, that is, they should allow composition and derivation where are necessary. Lastly, the meaning of term should be context-free. Term creation including primary and secondary, is under various influences and subject to different motivation. When a new concept appears, primary term formation is created meanwhile secondary term formation appears to name monolingual revision of a given terminology or the term in the TL after a process of transferring knowledge from one linguistic community to another.

It is common knowledge that technical terminology is volatile due to the changes and continual development of science and technology. Both primary and secondary term formation in technology is affected by a proliferation of variants and synonyms which occur to satisfy the need for popular version of scientific term and product differentiation.

The distinction between term and word

It is necessary to distinguish between terminology and ordinary words. Baker (1998) claims that “terms differ from words in that they are endowed a word with a special form of reference, namely that they refer to discrete

conceptual entities, properties, activities or relations which constitute the knowledge space of a particular subject field”

In addition, meanwhile words function in general reference or a variety of subject fields, terms have special reference within a particular discipline and they keep their lives and meanings only when they serve the system of knowledge that create them

Despite the distinction between term and word mentioned above, the boundary between them is not a clear cut, as many terms become ordinary words when they are closed to daily life and used with high frequency and many words become terms when they are used in specialized field

I. Typical features of technical terminology.

As a special unit in the lexical system of language, terminology has its own distinctive features. According to many linguists, terminology should have the following qualities: accurateness, systematism, internationalism, nationalism, popularity

1. Accuracy

The first quality of terminology is accurateness, that is, it expresses a specific concept or definition concretely and precisely so that it can help to avoid the misunderstanding one concept for another. It is necessary for each term in a typical professional scale, denotes only one concept in that system. The meaning of a term is normally the combination of linguistic signals not only the sum of its component's meaning. Luu Van Lang (1977) claimed that each linguistic signal poses one basic nuclear meaning and vice versa a concept also has a typical linguistic signal in a concrete situation. New Mark (1998) also said that concept-words are notorious for their different meanings in various technologies. Therefore, when a term is created in a specific field,

it is necessary to take into account its homophone or synonymy which are often seen in linguistics

The accuracy is one of features of technical terminology, it has the logical basis. It is not used the expressive construction.

2. Systematism

Which deals with all the terms in a specific subject field or domain activity.

It is the second criterion of a scientific term. As a part of a language, each term has its own position in the system of concepts and belongs to a terminological system. Each term requires its meaning in the relationship with other terms in its system. Once separated from its system, its meaning is vague. Therefore, systematism is seen as one of the most important features of terminology. There is the difference in the viewpoints about the characteristics of terminology among terminologists. Some say the typical characteristic of terminology is the systematic formation, whilst others claim that it is the feature of content. However, it is the combination of both content and expression form. It is impossible to separate a concept from the system to make a term but it determines its position in the system.

3. Internationalism

Terms are special words expressing common scientific concepts together with the development, cooperation and scientific, technological exchanges among countries throughout the world, terms are internationalized. The globalization enables terminology to be used more popularly in different languages so as to make the international science develop faster. As a result of this process, there exists a number of terms being internationalized in different languages namely medicine (names of illness, medicine, physics, telecom...). Based on the criteria of terminology, each language may require

other principles in accordance with its culture. Accordingly, terminology in Vietnamese is not an exception, it has its typical characteristics including nationalism and popularity

When translating the technical texts into Vietnamese, the technical terms are effected greatly by foreign language. It is used largely in the world.

Example: rotor, stator, turbine, cathode, antenna.

4. Nationalism:

It is undeniable that term is special linguistic unit of a language used in specific profession, it clearly belongs to national language. As a result, terminology in Vietnam should be imbued with Vietnamese culture, and characteristics of Vietnamese language. They should be appropriate to Vietnamese people from the lexicology to the grammatical composition

5. Popularity.

It is characteristic of terminology which can bring scientific and technological progress to all people. As a component of linguistics, terminology plays an important role in pushing up the development of science, hence it should be comprehensible to all people in its way of reading, writing, speaking and memorizing

In summary, the general characteristics of terminology have been reviewed. They are the vital principles in the creation and existence of terminology in science and technology

II. Structural features

1. Single terms and neologisms.

1.1 Single terms

There are many ways applied to translate single terms. However, due to the limited time and knowledge, this paper concentrates on one of the most popular way: recognized translation

A large number of words can be translated based on original words in general text. Due to the multi-lexical meaning of word and type of translation field, word still carries the original meaning and has slight change in meaning which translators can easily realize and find the closest meaning of the word in TL.

Sub-technical terms

In the scientific and technological texts are known as sub-technical (or semi-technical). This consists of items of vocabulary from normal English operating within science context.

Besides the differences existing in the labelling of this special range of words existing between the fully technical and general English.

Some researchers prefer using sub-technical, others prefer semi-technical. There are some commentators who prefer to use the term in relation to general vocabulary of science consists of words that have a wide distribution.

Others adopted abroad view on sub-technical vocabulary, maintaining that it consists of words that have one or more general meaning and in technical context take on extended specialized technical meaning.

Sub-technical terms can be classified into categories : words that have the same meaning in several science or technical disciplines words such as function, isolate, basis, stir, boil, freeze) that is context independent and words that are common but take on extended meanings in specific ST texts. Context dependent discipline based word. The already popular claim that these intermediate level words, neither highly technical nor obviously general constitute.

For example, the words “ **conductor**” in everyday language means a person who collects fares, but in the electricity it means a substance.

“**spring**” in everyday language means season of the year, but in the electricity it means an equipment of hanging system.

“**field**” in everyday language means an area of land where grows crops, keep animal or catsle, in the electricity it means that a force of magnet.

- Highly technical terms:

In the scientific and technological texts, the sub-technical terms are about 70 percent Inman (1979). Because in technical texts, there is not the clear distiction between general words and specialized words. Highly technical terms are used less than sub-technical terms. Highly technical terms are specialized words which used in owns fields.

For example: “electromagnet”, “magnetic” are the words belongs to highly technical terms mean that “ nam châm điện”, “ nam châm”

1.2 Neologisms:

Neologisms (term creation) we can see that terms may be created by assigning new meaning to existing terms or by combining and deleting lexical elements DUBUC (1997:131-141). In either case, certain principles should be restricted to improve the chances that new terms will be accepted.

Sense neologisms do not involve any change to the form of the term. Instead, they result from:

Expansion: extending the meaning of a term by giving it a new meaning, as in shift from the concrete to the abstract or from the abstract to the concrete.

Metaphor : giving a new meaning by analogy to that of an established terms.

Metonymy: taking the part for the whole.

Eponymy: widening the use of a proper name as a common noun (e.g: Watt from James Watt, the Scottish inventor of the unit of electrical power)

Conversion of grammatical category.

Borrowing from another subject field: adopting a term already established elsewhere with a slight change in meaning such as animate to inanimate.

Form neologisms (that is new lexical items) are created through a variety of process) including:

Derivation: by adding grammatical prefixes or suffixes to establish.

Composition: by joining bound and free forms in single words.

Blending: by clipping and joining parts of multiple words in a single words.

Acronymy and initialism by joining certain syllables or letters from compound.

Borrowing : adopting a word from another language.

Acceptance of neologism depends on such factors as their brevity, their mnemonics and their potential for derivation or productivity.

But the most important factor in acceptance of neologism is the motivation: the term should reflect the characteristic of concept it designates.

- **Eponyms** are the words which constructed with the proper name or general name. They are used in written or spoken communication in the technical texts. Eponyms in the technical texts are often name of the scientists or investors. For example : “Watt” from James Watt, the Scottish inventor of the unit of electrical power.

- **Acronyms** are the words which constructed with the first letter of a word group. Acronym terms are words or phrases that have been abbreviated. They are used in written or spoken communication in technical field to save time and space. Abbreviation terms sometimes represent the first letter of several words or the first letter of just one word. For example: the word “ AC” is acronym of a phrase “ alternating current”

2. Compound terms

Many compound terms and phrases mentioned are easily translated and guessed the meaning basing on the meaning of each word. On the contrary, there are a lot of compound terms and phrases which we can translate individually however, it is difficult to guess the meaning of whole term or focus on a word or compound word in Vietnamese equivalence.

- Nominal groups

In technical terms, we often use amount of compound terms which constructed from nominal group. They are:

Terms consist of classifier Past participle+noun

For example: Generated voltage

Terms consist of classifier: gerund+noun

For example: Rotating field

Terms consist of : noun+gerund

For example: Generator slipping

Terms consist of : (noun)+quantifier+ noun

For example: 4PDT relays

Terms consist of : noun+ Past participle+thing

For example: Current- carrying conductor

Terms consist of : thing+qualifier

For example: Effect of light

Terms consist of : preposition+ thing

For example: Of travelling wave

- Noun phrases

Apart from using compound terms from nominal group, we also use “noun phrases” in technical terms.

Terms consist of classifier: noun+ noun

For example: Pilot exciter

Terms consist of classifier : adjective+noun

For example: Magnetic field

Terms consist of : adj+adj

For example: Pure inductive

Terms consist of acronyms+ noun

For example : A.c potentionmeter

III. Some strategies in translating technical terminology.

The most difficulty to translate ESP is terminology which is often translated practically and exactly in requirement. Generally, the best translation should be performed according to some following steps:

The translators should try to understand new terms in the whole content and intention of the text which they are translating. The principal way to reach it is reading all sentences or the text completely to give the idea that we want to say in the TL because the most important characteristic of this technique is translating the message as clearly and naturally as possible. By this way, translators can get the meaning of word in the detail content. Moreover, it is necessary to look up new word in dictionary. Most of terms are created from original word in general English.

Secondly, the translators should search the knowledge about the translation matter in order to, at least understand the concept of terms and use them correctly and decrease all the difficulties stated above. By doing this, translators can choose the best equivalence in Vietnamese and avoid the misunderstanding

Thirdly, the translator should avoid the tendency to translate word by word because that will destroy the meaning of the original word and ruin the beauty of the expression. Basically most of terms are translated by using general word. However, sometimes, it is necessary to translate an English word by a long phrase or even a whole sentence to help reader understand.

In the scientific technical texts are usually used amount of scientific terms, it means that terminology express the scientific concepts. It is not restricted clearly between the terminology and the general words because of its polysemantic.

When translating these terms into Vietnamese, the translator use many loanwords orginated Latin.

In some technical guide books, we meet a lot of paragraghs in which words and phrases often list numbers, technical report. These words and phrases were set up follow the model, the specialist terminology set up follow the lexical model.

Single terms.

There are many ways applied to translate single terms. However, due to the limited time and knowledge, this paper concentrates on one of the most popular way: recognized translation

A large number of words can be translated based on original words in general text. Due to the multi-lexical meaning of word and type of translation field, word still carries the original meaning and has slight change in meaning which translators can easily realize and find the closest meaning of the word in TL.

Group I. Sub-technical terms & highly technical

Translating by using a loan word

In the technical texts are used many loanwords orginated Latin. For example: the term “rotor” and the term “stator” are translated into Vietnamese “phần quay”, “phần tĩnh”. However, these terms in technical texts are translated “rôto”, “stato” because these terms have been in common used in

Vietnamese for a long time, they are often used without any accompanying explanation, whenever a loan word is used, it is better to give an explanation. Another example the terms “diesel” and “creosot”, they are two kinds of oil, and they are translated “điêzen”, “dầu crêôzôt”.

Translating by a more specific word.

A part from using many loan words, in the technical texts we often meet some specific words. For example: the word “boss” is often translated into Vietnamese by many meanings such as “Lãnh đạo”, “ông chủ”, in electrical the words “boss” means “búa đập”, or “bulông, ốc vít”. “Shoe” is translated into Vietnamese “giày”, in the electrical it means that “chân đế”, “má phanh”.

Another example, the words “use”, “employ” are also translated into Vietnamese “sử dụng”.

Group II: Neologisms (eponyms, acronyms)

Eponyms

Eponyms are the words which constructed with the proper name or general name. They are used in written or spoken communication in the technical texts. Eponyms in the technical texts are often name of the scientists or investors. When translating these technical terms into Vietnamese, Vietnamese translators use many proper names in translation texts.

Acronyms

Translation of acronyms by using a loanwords

Loan words have increased in the process of human working and studying and occupied a large amount of vocabulary to enrich the human language. In the recent decays, Vietnamese language has added more new loan words

originating from English such as: I (current), R (resistance), M (magnetic),...and in the technical field, loan words are mainly the case of acronyms

An acronym is a shortened form of a word.

Compound terms.

Group I: Nominal group

Translating by using a loan word plus explanation.

The compound terms are also used amount of loanwords. They often includes two words or more. For example, the terms “ rotor current” is translated into Vietnamese “ Dòng điện rôto”, “ stator winding” means “ cuộn dây stato”.

Rank-shift translation

The other case, also, involves the change in grammar from SL to TL. However, the TL is added or omitted words comparing with SL

Example: Rotating field Từ trường quay

V-ing + noun noun + verb

We can see that in SL, “Winding resistance” is composed by V-ing and Noun, but V-ing “Rotating” becomes “ verb” when this term is translated into TL. We also can see that there is changing in the grammar of the word from SL to TL

For example: Excitation current Dòng điện kích từ

Noun+ noun noun + verb

In the TT, you can see that it is added word “kích từ” comparing with SL. Adding words make readers understand clearer and more exactly about the terms

Group II: Noun phrases

Translating by a more general words. The words “*line*”, “*circuit*” in Vietnamese means “*mạch điện*”, however, these words depends on each situation.

For example, the terms “*line loop*” means “*mạch vòng*”, “*current circuit*” means “*mạch dòng điện*”

Acronyms

Translating acronyms by using loan words.

Loan words have increased in the process of human working and studying and occupied a large amount of vocabulary to enrich the human language. In the recent decays, Vietnamese language has added more new loan words originating from Latin such as: I(current) “*dòng điện*”, R(resistance) “*điện trở*”, M(Magnetic) “*nam châm*”...and in the technical field, loan words are mainly the case of acronyms

An acronym is a shortened form of a word or phrase. Usually, but not always, it consists of a letter or group of letters taken from the word or phrase.

For example: “DC” is abbreviated by two words “direct current”

Other strategies:

Strategy: How to deal with voice, number, and person.

Voice.

The passive voice is often used in the technical texts. It causes some difficulties for Vietnamese translation. For example:

Small generators usually employ permanent for the magnetic field poles while high output generators will require electromagnetic field poles. The electromagnetic field used in power station. **Generators is constructed of an iron core with wound coils and when direct current (DC) is passed through the coils. A magnetic field is created within the iron core causing it to become a magnet.** (Principle of generators). This text is translated into Vietnamese “Các máy phát có kích thước nhỏ thường sử dụng các nam châm vĩnh cửu để chế tạo các cực từ trường. Các máy phát điện có công suất lớn trong nhà máy điện sử dụng từ trường của nam châm điện có cấu trúc gồm một lõi sắt với những cuộn dây quấn xung quanh và khi dòng điện một chiều (direct curent-DC) chạy trong các cuộn dây, một từ trường được tạo ra trong lõi sắt làm cho nó trở thành một nam châm.” (nguyên lý máy phát).

Number

In the technical texts, name of thing is the first position because the concern issue is the specific penomenon which needs to describe and explain. In the morden technical texts, the content communicates by the impesonal construction “ being”, “ need”, “should”.

For example:

The shape off the open circuit characteristic curve is determined by the behaviour of the magnetic circuit of the generator. The magnetic circuit **being** the path taken by the magnetic flux. When the generator is open circuited the terminal voltage is propotional to flux density. At low flux densities the iron circuit offers a very low reluctance path (opposition to the flow of magnetic lines of force) in comparison to the reluctance air. With this **being** the case the magnetising current at the lower end of the curve goes largely towards forcing the flux across the two air gaps. This text is translated into Vietnamese “Hình dáng của đường cong đặc tính không tải được xác định bởi tác động của mạch từ của máy phát điện. Mạch từ là đường dẫn tạo ra bởi các đường thông lượng. Khi máy phát hở mạch điện áp đầu máy tỉ lệ với mật độ

từ thông. Lúc mật độ từ thông thấp mạch từ tạo ra một đường dẫn có từ trở rất nhỏ (tỉ lệ với lưu lượng đường sức từ) so với từ trở của không khí. Điều kiện như vậy ở vào trường hợp dòng từ hoá ở vào đầu thấp hơn của đường cong mở rộng theo hướng ép đường thông lượng từ đi qua hai khe hở.”

Chapter 3: The translation of technical terms into Vietnamese

1. Single terms & Neologisms

1.1 Single terms

Bias : Sự phân cực (in Vietnamese)

The DC in the input circuit of electronic lamp inputs the element of transistor, similarly the bias between the emitter and the base.

Conductor: Dây dẫn

A substance that allows electricity or heat to pass along it or through it

Spring: Lò xo

A twisted piece of metal that can be pushed, pressed or pulled but which always returns to its original shape or position afterwards

Field: Từ trường

An area within which the force mentioned has an effect.

Electricity: Điện

A form of energy from charged elementary particles, usually supplied as electric current through cable, wire...

Magnetic: Nam châm

A piece of iron that attracts objects made of iron towards it, either naturally or because of an electric current that it passed through it. The block becomes magnetic when the current is switched on.

Magnet: Từ tính

A piece of iron that attracts objects made of iron towards it, either naturally or because of an electric current that is passed through it.

Electromagnet: Nam châm điện

A piece of metal which becomes magnetic when the electricity through it.

Electron: Điện tử

A very small piece of matter with a negative electric charge, found in all atoms.

Proton: Hạt điện dương or prôton

A very small piece of matter with a positive electric charge that forms part of the nucleus.

Neutron: Hạt điện tích âm, or nơtron

A very small piece of matter that carries no electric charge and that forms part of the nucleus.

Nucleus: Hạt nhân

A part of atoms that contains most of its mass and that carries a positive electric charge.

Atoms: Nguyên tử

The smallest part of a chemical element that can take part in chemical reaction.

Ions: Ion

An atom or a molecule with a positive or negative electric charge caused by its losing or gaining one or more electrons.

Volt: Vôn

A unit for measuring the force of an electrical current

Resistance: Điện trở

The opposition of a piece of equipment

Current: Dòng điện

The flow of electricity through a wire

Circuit: Mạch

The complete path of wires and equipment along which an electric current flows.

Rotor: Phần quay, rôto

A part of a machine that turns around a central point.

Stator: Phần tĩnh, stato

A part of a machine that holds and causes rotating field.

Busbar Thanh g óp điện

Relay: Rơ le

An electronic device that receives radio or television signal and sends them on again with greater strength.

Fuse Cầu chảy

A small wire or device inside a piece of electrical equipment that breaks and stops the current if the flow of electricity is strong.

Pivot: Tr ục

The central point, pin or column on which sth turns and balances.

1.2 Neologisms

Overcurrent: Dòng điện quá tải

Overload: Sự quá tải

An electrical current or a part of generator consumes the output higher than the electrical lagging designed

Intra-atomic: Nội nguyên tử

Sub-cooled: Quá lạnh

Sub-switch: Cầu dao phụ tải

Sub-loading: Phụ tải

Extra-code: Mã ngoài

Polystyrene : Chất dẻo PS

It is a kind of synthetic resin which has mechanic feature and insulator feature, it is a good insulation.

Bioelectric : Điện sinh vật

Ohm : Om

Is the name German scientist who found out the relation between the electrical potential, current, resistance.

Watt: Oat

“Watt” from James Watt, the Scottish inventor of the unit of electrical power.

Diode: Điốt

Is the semiconductive rectifier or semiconductive diode.

Cathode: Catốt, Âm cực

Is the emitter electron in the electron lamp.

Antenna: Ăng ten

A path telecasting or receiving radio waves

I (Current): Cường độ dòng điện

The flow of electricity through a wire.

R (Resitance): Điện trở

The opposition of a piece of equipment.

V (Volt): Vôn

A unit for measuring the force of an electrical current

W(Watt) O át

A unit for measuring electrical power

E_g (Generated voltage): Điện áp phát

The value of this voltage depends on the value of the rotor excitation current and it represents the voltage which would be induced in the stator windings wree it not for the effect of armature reaction. This voltage would appear at the generator terminals if the load was lost.

X_s (Synchronous reactance) Trở kháng đồng bộ

X_l (Inductive reactance) Điện cảm ứng

Ac (Alternating current) Dòng điện xoay chiều

Dc (Direct current) Dòng điện một chiều

E_t (Terminal voltage) Điện áp phát

M (Magnetic) Nam châm

E (Voltage actually induced) Điện áp cảm ứng

2. Compound terms

2.1 Nominal groups

2.1.1 Terms consist of : *Past participle* +noun

Generated voltage : Điện áp phát

Laminated core: Lõi thép lá

Coiled coil: Cuộn dây dạng ốc kép

Receive signal: Tín hiệu thu được

Blown fuse: Cầu chì ngắt

Modulated wave: Sóng được điều biến

Sealed relay: Rơle kẹp chì

Sealed transformer: Máy biến áp bọc kín

2.1.2 Terms consist of : *present participle* +thing

Damping coil: Cuộn dây làm nhụt

Rotating field: Từ trường quay

Permanent field at a position but the direction around a position in shaft system.

Winding resistance: Điện trở cuộn dây

Modulating signal: Tín hiệu điều biến

Leading power : Công suất vượt trước

Rotating amplifier: Máy khuếch đại quay

A kind of D.c generator in which electrolumine output can be controlled quickly and electrical signal input the field.

Winding cable: Cáp rút

Winding ends: Đầu cuộn dây

Winding factor: Hệ số dây quấn

Lagging power: Tải điện kháng

2.1.3 Terms consist of : noun+ gerund

Generator slipring: Vòng góp máy phát

Stator winding: Cuộn dây stato

Rotor cooling: Rôto làm lạnh

Screwing die: Bàn cắt ren

Power winding: Cuộn công suất

Electrical arcing: Phóng điện

Field winding: Cuộn dây kích thích

2.1.4 Terms consist of : (noun)+quantifier+noun

12-wire cable: Cáp 12 sợi

4 PST relays : Rơ le 4PST

4PDT contacts: Công tắc 4 PDT

2.1.5 Terms consist of : Noun+ PII+thing

Heat-absorbing surface: Bề mặt hấp thụ nhiệt

Heat-regulating system: Hệ thống điều hoà cách nhiệt

Current-limiting circuit breaker: Bộ ngắt mạch hạn chế dòng

Current- limiting reactor: Bộ điện kháng nối tiếp

Temperature- compensating capacitor: Tụ bù nhiệt

Temperature-indicating paint: Sơn chỉ thị nhiệt độ

Heat-insulated vessel: Bình cách nhiệt

2.1.6 Terms consist of : *thing+qualifier*

Effect of light: Hiệu ứng ánh sáng

Line of sight: Đường truyền thẳng

Transmission of energy: Truyền tải năng lượng

Transmission of sound: Truyền dẫn âm thanh

Effect of exchange interaction: Hiệu ứng tương tác trao đổi

2.1.7. Terms consist of : *preposition + thing*

Of travelling wave: Tốc độ sóng chạy

Off period: Chu kỳ ngắt

Off transistor: Transistor ngắt

2.2 Noun phrases

2.2.1 Terms consist of : *noun+noun*

Pilot exciter: Máy kích từ

Rotor conduction: Cuộn dây rôto

Voltage transformer: Máy biến điện áp

Stator armature: Phần ứng stato

Saddle key: Then ma sắt

Screen generator: Bộ sinh màn hình

Screen grid: Lưới chắn

The secondary grid in the electronic lamp among the controlled grid and positive decreases chatter continuously.

Rotor shaft: Trục rôto

Excitation current: Dòng điện kích thích

Screw cap: Đui xoáy

Stator conduction: Cuộn dây stato

2.2.2 Terms consist of : Adj +Adj

Pure inductive: Thuần cảm

Resistive-inductive: Trở cảm

Resistive –capacitive: Trở dung

Pure capacitive: Thuần dung

2.2.3 Terms consist of : Adj+noun

Magnetic field: Từ trường

Synchronous reactance: Trở kháng đồng bộ

Electrical grid: Lưới điện

Protective switch: Cầu dao bảo vệ

Protective circuit: Mạch bảo vệ

Primary coil: Cuộn sơ cấp

Secondary coil: Cuộn thứ cấp

2.2.4 Terms consist of : Acronyms+noun

D.c current transformer : Máy biến dòng một chiều

D/E curve: Đường cong D/E

A.c potentionmeter: Điện kế thế AC

B- battery: Bộ pin B

C-class insulator: Cách điện cấp C

2.2.5 Acronyms

AVR (Automatic voltage regular): Hệ thống tự động điều chỉnh điện áp

AER (Automatic excitation regular): Hệ thống điều chỉnh kích thích tự động

PIB (Phase Isolated Bus): Thanh cái cách điện pha

MVA (Mega volt-ampere): Công suất kiểu biến

EMF (Electromotive force): Sức điện động

DC (Direct current): Dòng điện một chiều

PA (Pulse amplifier): Bộ khuếch đại xung

An instrument that measures the altitude of an aircraft, in which radar signal are transmitted in the short pulse, and the time delay between the leading edge of the pulse and the pulse returned from the ground is measured to calculate altitude.

UHF (Ultra- high frequency): Tần số siêu cao

The frequency between waves from 300 to 3000 mega periodic.

VHF(Very High Frequency): Tần số rất cao

PART III: CONCLUSION

Nowadays, English is used commonly almost fields of life such as: economy, science, politics, medical, education... therefore, terms of English for specific purpose plays a crucial role. To understand clearly and exactly is not easy else.

English in technical field has played important role because any field almost uses equipments and assembly line. The instruction about technique, lists, technical reports is written by English. That is the reason for the conduction of this graduation paper with 3 parts:

The rationale, research restriction & application, method and design are mentioned in part one with the research restriction & application that the readers could have an overview of my research.

Part two includes three chapters. Based on the theoretical background of translation in chapter I, chapter II Some strategies in translating technical terminology; including definition of terminology, characteristics of technical terms, some strategies in translating technical terminology. The translation of technical terms in the chapter 3.

Part three summarizes main ideas mentioned in previous parts and gives some suggestions for further research.

From this research, it can be concluded that English technical terms is quite difficult and very large thesis to study. Some suggestions drawn from this research for further research: study English in technical terms.

In conclusion, I would like to contribute to the study of English-Vietnamese translation in universities and on the media this thesis. In my opinion, it can be considered a companion of all people who are seeking to

improve their English-Vietnamese translation. Hopefully, the readers of this thesis can find it usefulness in their future work and study or at least see it as a reference worth looking at.

At last, after a process of seriously working, I completed the topic which I have embraced for a long time. It will be so soon to mention to the success of this topic but I have actually tried my best, which I feel satisfactory.

Surely, mistakes and shortcomings in this graduation paper are unavoidable due to my limitation of time and knowledge. Therefore, I'm always willing to receive the contributions, advices and sympathies from teachers and readers to make my graduation paper much better.

Once again, I would like to send my sincere thanks to all who always stand beside me on the way to the bright future.

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Link from internet:

(<http://en.wikipedia.org/wiki/translation>)

<http://en.wikipedia.org/wiki/terminology>

GLOSSARY

No	English	Vietnamese
1	1/f noise	Tiếng ồn 1/f
2	4W/2W terminating set	Đầu cuối 4 dây, 2 dây
3	6 KV (distribution)	Buồng 6KV
4	A 15 phase	Cách pha A15
5	AC	Dòng điện xoay chiều
6	Anti-creep	Chống tự quay
7	Ampere	Ampe
8	Armature	Phần ứng
9	Armature reaction	Phản ứng phần ứng
10	Alternator stator	Cuộn stato thay thế
11	Boss	Bulông, ốc vít
12	Bias circuit	Mạch định thiên
13	Brushless excitation	Hệ thống kích từ không chổi than
14	Bipolar	Mạch lưỡng cực
15	CT	Biến dòng
16	Cathode	Catốt
17	Capacitive load	Tải cảm từ
18	Circuit delay	Độ trễ mạch
19	Circuit closer	Bộ đóng mạch
20	Cam	Bánh lệch tâm

21	Ceiling voltage	Điện áp tối đa
22	Diopter	Số điốp
23	Diode voltage	Điện áp điốt
24	Diode –connected transistor	Transistor mắc như điốt
25	E_g	Điện áp phát
26	Electrical grid	Lưới điện
27	Earth line	Dây chống thép
28	Earth potential	Điện thế đất
29	Extra-current	Dòng điện dư
30	EHV (Extra High Voltage)	Điện áp cực cao
31	Excitation	Kích từ
32	Electromagnet	Nam châm điện
33	Grid	Mạng lưới
34	Generator	Máy phát điện
35	IR	Giảm áp do điện trở
36	IX_l	Giảm áp do trở kháng
37	IX_a	Giảm áp đại diện
38	Inductive load	Điện tích cảm ứng
39	Intra-atomic	Nội nguyên tử
40	Insulation	Vật cách điện
41	Jacking oil	Dầu thủy lực
42	Magnetic wheel	Bánh đà từ
43	Magnet wire	Dây điện từ

44	Magnetic activity	Sự hoạt động từ tính
45	Magnetic amplifier relay	Role khuếch đại từ
46	Magnet coil	Cuộn dây lõi sắt/ cuộn hút
47	Magnetic	Nam châm
48	Main exciter	Kích từ chính
49	Magnet	Từ tính
50	Loop	Mạch kín
51	Over-voltage	Điện thế quá mức
52	Output	Công suất
53	Polyatomic	Đa nguyên tử
54	PF (pulverising)	Máy nghiền
55	Pivot point	Ngõng trục
56	Pinion	Bánh khế
57	Pressure	Áp suất
58	Pole	Cực
58	Resistive circuit	Mạch điện trở
59	Relay base	Đế role
60	Roll	Bánh đà
61	RMS (Root mean Square)	Giá trị hiệu dụng
62	Relay amplifier	Bộ khuếch đại role
63	Rotor current	Dòng điện rôto
64	Relay armature	Phần ứng role
65	Rotor field	Từ trường quay

66	Radiation	Bức xạ
67	Scrubber	Máy lọc khí
68	Single circuit	Mạch đơn
69	Single phase supply	Nguồn cấp một pha
70	Shoe	Chân đế
71	Slipring	Vành trượt ợt
72	Synchronous reactance	Trở kháng đồng bộ
73	Screwed fuse	Cầu chảy xoáy
74	Synchronous generator	Bộ phát xenxin
75	Sandwich	Bánh kẹp
76	Screw base	Đế xoáy
77	Tension	Áp lực
78	Voltage	Điện áp
79	Voltage drop	Giảm áp
80	Voltage fluctuation	Thăng giáng điện áp
81	Voltage fall	Giảm áp
82	Voltage impulse	Xung áp
83	Worm wheel	Điện áp phát
84	Winding	Dòng điện xoay chiều
85	X_l	Điện cảm ứng
86	X_s	Trở kháng đồng bộ