

Translation Techniques of The Complex Sentences in Bilingual Textbook *Science Biology 3* for Junior High School Grade IX Published by Erlangga

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ABSTRACT

This study analyzes how the translation techniques is applied in the bilingual textbook *Science Biology* for Junior High School. The study was conducted qualitatively. Data was collected by selecting complex sentences from chapter six and seven. Then, I analyzed and categorized the translation techniques used according to the classification of Molina and Albir. The data is then calculated to determine the main translation techniques. The findings indicated that in this textbook, there are many translation techniques that contained in a complex sentences. As a result of the study 40 complex sentences were found in the sixth and seventh chapter. This textbook has nine translation techniques there were: literal translation, borrowing, adaptation, reduction, particularization, amplification, generalization, transposition and description. From 40 complex sentences it can be concluded that there are 15 complex sentences of literal translation, 4 complex sentences of borrowing, 1 complex sentence of adaptation, 2 complex sentences of reduction, 3 complex sentences of particularization, 7 complex sentences of amplification, 2 complex sentences of generalization, 1 complex sentence of transposition, 5 complex sentences of description. Literal translation is the most numerous technique in the text book. So, over all the concept of a sentence can be easily understood and the knowledge can be developed from daily experiences.

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RESEARCH BACKGROUND

In this period the role of international languages is very important especially English. As English is used to access knowledge and information there is a growing public demand for English language skills that are now easily accessible through the Internet. Indonesia which is truly a developing country in this respect does not want to miss any opportunity to advance and be active in this era. So the government has taken many steps to improve the quality of our education. One of them is the establishment of bilingual programs for many educational institutions in Indonesia. The bilingual textbook *Science Biology 3* for Junior High School Grade IX published by Erlangga provides content in English and Indonesian language. A book description contains many words sentences phrases and paragraphs that describe specific things. Furthermore, biology includes many technical terms that are relatively difficult to translate because they may not have equivalents in the target language. The translation of biological texts becomes more complicated with the advent of complex sentences. So the editor of this bilingual textbook has to use certain skills in the translation process.

Larson (1984: 3) states that “translation is basically a change of form”. In translation, the form of the source language is replaced by the form of the target language. Larson (1984:3) also defines “translation consists of transferring meaning of the

source language into the target language. This is done by moving from the first language form to the second language form through semantic structure. This means it has been transferred and should remain unchanged.

Hartono (2009:6) defines translation as the will and purpose of the author to form a message that has both the literal and semantic meaning found in the source text to be translated into the target language by the translator. This process runs in a concurrent cycle.

The basic purpose of translation is to translate different types of texts including literary religious scientific and philosophical texts into different languages. Therefore, it not only helps the general public to understand new meanings of certain sentences but also widens the reading range of the target readers.

From those quotations of translation it can be concluded that translation is an activity to find the equivalents of the source language in the target language so that the target language text contains the most logical and correct message with the source language text. It is clear from the definition of translation above that every translator must be able to accurately convey the message of the source text to the target text.

REVIEW OF RELATED LITERATURE

This review consists of related literatures which cover the definition of translation and translation techniques.

Definition of Translation

In general, translation is the process of conveying an idea or message about the meaning of text from one language to another. Accuracy of meaning ideas or messages Clarity and originality are some of the considerations in the translation process. Therefore it is important to consider whether the target audience will receive the same information as the original text readers.

Translation Techniques

Molina and Albir (2002:509) Translation techniques is defined as the process of analyzing and characterizing how translation equivalence works. Absolutely , translation techniques are not the only ones available for analyzing translated texts. A combination of thematic development and contextual dimensions intervenes in the analysis.

According to them , there are eighteen translation techniques namely adaptation, amplification, borrowing, calculating, compensation, discursive creation, common equivalence, generalization, linguistic amplification, linguistic compression, literal translation, modulation, particularization, reduction, substitution, transposition, and variation., but in this study only using nine translation techniques as follows :

1.Literal Translation

Word for word translation . This technique is used for the translation of scientific text to avoid misunderstanding . Example : She took a nap translated she took a nap

2. Borrowing

A technique of taking a word or phrase directly from the source language without any change in pronunciation or phonetics. This translation is a foreign form that transfers the source text to the target text. Example : the first man-made satelllites were Soviet, so for a time they were known in English as "sputniks".

3. Adaptation

To replace elements of the source language with elements that are accepted and recognized in the target language . Adaptation technique is also defined as an adjustment or equivalence between SL and TL. Example : to change *cricket* for baseball

4. Reduction

A technique of reducing or removing data from SL to TL. This technique is similar to removal (ommission or deletion or negation) or impersonation. Example : *the month of fasting* in opposition to *Ramadhan* when translating into Arabic. It is an opposition to amplification.

5. Amplification

A technique to provide detailed descriptions of words in target language. Example : *Ramadhan* is translated the month of fasting of muslim

6. Description

A technique for interpreting or describing the form and function of words in the source language in the target language. Example : panetton translates to a traditional Italian cake eaten at New Year's time.

7. Particularization

A technique for using more precise and specific terms. Example : *window* translates to *ventilation* (superordinate to subordinate). This technique is the opposite of the generalization technique

8. Generalization

A technique for using more general terms. Example : translate the English “window” , as *guichet* , *fenetre* , *devanture* in French.

9. Transposition

A technique that switches the grammar category between SL and TL. Example : rendering a French noun with an English verb, such as *après sa mort* 'after she died')

3. RESEARCH METHOD

A qualitative methodology was applied in this study. Qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore social or human problem, it is used to study the state of natural objects and generates descriptive data in the form of researcher-focused written text.

Translation method refers to how a certain translation process is carried out according to the translators intention. Molina and Albir (2002: 507) Each solution chosen by the translator to translate the text corresponds to a global choice that affects the entire text (the method of translation) and depends on the purpose of the translation. However, the mode of translation affects the result of translation. This means that the translation product depends on the translation method chosen by the translator in order to create a quality translation product that has good acceptance.

RESULT AND DISCUSSION

Result

The overview of translation techniques found in textbook to make information about study results more accessible to the reader that were shown in percentage in the following table :

No.	Translation Techniques	Frequency	Percentage
1.	Literal Translation	15	37,5%
2.	Borrowing	4	10%
3.	Adaptation	1	2,5%
4.	Reduction	2	5%
5.	Particularization	3	7,5%
6.	Amplification	7	17,5%
7.	Generalization	2	5%
8.	Transposition	1	2,5%
9.	Description	5	12,5%
Total		40	100%

Table above displays that there are 40 sentences of Translation Techniques in bilingual textbook Science Biology 3 for Junior High School Grade IX Published by Erlangga. There are 15 sentences of literal translation (37,5%) . Second, 4 sentences of borrowing (10%) . Third , 1 sentence of adaptation (2,5%) . Fourth ,2 sentences of reduction (5%). Fifth , 3 sentences of particularization (7,5%) . Sixth, 7 sentences of amplification (17,5%) . Seventh, 2 sentences of generalization (5%) . Eighth,1 sentence of transposition (2,5%) . Ninth , 5 sentences of description (12,5%) . The most numerous translation techniques that used in the bilingual textbook is literal translation with frequency 15 times (37,5%). It shows that literal translation contained in a sentence will be easily understood because the meaning of the translation result is the same as the original sentence.

Discussion

Literal Translation

Literal translation were the most used translation technique in Bilingual Textbook Science Biology 3 for Junior High School Grade IX Published by Erlangga. The frequency was 15 times (37,5%) . Example :

- (1) Chapter 6 ; part A Chromosomes and Genes ; page 216

ST : *Kromosom adalah benang-benang halus yang berfungsi sebagai pembawa informasi dari tetua kepada keturunannya.*

TT : Chromosomes are fine threads which function as information carriers from parents to their descendants.

- (2) Chapter 6 ; no 2 Genotype and phenotype; page 218

ST : *Fenotipe adalah sifat yang dapat diamati oleh alat indera.*

TT : Phenotype is a characteristic which can be observed by the senses.

Borrowing

Borrowing occurred for 4 times (10%).Borrowing is s technique of taking a word or phrase directly from the source language without any change in pronunciation or phonetics.

Example :

(3) Chapter 6 ; part E ; page 246

ST : *Sifat **dominan** adalah sifat yang selalu tampak atau menguasai sifat yang lain*

TT : A **dominant characteristic** is one which always appears or dominates other characteristics.

This sentence also used literal translation beside borrowing technique on the words which were typed in bold font in those sentence.

Adaptation

This kind of technique occurred for 1 times (2,5%) . This technique is to replace elements of the source language with elements that are accepted and recognized in the target language. Example :

(4) Chapter 7 ; no 5 ; page 264

ST : *Keju dibuat dari air susu yang tidak mengandung antibiotic karena antibiotic dapat menggagalkan proses pembuatan keju tersebut.*

TT : Cheese is made fro milk that does not contain any antibiotics because even a small amount of antibiotics can stop the process of producing cheese.

Reduction

Reduction is a technique of reducing or removing data from SL to TL. This technique occurred for 2 times (5%) . Example :

(5) Chapter 6 ; part E ; page 246

ST : Sifat **dominan** adalah sifat yang selalu tampak atau menguasai sifat yang lain

TT : A **dominant** characteristic is one which always appears or dominates other characteristics.

Instead of translated into the word characteristic, the word **sifat** was omitted ; therefore , the translation technique used in those sentence was reduction.

Particularization

Particularization is a technique for using more precise and specific terms. This translation technique was found in the data analysis with frequency 3 times (7,5%) . Example :

(6) Chapter 7 ; no 5 ; page 265

ST : *Lactobacillus bulgaricus dan Streptococcus thermophillus , untuk mengubah **gula susu** atau disebut laktosa menjadi asam susu (asam laktat).*

TT : Lactobacillus bulgaricus dan Streptococcus thermophillus , to alter **milk sugar** or lactose into milk acid (lactate acid).

The phrase **asam susu** was translated into the word **lactose**; so this sentences used particularization since **lactose** was the precise term for **asam susu**.

Amplification

Occurred for 7 times (17,5%). Amplification is a technique to provide detailed descriptions of words in target language, information, explicative paraphrasing. This is the opposite of reduction technique.

Example :

(7) Chapter 7 ; part C ; page 288

ST : Berdasarkan kompleksitasnya, bioteknologi dibedakan menjadi 2 macam , yaitu bioteknologi konvensional dan bioteknologi modern.

TT : According to its complexity , biotechnology is divided into two types , namely conventional or **used the simple and traditional system without machine** and modern technology.

There is an additional information in the target text about **conventional** , that is **used the simple and traditional system without machine** ; this sentence applied amplification technique. It also used literal translation and borrowing beside used amplification on the phrase was typed in bold font in those sentence.

(8) Chapter 7 ; part C ; page 288

ST : Jika sporangium sudah matang , maka annulus akan mengering dan mengerut sehingga menyebabkan sporangium pecah.

TT : If sporangium has already matured , annulus or **a row of specific cells at the side of sporangium** will dry and shrink , so that causes sporangium to brake.

There is an additional information in the target text about **annulus** , that is **a row of specific cells at the side of sporangium** ; this sentence applied amplification technique. It also used literal translation and borrowing beside used amplification on the phrase was typed in bold font in those sentence.

Generalization

This technique only occurred for 2 times (5%).It is the opposite of particularization. Example:

(9) Chapter 7 ; part F; page 280

ST : Aeroponik adalah cara **lama** dalam bercocok tanam dengan akar menggantung di udara tanpa menempel pada media apapun.

BT : Aeroponics is a old way of farming by hanging the plant root down in the air without them adhering to any media.

TT : Aeroponics is a **mature** way of farming by hanging the plant root down in the air without them adhering to any media.

The word **tua** was translated into **mature** ; not old this is a generalization technique The word **mature** here is more general than the word **old**.

Transposition

Transposition is a technique that switches the grammar category between SL and TL. Occurred for 1 time (2,5%) Example :

(10) Chapter 7 ; no 5 ; page 283

ST : Fotosintesis merupakan proses dari daun yang memiliki kemampuan untuk membuat makanan sendiri .

TT : Photosyntesis is a process from leaf which are able to produce their own food.

The phrase **yang memiliki kemampuan untuk membuat makanan sendiri** was translated into **which are able to produce their own food**. There is a change of grammatical category that is noun (*kemampuan*) was translated into adjective (able). Beside used transposition technique , this sentence is also used borrowing and reduction technique which has type in bold font.

Description

Description is a technique for interpreting or describing the form and function of words in the source language in the target language. This last technique occurred for 5 times (12,5%) . Example :

(11) Chapter 6 ; part B ; page 217

ST : *Gen , yaitu satuan kecil yang berasal dari sebuah gen.*

BT : Genes , small unit which are from chromosomes.

TT : Genes , small **tubular unit** which are from chromosomes.

The word **satuan kecil** was translated into **tubular units** ; it is used description technique since the word **tubular** is used to describe the form of the unit itself. Beside use description technique, this sentence also used borrowing technique.

CONCLUSION

The analysis from the bilingual textbook Science Biology 3 for Junior High School Grade IX Published by Erlangga showed that from 40 data , there were nine translation techniques were used to translate the materials from Indonesia (SL) to English (TL). Those were literal translation, borrowing, adaptation, reduction, particularization, amplification, generalization, transposition and description. From the data result the most numerous translation techniques that used in the bilingual textbook is literal translation with frequency 15 times (37,5%). Second, 4 sentences of borrowing (10%) . Third, 1 sentence of adaptation (2,5%) . Fourth ,2 sentences of reduction (5%). Fifth ,3 sentences of particularization (7,5%) . Sixth, 7 sentences of amplification (17,5%).Seventh, 2 sentences of generalization (5%) . Eighth,1 sentence of transposition (2,5%) . Ninth, 5 sentences of description (12,5%) . However , literal translation is the most contained in a sentence will be easily understood because the meaning of the translation result is the same as the original sentence.

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