CHAPTER III

THE DESCRIPTION OF THE TOPIC

3.1 Combining Form in Medical Translation

Medical is one of the fields that has many kinds of terminology adopted from Latin. These medical terms often appear in many forms. It usually appears in combining form. Combining form is lexemes which combine and form as a new word. Combining form is also known as Neoclassical formations. Neoclassical formations as forms in which lexemes of Latin or Greek origin are combined to form new combinations that are not attested in the original languages (hence the term Neoclassical). (Plag 2002:210). However, it also provokes the question whether the form is the construction of affixation or combining form, considering they may be both composed of the prefix and suffix. In his book, Ingo Plag (2002: 200) explains that the difference between affixes and combining forms now is that neither affixes nor bound roots can combine with each other to form a new word.

According to the previous statement, it can be concluded that constructions formed through affixation or those through combining form are different. The difference may be identified by its constituents. Combining form, especially, is constructed by root and bound root. By applying Ingo Plag theory, the origin of the word formation can be determined. As a result, the meaning may be understood easily. Furthermore, this case will be discussed deliberately in the report.

3.2 Data Analysis

Before starting analyzing the combining form that is found in my translation worksheet about medical, some of the medical terms suspected as combining form are listed. Here is the list:

1. Endochondral
2. Endocranial
3. Morphogenesis
4. Sphenoid
5. Craniofacial
6. Osteogeneous
7. Epiphyses

The list above is just some of the medical terms I found in medical handout. I suspected them as combining form because most of them are constructed by the bound roots. For more specific analysis, it will be discussed in the next section below. The medical terms that appear above, will be analyzed based on combining form theory developed by Ingo Plag.

Data I: ***Endochondral***

According to the word, it may be assumed that *Endochondral* is formed by bound End- and lexeme Chondral. Bound root End- defines as ‘within’ Chondral defines as pertaining to cartilage. Dictionary defines *Endochondral* as relating to, formed by, or being ossification that takes place from centers arising in cartilage

and involves deposition of lime salts in the cartilage matrix followed by secondary absorption and replacement by true bony tissue—compare.

In the performance, bound root end- and lexeme Chondral blends to become Endochondral not Endchondral. It can be seen the appearance of medial –o-. Based on the theory of Plag, The final position of combining form Endochondral is not already a vowel, therefore this word takes –o- in the forming process of combining form. So, the form process can be seen in the following:

End- + Chondral → End[o]chondral → **Endochondral**

Data 2: ***Endocranial***

Based on the dictionary, *Endocranial* means within the cranium or relating to the endocranium. It can be examined that *Endocranial* is constructed by bound root End- and lexeme Cranial. Endocranial takes –o- in the construction because it does not have a vowel in the final position of the combining form. See the process below:

End- + Cranial → End[o]cranial → Endocranial

Data 3: ***Morphogenesis***

It may assume that *Morphogenesis* can be divided into bound root Morph- means form, shape or structure, and lexeme Genesis. The combination of this

bound root and lexeme become *Morphogenesis* not Morphgenesis. It takes –o- between it, because the final position of combining form has no vowel. So the construction of the combining form will be:

Morph- + Genesis → Morph[o]genesis → Morphogenesis

Dictionary defines Morphogenesis as the biological process that causes an organism to develop its shape.

Data 4: ***Sphenoid***

Sphenoid based on the dictionary means relating to, or being a winged compound bone of the base of the cranium. It is formed by bound root Sphene- and –id. They combine together as a new form of word *sphenoid.* In this data, the form takes –o- because the final position of the combining form is not a vowel. Maybe it appearing the confusion because it can be seen literally the final position of the combing form is a vowel. However phonologically, bound root Sphene- is spell [sphen], therefore the form become *sphenoid* not *sphenoid.* It can be seen the process of combining form below:

Sphene- + -id → Sphen[o]id → **Sphenoid**

Data 5: ***Craniofacial***

Dictionary defines *Craniofacial* as something involves both the cranium and the face. *Craniofacial* is divided into bound root cranio- and word/lexeme facial. It is still used the theory that if the final position of the combining form has a vowel, it may not take –o-. However if it does not have the vowel in the final position of combining form, it may take –o-. In this data, the bound root has vowel in the final position. Therefore, in the forming of this word, the process is:

Cranio- + facial → **Craniofacial**

Data 6: ***Osteogenous***

Based on the dictionary, *Osteogeneous* or *Osteogenesis* is any of several types of collagen disorders, of variable inheritance, due to defective biosynthesis of type I collagen and characterized by brittle, osteoporotic, easily fractured bones; other defects are blue sclerae, wormian bones, and dentinogenesis imperfecta. It is formed by bound root Osteo- and lexeme generous/genesis. It does not take –o- because it has a vowel in the final position of combining form. The process of combining form is in the following:

Osteo- + Geneous → **Osteogeneous**

Data 7 : ***Epiphyses***

In medical terms, *Epiphyses* means the rounded end of a long bone, at its joint with adjacent bone(s). It is divided with bound root Epi- and lexeme physes. The final position of Epi- is a vowel. Therefore it does not take –o- when it forms into the word. It is a bit different from the previous data. This data shows the appearance of –o- in the word. The process of the combining form is in the following:

Epi- + physes → **Epiphyses**

3.3 The Discussion

Based on the analysis above, it can be seen that there is a distinction between the data that I have already served to you. In data 1 and data 2, the form changed. For example in data 1, the terms Endochondral which is formed by bound root End- and lexeme chondral becomes Endochondral not Endchondral. It takes –o- between the bound root and lexeme. It also happens in data 2. Bound root Sphen- and –id is formed Sphenoid not Sphenid. In data 2, the form takes –o- therefore it becomes sphenoid because even the bound root is Sphene-, phonologically, the following sound is a consonant (Sphen-, -id). However it does not happen in data 7. Data 7 shows that the word does not take –o- because the final position of the combining form has a vowel.

According to Plag, the status of *-o-* is not the same in all neoclassical formations, but should be decided on for each combining form separately on the basis of distributional evidence. (Plag 2002: 215). After all, in determining combining form, we are not only examining the bound roots that construct it but we also examine it phonologically.

3.4 Table of Form

In order to make my explanation more clear, I make the table of form about the division of medical terms including the construction of the form and the definition based on the dictionary.

Terms	**Bound root**	**Lexeme**	**Meaning**
Endochondral	End-	Chondral	relating to, formed by, or being ossification that takes place from centers arising in cartilage and involves deposition of lime salts in the cartilage matrix followed by secondary absorption and replacement by true

			bony tissue—compare
Endocranial	End-	Cranial	1. Within the cranium. 2. Of or relating to the endocranium.
Morphogenesis	Morph-	Genesis	The biological process that causes an organism to develop its shape
Sphenoid	Sphen-	-id	of, relating to, or being a winged compound bone of the base of the cranium
Craniofacial	Cranio-	Facial	involving both the cranium and the face.
Osteogeneous	Osteo-	geneous	any of several types of collagen disorders, of variable inheritance, due to defective

			biosynthesis of type I collagen and characterized by brittle, osteoporotic, easily fractured bones; other defects are blue sclerae, wormian bones, and dentinogenesis imperfect
Epiphyses	Epi-	-physes	the rounded end of a long bone, at its joint with adjacent bone(s