TRANSLATION STRATEGIES OF SECURITY AND LIFE SAFETY TEXTS

Svitlana Kiyko
Doctor of Philological Sciences, Associate Professor at the Department of Germanic,
General and Comparative Linguistics, Yuriy Fedkovych Chernivtsi National University,
Ukraine
e-mail: s.kiyko@chnu.edu.ua, orcid.org/0000-0003-4964-7043

Summary

The article discusses general translation strategies such as literal translation, borrowing, calquing, equivalence, transposition, modulation, adaptation, expansion, contraction, generalizing, particularizing as well as compensation and restructuring and describes how they can be used when translating texts of security and life safety. The author looks at how to formulate a translation brief and what type of information it should contain. Some of the specific strategic problems a translator might encounter in texts of security and life safety are described as well as some of the strategies a translator use to deal with them are explored.

Using a corpus of 500 risk and safety phrases, we compared the use of various translation strategies in English texts and their Ukrainian translations and found that in risk and safety phrases, literal translation occurs more frequently than other strategies such as transposition, modulation, addition or adaptation. Nevertheless, even though literal translation may proportionally see more use in technical texts, it is by no means the most important strategy, nor does it represent the main tool in a translator's toolbox.

Keywords: translation, safety and risk phrases, literal translation, borrowing, calquing, recategorization, modulation, adaptation.

1. Introduction

The texts of security and life safety present technical or applied information and combine various elements of technical language with those of common language in as clear and efficient manner as possible. They usually contain instructions for managing security and life safety operations therefore they are characterized by a list of risk and safety phrases which are used internationally to advise readers on potentially dangerous substances. These texts contain also internationally-recognized symbols used to label hazardous materials *(Kiyko, 2021: 49-50)*. The aim of the article is to describe and to characterize general translation strategies of safety and risk phrases from English into Ukrainian such as: *Keep out of the reach of children. – Зберігати в недоступному для дітей місці. May cause lang-term adverse effects in the aquatic environment. – Може спричинити тривалий несприятливий вплив на водне середовище. Very toxic in contact with skin. – Дуже токсичний при контакті зі шкірою* etc.

These set phrases (in general 500 phrases collected by us from manuals, handbooks, instructions, notes, tutorials, containing clear definitions of concepts and standardized terms, branch encyclopedias etc.) should always be used when translating safety information. The language used in the text, therefore, needs to reflect this without overstating or misrepresenting the reality of the product. Following on from the discussion of Skopos theory *(Reiss at all 2013)*, we consider technical translation as part of a much larger communicative

environment which is based on the development and dissemination of technical information. Due to M. Markel *(Markel 2001: 4)* we define technical translation as "producing technical communication that involves creating, designing, and transmitting technical information so that people can understand it easily and use it safely, effectively, and efficiently". We look at how to formulate a translation brief and what type of information it should contain and distinguish direct and oblique translation as proposed by J.P. Vinay and J. Darbelnet *(Vinay at all, 1995; see also Camargo 2005: 37).*

2. Main text

Direct translation involves relatively straightforward strategies which require less intervention by the translator and less deviation from the source text. The direct translation strategies such as *literal translation, borrowing* and *calquing* are useful in a range of safety and risk phrases.

Literal translation is a simply replacing each source text word with a corresponding target text word, for example: *Avoid contact with eyes / skin. – Уникайте контакту з очима / зі шкірою. Keep container tightly closed / dry / in a well-ventilated place. – Тримайте контейнер щільно закритим / сухим / у добре провітрюваному місці. Harmful by inhalation. – Шкідливий при вдиханні. Avoid release to the environment. – Уникайте потрапляння в навколишнє середовище. Risk of explosion by shock, friction, fire or other sources of ignition. – Ризик вибуху через удар, тертя, вогонь або інші джерела займання.*

Essentially, literal translation involves producing a target text which reflects the content and features of the source text as closely as possible and only deviating from this where necessary in order to produce a target text which is grammatically correct and intelligible: *Keep away from food, drink and animal feedingstuffs – Зберігати подалі від їжі, напоїв і кормів для тварин. In use, may form flammable / explosive vapour-air mixture. – Під час використання може утворювати легкозаймисту / вибухонебезпечну пароповітряну суміш. Heating may cause an explosion. – Нагрівання може призвести до вибуху.* Literal translation avoid any additions, omissions, paraphrasing or other translation techniques to produce what could be described as a faithful and simple translation.

Borrowings are the simplest form of exchange between languages as it involves transferring an source language lexical item into the target text without any form of modification except for transliteration to account for different writing systems and characters, for example: *This material and its container must be disposed of in a safe way – Матеріал і його контейнер необхідно утилізувати безпечним способом. Handle and open container with care – Обережно поводьтеся та відкривайте контейнер. May form explosive peroxides. – Може утворювати вибухонебезпечні пероксиди.*

Often borrowings are used because there is no existing word or concept in the target language. The following underlined words are used in a variety of languages without translation, although they may be modified slightly to fit in with the grammatical rules of the receiving language: *In case of insufficient ventilation wear suitable respiratory equipment. – У разі недостатньої вентиляції використовувати респіратор. Avoid exposure – obtain special instructions before use. – Уникайте впливу – ознайомтеся з інструкцією перед використанням. Danger of cumulative effects. – Небезпека кумулятивних ефектів.*

Calquing involves the literal translation of the individual constituent parts of a source language word or phrase to create a new term, or neologism, in the target language. Calques

may confound most readers and ultimately prove as uninformative as retaining the original source language term, therefore, they are not often used in translations of safety and risk phrases: *During fumigation wear suitable respiratory equipment – Під час обкурювання використовуйте відповідний респіратор.* Sometimes it is necessary to introduce calques, particularly where there are perfectly acceptable alternatives in the target languages: *Під час розпилювання використовуйте відповідний респіратор.*

Oblique translation is used when the grammatical, pragmatic and lexical differences between the source and target languages are too significant to allow direct translation. Coined by J.P. Vinay and J. Darbelnet *(Vinay at all, 1995: 30-58)*, it describes four translation procedures – equivalence, transposition, modulation and adaption, which are used where the stylistic or linguistic features of the source text are such that a straightforward replacement of source text elements is not possible because it would produce a target text which is unacceptable in terms of meaning, structure, idiomaticity or style.

Equivalence is the process of replacing elements in the source text with corresponding elements in the target text with the aim to "replicate the same situation as in the original whilst using completely different wording" *(Vinay at all, 1995: 31)*. This translation technique that implies using a completely different expression to reformulate and transmit the same reality, for example: *lf swallowed, seek medical advice immediately and show this container or label. – У разі проковтування негайно зверніться до лікаря та покажіть цей контейнер або етикетку. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. – У разі потрапляння в очі негайно промити великою кількістю води та звернутися до лікаря.* Equivalence as a translation procedure involves finding the target language counterpart for a particular source language word or phrase, for example, to replace fixed expressions or formulaic phrases, idioms or proverbs, for example: *Contact with water liberates extremely flammable gases. – При контакті з водою виділяються надзвичайно легкозаймисті гази. Do not empty into drains. – Не виливати в каналізацію. Wear eye / face protection – Одягайте засоби захисту очей / обличчя. Not recommended for interior use an large surface areas. – Не рекомендується для використання всередині приміщень із великою площею.*

In the case of safety and risk phrases we can use this procedure as a way of translating elements such as warning signs and labels: *Danger! Risk of Death. – Обережно! Смертельна небезпека. Take precautionary measures against static discharges. – Обережно! Статичний розряд!*

Transposition or recategorization involves moving from one grammatical category to another without changing the meaning of the text. This procedure is usually needed because of differences in the way information is expressed in the source and target languages, and maintaining the same word class would result in a translation that is awkward or unintelligible. Some transpositions are obligatory, for example, where the source language may have a noun describing a particular process or object, while the target language can only convey this information using a descriptive phrase. Other transpositions are optional and may be chosen simply to improve the style or flow of the target text. Examples of transpositions include:

– Nominalizations (verb to noun): *If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. – У разі проковтування не викликайте блювоту: негайно зверніться до лікаря та покажіть цей контейнер або етикетку. To clean the floor and all objects contaminated by this material use ... (to be specified by the manufacturer). – Для очищення підлоги та всіх предметів, забруднених цим матеріалом, використовуйте ... (вказується виробником). In case of accident or if you feel unwell seek*

medical advice immediately (show the label where possible) – *У разі нещасного випадку або погано́го самопочуття негайно зверніться до лікаря (якщо можливо, покажіть етикетку). Explosive when mixed with oxidizing substances.* – *Вибухонебезпечний при змішуванні з окислюючими речовинами.*

– Nominalizations (adjective to noun): *lf swallowed, rinse mouth with water (only if the person is conscious).* – *У разі проковтування прополоскати рот водою (тільки якщо людина при свідомості).*

– Verbalizations (noun to verb): *When using do not eat or drink* – *Під час використання не їсти і не пити. When using do not smoke.* – *При використанні не палити. Refer to manufacturer / supplier for information on recycling.* – *Зверніться до виробника / постачальника, щоб отримати інформацію щодо переробки.*

Adjektivization: *Keep at temperature not exceeding ... °C.* – *Зберігати при температурі не вище ... °C.*

Passive to imperative: *This material and its container must be disposed of as hazardous waste.* – *Утилізуйте цей матеріал і його контейнер як небезпечні відходи.*

Passive to active: *Keep only in the original container in a cool, well-ventilated place away from ... (incompatible materials to be indicated by the manufacturer).* – *Зберігати лише в оригінальній упаковці в прохолодному, добре провітрюваному місці подалі від ... (несумісні матеріали вказує виробник).*

Modulation means changing the form of the text by introducing a semantic change or perspective. It refers to the process of changing the form of information by presenting it from a different point of view. It is useful where a literal translation would result in a translation which might well be grammatically correct but which is nevertheless unidiomatic. Some modulations are compulsory (or fixed), usually because of structural differences between the source and target languages, while others (known as free or optional modulations) are not. At the most basic level, modulations might involve changing a sentence from a positive to a negative, for example: *Leave the refrigeration turned on at all times.* – *Не вимикати холодильну установку. Keep away from heat.* – *Зберігати в прохолодному місці. Keep away from combustible material.* – *Не тримати поруч з горючими матеріалами.* Other types of modulations involve replacing abstract concepts with concrete concepts: *In case of accident by inhalation: remove casualty to fresh air and keep at rest.* – *У разі нещасного випадку через вдихання: вивести постраждалого на свіже повітря та забезпечити йому спокій. Wear suitable gloves* – *Одягніть захисні рукавички.* Some modulations involve replacing a concept "part for whole" or "whole for part", for example: *Use only in well-ventilated areas* – *Використовувати тільки в добре провітрюваних приміщеннях.*

Adaptation, also called cultural equivalent, substitutes the original text with one that is better suited to the culture of the target language. It may involve a significant amount of deviation from the source text. J.P. Vinay and J. Darbelnet *(Vinay at all, 1995: 39)* describe it as the "extreme limit of translation". Adaptation makes use of three key procedures – *cultural substitution*, *paraphrasing* and *omission* – and is used when the source text describes a situation or concept which does not exist in the target language culture or which does not have the same connotations or relevance to members of the target language audience. Such cases might include references to institutions such as local councils or government authorities in design and construction documentation for a manufacturing plant.

We use cultural substitution first in order to overcome a culture-specific problem in the source text. For example, in an environmental impact report for building storage tanks in a biogas processing plant we might replace a reference to a government agency in the source

culture with a reference to the corresponding agency in the target language culture. We might even replace a reference to a particular type of soil commonly found in the source country with a reference to a comparable soil in the target country, for example: *Dispose of this material and its container at <u>hazardous or special waste collection point</u>. – Утилізуйте цей матеріал та його контейнер у <u>пункті збору небезпечних або спеціальних відходів</u>*. If such a substitution fails, we may paraphrase the source text by expressing its meaning descriptively, using words which do not necessarily correspond to those of the source text. Paraphrasing helps generally to avoid interference and unidiomatic constructions caused by sticking too closely to the source text.

If we cannot find a cultural substitute or paraphrase the source text, we may, in a limited number of cases, omit information. Extreme caution is required in such instances because "technical documentation is concerned first and foremost with information so the decision to omit information should only be a last resort and we must be able to justify it completely" *(Byrne, 2014: 123)*. Practical examples of using adaptation might include replacing a sentence in the documentation for technical devices which advises users to consult a specific magazine which only exists in the source language country with a generic reference such as "more details can be found in various satellite magazines". Training materials or technical advertisements may describe typical scenarios in which a product might be used. In order to make this information as meaningful and clear to the reader as possible, the scenarios will more than likely be something to which the reader can relate, and as a result, they may be quite firmly rooted in the source language culture. Depending on the subject and target audience's background knowledge, we may need to add explanations to our translation or remove unnecessary detail so that it meets readers' expectations.

Expansion, also known as explicitation, involves "making something which is implicit in the source text explicit in the target text in order to make the target text clearer, more relevant to the audience, or to compensate for some perceived lack of background knowledge on the part of the target text audience" *(Byrne, 2014: 124)*. Expansion may involve adding explanatory phrases to clarify terms or statements or adding connectors to improve the flow of the text and to make it more readable, for example: *<u>Refer</u> to special instructions / safety data sheet. – <u>Детально ознайомтеся</u> з інструкцією / паспортом безпеки.* As a result of this strategy, a translation ultimately may contain a higher level of semantic redundancy or repetition, whereby the same or similar information may appear a number of times, sometimes in close proximity. Although this may prove problematic in certain types of text, technical texts in particular are less likely to suffer as a result because they are by necessity explanatory in nature and present less information in a greater number of words than other texts, for example: *Keep contents under ... – Зберігайте вміст у ... (<u>відповідну рідину вказує виробник</u>). Keep under ... – Зберігати у ... (<u>інертний газ вказується виробником</u>). In case of fire use ... – У разі пожежі використовуйте ... (<u>вкажіть точний тип протипожежного обладнання</u>)*.

Expansion is a useful strategy for improving the cohesion and coherence of the target text, when the source text contains ellipsis, which may not be entirely intelligible to a target text audience. Expansion can also prove useful where the target text audience typically has less subject or background expertise than the source text audience and requires additional explanation. But there is still a "risk of either patronizing one audience (by including instructions which the target audience may regard as obvious) or failing to respect the preferences of the other (by omitting instructions, which forces the target audience to resort to guesswork)" *(Byrne, 2014: 125)*.

Contraction refers to the practice of making something less de tailed in the target text. The aim is to adapt the target text to the perceived expectations and background knowledge of the audience, for example: *<u>This</u> material and its container must be disposed*

of as hazardous waste. – Матеріал і його контейнер необхідно утилізувати як небезпечні відходи. This material and its container must be disposed of in a safe way. – Матеріал і його контейнер необхідно утилізувати безпечним способом. Translators may also choose to employ contraction as a strategy to eliminate information which can reasonably be regarded as unnecessary, irrelevant or potentially confusing for the target text audience, for example: *Never add water to this product. – Не додавайте воду до цього продукту. Never use water. – Не використовувати воду. Spontaneously flammable in air. – Самозаймистий на повітрі.* Different languages, texts and audiences will require different levels of precision and specificity.

Generalizing is used to describe the practice of making information in the source text less detailed when it is transferred to the target text. This strategy can take the form of omitting information or replacing a specific word with a word which has a less specific meaning *(Byrne, 2014: 127)*. This may be useful where the target language does not have a similarly specialized or specific word, preferring instead to use a generic catch-all term: *Vapeurs may cause drawsiness and dizziness. – Електронні сигарети можуть викликати втому та запаморочення. May cause sensitization by inhalation. – Може викликати підвищену чутливість до алергенів при вдиханні.* It may also be necessary if we are translating a specialized text for a general audience where we might decide that a particular term in the source text will be unfamiliar to the target audience so we decide to translate it using a less specific, more generic term or hyperonym in the target text: *Toxic to flora. – Токсичний для рослин. Toxic to fauna. – Токсичний для тварин. May impair fertility. – Може знижувати репродуктивну функцію.*

Particularization, or specification, is using of more specific term to the one contained in the source text when the generic term used in the source is too broad in the target text, introduces too much uncertainty or ambiguity in the target text or has connotations associated with it which are undesirable in the target text. The translator has to understand the subject matter of the text sufficiently well to allow him to decide which of the possible specific terms available is the correct one. For example, does *aquatic organism* in phrase "Very toxic to aquatic organisms" mean *animal, plant of any species* or *hybrid?* Often we can ascertain the correct term from the context but this will not always be the case, and thus good communication with the author or client or access to a subject matter expert is vital.

Compensation is the process where we make up for the loss of certain source text features in the target text by introducing other features elsewhere in the translation which are not necessarily present in the source text. Applying this basic idea to technical texts, we can redistribute information and textual features throughout the text in order to balance out the information load or make the style more consistent. K. Hervey (1995: 65-86) describe four types of compensation:

Compensation in kind involves replacing one type of textual feature in the source text with another type of feature in the target text. This might involve replacing imperative verb forms in English to give instructions with infinitive form of verbs used in Ukrainian: *Keep locked up and out of the reach of children. – Зберігати під замком і в недоступному для дітей місці. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. – У разі потрапляння в очі негайно промити великою кількістю води та звернутися до лікаря.* If the syntax or tone of the source language indicates a level of formality which is not reflected by the same structure in the target language, we may need to add other syntactic or stylistic devices to recreate this effect: *Risk of explosion if heated under confinement. – Ризик вибуху при нагріванні в закритому просторі.*

Compensation in place is used to make up for the loss of a particular feature or effect at a particular point in the source text by recreating it elsewhere in the target text. If, for example, a technical advertisement contains an example of wordplay which cannot be rendered accordingly in the source text, it may be possible to produce a similar play on words elsewhere in the text providing it is appropriate to the overall purpose of the text. This approach is quite similar to the strategy of recycling information described above, and involves taking information which was originally found in one part of a text and using, or reusing, it somewhere else.

Compensation by splitting may be used where the source language contains a word for which there is no corresponding target language word which conveys the same range of meanings. An example might be the English word *fastener* which is used as a collective term for all manner of objects used to attach things together such as *bolts, screws, clips, clamps, snaps, plackets, morses and pins*. If we are translating into a language where a corresponding term either does not exist or is not as comprehensive we may need to spell out these meanings so as to ensure comprehensibility: *Repeated exposure may cause skin dryness or <u>creaking</u>. – Повторний вплив може спричинити сухість або <u>тріщини на шкірі</u>.*

Compensation by merging allows us to condense features or information pre- sented in the cource text over a fairly long stretch of text (or in a complex compound word) and to present it in a shorter phrase or even in a single word. Using the previous example, if the source text refers to attaching a "mounting bracket to a rack unit using bolts, screws, clips, clamps or pins" we might decide to use the generic target language term *fastener* to combine all of these meanings into the expression "the mounting bracket can be attached using suitable fasteners".

Both compensation by splitting and compensation by merging are very similar to the ideas of generalizing and particularizing translation and the reasons for using them often overlap.

Restructuring provides a rearranging of the information within sentences, paragraph or even chapters. Usually, information in a technical text is presented in a logical or chronological sequence. Such sequencing is particularly true in the case of instructional texts or texts which describe processes and procedures which need to be carried out. Often this will involve presenting information in the order in which it is required and the sequencing is fairly stable because it depends on real-world objects or processes. H. Gerzymisch-Arbogast *(1993)* identified certain patterns and characteristics relating to the sequencing of information in texts and found that certain languages favoured a particular sequencing of informal on which could be perceived as given and new relative to the author's percepfions of the readers' background knowledge. It is worth pointing out that this is quite different from the notions of theme and rheme, which relate to given and new information within a particular sentence or discourse. However, although perceptions of what does and does not constitute a logical or intuitive flow of information are largely culture-independent because they depend on our human cognitive processes, there are instances where cultural expectations and norms take priority and it will be necessary to rearrange the sequence of information in a sentence, for example: *Take off <u>immediately</u> all contaminated clothing. – <u>Негайно</u> зняти весь забруднений одяг.*

3. Conclusions

Our calculations shows that literal translation is one of the most frequently used translation strategies in technical texts. Using a corpus of 500 risk and safety phrases, we compared the use of various translation strategies in English texts and their Ukrainian translations and found

that in risk and safety phrases, literal translation occurs more frequently than other strategies such as transposition, modulation, addition or adaptation. Nevertheless, even though literal translation may proportionally see more use in technical texts, it is by no means the most important strategy, nor does it represent the main tool in a translator's toolbox. When it sounds unnatural in the target language and we reach a point where the target text no longer complies with the grammatical rules of the target language, we move to translating group-by-group or clause-by-clause. In addition to literal translation, technical translation requires a range of other translation procedures. In order to produce effective translations, a translator may need to alter the sequencing and even the proportion of given and new information within paragraphs or sections of text (using expansion and contraction, generalization and particularization, or even repetition). In practice, this may involve foregrounding certain information, omitting other information or even repeating information.

References

1. Byrne J. (2014). Scientific and technical translation explained: a nuts and bolts guide for beginners. New York: Routledge.

2. Camargo D. C. (2005). Stylistic Patterns of Translators: A Study of Similarities and Differences in Corpora of Literary, Specialized and Sworn Translations. São José do Rio Preto: Department of Modern Languages.

3. Gerzymisch-Arbogast H. (1993). Contrastive Scientific and Technical Register as a Translation Problem. Leland & Sue Ellen Wright [Eds.] (1993): Scientific and Technical Translation. New York: SUNY. Vol. VI: 21-51.

4. Harvey K. (1995). A Descriptive Framework for Compensation. The Translator. 1(1): 65-86.

5. Kiyko S.V. Pryntsypy ukladannia «Nimetsko-ukrainskoho slovnyka terminiv bezpeky zhyttiediialnosti» [The principles of compiling the "German-Ukrainian dictionary of life safety terms"]. Naukovyi visnyk Chernivetskoho natsionalnoho universytetu imeni Yuriia Fedkovycha. Hermanska filolohiia. Chernivtsi: ChNU, 2021. № 833. S. 47-53. [in Ukrainian]

6. Markel M. (2001). Ethics in technical communication: A critique and synthesis. Westport. CT : Ablex

7. Reiss K., Nord Ch., Vermeer H.J. (2013). Towards a General Theory of Translational Action: Skopos Theory Explained. London: Routledge. 240 p

8. Vinay J. P., Darbelnet J. (1995). Comparative Stylistics of French and English: A Methodology for Translation. Amsterdam/Philadelphia: John Benjamins.