

**WORD FORMATION PROCESS FOUND IN THE NEW TERMS IN ADOBE
PHOTOSHOP CS4 PROGRAM**

THESIS

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**ENGLISH LETTERS AND LANGUAGE DEPARTMENT
FACULTY OF HUMANITIES
THE STATE ISLAMIC UNIVERSITY
MAULANA MALIK IBRAHIM OF MALANG
2015**

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PHOTOSHOP CS4 PROGRAM**

THESIS

Presented to
The State Islamic University Maulana Malik Ibrahim of Malang
in partial fulfillment of the requirement for the degree of *Sarjana Sastra (S.S.)*

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APPROVAL SHEET

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STATEMENT OF AUTHORSHIP

This is to state that this thesis is truly my original work. I do not incorporate any materials previously written or published by another person, except those one who is indicated in the quotation and bibliography. Due to this fact, I am the only responsible for the thesis if there is any objection or claim from others.

Malang, February , 2015

Ahmad Takhfif

MOTTO

Open your eyes, Edit your life, Save as successful
- Ahmad Takhfif -

DEDICATION

This thesis is my special gift that dedicated to beloved people in my life for their affection, kindness, and support along my study, they are:

My dearest parents
Suprat and Atminah

You have made my dreams come true with your prayer, endless love and support. You make me be proud of being your son. You always encourage me, give me solutions, and many others that I can not mention one by one

My beloved sister:
Maf'ula

All of my big families and my dearest friend that I can not mention all
For always cheering me up and giving me support

And also thanks for your support Rie Iyya

You are my inspiration

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I express my gratitude to God of this universe, Allah SWT for His great blessing and mercy, so I can accomplish my thesis entitled *Word Formation Process Found in The New Terms in Adobe Photoshop CS4 Programs* the requirement for the degree of *Sarjana Sastra*. Shalawat and salam are always delivered to the last Islamic prophet, Muhammad SAW, who has guided his followers to the rightness.

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Malang, February , 2015

Ahmad Takhfif

ABSTRACT

Takhfif Ahmad. 2013. *Word Formation Process Found in the New Terms in Adobe Photoshop CS4 Program*. Thesis, English Letters and Language Department, The Faculty of Humanities. The State Islamic University Maulana Malik Ibrahim of Malang.

Advisor: Galuh Nur Rohmah, M.Pd., M.Ed

Key Words: Word Formation Process, New Terms, Adobe Photoshop CS4 Program

This research is about word formation processes found in the new terms in Adobe Photoshop CS4 program. The new terms are from the Adobe Photoshop CS4 program since the program provides the new terms noun found in Oxford and Longman dictionary. The descriptive qualitative is employed in this research. It analyzes the data that are in the form of word rather than number and statistical procedures. The researcher analyzes the kinds of word formation processes focusing on derivation and compounding, and the way the new terms are formed. To get the convenient and systematic data, the researcher becomes the main instrument by analyzing, interpreting and classifying the data. Then, the data are presented and analyzed by using Ingo Plag's theory.

As the result, the findings show that there are nine data found in the Adobe Photoshop CS4 program: bicubic, despeckle, zoomify, spherize, pointillize, vibrance, photomerge, picasize and mezzotint. The word formations used are derivation and compounding. The derivation process includes the new term bicubic, despeckle, zoomify, spherize, pointillize, vibrance. Then, the compounding word formation process are the new term photomerge, picasize and mezzotint. It depends on the head of the new words that modified the words attached to. The new terms can produce a new contextual meaning and change the class of word whether the word formation is derivation or compounding. They may change from a noun to become a verb, an adjective to become a noun. Finally, the researcher may conclude that the development of the technology can be studied by language field since it has an issue deals with the language. One of the language fields that relate to these phenomena is morphology as studied in this research.

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As the result, the findings show that there are nine data found in the Adobe Photoshop CS4 program: bicubic, despeckle, zoomify, spherize, pointillize, vibrance, photomerge, picasize and mezzotint. The word formations used are derivation and compounding. The derivation process includes the new term bicubic, despeckle, zoomify, spherize, pointillize, and vibrance. Then, the compounding word formation process are the new term photomerge, picasize and mezzotint. It depends on the head of the new words that modified the words attached to. The new terms can produce a new contextual meaning and change the class of word whether the word formation is derivation or compounding. They may change from a noun to become a verb, an adjective to become a noun. Finally, the researcher may conclude that the development of the technology can be studied by language field since it has an issue deals with the language. One of the language fields that relate to these phenomena is morphology as studied in this research.

ABSTRACT

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Kata Kunci: Proses Pembentukan Kata, Istilah Baru, Program Adobe Photoshop CS4

Penelitian ini membahas tentang proses pembentukan kata yang ditemukan di program Adobe Photoshop CS4. Istilah-istilah baru berasal dari dalam program Adobe Photoshop CS4 karena program ini menyediakan istilah-istilah baru yang juga ditemukan di kamus Oxford dan Longman. Penelitian ini menggunakan metode *descriptive qualitative*. Penelitian ini meneliti data-data berupa kata bukan nomor dan tidak menggunakan penghitungan secara statistik. Peneliti menganalisis macam-macam proses pembentukan kata diantaranya *derivation* dan *compounding* dan juga meneliti bagaimana kata-kata atau istilah-istilah itu terbentuk. Untuk memperoleh data yang tepat dan sistematis, peneliti berperan sebagai instrumen pokok dimana peneliti menganalisis, menginterpretasikan serta mengklasifikasi data. Data-data yang diperoleh kemudian di tunjukkan dan dianalisis dengan menggunakan teori dari Ingo Plag.

Hasil dari penelitian ini, penemuan menunjukkan bahwa ada 9 data yang ditemukan di dalam program Adobe Photoshop CS4 diantara kata-kata *bicubic*, *despeckle*, *zoomify*, *spherize*, *pointillize*, *vibrance*, *photomerge*, *picasize* dan *mezzotint*. Proses pembentukan kata yang digunakan antara lain *derivation* dan *compounding*. Istilah-istilah yang menggunakan proses pembentukan *derivation* antara lain istilah *bicubic*, *despeckle*, *zoomify*, *spherize*, *pointillize*, dan *vibrance*. Sedangkan, istilah-istilah yang menggunakan proses pembentukan *compounding* antara lain istilah *photomerge*, *picasize* and *mezzotint*. Proses *compounding* ini tergantung pada awal kata (*head*) dari istilah baru yang memodifikasi kata yang melekat padanya. Istilah-istilah baru tersebut dapat menghasilkan makna kontekstual baru yang bisa berhubungan dengan konteks, dilihat dimana kata itu digunakan baik proses pembentukannya secara *derivation* atau *compounding*. Istilah-istilah baru dapat mengubah kelad katanya seperti dari kata benda menjadi kata kerja, kata sifat menjadi kata benda. Akhirnya, berkaitan dengan pembahasan diatas, peneliti dapat menyimpulkan bahwa perkembangan teknologi dapat diteliti dalam bidang bahasa selama itu memiliki isu-isu yang berkaitan dengan bahasa. Salah satu dari bidang bahasa yang berhubungan dengan fenomena diatas adalah morfologi sebagaimana yang telah dipelajari dan diteliti di penelitian ini.

CHAPTER I

INTRODUCTION

This chapter presents the following topics background of the study, problems of the study, objectives of the study, scope and limitation, significances of the study, definition of the key terms, and research method which includes research design, research subject, data source, research instrument, data collection, and data analysis.

1.1 Background of the Study

Computer is one of the instruments of media in communication which makes people appreciate more not only about the information but also knowledge. The development of computer program creates new language with more modern and easy use. Language used in computer program can be determined as the communication tool for its application. Related to the language studies, this phenomena can be analyzed since it relates to the linguistics field. One of linguistics field that studies about the words is morphology. It is a branch of linguistics that that studies about the words, how the words are constructed by the smallest meaningful unit or grammatical function (Jennedy et. al., 1994). The process of creating new words by some ways is called word formation. In addition, the language used in computer programs is one of the phenomena that must be considered by linguistic students to increase their knowledge about

language. The language growth, the rise of language technology has led to a renewed interest in practical applications of linguistic theory Mair et al. (2006).

This study discusses about the new terms found in one of the computer programs that is Adobe Photoshop CS4. Adobe Photoshop CS4 is the program which is developed and published by Adobe Systems. It is popular image editing software that provides a work environment consistent with Adobe Illustrator, Adobe In Design, Adobe Image Ready, and other products in the Adobe Creative Suite.

Adobe Photoshop CS4 gives more facilities for the users which can be applied in their job. Although most of people use this program but, many of them do not understand many icons which exist there. Therefore, they cannot optimally use that program. If the users can understand the terms in that program, the program will more help them to do their job because the more they know something is the more they can control it.

In relation with the description above, the researcher classifies the new terms in Adobe Photoshop CS4 by using word formation process. Word formation is one of the most important discussions in linguistic because; it covers all of the study about how the words can be formed. In its development, word formation processes happen in these phenomena. It can be found in the term consisted in the tools of Adobe Photoshop CS. In short, the study on the words used in computer program is interesting, since it comes under the study of linguistics such as morphology. Besides, the core of these phenomena is that language used in

computer program. The use of words in computer program need to be analyzed dealing with the meaning of the words which is obviously of great interest to linguists. Simpson (2011) argued that the influence of new technology as the computer enters the relationship. Therefore, the researchers can assure the readers that the result of this research become useful and give contribution especially in relation to the language and the media or technology used.

Plag (2003) says that word formation process is the way in which new words are created. When people create new term of words, they make word formation at the same time. It means that they can use word formation to understand the form of new words because word formation explains clearly about the background of every new expression form that is how those terms are formed. He says that word formation consists of two kinds of processes, there are derivation and compounding. Furthermore, he divides derivation into two subcategories, those are affixation, which is included: prefixation, suffixation, and infixation; and non- affixation, which is included: conversion, truncation, and blending.

Aitchison (2005) gives different classification about word formation, he divides word formation into five types, they are compounding, affixation, conversion (change of word class), abbreviation and blends. The process of creating new word is also explained by Aitchison. He gives explanation about how to create the words. New words can be created by word formation or taken from other language. When people loan the words from other language, they make word formation processes.

Plag (2003) divides word formation into two categories, they are derivation and compounding. Derivation is forming of a new word by adding affixes to the existing word. Derivation consists of affixation and non-affixation. Affixation consists of prefixation, suffixation, and infixation while non-affixation consists of conversion, truncation, and blending.

Compounding is the combination of two words to form new word Plag (2003). He explains the types of characteristics in compounding; they are nominal, adjectival and verbal. Compounding is a very common process in most languages of the world. In addition, Compounding may consist of various combinations of part speech. Compounding is also explained by Yule. He says that Compounding is a joining of two separate words to produces a single form.

In this study, the researcher uses Ingo Plag's theory because he gives the explanation more clearly and simple than other theories. The researcher assumed that Ingo Plag clearly provides detail description and explanation dealing with the kind of word formation processes. Hence, it gives benefit for the researcher in order to answer the research problem proposed in this research. Moreover, the findings of this research are supposed to give contribution to the theory used that is Plag theory (2003) on word formation. In addition, the theory of word formation proposed by Plag (2003) mentioned that there are two kinds of word formation that are derivation and compounding. Therefore, the theory used is relevant to the topic of the research. In short, Plag (2003) explains more detail about derivation and compounding. Hence, the finding and the discussion of this research are explained in detail regarding to the theory used.

The same study about word formation had been conducted by Susilowati (2001), with her thesis entitled “A Study on Word Formation Process and Semantics on English Terms Used in Guiding Technique”. She used semantics approach to find the lexical and contextual meaning of the guiding terms in order to support the word formation processes that discussed in her thesis. While the second was Setiawan (2004), with his thesis entitled “A Study on Word Formation Used In Short Advertisement on Jakarta Post “, the researcher found the word formation processes in his thesis without any explanation about the causes of the processes. Ifafa (2007), “Patterns of Word Formations in Comic Series Issued in the Jakarta Post”. She found that the main findings of this study include first of all, the word formation is mostly used in Jakarta Post, are: derivation, compounding, shortening, acronym, and blends. Hindiyati (2008), “A Morphological Study on Word Formation of ERP Software Terms in [www. wiley. com](http://www.wiley.com)”. She found the result of this study shows three categories of word formation namely affixation, non-affixation and compounding. Malik (2009), “Morphological Analysis on the Word Formation found in the Terms of Microsoft Word 2007™ Program “, she found that the Word formation processes that found in Microsoft Word 2007™ program are: inflectional affix, derivational affix, compounding, multiple processes, blending, and borrowing. Rif’ah (2011), “Word Formation Used in Text Messages (TM) in Netlingo”. She found that there are eleven types of WF used in Text Messages. Alnajib (2012), “An Analysis on Word Formation Process of Technological Portmanteaus terms”. She found that most words of technological portmanteaus terms are clipped only in the process of

forming a new word and she found nine words are both clipped and overlapped in its formulation.

The similarity of this study and the previous study appears in analyzing the word formation process on the computer program. While, the differences are the researcher uses the different theory that is Ingo Plag's theory (2003), because it describes word formation processes in a more complex classification. The researcher analyzes the new terms that stated on the Adobe Photoshop CS4 as the research subject in which it contains of some relevant linguistics feature in the use of the terms. It means that there are many morphological processes found in the new terms in Adobe Photoshop CS4. By this research, the researcher finds new terms in Adobe Photoshop CS4. Besides, Adobe Photoshop CS4 has new terms that are not only in the lexical form but also in relation to the contextual meaning. Therefore, the researcher thinks that it is very interesting subject to be analyzed.

In conclusion, the researcher analyzes the word formation processes to explain the causes of its processes focuses on the morphological discussion, and show the location of the analyzed terms in Adobe Photoshop CS4 after finding the process. Finally, the researcher hopes that the findings of this research become understandable and useful for the reader.

1.2 Research Problems

Based on the background of the study, this study is aimed to answer the following questions below:

1. What kinds of compound words found in the new terms in Adobe Photoshop CS4?
2. What kinds of derived words found in the new terms in Adobe Photoshop CS4?
3. How are the word formation processes of those compound and derivation words formed?

1.3 Objectives of the Study

This research is intentionally written as attempt to provide the answer to the Research problems above. In other word the purposes are:

1. To find the kinds of compound words in the new terms in Adobe Photoshop CS4.
2. To find the kinds of derived words in the new terms in Adobe Photoshop CS4.
3. To describe how the way compound and derivation words are formed.

1.4. Scope of the Study

In accordance with the research topic, the researcher needs to emphasize its scope. There are many programs in Adobe System; they are Adobe Reader,

Adobe Illustrator, Adobe Flash Player, Adobe In Design and Adobe AIR. Here, the researcher only focuses his attention on Adobe Photoshop CS4 because there are many morphological processes found in that program such as compounding, affixation and blending.

1.5 Significance of the Study

This study gives three contributions as theoretical, practical and academics functions. Theoretically, the researcher hopes that the result of this research is useful and gives contribution to linguistic field, especially in new word formation and its process.

Practically, for the users of Adobe Photoshop Program, the researcher hopes that it helps them to understand the content of the terms. Academically, the researcher hopes that this study gives additional information for those who intend to get the data and do research in the same topic.

1.6. Research Method

This section discusses the method used in the study word formation processes found in the new terms in Adobe Photoshop CS4 which are explained as the following.

1.6.1 Research Design

This study is categorized as descriptive qualitative research which uses study text method to analyze the data because it deals with data or text that is in the form of word rather than number and statistical procedures. It means that the researcher describes the data is not in the form of number. The method is chosen because the researcher wants to get deep understanding about the phenomena by describing and exploring the result of the research. The qualitative research uses more in-depth information on a few cases by interpreting the data deeply.

Moreover, this study describes the words formation process in the terms of Adobe Photoshop CS4. This study is expected to examine the kinds of word formation processes are found in Adobe Photoshop CS4 and how the word formation processes used to the terms of Adobe Photoshop CS4.

1.6.2 Data and Data Source

In this study, the source of the data is Adobe Photoshop CS4. The official website of this program is <http://www.adobe.com>. The researcher gets the program by downloading from the internet. While, the data of the research are the new terms found in that program that have compounding and derivation process.

1.6.3 Research Instrument

In this research, the human investigator is the primary instrument for gathering and analyzing the data. Because, there is no possible instrument for

analyzing this research to collect the data. Moreover, human instrument is only visible instrument which can obtain the data of the research. The researcher is the only instrument that analyzes the whole data used in this research based on the researcher's point of views which related to the theory applied. The researcher has central function to collect, interpret, and analyze the data by himself.

1.6.4 Data Collection

The data of this research is collected through some steps. First, the researcher collects the data from the preview of the program. Second, the researcher finds and writes the data which consist of new terms. To find the new terms, the researcher uses Oxford and Longman dictionaries. In addition, Oxford and Longman dictionaries are used to decide the word is new or not. By looking at the two dictionaries used, the researcher can determine the terms whether they are new or not. If the terms are not exist in the dictionaries that means the words are not provided there, the researcher may determine those terms are new. Finally, the researcher classifies those data into two categories; they are compounding and derivation by giving underline to the affixes and compound words.

1.6.5 Data Analysis

After gathering the data from Adobe Photoshop CS4, the researcher has some stages to analyze the data in order to answer the research questions.

Firstly, the researcher categorizes the data in accordance with the kinds of word formation processes, they are compounding and derivation. Secondly, the researcher analyses the compound and derivation words found in the new terms in Adobe Photoshop CS4 based on Ingo plag's theory. Thirdly, the researcher discusses and interprets the data from each category based on Ingo Plag's theory about word formation processes. Finally, the researcher discusses the whole data based on the theory of word formation processes to get the answer of the research questions.

1.7 Definition of Key Terms

To guide the readers following the discussion of this research, the researcher thinks the necessity to formulate the operational definition key of term used in order to avoid misunderstanding on the problem indeed. They are as follows:

- Morphology is a branch of linguistics that studies about morphemes and their arrangement in forming words.
- Adobe is an American multinational computer software company headquartered in San Jose, California, United States. The company has historically focused upon the creation of multimedia and creativity software products, with a more-recent foray towards rich Internet application software development. Adobe Photoshop is a graphics editing program developed and published by Adobe Systems.

- Word formation process is the way in which new words are created. The creation of a new word which is a change in a single word's meaning.
- Compounding is a joining of two separate words to produce a single form.
- Derivation is forming of a new word by adding affixes to the existing word. Formal means employed in derivational can be classified into two types; affixation and non-affixation.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

This chapter presents some theories related with the topic which is discussed in this thesis. This chapter is divided into two sub-chapters, they are; basic concepts and previous studies.

2.1 Morphology

Study on the process of formation words called morphology. It is the type of investigation which analyzes those entire basic “element” which are used in language. Fromkin (2003: 76) said that morphology is the study of internal structure of words, and the rules of words are formed. It means that forming new words has rules containing grammatical structure in a language. It can be said that it studies about part of speech grammatically. Moreover, Alwasilah (1990: 101) said that morphology is also studying and analyzing structure, forms, and words classification.

In addition, morphology consists of two morphemes, ‘morph’ and ‘ology’. The word “ology” means science or branch of knowledge concerning. Subsequently, morphology is the science of studying word forms. It means this science explores and clarifies the base of word forms. The words are formed can change in meaning and form if we added the syllables such as prefixes, suffixes.

Besides, Matthew says that morphology as the study of form of words. The area of grammar concerned with the structure of words and with relationships between words involving the morphemes that compose them is technically called morphology (Carstairs, 2002). Furthermore, Crystal (1987: 90) said that morphology is one branch of linguistics in grammar which studies the structure of words. It means that words forms being a new word in language with using the structure. Both of two linguists above have similarity in meaning of morphology that is related with structure of word. Besides that, Crystal tells more detailed that morphology is connected with grammar studies.

Based on the definitions above the writer concludes that morphology is a branch of linguistics that studies about the words structure or words forming process. Then, it can be concluded from the definitions above that morphology is related with word formation process/the grammar of words where the words can be constructed from the smallest part, which usually called as morpheme in well formed. Hornby (1987: 549) stated that morphology is the study of morphemes of language and how they are combined to make words. Therefore, in studying morphology, it also studies about the morpheme as the smallest meaningful units in the structure of language.

2.2 Morphemes

The smallest units of language that have a meaning or a grammatical function and form words or parts of words are called morpheme. Others,

morpheme is the smallest meaningful constituents of words; e.g., in books, both the suffix -s and the root book represent a morpheme. In writing, individual morphemes are usually represented by their graphic form, or spelling; e.g., -es, -er, un-, re-; or by their graphic form between braces, { }; e.g., {-es}, {-er}, {un-}, {re-}. The branch of linguistics in charge of studying the smallest meaningful units of language (morphemes), their different forms, the internal structure of words, and the processes and rules by which words are formed is called morphology.

Fromkin (1999: 67) says that morpheme may be defined as the minimal linguistic sign, a grammatical unit in which there is an arbitrary union of sound and a meaning that cannot be further analyzed. Morpheme is the minimal unit of grammatical function Yule (1987: 75). For example: the word *unhappy* consists of two morphemes. One minimal unit of meaning is *happy*; another minimal unit of meaning is *un-*(meaning 'not').

After studying those theories above, the researcher made a conclusion about the definition of morphemes. It can be said that morpheme is the smallest functioning unit of meaning or grammatical function in the composition of words. Thus, morpheme serves as the element from which words are built.

Depending on the way morphemes occur in an utterance, there are two types of morphemes; they are free morphemes and bound morphemes.

2.2.1 Free Morphemes

Morphemes which can stand by themselves as single words such as *sit*, *walk*, *door*, etc are called free morphemes. In contrast morphemes cannot normally stand alone, but typically attached to another form, e.g. *re-*, *ist*, *-ed*, *-s*, etc are defined as bound morphemes.

Lyon (2001: 39) explains that free morphemes fall into two categories. The first is that set of nouns, adjectives, and verbs are categorized as lexical morphemes. For example; *boy*, *man*, *house*, *beautiful*, *bad*, etc. The other category of free morphemes is called functional morphemes. This set consists largely of the functional words in the language such as conjunctions, prepositions and pronouns. The examples are *and*, *but*, *when*, *because*, *near*, *in the*, *that*, etc.

There are two types of free morphemes, lexical (content of referential) morphemes and functional (grammatical) morphemes (Yule, 2010: 68). Lexical (content of referential) morphemes are free morphemes that have semantic content (or meaning) and usually refer to a thing, quality, state or action. For instance, in a language, these morphemes generally take the forms of nouns, verb, adjectives and adverb; e.g., *dog*, *Peter*, *house*, *build*, *stay*, *happy*, *intelligent*, *quickly*, *always*. Actually, lexical morphemes constitute the larger class of morphemes. They form the open class of words (or content words) in a language, i.e., a class of words likely to grow due to the incorporation of new members into it.

Other types of free morphemes are called functional (grammatical) morphemes are free morphemes which have little or no meaning on their own, but

which show grammatical relationships in and between sentences (Yule, 2010: 69). For instance, in a language, these morphemes are represented by propositions, conjunctions, articles, demonstrations, auxiliary verbs, pronouns; e.g., with, but, the, this, can, who, me. It should be said that function words are almost always used in their unstressed form.

2.2.2 Bound Morphemes

Other types of morpheme is bound morpheme. Yule (2010) proposed that there are also bound morphemes, which are those forms that cannot normally stand alone and are typically attached to another form, exemplified as *re-*, *-ist*, *-ed*, *-s*. Bound morphemes also can be categorized into two types; they are Derivational morphemes and Inflectional morphemes. Haspelmath (2010) derivational patterns commonly change the word-class of the base lexeme – i.e. nouns can be derived from verbs, adjectives from nouns, and so on. Derivational morphemes include suffixes such as the *-er* in *walker*, the *-ment* in *development*, the *-able* in *believable*. It includes prefixes such as *re-*, *pre-*, *ex-*, *un-*, *il-*, *im-*, and so on. Yule (2010) states the list of derivational morphemes will include suffixes such as the *-ish* in *foolish*, *-ly* in *quickly*, and the *-ment* in *payment*. The list will also include prefixes such as *re-*, *pre-*, *ex-*, *mis-*, *co-*, *un-* and many more.

The second type is inflexional morphemes which are used to show if word is plural or singular, if it is past tense or not, and if it is a comparative or possessive form Yule (2010). Inflectional morphemes modify the grammatical class of words by signaling a change in number, person, gender, tense, and so on,

but they do not shift the base form into another word class. When *'house'* becomes *'houses'*, it is still a noun even though you have added the plural morpheme's'.

Yule (2010) bound morphemes, which are those forms that cannot normally stand alone and are typically attached to another form. Bound or dependent morphemes are those morphemes which never occur alone as words but as parts of words; they must be attached to another morpheme (usually as free morpheme) in order to have distinct meaning, e.g., *-er* in worker, *-er* in taller, *-s* in walks. *-ed* in passed, *re-* as in reappear, *un-* in unhappy, undo, *-ness* in readiness, *-able* in adjustable; *-ceive* in conceive, receive, *-tain* in contain, obtain, etc.

Plag (2003) there are also bound roots, i.e. roots that only occur in combination with some other bound morpheme. Bound roots are those bound morphemes which have lexical meaning when they are attached to other bound morphemes to form content words; e.g., *-ceive* in receive and conceive, *-tain* in retain, contain; *plac-* in implacable, placate; *cran-* in cranberry, etc. notice that bound morphemes can be prefixed or suffixed to other affixes. The bound morphemes include the following affixes (affixes being bound by definition): *-s*, *-er*, *un-*, *-ly*, *-ing*, *de-*, *-al*, *-is(e)*, *-some*, *-(e)d*, *con-*, *-tion* Carstairs (2002). Affixes are bound morphemes which are usually marginally attached to words and which change the meaning or function of those words; e.g., *-ment* in development, *en-* in enlarge; 's in John's; *-s* in claps, *-ing* in studying, etc.

Moreover, an analysis of morphology, it is absolutely related with how the word are formed. Plag (2003) as the term 'word-formation' suggests, we are

dealing with the formation of words. In other word, it can be said that forming a word is the term that studied in the morphology because it also concern to the how the words are formed. In short, this definition called word formation that studies on the process of forming words in a language.

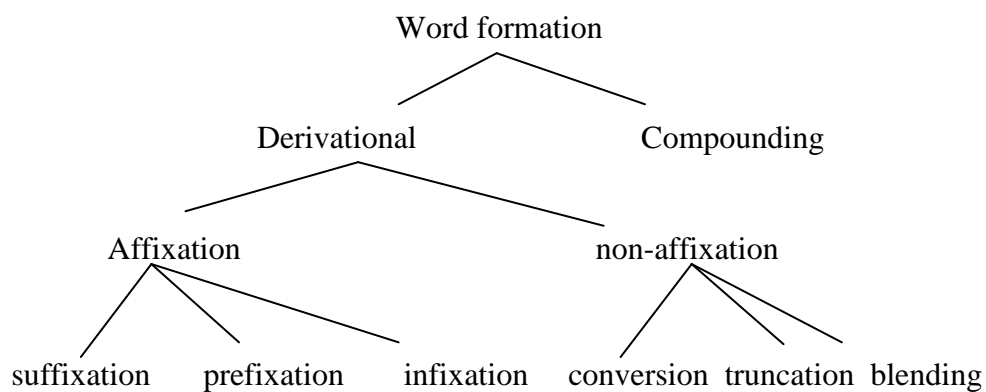
2.3 Word Formation

In word formation, there are some definitions and different idea from some linguists Yule (1985: 52) states that word formation studies of the process whereby new words come into being in a language. Besides that, he classified the types of word formation as blending, clipping, backformation, compounding, coinage, borrowing, conversion, acronyms, derivation prefixes and suffixes, and multiple processes.

Brinton (2000: 85) remarks that English has a number of means by which morphs combined or are altered to form new words. For the process he divided them into seven types namely derivation, reduplication, conversion, or functional shift, compounds, blends, backformation, shortening which is contains of acronyms and initializes, clipped forms.

Plag (2003: 9) has a good vision in exploring the understanding of word-formation. He says that the term ‘word-formation’ is dealing with formation of words. It means that the word has some of processes in making a new word. In addition, Plag (2003) divided word formation into two categories namely derivational and compounding. First is derivation which includes affixation and

non-affixation. Affixation consists of prefixation, suffixation, and infixation while non-affixation consists of conversion, truncation, and blending. It can be concluded that words can be composed of smaller units, called morphemes, and that there are many different ways to create new words from existing ones by affixational, non-affixational and compounding processes (Plag, 2003). Furthermore, it became clear that there are remarkable differences between different types of morphological processes. The following are the classification of word formation processes:



The schema has divided and explained about morphology in detail and it will be discussed completely as mentioned below:

2.3.1 Derivation

Derivation is one of section in word formation which is differentiated in classification of it. Crystal (1987: 90) states that derivational morphology studies the principle governing the construction of new words, without reference to the specific grammatical role a word might play in a sentence.

The most common word-formation process is derivation (Yule, 2006), to build new words by adding morphemes. These morphemes are added to the word by affixation, through prefixes and suffixes. While prefixes like *-un* or *-dis-* usually do not change the lexical category of the word, suffixes, such as *-ness* or *-ation*, usually do. If you take the examples happy → unhappy and happy → happiness, it is obvious that because of the suffix *-ness* the lexical category of happy has changed. The meaning is always slightly changed, but in a way that the final word is still closely related to the former word. In times of rapid changes in the world technology, new morphemes to describe new words rise, such as *cyber-* and *nano-* (Finegan, 2007: 46). In addition, Derivation is forming of a new word by adding affixes to the existing word.

Affixation is one of derivational that contains of three kinds of categories that will be discussed in this study. According to Plag (2003: 104) affixes were provided by wide range of derivational patterns available in the language. Prefixation and suffixation are very common, whereas infixation is a marginal and extremely restricted phenomenon in English word-formation.

All English words formed by this derivational process have either prefixes or suffixes or both. Thus, *mislead* has a prefix, *disrespectful* has both a prefix and suffix, and *foolishness* has two suffixes.

a. Prefix

Prefixes are bound morphemes that are added to the beginning of the word; e.g., *un-* in *unnoticed*, *a-* in *amoral*, *sub-* in *subway*, etc. Yule (2010) states

that the preceding group of words, some affixes have to be added to the beginning of the word (e.g. un-, mis-) are called prefixes. In other word, prefixes are some affixes that come in beginning of a word or affixes that precede the words attached to. For example: *un-* "unhappy" becomes "*unhappy*". Notice that prefixes are represented by the morphemes followed by a hyphen (-).

The prefixes *un-* attached to adjectives, meaning "not" or "the converse of". In addition, *un-* cannot attach to the verb read although there is the word *unread*, an adjective meaning "not read" and derived from the past participle of read. As proposed by Plag (2003) The prefixes *un-* adds a negative meaning to the base. The rule makes the interesting prediction that all adjectives can be prefixed with *un-*, and that no verb and no noun can take *un-*. Consequently, in *unreadable*, *-able* must be attached to (read) to create the adjective *readable*. *Un-* may then be attached to readable to create unreadable. Another example will be explained more detail below:

Prefix	Meaning	Example
dis-, un-, anti-, (de-)	opposite, negative	<i>disrespect, unsteady, antibiotic,(desposal)</i>
Ex-	out, upward, previous	<i>exclude, expand</i>
a-	without, not	<i>atheist</i>
re-	again, repeatedly(some exceptions)	<i>Replay(remove, remote)</i>
non-	absence, negation	<i>non-smoker</i>

b. Suffix

Suffixes are bound morphemes which are attached to the end of the word; e.g., *-able* in noticeable, *-less* in careless, *-s* in seeks, *-en* in shorten, etc. notice that suffixes are represented by the morphemes. Other affixes have to be added to the end of the word (e.g. *-less*, *-ish*) and are called suffixes (Yule, 2010). In that explanation, suffixes are some affixes that are added to the end of the words, such as the suffix *-ness* + “*happy*” becomes “*happiness*”.

Others, Haspelmath (2010) stated that affixes that follow the main part of the word are called suffixes. In other words, suffixes are letter groups that are added to the end of base words. There are two types of suffixes: derivational and inflectional. Plag (2003) derivational morphemes can occur at either end of the base words whereas regular inflection is always expressed by suffixes.

Derivational suffixes are morphemes that create new words, usually by either changing the meaning and/or the part of speech or both of the words they are attached to. The suffixation of *-less* makes an adjective out of a noun, the suffix *-ity* makes a noun out of an adjective, and the suffix *-ize* turns an adjective into a verb (Plag, 2003). For example, *un-* + happy (adj); *re-* + classify (v) becomes reclassify; *by-* + product become by product. In other words, the process by which affixes combine with roots to create new words. Derivation is viewed as using existing words to make new words.

The other types of suffixes is inflectional suffixes that are morphemes which serve a purely grammatical function, such as referring to and giving extra

linguistic information about the already existing meaning of a word (e.g., number, person, gender, case, etc), expressing syntactic relations between words among others. This inflectional suffixes cannot change the part of speech of the words being attached to. Plag (2003) said that inflectional suffixes don't change the category of the base word. A plural marker on a noun does not change the category, nor does the past-tense marker on the verb. Yule (2010) mentioned that inflectional suffixes such as -s (plural) and -'s (possessive). In addition, some examples of inflectional suffixes is the different forms of the verb speak are all considered to be verb too, namely speak, spoken, speaking. In a like manner, the comparative and superlative forms of the adjective strong are also adjectives, namely stronger, strongest.

Another will be explained more detail below:

Suffix	Meaning	Example
-er, -or, -ar	creates an agent noun	<i>designer</i> (– one who designs; Finegan, 2007)
-ness, -ation, -ment	verb-to-noun derivation	<i>sadness, hesitation, treatment</i>
-less	lack of	<i>Merciless</i>
-ize, -ate	creates verbs	<i>terrorize, hyphenate</i>
-al, -able, -ary, -ful	creates adjectives	<i>accidental, believable, imaginary, peaceful</i>

c. *Infix*

Infix is an affix which is incorporated inside another word. Yule (2010) infix is a morpheme that is inserted in the middle of a word (e.g. -rn- in *srnal*). However, linguists agree that English has no infixes. Indeed, there is the possibility of inserting expletives in the middle of words to create new words expressing the strongly negative attitude of the speaker (e.g. *kanga-bloody-roo*, *abso-blooming-lutely*) Plag (2003). Moreover, it is not only normally to be found in English but fairly common in some other language. For example is *ijtahada* "he worked hard", from *jahada* "he strove".

Other definitions about infixes are bound morphemes that are inserted within the words. Yule (2010) states that infix is not normally used in English, but found in some other languages. There are no infixes in the English language, but in the language such as Tagalog and Bontoc (in the Philippines), infixes are represented by the morphemes preceded and followed by a hyphen; e.g., *-um-*. Haspelmath (2010) mentioned the example of infix in Tagalog language is *-um-* in *s-um-ulat* means 'write', it is from the root "*sulat*".

Yule (2006) clarifies in his book that infixes are not normally to be found in English, but very common in some other language. Infix is an infix which is incorporated inside another word. It is possible to see the general principle at work in certain expressions that occasionally used in fortuitous or aggravating circumstances by emotionally aroused English speaker; *Halle bloody lujah*.

In conclusion, we can see that affixes exemplified in the wide range of derivational patterns obtainable in the language. So, suffixation and prefixation is universal or ordinary, whereas infixation is marginal and very limited phenomenon in English word formation.

It is a number of word-formation processes that do not involve affixes as their primary or only means of deriving words from other words or morphemes. According to Plag (2003: 129), Non-affixation divided into three categories. They are conversion, truncation and blending. It will be discussed completely as mentioned below:

1. Conversion

In forming a new word, we do not necessary need to derive words with the help of affixes, there are a number of other ways to create new words on the basis of already existing ones such as conversion. Plag (2003) mentioned that conversion can be defined as the derivation of a new word without any overt marking. In order to find cases of conversion we have to look for pairs of words that are derivationally related and are completely identical in their phonetic realization. In addition, Yule (2010) proposed that conversion is a change in the function of a word, as for example when a noun comes to be used as a verb (without any reduction). Other labels for this very common process are “category change” and “functional shift”. The conversion in English can be varied such as noun becomes verb, verb becomes noun, adjective become verb, and adjective become noun Plag (2003). For example, when the word is attached with the suffix

–ing such as in vacation in They're vacationing in Florida. The word vacation as noun become verb after it is attached by suffix –ing.

The following are some other common cases of conversion:

a. Conversion to noun

1. From verbs to noun. Yule (2010) the conversion can involve verbs becoming nouns such as with guess, must and spy as the sources of a guess, a must and a spy. Phrasal verbs such as to print out and to take over also become nouns a printout and a takeover. The other examples of conversion verb becoming noun are the words: to call becomes a call, to dump becomes a dump, to guess becomes a guess, to jump becomes a jump, to spy becomes a spy, etc.
2. Plag (2003) mentioned the example of words conversion which is from adjective to noun that are (the) ignorant, (the) poor, (the) poorest, (the) rich, (the) wealthy, (the) wealthier, (the) wicked, etc. The other examples are from adjective well-fed becomes the well-fed, blind becomes the blind and sublime becomes the sublime.
3. From closed-class words: butts, downs, how, if, a must, ups, why, etc. Plag (2003) Other forms, such as up and down, can also become verbs, as in They're going to up the price of oil or We downed a few beers at the Chimes.
4. From phrases: also-rans, been-to, do's and don'ts, down- and -out, free for all, has been, high ups, know it all, low down, etc. Yule (2010) one

complex verb combination such as want to be has become a new noun, as in He isn't in the group, he's just a wannabe.

b. Conversion to verb

1. The first type conversion to verb is from nouns changed into verb. Plag (2003) mentioned the examples of nouns become verb such as the word the bottle become to bottle, the hammer become to hammer, the file become to file, the skin become to skin and the water become to water. The other examples are the words baby, bicycle, boat, bottle, brake, butter, canoe, carpet, catalogue, cash, chaperon, coat, commission, core, corner, cripple, elbow, father, fiddle, finger, floor, garage, glue, grease, group, gut, hand, knife, mail, mask, mother, motor, muzzle, nurse, oil, parrot, peel, pit, pilot, plaster, porch, position, rack, shelve, skin, etc.
2. The other conversion to verb is from adjective such as the words better becomes to better, empty becomes to empty, hip becomes to hip, open becomes to open, and rustproof becomes to rustproof Plag (2003). The other examples are calm, calm down, dirty, dry, empty, humble, lower, narrow, sober up, smooth out, soundproof, weary, yellow, etc.

c. Conversion to adjectives

1. From nouns: (in both predicative and attributive position) brick, cotton, nylon, reproduction (furniture), wool, Worcester (porcelain), etc.

2. Verbs (see through, stand up) also become adjectives, as in see-through material or a stand-up comedian. Or adjectives, as in a dirty floor, an empty room, some crazy ideas and those nasty people, can become the verbs to dirty and to empty, or the nouns a crazy and the nasty Yule (2010).

In addition, there are common adverbs that are formed by conversion such as adverbs derived from adjectives. As mentioned by Carstairs (2002) the example of adjective become adverb as in *The car was driven fast* and as in *They worked hard*, derived from the adjective as in *a fast car* and as in *hard work*.

3. *Truncation*

Truncation is a process in which the relationship between a derived word and its base is expressed by the lack of phonetic material in the derived word Plag (2003). Truncation names are normally used by people who feel familiar with the person referred to and for those who want to express the familiarity overtly. The examples are:

Ron (← Aaron)	demo (←demonstration)
Liz (← Elizabeth)	lab (←laboratory)
Mike (←Michael)	disco (←discotheque)

4. *Blending*

Yule (2010) argued that blending is the combination of two separate forms to produce a single new term is also present in the process. However, blending is

typically accomplished by taking only the beginning of one word and joining it to the end of the other word. Blending is large class of complex words whose formation. Other, Plag (2003) stated that blending differs from the processes discussed in the previous section in that it involves two or (rarely) more base words (instead of only one), but shares with truncations a massive loss phonetic (or orthographic) material. For the example:

Blends, type 1	Blends, type 2
motor + hotel → motel	breakfast + lunch → brunch
television/broadcast → telecast	channel + tunnel → channel

The examples above show that in first type dealing with existing compounds that are shortened to form a new word. It is contrast to abbreviated compounds, the base words of the blends in second type which are typically not attested as compounds in their full form. In conclusion, non-affixation is not involve affixes as their primary or only means of deriving words from other words or morphemes.

2.3.2 Compounding

Compounding is the process of putting words together to build a new one. In addition compounding is the bundling of two or more lexemes which made a new term. (Plag, 2003: 132) gives real clarifies and explores the kinds of element or types of characteristic in compounding. It is shown by the statement that there are crucial assumptions namely compound which consists of two and not more

element and, the second element is words. In this study, there are four types which include nominal, adjectival, verbal and neoclassical compound.

First, Nominal compound, it is compound with nouns as heads which falls into the three subclasses mentioned above, involving nouns, verbs, and adjectives as non-heads Plag (2003).

For example: Book cover,

Letter head

Sea power

They are noun-noun compounds and that they denote a subclass of the referents of the head: a *Book cover* is kind of covers, a *letter head* is the head of a letter, a *Sea power* is the power of the sea.

Second, Adjectival compounds, it can have nouns or other adjectives as non-heads. The interpretation of noun-adjective compounds basically follows the same principles as that of noun-noun compounds Plag (2003). The non-head element can serve either as a modifier or given appropriate adjectival head, as an argument of the head. The following are the examples:

Knee-deep sugar-fee

Blood-red girl-crazy

From the example above, the compounds in the left-hand column receive various kinds of interpretations ('deep to the height of one's knee', 'red like blood'). The most common type of interpretation is the one involving a comparison ('red

like blood'). The items in the right-hand column can be analyzed in such a way that the first element of the compound satisfies an argument position of the adjective.

The third kind of compounding as proposed by Plag (2003) is verbal compounds. These compounds may have nouns, adjectives, and verbs as their non-head, as exemplified:

Noun as non-head	Adjective as non-head	Verb as non-head
Proof-read	Deep-fry	Dry-clean
Talent-spot	Shortcut	Freeze-dry
Ghost-write	Broadcast	Drink-drive

The majority of compounds involving a verbal head are best analyzed as the result of a back-formation or conversion process. Thus, the items in the left column are all back-formations from noun-noun compounds with either a verbal noun in -ing or a person noun in -er in head position (*e.g. proof-reading, talent-spotter, and chainsmoker*). Considered with adjective-verb compounds, conversion is involved with to shortcut ('to take a shortcut'), and to dry-clean ('to use a blind-fold'), while to deep-fry and to broadcast seem to be rather idiosyncratic instances of this type, whose semantics is not transparent. Plag (2003) it means that back-formation and conversation analyses make sense which is supported by mentioning fact that verbal compounds with nouns as non-heads are impossible in English, and verbs cannot incorporate adjectival/adverbial.

The last is neoclassical formations. Plag (2003) states that neoclassical compound is the formation processes a number of interesting formal properties that distinguish them from other types of compounds that discussed before. As forms in which is the of Latin or Greek origin are joint to form new combinations but they not proven in original language. For example:

<i>Biochemistry</i>	<i>Photograph</i>	<i>Geology</i>
<i>Biorhythm</i>	<i>Photoionize</i>	<i>Biology</i>
<i>Biography</i>	<i>Photoanalysis</i>	<i>Neurology</i>

2.4 Previous Studies

This research has a relation to the previous researches on the same field. For instance, Hindiyati (2008), “A Morphological Study on Word Formation of ERP Software Terms in [www. wiley. com](http://www.wiley.com)”. She found the result of this study shows three categories of word formation namely affixation, non-affixation and compounding. In her research the type of word formation mostly used is compounding. There is the dominant type of compounding are found in nominal compounds. Leading in endocentric compounds in which the meaning head of compound is inside the combined words. He also said that there are types of word formation namely affixation, non-affixation and compounding. First is affixation which happened if the free morphemes or the base words are added by one or more bound morpheme. Affixation found in the data consists of prefixes and suffixes. Infix is a marginal or uncommon word in ERP software terms. In

prefixes, there are two kinds found namely prefix un- and re- which consists of one word as unloading and reallocation. While, suffixes only found in nominal suffixes namely suffix –er, -ing and -ion. The second is non-affixation which does not belong to affixes but deriving the words from other words or morphemes.

Ifafa conduct a study (2007) entitled “Patterns of Word Formations in Comic Series Issued in the Jakarta Post”. In her study, she described word formation theory based on George Yule. Later, she gives the explanation about patterns of word formation specified in comic series issued in the Jakarta Post. She analyzes the data which are divided into form of word-formation process. They are derivation, compounding, shortening, acronym, blending, and unidentified. So, she studies the patterns of word-formations in comic series issued in the Jakarta post published from December 2003. The result shows the special type of word-formation in comic is visual communication. The visual aspects used as medium for the character to move and speak within a reality to begin before and carry past the action depicted, establishing “reality” perpetually. Not only used visual communication the writer also used picture. Comic strips are virtually pictures because picture may trigger huge associate pathway to memory experiences, pleasure that predate verbal equivalent. The unidentified word is one of the characteristic that makes them interesting.

Another previous study is conducted by Malik (2009), “Morphological Analysis on the Word Formation found in the Terms of Microsoft Word 2007™ Program ”. she found that the Word formation processes that found in Microsoft Word 2007™ program are: inflectional affix, derivational affix, compounding,

multiple processes, blending, and borrowing. The numbers of each process are as follows: inflection: 38 terms and followed by derivation: 16 terms, and then compounding: 15 terms, multiple processes: 2 terms, blending: 2 terms, clipping: 1 term and borrowing: 2 terms. So, the word formation processes that are mostly used in Microsoft word 2007™ program is Inflectional Affix. He also concludes that the changes of the terms that have the word formation processes in Microsoft Word 2007 were not a significance changes, it were proved by the result the analysis which showed that inflectional affix (word formation process that does not change the part of speech of the base morpheme to which they are attached to complete words) becomes the dominant process.

In conclusion, this study considers that software terms has different object from three previous studies above. Plag's theory is not used by Malik and Ifafa. It means that this study has a new idea in identifying and analyzing word formation process.

CHAPTER III

FINDINGS AND DISCUSSION

This chapter presents the result of data analysis based on the research problems. It is divided into two that are research findings and discussion. In the research findings, the researcher describes the kinds of the derivation and compounding processes and the way the new terms are formed. While, in the discussion the findings inferences on the data analysis is elaborated.

The findings are discussed based on the data provided in the program of Adobe Photoshop CS4. The last section of this chapter is the discussion based on the analysis of data finding to explain the research concerned.

3.1 Research Findings

Based on the data, there are nine collected new terms; bicubic, despeckle, zoomify, spherize, pointillize, vibrance, photomerge, picasize, mezzotint. These terms are discussed by analyzing the word one by one in order to make this research completely. The complete data are presented as follow:

DATUM 1

BICUBIC

The researcher classifies the word “bicubic” as new term in Adobe Photoshop CS4 because the researcher do not find the word “bicubic” on

dictionaries. The word “bicubic” can be categorized as a new term in Adobe Photoshop CS4. This tool is used to interpolate in two dimensions using cubic lines. This term is formed by Adobe Photoshop CS4 developer and it is almost used in every photo editor.

Historically, this term is created by the developer of Adobe Photoshop CS4 to make easy editing by optimizing the quality of the picture pixel, which is not created by another developer before. This tool is for sharpening enlargements of digital images. Generally, an image with a higher resolution produces a better printed image quality.

The term bicubic produced a new contextual meaning, it is *creating two shapes of cube* (on the image or picture) in order to optimize the quality of the pixel. The word formation process of that term is called affixation in which it is added by prefix bi- and suffix -ic. It is from the root “cube” as a noun, prefix bi- and suffix -ic then it becomes to the word “bicubic” as a noun.

The word “cube” (noun) means a symmetrical three-dimensional shape, either solid or hollow, contained by six equal squares or a solid object with six equal square sides. The researcher divides “cube” as noun because it has relevance meaning with the use of the term in Adobe Photoshop CS4. In this case, the word “cube” is changed its meaning, which is originally an object, square and three dimensional shapes becomes optimizing quality of the image in Adobe Photoshop CS4.

The word “bicubic” consists of prefix bi- and suffix -ic. In this word, prefix bi- + adjective become noun. It means that joining the syllable bi- makes the word cubic becomes “bicubic” identified with noun. Others, its suffix –ic forms the word “cube” become a adjective.

The term “bicubic” is a combination between bound morphemes that are prefix bi- and suffix –ic and free morphemes “cube”. Prefix bi- build noun, while suffix –ic is used to form adjective. Prefix Bi- is a combining form meaning two and twice. Prefix bi- means having two forms or consisting of two units, or two parts. Some common words with bi- include bicycle (two wheels) biweekly (every 14 days).

While suffix –ic means (in adjectives) of, like, or related to a particular thing. This suffix is also called by adjective suffix because this suffix usually used to form adjectives from nouns with the meaning relating to, or resembling. The suffix –ic that attach to the word “cube” is involved in adjective suffix. Moreover, the word “bicubic” firstly formed by the word cubic (cube + -ic) as an adjective then it is added by prefix bi- identified as a noun.

In short, the word “bicubic” is constructed by the two affixes that are prefix bi- and suffix –ic. This word formation is called affixation process. Then, it also produce a new meaning after the word “bicubic” is formed even it do not change its class of word.

Datum 2

DESPECKLE

The researcher found the word “despeckle” as a new term in Adobe Photoshop CS4. This word could not be found in Oxford and Longman dictionaries. In Adobe Photoshop CS4, the terms “despeckle” is used to remove small defects due to dust, or scratches, on a scanned image. Despeckle replaces each pixel with the median value of the pixels within the specified radius. In addition, the term “despeckle” smoothes areas in which noise is noticeable while leaving complex areas. The effect is that grain or other noise is reduced without severely affecting edges.

The term “despeckle” is created by the developer of Adobe Photoshop CS4 which is used to remove noise while preserving detail. The user of Adobe Photoshop CS4 can use this filter to remove banding or visual noise that often appears in scans of picture or other printed materials. This function is needed by the user of Adobe Photoshop CS4 in order to make a blur picture by removing the noise on the image.

Theoretically, this new term also creates a new contextual meaning as the formation of the word “despeckle”. The term “despeckle” produces a new meaning; *to remove speckles from*. The word formation process of the term “despeckle” is called affixation. It is formed by the root “speckle” as a noun and prefix de- then it becomes to the word “despeckle” as a verb.

From the data, it is found that the word “despeckle” consist of prefix de-. In this type, prefix de- + noun become verb. It means that joining the syllable de- makes the word “speckle” becomes “despeckle” identified with verb. The term “despeckle” is a combination between bound morphemes (prefix de-) and free morphemes “speckle”. The prefix de- used to indicate removal and separation. The prefix de- means to show that something is reduced.

Then, the word “speckle” as a noun means a small or slight mark of a contrasting color, as on the skin, a plumage, or foliage. In sort definition of the word speckle is a small spot or patch of color. While, the word “speckle” as a verb means to mark with a large number of small spots or patches of color. In this analysis, the researcher categorizes the word “speckle” as a noun because its meaning is relevant to the Adobe Photoshop CS4 program.

In short, the word “despeckle” is constructed by the affix that are prefix de-. This word formation is called affixation process. Then, it also produces a new meaning after the word “despeckle” is formed. It changes the class of word that a noun to become a verb.

Datum 3

ZOOMIFY

The word “zoomify” is not provided in the dictionary either Longman or Oxford dictionary. Then, the researcher decides to classify the word “zoomify” as

new word. The word “zoomify” means to resize the image size. As the use of that term, zoomify makes high quality images for fast interactive viewing on the web. It means that zoomify can export the image in Adobe Photoshop CS4 to the web with different size. The researcher devides the term “zoomify” is used to post high-resolution images on the web that viewers can pan and zoom to see more detail. Photoshop exports the image files by using zoomify tool, then it is imported to web.

The word “zoomify” is created by the developer of Adobe Photoshop CS4 that aims to make new term which has easy function to zoom in, zoom out, export file and make high resolution on web without breaking the pixel of the image. In addition, the term “zoomify” is an essential tool for web designers and flash developers whose work involves high-quality, high-resolution images. In the other hand, since the new word is created, it also conveys the new meaning. It produced a new contextual meaning.

Theoretically, the word “zoomify” is constructed by the word zoom and suffix –ify. The word formation process of that term is called affixation with the type derivational suffixes. The suffix –ify attach to the word zoom that change the meaning of the word “zoom” as a noun to become a verb. Therefore, suffix –ify denotes transformation the process of making into verb.

From the data, it is found that the word “zoomify” includes suffix -ify. In this type, a verb + suffix -ify becomes to a verb. It means that joining the syllable -ify makes the word zoom becomes “zoomify” identified as a verb. The term

“zoomify” is a combination between free morphemes “zoom” and bound morphemes that is suffix –ify.

Zoom as a noun means to change smoothly from a long shot to a close-up. Scrolling zoom in and zoom out with choices to resize the window to fit on the screen. The word “zoom” can be divided as a verb that means to move or travel very quickly. Moreover, zoom is also used to make thing (picture or image) bigger and smaller. The researcher categorizes the word “zoom” into noun because it is relevant to the meaning that convey by the tool of Adobe Photoshop CS4 term.

While, suffix –ify means to cause and increase in the stated quality. The suffix –ify is forming verbs or denoting transformation the process of making into verb. The suffix –ify is to make something be in a particular state or condition, for example: *to clarify the situation* (make it clear). In other definition, suffix -ify indicates to make or resemble and to expand meaning of words.

In summary, the word “zoomify” is constructed by the affix that are suffix –ify. This word formation is called verbal suffixes. Then, it also produces a new contextual meaning after the word “zoomify” is formed. It changes the class of word that a noun to become a verb.

Datum 4

SPHERIZE

The word “spherize” is classified as the new term in Adobe Photoshop CS4. It cannot be found in Oxford and Longman dictionary. The meaning of this word is to appear on the surface of a sphere. The function of that term in Adobe Photoshop CS4 is used to create sphere or globe effect on the picture. Besides, the developer of Adobe Photoshop CS4 created the term “spherize” is to give objects a three dimension effect by wrapping a selection around or inside a spherical shape, distorting and stretching the image. In other word, this the term “spherize” is created in Adobe Photoshop CS4 because the developer wants to help the user of Adobe Photoshop CS4 to edit the picture look like a fishbowl or balloon effect quickly and smoothly which has not build before in another photo editing. Then, the word “spherize” also produced a new contextual meaning that the analysis as follows.

The word formation process of this term is called affixation. Then, this process can be classified as the verbal suffixes. The word “spherize” is formed by the root sphere as a noun and attached by the suffix -ize then becomes to the word spherize as the verb. In other words, the concept is a noun + suffix -ize becomes a verb. Therefore, the researcher finds the word “spherize” that consists of suffix – ize makes the word sphere becomes to “spherize” which is identified with a verb.

The term “spherize” is combination between two free morphemes “sphere” and “ize”. The word sphere (noun) means a solid object with a surface on which

all points are an equal distance from the centre, like a ball or globe. After being attached by the suffix *-ize*, the meaning changes to appear on the surface of a sphere. While, the suffix *-ize* is bound morpheme that definition is to make or to cause, for examples the words *apologize*. The suffix *-ize* also *-ise* in British English is to change something to something else, or be changed to something else. It is added to adjectives and nouns to form transitive verbs with the general senses “to render, make” (*actualize; fossilize; sterilize*), “to convert into, give a specified character or form to” (*computerize; dramatize; itemize; motorize*).

In conclusion, the researcher divides the word “sphere” into noun which is added by suffix *-ize* to become “spherize”. The combination of those two words “spherize” produces a new contextual meaning; it is to appear on the surface of a sphere. Then, the word “spherize” is categorized as verb because the use of the suffix *-ize* is to change noun or adjective into verb.

Datum 5

POINTILLIZE

The word “pointillize” is a new word that its contextual meaning means to make dotted patterns. The function of the term “pointillize” in Adobe photoshop CS4 program is making small areas of color dot to construct an image. The developer of Adobe Photoshop CS4 created the term “pointillize” because they want to build a filter effect to redraws a layer as randomly placed dots, as in a pointillist painting, and uses the background color in the toolbox as a canvas area.

The researcher finds the word “pointille” as loan word which is borrowed from French. The word “pointille” is one of word formation process which is called borrowing. Borrowing is the process of taking a word from one language and integrating it into another or the process of taking over the words either in their original or moderated form from other languages and incorporating them in another language. It may also be referred to as adapting the borrowing language's phonological or morphological system to varying degrees into another language. In addition, the word “pointille” means dot a small round mark or spot, and a decorative technique in which patterns are formed on a surface by a means of punched dots.

The word formation process of “pointillize” is affixation that it is formed by the word “Pointille” and suffix “-ize”. In this type, the word “pointille” as noun that is attached by suffix -ize becomes verb. It means that joining the syllable -ize makes the word pointille becomes “pointillize” identified with verb.

While, suffix -ize is a bound morpheme that definition is to act in a certain way, to treat in a certain way, to make into, to treat with, to do, to make, to cause. The suffix -ize is the preferred ending for many verbs because it changes noun and noun into verb. It is one of the most productive suffixes in the language.

In summary, the word formation process of the term “pointillize” is affixation which is classified as the verbal suffixes. The word “pointillize” is constructed by the root pointille as a noun and suffixe -ize. It also changes the

meaning of the word after being added by the suffix -ize. Others, the class of word also changes from the noun to become a verb.

Datum 6

VIBRANCE

The word “vibrance” found in Adobe Photoshop CS4 as the new word that is not be found in the dictionary. The use of this term in Adobe Photoshop CS4 is to make the color of the picture look naturally. This term is one of the new features in Adobe Photoshop CS4. The developer of Adobe Photoshop CS4 creates the term “vibrance” is to make the tool which helps the user of Adobe Photoshop CS4 easy to edit the color of the picture.

Then, the word “vibrance” is analyzed how it is formed and its contextual meaning. This word is produced by constructing from the root “vibrant” then it is attached by the suffix -ance. This suffix mostly becomes noun and it is usually used to indicate an action, condition or quality. From the data, it is found that the word “vibrance” includes suffix -ance. In this type, the word vibrant as an adjective added by the suffix -ance to become a noun. It means that joining the syllable -ance makes the word vibrant becomes “vibrance” identified with a noun.

In the other words, the term “vibrance” is the combination between the word “vibrant” and suffix “-ance”. Those two morphemes have different meaning, the word “vibrant” means giving bright and striking the color of the image (of color), gives relatively high on the scale of brightness. In addition, the word

“vibrant” is categorized as adjective which has relevant meaning with Adobe Photoshop CS4 use of the tool.

While, the suffix –ance means to indicate an action, state, condition or quality. This suffix is used to form a noun for example: brilliance and appearance. Historically, the suffix “-ance” is taken from Latin nouns ending in -antia, -entia (from present participial stems -ant-, -ent). Others, the function of suffix –ance is used to form nouns either from adjectives in -ant or from verbs.

In short, the combination of those two words “vibrance” produces a new contextual meaning; it is giving bright and striking effect of the color. The word formation process of that term is called nominal suffixes. The word “vibrance” is constructed by the word vibrant as an adjective to become the word “vibrance” as a noun. Then, the word “vibrance” is changed in term of its class of word that is from a noun to become a verb.

Datum 7

PHOTOMERGE

The word photomerge is the other new term that found by the researcher in which it is not listed in Oxford and Longman dictionary. The meaning of this word is to combine multiple pictures into one file. This term is used to scan large artwork in order to maximize the quality of the size. Then, it is also used to make easy in adjustment, that only pushes already intense colors (bright reds, blues,

greens, etc.) more saturated, while leaving skin tones and other normal colors alone.

The developer of Adobe Photoshop CS4 created the term “photomerge” to make the user of the program easy to combine two pictures. In other word, the term “photomerge” is a great way to further enhance the color intensity of the photography. Then, the formation of the word “photomerge” produceS a new contextual meaning. The analysis of how it is constructed and its meaning as follow.

The term “photomerge” as a verb that is actually a combination between two free morphemes “photo” as a noun and “merge” as a verb. Then, the word “photo” means a photograph; a picture made using a camera, in which an image is focused on to light-sensitive material. The word “merge” means to combine, or to join one thing to another thing. If two things merge, or if one thing merges into another, those things cannot be seen. In addition, the word merge is used in Adobe Photoshop program to combine between one color and other color in order to make gradient effect.

The combination between the words “photo” and “merge” which have different meaning that are combined then produced a new meaning. The word formation process of that term is called compounding because there is process of combining two words into one word between “photo” and “merge”. The kind of this compounding is verbal compound that the verb of the word as a head. The word “photomerge” is from the word photo and merge. The word “merge” is a

verb that the role as a head modified by the word “photo” as a noun. Hence, this formation produce new contextual meaning of the word “photomerge” that is to combine multiple pictures into one file.

In short, the word formation of the word “photomerge” is compounding that can be classified as verbal compound. It is constructed by the different class of words that are a noun (photo) and a verb (merge). After those two words are combined, it produced a new word which class of the word to become a verb. Those two words have different meaning that produce a new contextual meaning after it is combined. Finally, the meaning of the word “photomerge” is to combine multiple pictures into one file.

Datum 8

PICASIZE

The word “picasize” is defined by the researchers as a new term because it could not be found in Oxford and Longman dictionary. The word “picasize” means to change the pixel, point, inch of the size in picture. The use of the term “picasize” is used to set the point of saving image, and changes the inch, pixel and point. The developer of Adobe Photoshop CS4 program created the term “picasize” in order to make easy save the picture by resizing the pixel, point and inch of it.

Theoretically, the word formation of the word “picasize” produces a new contextual meaning. The term “picasize” as a noun that is a combination between two free morphemes “pica” as a noun and “size” as a noun. The researcher finds different meaning those two words “pica” and “size” with the use of the term in Adobe Photoshop CS4 program.

The word pica means a unit of type size and length equal 12 points and it also has meaning the size of the thing. It means the depth of the type size as a unit of linear measurement for type, pages containing type, and image type. While, the word size means dimensions, including length, width, height, diameter, perimeter, area, volume. That word refers to how big or small something is. This kind of words is mostly used in Adobe Photoshop CS4 program, the process or the result of determining the magnitude of a quantity, such as length or mass, relative to a unit of measurement, such as a meter or centimeter.

The combination of those two words “picasize” produces a new contextual meaning; it is changing the size of the picture. Then, the word formation process of that term is called compounding which is categorized as nominal compound. It is a combination between noun and noun class of words. In this case, the word pica and size are in the same class as a noun. Besides, noun-noun compounds are the most common type of compound in English.

In a conclusion, the word formation of the word “picasize” is compounding that can be classified as nominal compound. It is constructed by the similar class of words that are pica and size as a noun. After those two words are

combined, it formed a new word which class of the word to become a noun.

Those two words have different meaning that produce a new contextual meaning after it is combined. Finally, the meaning of the word “picasize” is to change the pixel, point, inch of the size in picture.

Datum 9

MEZZOTINT

The researcher decides the word “mezzotint” as a new word found in Adobe Photoshop CS4. It is not exist in oxford and Longman dictionary. As a new word, the researcher proposes that it conveys a new contextual meaning. The meaning of the word “mezzotint” is a way of reproducing a photograph in black and white with etched lines instead of the familiar dot pattern of a typical halftone. In addition, the developer of Adobe Photoshop CS4 created the term “mezzotint” to make thousands of little dots effect on the image because it gives gradient color between black or white and coloring photo. Then, the analysis of how it is formed and its meaning as the explanation follows.

The term “mezzotint” is combination between two morphemes “mezzo” and “tint”. The word “mezzo” is an adjective and “tint” is a noun. The researcher finds multiple processes in the term “mezzotint” which are borrowing and compounding. First, the word “mezzo” is taken from Italian that means half or medium. It is categorized as borrowing since the English word formed by taking a word from any other languages.

The word “mezzo” is the Italian word for "half", "middle" or "medium.". It is pronounced /'metso/ in English, but /'mɛddzo/ in Italian. While, the word “tint” is a shade or variety of color, a trace of something. In other definition, the word “tint” means color of something. The researcher divides the word “tint” into noun because it has same meaning with the function of Adobe Photoshop CS4 program, it is gradation of a color made by adding white to it to lessen its saturation and a color that is softened.

The researcher finds new meaning of forming the word “mezzotint”. The combination between the word “mezzo” and “tint” to become “mezzotint” produces a new meaning; it means to make gradient color by giving dot effect. The word formation process of that term is called compounding. The process of that compounding can be classified as nominal compound. It is constructed by the different class of words that are an adjective (mezzo) and a noun (tint). After the word “mezzotint”, it changes the meaning. Those two words have different meaning that produce a new contextual meaning after it is combined.

In a conclusion, the word formation of the word “mezzotint” is compounding that can be classified as nominal compound. It is constructed by the different class of words that are mezzo as an adjective and tint as a noun. After those two words are combined, it formed a new word which class of the word to become a noun. Those two words have different meaning that produce a new contextual meaning after it is combined. Finally, the meaning of the word “mezzotint” is to change the gradient color.

3.2 Discussion

Based on data analysis as presented in the findings above, the following discussion refers to the research problems formulated in chapter one, which deal with the kinds of compound and derived words and the way of those two kinds of words formation are formed.

1.2.1 Kinds of compound words

In line with the first research problem stated in the first chapter, the researcher firstly discuss the finding on the kinds of compound words. One of word formation mentioned by Plag's theory (2003) is compound word that is forming the words by combining the words being formed. Plag (2003) mentioned that compounding is also called composition is the combination of two words to form a new word.

In this research, the researcher founs that there are six new terms that have the word formation 'compounding' in the whole categories, they are: "Bicubic", "Despeckle", "Zoomify", "Spherize", "Pointillize", "Vibrance". Those new terms are found in Adobe Photoshop CS4 which is not provided in the Oxford and Longman dictionaries used by the researcher. Therefore, the researcher classified those terms into new terms as the data identified to answer the first research problem.

1.2.2 Kinds of derived words

The second question answered in this research is about the kinds of derived words. Plag (2003) stated that derivation is the process of word formation in which the new words are forming of a new word by adding affixes to the existing word. He defines derivational word processes into two categories that are affixation and non-affixation.

In this research, the researcher found three new terms that have the word formation ‘derivation’ in the whole categories, they are: “Photomerge”, “Picasize”, “Mezzotint”. These terms found in Adobe Photoshop CS4 and categorized as the new terms since they cannot be found in the dictionaries used by the researcher.

1.2.3 The words formation processes of those compound and derived words

The last question is about the word formation processes namely compounding and derivation words. As mentioned before, the researcher have found nine new terms including six compound and three derived words. First, compounding word formation processes, compounding is joining two words or more to form a new word. In this type consists of nominal, adjectival and verbal compound. The first data, the term “bicubic” is from the root “cubic” which is added by prefix bi- and suffix –ic. This processes is called affixation process. It also produce new contextual meaning that is creating two shapes of cube.

DATA 2 is the word “despeckle” which is formed by adding prefix de-. It is from the root “speckle” then it is added by prefix de-. Others, it also produces

new contextual meaning that is to remove speckles from. After the word “despeckle” is formed, it also change its part of speech that is from noun to become verb. Moreover, it also creates new contextual meaning that is to remove speckles from. The process of adding prefix de- in this new term called affixation process.

DATA 3, the word “zoomify” is formed by the affixes that are suffix –ify. Moreover, the word “zoomify” is constructed from the word “zoom” then it is added by by suffix –ify. In short, the word “zoomify” produces new contextual meaning that is resize the image in website. The word formation process of the word “zoomify” is called affixation process. Then, DATA 4, the word “spherize”, is also belong to the affixation process. It is formed by adding suffix –ize to the root “sphere”. The word “sphere” is a noun then it is added with suffix –ize become the word “spherize” as a verb. This process is called verbal suffix because it change its part of speech from noun to become verb. Finally, it changes its contextual meaning that is to appear on the surface of a sphere.

Next, DATA 5, the word “pointillize” is constructed from the word “pointille” and suffix –ize. In addition, the word “pointille” is from french language, hence, the word formation process of the word “pointillize” also called borrowing since it is formed by borrowing the word from the other languages. Besides, the word “pointillize” is a noun which is added by suffix –ize then it become a verb. Therefore, the word formation process of this word is called affixation process which is classified as the verbal suffixes since it change its

part of speech to become a verb. In addition, it also produces new contextual meaning that is to make dotted patterns

Then, DATA 6, the word “vibrance” is produced by adding suffix –ance to the root “vibrant”. The word formation of the word “vibrance” is called affixation process that is in the part of nominal suffixes since it change the part of speech of the word vibrant. The word “vibrance” is formed an adjective vibrant which is added by suffix –ance then become a noun. After it is constructed, it produces new contextual meaning that is to give bright and striking effect of the color.

Then, the second is about compounding word formation process. As mentioned earlier, the researcher found three compound word that are “Photomerge”, “Picasize”, and “Mezzotint”. DATA 7, the word “Photomerge” is created by combining the word “photo” and “merge”. The word formation of the word “Photomerge” is called compounding since it is constructed by joining two words. This combination is between noun and verb which can be classified as verbal compound. After those two words are combined, it produces different class of word that become a verb after those two different class of words are combined. Therefore, it is called verbal compound. Others, it also produces new contextual meaning that is to combine multiple pictures into one file.

DATA 8, the word “picasize” is formed by combining the words “Pica” and “Size”. Those two words have different meaning, then after they are combined, it produces new contextual meaning that is to change the pixel, point,

size in the picture. Others, the word formation process of this word is called nominal compound (noun-noun compound) since it is formed by compounding the two nouns that are pica and size. The last, DATA 9, the word “Mezzotint” is constructed by combining the words “Mezzo” and “Tint”. In addition, the word formation of the word “Mezzotint” have multiple word formation processes that are borrowing and compounding. The word “Mezzo” as an adjective is actually coming from Italian word. Then, it is combined with the word “Tint” as a noun. Hence, the combining word process here is called nominal compound since they are from different class of words that are adjective and noun, then become a noun. Therefore, it is called nominal compound. In addition, it changes its contextual meaning after those two words are combined that is to change the gradient color.

CHAPTER IV

CONCLUSION AND SUGGESTION

The last chapter of this research, the researcher presents the conclusion and suggestion of the research. The following section is the presentation on the conclusion that becomes the answer of the problems formulated in this research. Then, the following is the suggestion which refers to the research findings and discussion.

4.1 Conclusion

Based on the analysis done on the research, the conclusion of this study can be formulated to answer the research problem. The researcher finds nine new words in Adobe Photoshop CS4 program that are bicubic, despeckle, zoomify, spherize, pointillize, vibrance, photomerge, picasize and mezzotint. Those nine new terms have the word formation processes.

The first word formation process is derivation. Derivation is the process of forming a new word on the basis of an existing word. Derived word that found in the data consists of prefixes and suffixes. In prefixes, there are two kinds of prefixes found namely prefix bi- and de-. The researcher found that prefix di- attaches to the word cubic, it formed the word bicubic. Others, the term “bicubic” do not change in term of its part of speech. The other prefix is de- that attaches to the word speckle, it forms the word “despeckle”. The term “despeckle” then

changed its part of speech to become verb. Before adding the prefix de-, the word speckle is a noun.

In other hand, the researcher found three suffixes that are suffix –ify, -ize, and –ance. The suffix –ify is involved in the word “zoomify” in which it is formed by the root “zoom”. The word “zoomify” after it is formed by adding suffix –ify, it does not change the part of speech that is from verb. Then, the suffix –ize is in the word “spherize” that it attaches to the word “sphere”. After the word “spherize” is formed, then, the part of speech of the word “spherize” changes to becomes a verb. Next, the word “pointillize” has suffix -ize that is inserted to the word “pointille”. Then, the word “pointille” becomes “pointillize” can be categorized with verb. The last, the suffix -ance is involved in the word “vibrance” that coming from the word “vibrant” attached by the morpheme -ance. Then, the suffix –ance that join after the word “vibrant” changes the word “vibrance” to become noun.

Then, the second word formation process is compounding. Compounding is created by combining two or more words together to form new word. The data shows that there are three data includes as compound word, they are “photomerge”, “picasize” and “mezzotint”. The word photomerge is classified as verbal compound. Verbal compound is the kind of compounding process in which a verb of the word as a head. Besides, the word “picasize” and “mezzotint” are categorized as nominal compound. Thus, nominal compound is a combination between noun and noun as the same class of words. It is commonly happened in constructing new English words.

From the explanation above, the researcher makes a conclusion that forming a new word may produce a new contextual meaning and may change the class of the word whether the word formation is derivation or compounding. For example, the word “cubic” as an adjective then attached by prefix bi- to become “bicubic” as a noun. Others, the word photomerge is formed by the word photo as a noun and the word merge as a verb. These combining words produce the word photomerge that is classified as a verb.

4.2 Suggestion

After analyzing the word formation of new terms in Adobe Photoshop CS4 program based on Ingo Plag’s theory, this research is recommended for the reader who want to analyze word formation on the computer program. Meanwhile, the researcher suggests for English learners, this research becomes additional empirical data about morphology study especially in software terms. For the next researchers are able to do analysis on the others program as their subject.

For the next researchers who are doing at the same area, the result of this research hopefully can be used as a source to analyze word formation deeply. Moreover, the next researcher can analyze the other computer program using Ingo Plag’s theory or any other theories that are related to the word formation.

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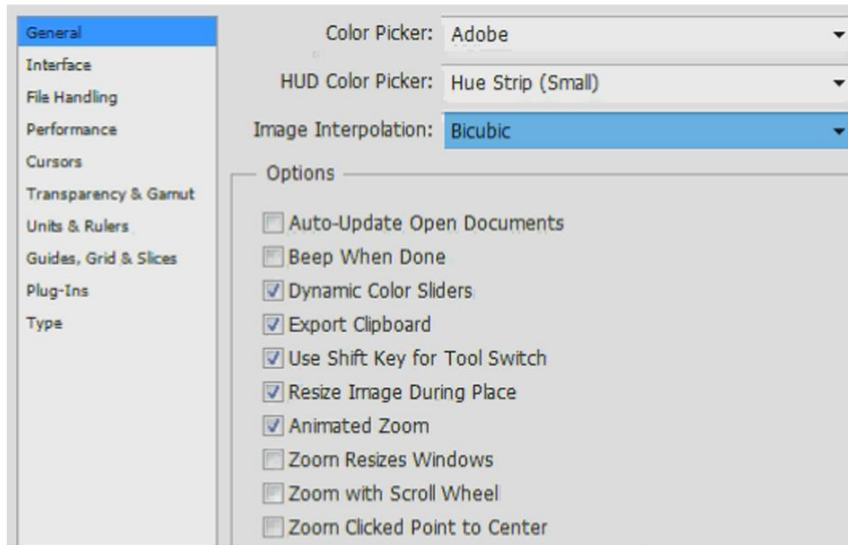
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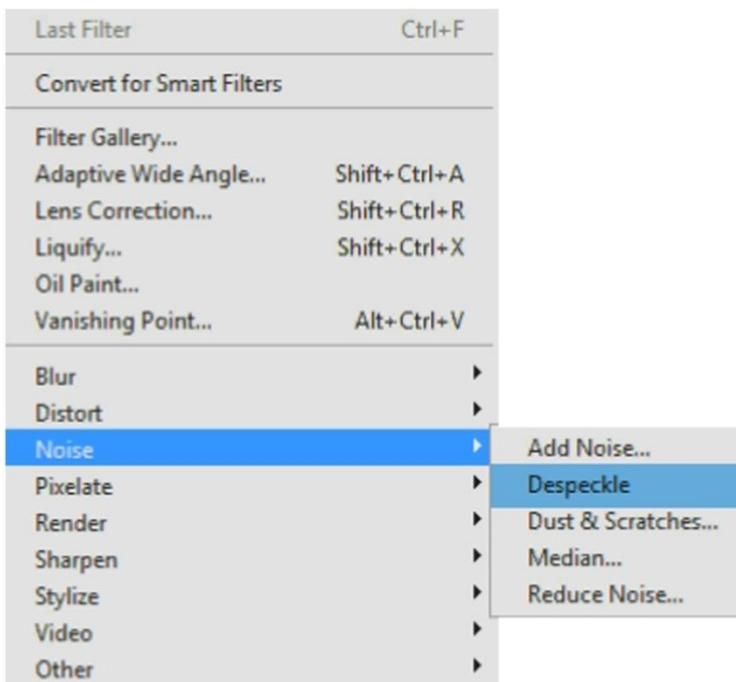
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APPENDIXES

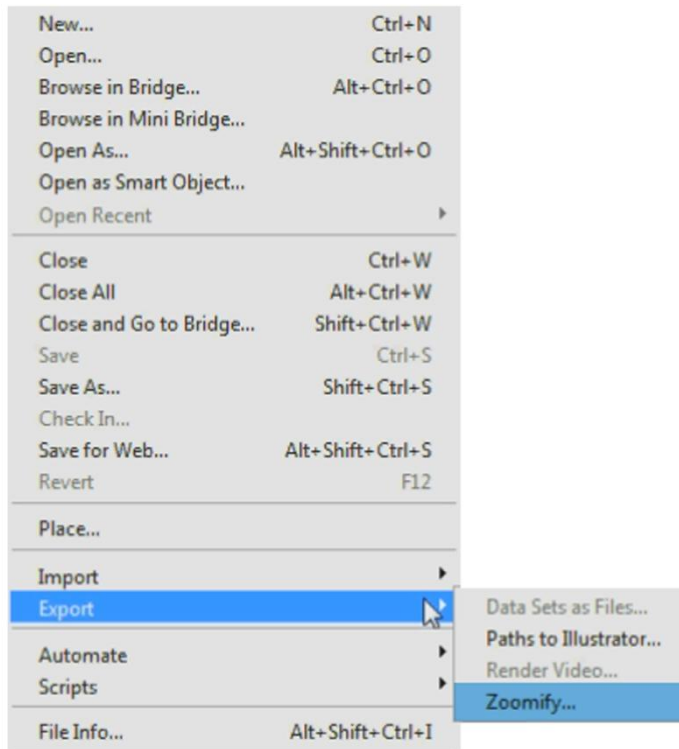
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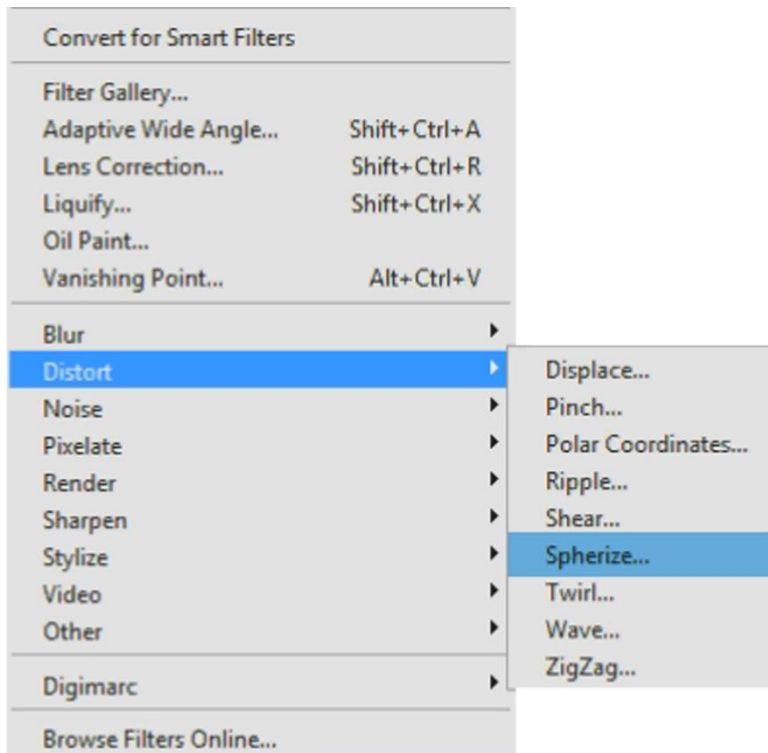
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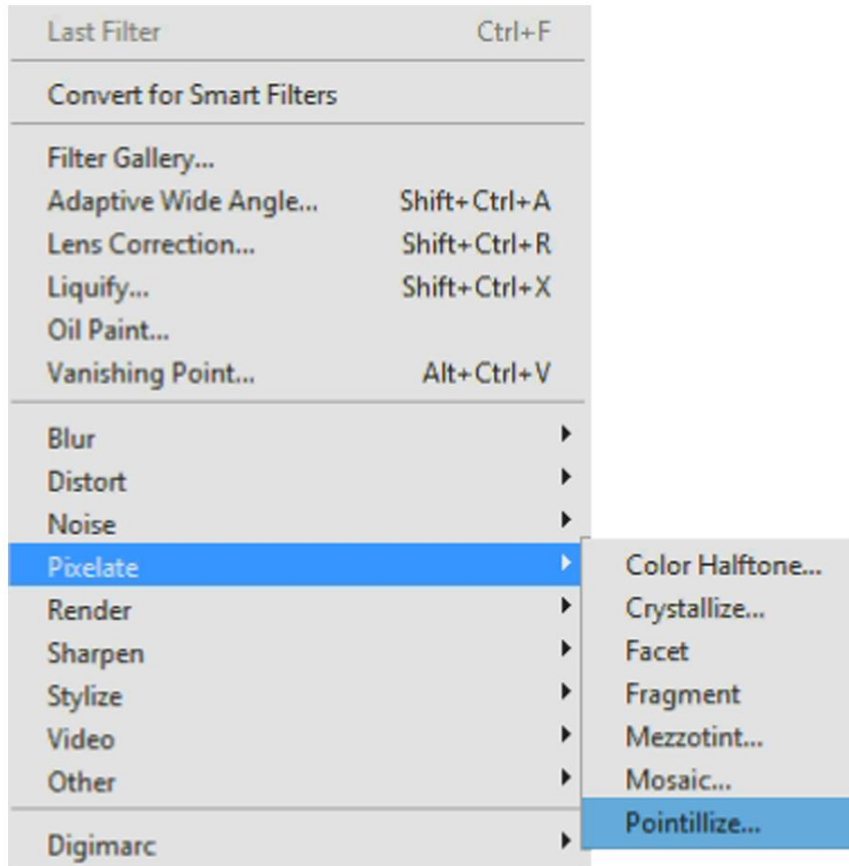
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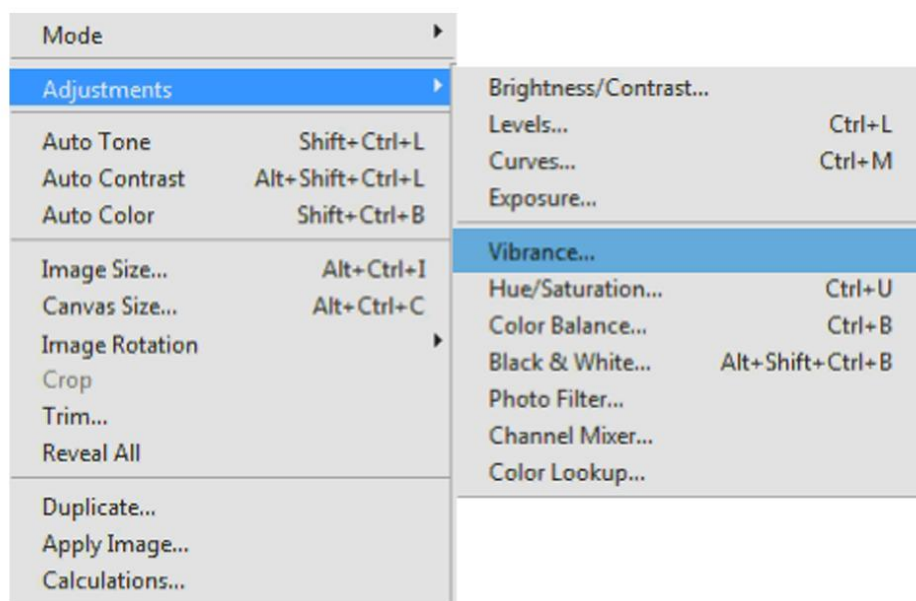
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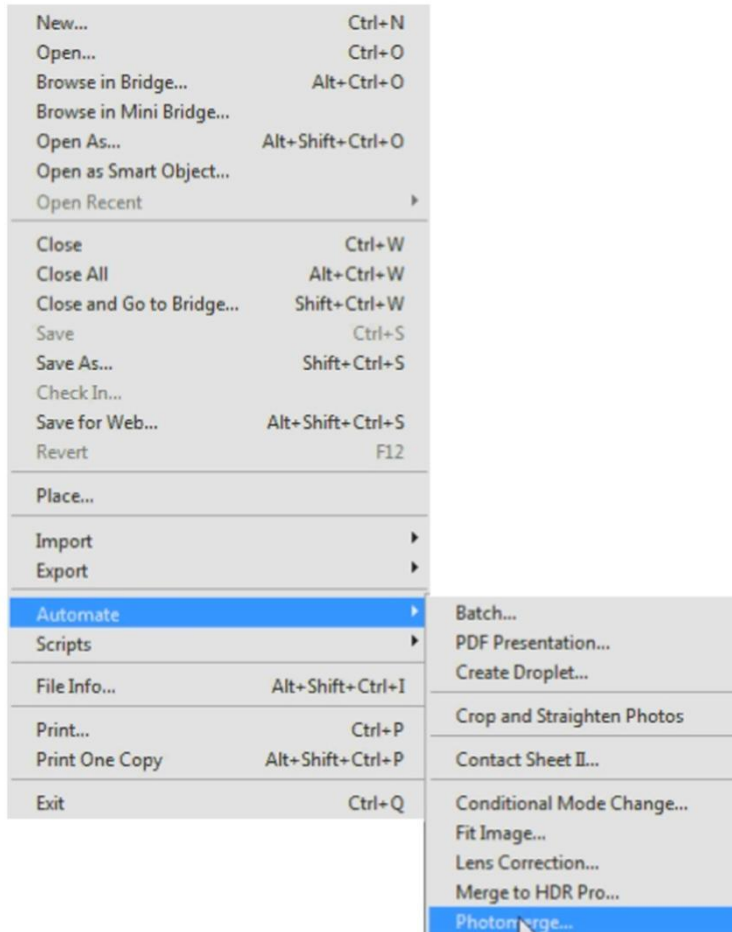
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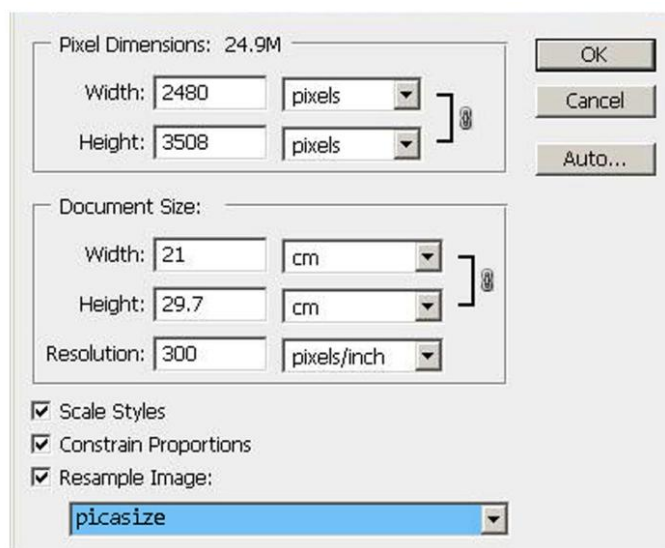
DATA 6



DATA 7



DATA 8



DATA 9

