The Mapping of Meaning Components of Phrases about Plants in Indonesian and English Translation

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Abstract-- This research aims at finding the types of procedures applied in translating Indonesian phrases about plants into English, as well as analyzing the mapping of meaning components of the phrases from the source language to the target language. The data source is a bilingual biology textbook for senior high school students. The data in this study is in the form of two-word noun phrases about plants. The data was collected using observation method, reading technique, and note-taking technique. The data was analyzed by using theories of translation procedures proposed by Vinay and Darbelnet and Natural Semantic Metalanguage. The result showed that the types of translation procedures applied were transposition and literal translation. The meaning components of the phrases of the source language are mostly transferred to the target language.

Keywords: Translation, Procedure, Mapping


Kata kunci: Penerjemahan, Prosedur, Pemetaan
1. Introduction

One important thing to be noticed in translating the source language (SL) to target language (TL) is meaning. The basic meanings or explanations of words are usually compiled in dictionaries or encyclopedias, however, sometimes meanings of words depend on particular context of situation. Beside literal meaning and meaning that is based on situation, there is special meaning as well, such as idiomatic meaning. Difficulties in knowing and understanding the meaning of a language usually appear in units of language that have special meanings because the meaning cannot be predicted literally (Setiawan 2019: 1). People should be careful in interpreting the meaning of word, especially words in foreign languages. This should be noticed especially when dealing with translation because the translation product should be acceptable to the target readers. One example of the difficulties that has to be considered by translators when translating SL text into TL is that a language can have some lexicons with very similar meanings, such as buy and purchase in English, and pintar and pandai in Indonesian (Sudipa et.al 2018: 156).

The basic principle of translation is transferring the meaning in SL to TL (Suryasa, et.al 2019: 113). Therefore, meaning becomes an important aspect in translation field. There are two main kinds of translation, namely form-based and meaning-based translation (Larson in Yanti 2017: 49). Form-based translation attempts to follow the form of the SL and is known as literal translation. Meaning-based translation makes every effort to communicate the meaning of the SL text in the natural forms of the TL. Translation enables the dissemination of information to a wider reading society because this intellectual activity links different languages by rendering the meaning from an SL text into a TL text (Umbas 2017: 97). In the translation process, the meaning must be held constant and must not be changed. The information contained in texts must be maintained, however, sometimes, the meaning components of SL and TL texts can be different because there is no equivalent for the SL in the TL which has exactly the same meaning components. The goal of translators is to keep the meaning constant (Sayani 2018: 7). Translators can merely use the closest natural equivalent of the SL.

Nowadays, many texts and books in one language are translated into other languages in order to make the information able to be delivered to people in many different countries. As an international language, most texts and books are translated into English. It is made as well bilingual books presented in English and another language depending on in which country the books are published. This is to enlarge the knowledge of the readers about English language, such as the vocabulary and sentence structures. Here, translation plays an important role not only in reaching more people who speak different languages to make them understand more about certain information (Jaya 2019: 138). In Indonesia, for example, there are several textbooks for high school presented bilingually, in English and Indonesian languages. The translators have to translate the material in the book carefully because it is used for academic purposes. Translators should use particular translation procedures to make translation result that can be accepted by the target readers. The other important thing is translators who translate important texts such as legal and academic texts should be experienced enough or professional.

Some studies have analyzed about translation and translation procedure. Aryani, et.al (2019) conducted research about problems in translating scientific terms about animals in English into Indonesian language and she found out that some data in SL and their translation products in TL are not equivalent. She claimed that revision is important in order to obtain a better result of translation and avoid misunderstanding of terms for target readers.

Susanthi, et.al. (2019) analyzes phenomena found in translating medical abbreviations and found out that SL abbreviations can be still in the
form of the same abbreviations in TL or in the different form, such as phrases.

Jayantini (2018) analyzed translation procedure, especially naturalization (a procedure proposed by Molina and Albir) and adaptation in the translation of English medical texts into Indonesian. She found that these two procedures were applied in translating medical texts.

Sunny (2017) analyzed the translation of English slang words in a novel into Indonesian. She stated that some people use slang words in daily communication for certain purposes and eventually replaces the use of standard language. Therefore it is difficult to translate slang words. She described that certain approaches are needed to analyze slang words in the translation process.

Those previous studies found out that translating both academic and non-academic texts is not easy and needs procedures to get results that can be accepted by the target readers. In relation to those studies, this study analyzes translation procedures applied by the translator in translating noun phrases about plants from Indonesian into English and the meaning components of SL and TL terms to see how the meaning is transferred from SL to TL.

In this study, the data source is a bilingual biology textbook for senior high school entitled *Theory and Application of Biology* and the data is two-word noun phrases about plants in the first and second chapters of the book. The translation procedures applied in translating the phrases from Indonesian language to English are analyzed by using the theory of translation procedures proposed by Vinay and Darbelnet (in Erfiani 2018: 37-39) which consists of seven procedures, they are borrowing, calque, literal translation, transposition, modulation, equivalence, and adaptation. Here is the explanation:

1. Borrowing
   This procedure is considered as the simplest of all procedures to solve discrepancy, usually something which is metalinguistic (for example: a new technical process, unknown concept).

Translators adopted this procedure to introduce the flavor of SL in translation. In other words, in translating SL terms into TL, foreign terms may be used. This usually happens without changing either the form or the meaning. Salum (2019: 131) stated that borrowing refers to the case where a word or an expression is taken from the SL and used in the TL but in naturalized form, for example the English verb ‘mail’ becomes *mailer* in Canadian-French utterance. The French suffix “er” is added to English verb ‘mail’ to conform to the French rules of verb formation (Harding & Riley in Salum 2019: 130).

According to Haugen (in Herman 2019: 8), there are some possibilities that may occur in borrowing procedure. The first one is borrowing with no change in form and meaning (pure loanwords). The second one is borrowing with changes in form but without changing the meaning (mix loan). The third one is borrowing when part of them is native and the other part is borrowed, but the meaning is fully borrowed (loan blends). Examples:

a. Borrowing with no change in form and meaning (pure loanwords)

<table>
<thead>
<tr>
<th>SL</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarket</td>
<td>Supermarket</td>
</tr>
<tr>
<td>Charger</td>
<td>Charger</td>
</tr>
<tr>
<td>Radio</td>
<td>Radio</td>
</tr>
</tbody>
</table>

b. Borrowing with a change in form but without changing the meaning (mix loanwords)

<table>
<thead>
<tr>
<th>SL</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation</td>
<td>Inflasi</td>
</tr>
<tr>
<td>Business</td>
<td>Bisnis</td>
</tr>
</tbody>
</table>

c. Loan blend (borrowing when part of the term is native and the other part is borrowed)

<table>
<thead>
<tr>
<th>SL</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>National debt</td>
<td>Hutang nasional</td>
</tr>
</tbody>
</table>
2. Calque
   This procedure is a special kind of borrowing; a language borrows an expression from another language and then translates each of its elements literally. In other words, calque refers to the case where the translator imitates in his translation the structure of expression of the ST (Salum 2019: 131). According to Herman (2019: 8), one example of calque application is when phrase borrowed from another language and translated literally word for word. Calque is categorized into two types: lexical calque and structural calque. Lexical calque (first example) values syntactic structure of TL while introducing a new expression mode. Structural calque (second example) introduces new construction into TL. Example:
   
   SL
   Crisis management

   TL
   Manajemen krisis

   Bali Post
   Bali Post

3. Literal (word-for-word) translation
   This procedure works by translating directly SL text grammatically or idiomatically in accordance with TL text. By applying this procedure, the translator focuses predominantly on adhering to the linguistic rules of the TL (Salum 2019: 131) Example:
   
   SL
   All the mice

   TL
   Semua tikus

4. Transposition
   This is a translation process that replaces one word class with another without changing the meaning. It deals with grammatical changes in translation (Salum 2019: 131). Transposition is also a change in the grammar from SL to TL (singular to plural; the position of adjective; etc.) (Herman 2019: 9). There are two kinds of transposition: obligatory and optional transposition. Obligatory transposition is applied when TL has no options because of the different language systems. Example:
   
   SL
   Tall grass

   TL
   Rerumputan yang tinggi

Optional transposition is chosen by translator for the sake of language style and if it fits better into the utterance. Examples:
   
   SL
   Medical student

   TL
   Mahasiswa kedokteran

   Password
   Kata sandi

5. Modulation
   This is a translation process characterized by the variation of message form. The variation happens because of different point of view. As the same with transposition, modulation is divided into two: optional or free and obligatory or fixed. Optional/ free modulation is generally adopted because of nonlinguistic reasons (Herman 2019: 9). This modulation is usually applied in order to stress the meaning or to find out the natural form in the TL. Examples:
   
   SL
   Black and blue

   TL
   Lebam

   He was killed in the war
   Dia gugur dalam perang

Obligatory/ fixed modulation is applied if SL words, phrases, or structures cannot be found in TL. When an active sentence is translated into passive, it is an example of this type of modulation. Example:
   
   SL
   I grew up in Jakarta

   TL
   Saya dibesarkan di Jakarta
6. Equivalence

This procedure is applied when there are two texts with the same context of situation but totally different method, style, and structure. This procedure is the ideal method when the translator has to deal with proverbs, idioms, the onomatopoeia of animal sounds, etc (Salum 2019: 131). This procedure means that the process of translating SL into TL that emphasizes on closest natural meaning (Herman 2019: 9).

Examples:

SL TL
Cock-a-doodle-do Kukuruyuk
Bookworm Kutu buku

7. Adaptation

This procedure is adopted if the message of SL texts is unknown in TL culture. Salum (2019: 132) stated as well that adaptation refers to the changing of the cultural reference when a situation in the source culture does not exist in the target culture. In this case, translators have to create a new situation that can be considered equivalent.

Example:

SL TL
Your Sincerely Dengan Hormat
Your Majesty Yang Mulia

In this research, it is also analyzed as well how the meanings of each phrase in the SL are mapped to the TL by using the theory of Natural Semantic Metalanguage (NSM) approach proposed by Goddard and Wierzbicka (2014). The formal mode of meaning representation in the NSM approach is the semantic explication. The meanings of each phrase can be mapped by making explication using a list of words called semantic primes. It can be seen the similarity and the difference of meaning components between the phrases in the SL and TL. List of words belonging to semantic primes is as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Primes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantives</td>
<td>I-ME, YOU, SOMEONE, SOMETHING-THING, PEOPLE, BODY</td>
</tr>
<tr>
<td>Relational substantives</td>
<td>KIND, PARTS</td>
</tr>
<tr>
<td>Determiners</td>
<td>THIS, THE SAME, OTHER-ELSE ONE, TWO, SOME, ALL, MUCH-MANY, LITTLE-FEW</td>
</tr>
<tr>
<td>Quantifiers</td>
<td>GOOD, BAD</td>
</tr>
<tr>
<td>Descriptors</td>
<td>BIG, SMALL</td>
</tr>
<tr>
<td>Mental predicates</td>
<td>THINK, KNOW, WANT, DON'T WANT, FEEL, SEE, HEAR</td>
</tr>
<tr>
<td>Speech</td>
<td>SAY, WORDS, TRUE</td>
</tr>
<tr>
<td>Actions, Events, Movement</td>
<td>DO, HAPPEN, MOVE, TOUCH BE (SOMEWHERE), THERE IS, BE (SOMEONE)’S, BE (SOMEONE/SOMETHING)</td>
</tr>
<tr>
<td>Existence, Possession</td>
<td>LIFE, DIE</td>
</tr>
<tr>
<td>Time</td>
<td>WHEN-TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT</td>
</tr>
<tr>
<td>Space</td>
<td>WHERE-PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE NOT, MAYBE, CAN, BECAUSE, IF</td>
</tr>
<tr>
<td>Logical concepts</td>
<td></td>
</tr>
<tr>
<td>Intensifier, augmentor</td>
<td>VERY, MORE</td>
</tr>
<tr>
<td>Similarity</td>
<td>LIKE-AS-WAY</td>
</tr>
</tbody>
</table>
2. Research Method

The source of data in this study is a bilingual biology textbook entitled *Theory and Application of Biology* and published in Indonesia. This book is chosen as a data source because this book is made for academic purposes and the contents are promising for this study. Biology is an important science about living organisms. There should be good consideration and intellectual thinking in translating such academic materials. The data is in the form of two-word noun phrases about plants. The data is taken from the first and second chapters of the book.

Documentation method, reading technique, and note-taking technique were applied in collecting the data. The data was collected through some steps: preparing all the equipment needed to collect the data such as pen or pencil, papers, highlighter, and laptop, reading the data source, and marking and typing the data. The data was typed by using a laptop in the form of tables.

In this study, qualitative method and paraphrasing technique were applied in analyzing the data. The classified data was analyzed based on the theory of translation procedures proposed by Vinay and Darbelnet and the theory of NSM proposed by Wierzbicka and Goddard.

3. Findings and Discussion

In this part, it is presented the result and discussion of the analysis of types of translation procedures applied in translating phrases about plants as well as the mapping of meaning components of the phrases from the SL into the TL. The English data was presented in bold type, meanwhile the Indonesian data was presented in bold and italic type.

<table>
<thead>
<tr>
<th>SL</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amatilah lima tanaman mawar (Rosa sp.) berjenis sama yang ada di daerah pegunungan.</td>
<td>Observe five <em>roses</em> (Rosa sp.) of the same kinds in a mountain range.</td>
</tr>
</tbody>
</table>

Based on data (5-1), *tanaman mawar* is translated into *roses*. The translation procedure applied here is transposition because there is a replacement of one word class with another without changing the meaning of the message (Vinay and Darbelnet in Erfiani 2018: 38). *Tanaman mawar* is a phrase and it becomes a word *mawar* in TL. However, *roses* literally are not obviously referred to the plants. It can be only the flowers. Perhaps the translator should translate the word plant as well, so it is clear that the meaning refers to the whole plant and not just the flower.

*Tanaman mawar* can be meant as shrub plants covering many species, growing upright or climbing, having spiny stems as well as colorful and fragrant flowers. *Roses* can be defined as a bush of thorns that produce flowers with sweet smell.

The explication of *tanaman mawar* “roses”

This is one kind of thing (plant)
This thing lives inside something (soil)
This thing is not very small
This thing can be big
There are bad parts of this thing (stems with thorns)
If people touch the parts, something can happen (getting hurt)
Because of this, people do not want to touch the parts
There are good parts of this thing (colorful, fragrant flowers)
Because of this, people want to see and touch the parts
People can see and touch this thing

The explication of *roses* “tanaman mawar”

This can be one kind of thing (plant)
This can be one part of thing (flower)
This thing can be inside something (soil or other places)
This thing is not very small
This thing can be big
There can be bad parts of this thing (stems with thorns)

If people touch the parts, something can happen (getting hurt)

Because of this, people do not want to touch the parts
There can be good parts of this thing (colourful, fragrant flowers)

Because of this, people want to see and touch the parts
People can see and touch this thing

Based on the explication of data (5-1), both tanaman mawar and roses are living things. Both of them are visible and touchable because their sizes are not very small. They have stems with thorns, so people avoid touching this part. They have fragrant and colorful flower, that is why people want to see and touch this part. The meaning components of the phrase of SL are mostly mapped into TL. However, there is a little difference in the meaning components. Tanaman mawar has to be referred to as rose plant, meanwhile roses is ambiguous because it can be referred to as either rose plant or merely the flower. The translator should translate tanaman as well into English, so it becomes rose plant. Therefore, the meaning will be clearer and misunderstanding can be avoided.

Based on data (5-2), biji bulat is translated into round seed. The translation procedure applied here is transposition because there is a grammatical change in SL text when it is translated into TL. The position of head and modifier of the phrase is changed in the translation process. The grammatical structure is different but the meaning is maintained.

Biji bulat means a round-shaped content of a fruit that can grow to be a new plant when it is planted in appropriate medium and condition. Round seed means small hard part of a plant from which a new plant can grow.

The explication of biji bulat “round seed”
This is one part of something (plant)
This part is inside other part of something (fruit)
This part can be small
This part can be big
This part can do something (become a new plant)

This part can do this if this part is in one good place (suitable place)
People can see and touch this part if something happens (it is not very small)

The explication of round seed “biji bulat”
This is one part of something (plant)
This part is inside other part of something (fruit)
This part can be small
This part can be big
This part can do something (become a new plant)

This part can do this if this part is in one good place (suitable place)
People can see and touch this part if something happens (it is not very small)

Based on the explication of data (5-2), the meaning components of biji bulat and round seed are the same. The meaning components of the phrase of SL are totally transferred to TL.

<table>
<thead>
<tr>
<th>(5-2)</th>
<th>SL</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilih kacang hijau yang memiliki penampilan baik, biji bulat, dan kulit halus. (p18)</td>
<td>Choose green bean with good appearance, round seed and fine peel. (p18)</td>
<td></td>
</tr>
</tbody>
</table>
SL | TL
---|---
Pilih kacang hijau yang memiliki penampilan baik, biji bulat, dan kulit halus. (p18) | Choose green bean with good appearance, round seed and fine peel. (p18)

Based on data (5-3), kulit halus is translated into fine peel. Transposition is applied in translating the phrases because there is a grammatical change in the position of head and modifier of SL phrase when it is translated into TL. It has to be adjusted with the TL linguistic system. Although the position of the head (noun) and modifier (adjective) of SL and TL phrases are different, the meaning is maintained and not changed.

Kulit halus can be meant as soft seed wrapper, meanwhile fine peel means delicate skin of fruit.

The explication of kulit halus “fine peel”
This is one part of something (fruit)
This part is near something (plant seed)
This part is not very small
This part is good (delicate)
This part can do something (protecting plant seed)
People can see and touch this part

The explication of fine peel “kulit halus”
This is one part of something (fruit)
This part is near something (plant seed)
This part is not very small
This part is good (delicate)
This part can do something (protecting plant seed)
People can see and touch this part

Based on the explication of data (5-3), it is shown that the meaning components in SL text are fully transferred to TL. There is no difference in their meanings.

SL | TL
---|---
Dalam pengamatan bunga mawar (Rosa sp.), dilakukan pengukuran diameter dan panjang mahkota. , … (p24) In observing rose (Rosa sp.), a diameter and corolla’s length measurement is performed … (p24)

Based on data (5-4), noun phrase bunga mawar is translated into rose. Transposition is applied in translating SL phrases to TL because there is a grammatical change in the TL. SL phrase is translated into merely one word. The grammatical category between SL and TL is different, but the meaning is maintained and not changed.

Bunga mawar can be meant as a beautiful, colorful, and fragrant part of a thorny bush that grows upright or climbs. Rose means bush with thorns producing a flower with a sweet smell.

The explication of bunga mawar “rose”
This is one part (flower) of something (rose plant)
The thing is inside something (soil)
This part is not very small
This part is good (fragrant and colourful)
Because of this, people want to see and touch this part
People can see and touch this part

The explication of rose “bunga mawar”
This can be something (plant)
This can be one part of something (flower)
The thing can be inside something (soil)
This thing is not very small
This thing can be big
There can be parts of this thing (stems with thorns)
If people touch the parts, something can happen (getting hurt)
Because of this, people do not want to touch the parts
There can be other parts of this thing (flowers)
The parts are good (colourful and fragrant)
Because of this, people want to see and touch the parts
People can see and touch this thing

Based on the explication of data (5-4), it can be seen that rose has some meaning components that bunga mawar does not have. It is because rose are more general and bunga mawar is more specific. Rose can be referred to as a kind of flower or the plant of that flower, meanwhile bunga mawar merely refers to the flower. Based on this case, the translator should be careful in translating texts from general into more specific words. In order to avoid misunderstanding, the translator should translate the word flower as well, so it becomes rose flower. There should be supporting information that can describe whether the word rose refers to merely the flower or the flower and the plant as well.

(5-5)
<table>
<thead>
<tr>
<th>SL</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dalam pengamatan bunga mawar (Rosa sp.), dilakukan pengukuran diameter dan panjang mahkota.</td>
<td>In observing rose (Rosa sp.), a diameter and corolla’s length measurement is performed … (p24)</td>
</tr>
</tbody>
</table>

Based on data (5-5), panjang mahkota is translated into petal’s length. The procedure of translation applied is transposition because there is a grammatical change in the translation process. The position of the head and modifier of SL phrase is head + modifier (panjang + mahkota) but the phrase structure of its translation in TL is modifier + head (corolla’s + length). Translator changes the structure so that the translation can be accepted by target readers. Although the structure is changed, the meaning of SL is maintained.

Panjang mahkota means the length (longitudinal distance from one end to another end) of the beautiful and colorful part of a flower. Petal’s length can be meant as the size or measurement of the ring of flower petal from one end to the other.

The explication of panjang mahkota “petal’s length”
This is something (length/ longitudinal distance from one end to another end)
This thing is one part of something (flower’s petal/flower)
This part can be small
This part can be big
People cannot see and touch this part
People can do something to this part (measuring the length)

The explication of petal’s length “panjang mahkota”
This is something (length/ measurement from one end to another end)
This thing is one part of something (flower’s petal/flower)
This part can be small
This part can be big
People cannot see and touch this part
People can do something to this part (measuring the length)

Based on the explication of data (5-5), the meaning components of panjang mahkota and petal’s length are the same. It can be seen that there is one difference between the meaning components of SL and TL phrases. In SL phrase,
panjang means longitudinal distance, meanwhile in TL phrase, length means size or measurement. Longitudinal distance can be measured, so that longitudinal distance and size/ measurement refer to something that can be measured. The meaning components are fully transferred from SL to TL.

Based on data (5-6), phrase **buah jeruk** is translated into **oranges**. Transposition is applied in translating this phrase because there is a change in the grammatical category. Phrase **buah jeruk** becomes a single word **oranges** in TL.

**Buah jeruk** means a kind of fruit of Citrus plant consisting of several sections inside and the taste can be sour and sweet. **Oranges** can be meant as a round citrus fruit with thick reddish-yellow skin and a lot of sweet juice.

The explication of **buah jeruk** “oranges”

<table>
<thead>
<tr>
<th>SL</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Namun, Anda juga dapat melihat bahwa dalam satu kotak yang berisi <strong>buah jeruk</strong>, antara jeruk yang satu dengan yang lain memiliki kemiripan. (p27)</td>
<td>However, you can see also in a box of <strong>oranges</strong>, there are similarities among them. (p27)</td>
</tr>
</tbody>
</table>

Based on data (5-6), there are differences between the meaning components of SL and TL phrases. **Buah jeruk** are fruits of citrus plant living in soil. The size can be small or big. **Buah jeruk** has sweet and sour content, visible, touchable, and edible. **Oranges** can be meant as the same as **buah jeruk** but it can be meant as a colour as well. **Buah jeruk** and **oranges** can be equivalent to each other or not depending on the context.

The explication of **oranges** “buah jeruk”

<table>
<thead>
<tr>
<th>SL</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the cell membrane is composed of cellulose, it is grouped into <strong>plant cell</strong>. (p31)</td>
<td>Jika sel membrane tersusun atas selulosa maka makhluk hidup tersebut dikelompokkan dalam <strong>sel tumbuhan</strong>. (p31)</td>
</tr>
</tbody>
</table>

Based on data (5-7), **sel tumbuhan** is translated into **plant cell**. The translation procedure applied here is transposition because there is a
grammatical change in the translation process. The position of the head and the modifier of SL phrase is changed when it is translated into TL. For SL phrase, \( \text{sel} \) is the head of the phrase and \( \text{tumbuhan} \) is the modifier. For TL phrase, plant is the modifier and cell is the head.

\textit{Sel tumbuhan} can be meant as the smallest and basic unit of life of organisms in Kingdom Plantae. \textit{Cell plant} has the same meaning.

The explication of \textit{sel tumbuhan} “plant cell”

This is one part of something (plant)
This part is inside something (plant)
This part is very small
People cannot see and touch this part
  Because of this, people do something (using microscope/ special equipment)
  After people do something, people can see and touch this part

The explication of \textit{plant cell} “sel tumbuhan”

This is one part of something (plant)
This part is inside something (plant)
This thing is very small
People cannot see and touch this part
  Because of this, people do something (using microscope/ special equipment)
  After people do something, people can see and touch this part

Based on the explication, \textit{sel tumbuhan} and \textit{plant cell} have the same meaning components. The meaning components are totally transferred from SL to TL.

\begin{align*}
\text{SL} & \quad \text{TL} \\
\text{Tumbuhan} \quad \text{tidak} \quad \text{Plant without} & \quad \text{bunga perfect flower,} \\
\text{mempunyai} & \quad \text{sejati} \quad \text{tumbuhan} \quad \text{plant with spore} \\
& \quad \text{berspora (Golongan (Group I = Ferns)}
\end{align*}

Based on data (5-8), \textit{bunga sejati} is translated into \textit{perfect flower}. Transposition is applied in translating the SL phrase into TL phrase because there is a grammatical change in the translation process. The structure of SL phrase is head + modifier (bunga + sejati), meanwhile the structure of TL phrase is modifier + head (perfect + flower).

\textit{Bunga sejati} means a type of flower that has two genital organs (male and female organs) in one flower/ individual. \textit{Perfect flower} is a flower in which both male and female reproductive structures are present.

The explication of \textit{bunga sejati} “perfect flower”

This is one part of something (plant)
This thing is inside some places (soil/ other places)
This part can be small
This part can be big
There are two parts of this part (male and female reproductive structures)
  Because of this, this part can do something (producing fruits and seeds without any involvements of other flowers/ organisms)
  People can see and touch this part if something happens (the size is not too small)

The explication of \textit{perfect flower} “bunga sejati”

This is one part of something (plant)
This thing is inside some places (soil/ other places)
This part can be small
This part can be big
There are two parts of this part (male and female reproductive structures)
  Because of this, this part can do something (producing fruits and seeds without any involvements of other flowers/ organisms)
People can see and touch this part if something happens (the size is not too small)

It can be seen from the explication of data (5-8) that the meaning components of SL phrase are totally transferred to the TL phrase. SL and TL phrases are naturally equivalent to each other.

\[
\begin{array}{|c|c|}
\hline
\text{SL} & \text{TL} \\
\hline
\text{Tumbuhan tidak mempunyai bunga sejati, \textit{tumbuhan berspora}} & \text{Plant without perfect flower, \textit{plant with spore}} \\
\text{Golongan I = Paku-pakuan} & \text{(Group I = Ferns)} \\
\text{(p34)} & \\
\hline
\end{array}
\]

Data (5-9) shows that phrase \textit{tumbuhan berspora} is translated literally into \textit{plant with spore}. Therefore, the translation procedure applied is literal translation. SL texts are translated literally word by word into TL.

\textit{Tumbuhan berspora} literally means plants that have spore. The meaning is the same as its translation \textit{(plant with spore)}. Spores are a kind of plant reproductive medium that is very small and light in weight. If spores are carried out by the water, wind, or other organisms and fall down in a suitable place, they can grow into new organisms.

The explication of \textit{tumbuhan berspora} “plant with spore”

This is something (plant)
This thing lives inside something (soil)
This thing can be small
This thing can be big
This thing is not very small
There are parts of this thing (spores)
Because of the parts, this thing can do something (reproduce new individual)
People can see and touch this thing

Based on data (5-9), the meaning components of SL phrase \textit{tumbuhan berspora} is totally transferred to TL. \textit{Tumbuhan berspora} and \textit{plant with spore} are naturally equivalent to each other.

\[
\begin{array}{|c|c|}
\hline
\text{SL} & \text{TL} \\
\hline
\text{Terdapat alat pembelit, kebanyakan tumbuhan memanjat} & \text{There is cirrus, most are climbing plants} \\
\text{Golongan 2 = Tumbuhan dengan alat pembelit} & \text{(Group 2 = plant with cirrus/tendrils)} \\
\text{(p34)} & \\
\hline
\end{array}
\]

Based on data (5-10), it can be seen that a phrase \textit{alat pembelit} is translated into single word \textit{cirrus}. The translation procedure applied is transposition because there is a change in grammatical category (from a phrase to a word).

\textit{Alat pembelit} in terms of plant means parts of a plant that is usually in spiral-like form and can wrap around things that are touched. The purpose of this part is to support the plant by getting handles to be wrapped around, so that the plant will be strong enough to maintain its position and grow upwards. \textit{Cirrus} basically has the same meaning
with transposition. The difference is that *alat pembelit* is more general than *cirrus*. *Alat pembelit* does not merely refer to plants but it can also refer to general tools that are used by wrapping them around particular things. *Cirrus*, unlike *alat pembelit*, specifically refers to a part of plant.

The explication of *alat pembelit* “cirrus”

This is one part of something (plant or other things)
This part can live (part of an organism)
This part cannot live (nonliving thing)
This part can be small
This part can be big
This part can do something (wrapping around other things by itself)
   This part does this because of something (the plant needs support to maintain its position)
People can use this part (wrapping this part to something)
People do this because of something (certain purposes)
People can see and touch this part

The explication of *cirrus* “alat pembelit”

This is one part of something (plant)
This part can be small
This part can be big
This part can do something (wrapping around other things by itself)
   This part does this because of something (the plant needs support to maintain its position)
People can see and touch this part

Based on the explication of data (5-10), it is shown that *alat pembelit* has more meaning components than *cirrus*. *Alat pembelit* is basically more general than *cirrus*, so that this thing does not merely belong to plants but it can be the other things with similar functions (wrapping around other things for certain purposes). *Cirrus* is a specific term for certain parts of plants. The translator translates the phrase *alat pembelit* into *cirrus* to make the meaning clearer for the readers that it is a specific part of plants and not the others.

<table>
<thead>
<tr>
<th>(5-11)</th>
<th>SL</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terdapat alat pembelit, kebanyakan tumbuhan memanjat (Golongan 2 = plant dengan alat pembelit) (p34)</td>
<td>There is cirrus, most are climbing plants (Group 2 = plant with cirrus/tendrils) (p34)</td>
<td></td>
</tr>
</tbody>
</table>

Based on data (5-10), SL phrase *tumbuhan memanjat* is translated into *climbing plants*. The translation procedure applied is transposition because there is a grammatical change of the phrase structure. The structure of SL phrase is head + modifier (*tumbuhan + memanjat*) meanwhile the structure of TL phrase is modifier + head (*climbing + plants*). Translator has to change the structure so that the translation result can be accepted by target readers.

*Tumbuhan memanjat* means a kind of plants that needs stronger structures (such as trees) as climbing medium to help them getting sun light. This kind of plants attach to supporting medium because their stems are not strong enough to stand by its own. Therefore, this kind of plant usually has supporting organs to help them climbing, such as cirrus/ tendrils. *Climbing plant* means a kind of plants that attach themselves to something as it grows up it.

The explication of *tumbuhan memanjat* “climbing plants”
This is something (plant)
This thing lives inside something (soil)
This thing can be small
This thing can be big
This thing cannot do something (growing up by its own)
   Because of this, this thing does something (getting attached to stronger mediums)
   This thing can do something because of one part of this thing (parts that attach to the medium)
People can see and touch this thing

The explication of *climbing plants* “*tumbuhan memanjat*”

This is something (plant)
This thing lives inside something (soil)
This thing can be small
This thing can be big
This thing cannot do something (growing up by its own)
   Because of this, this thing does something (getting attached to stronger mediums)
   This thing can do something because of one part of this thing (parts that attach to the medium)
People can see and touch this thing

Based on the explication of data (5-11) it can be seen that the meaning components of the SL phrase are totally transferred to TL. *Tumbuhan memanjat* and *climbing plants* are naturally equivalent to each other.

4. Conclusion

Based on the analysis, the types of translation procedures applied in translating noun phrases of plants are transposition and literal translation. Related to the mapping of meaning components, the meaning components of the SL phrases are mostly mapped to the TL.
References:


Goddard, Cliff and Wierzbicka, Anna. 2014. Words and Meanings; Lexical Semantics across Domains, Languages, & Cultures. United Kingdom: Oxford University Press


