CHAPTER II
REVIEW OF LITERATURE, CONCEPT, AND THEORETICAL BASIS

This chapter explains three things. First, Review of Literature which is some studies which is considered relevant to this study. Second, the explanation of word-formation, derivational, discourse, corpus, morpheme, root, stem and base which is presented in Concept. Third, theory used in solving the problems in this study that is presented in Theoretical Basis.

1.1 Review of Literature

Research relating to this study was done by Suardana (2002) entitled *The Analysis of Class-Changing Affixes in English*. Problems discussed in that research were the form of class changing affixes and their function. The data of the research were taken from two novels, *A Tale of Two Cities* by Charles Dickens and *Scarlet Letter* by Nathaniel Hawthorne. There were two theories applied in that research. Firstly, in analyzing the form of affixes, he used theory of Morphology developed by Laurie Bauer (1984) and used theory of Morphology developed by Quirk (1973) in analyzing the function of the affixes. He found that there are six types of class changing affixes, they are prefixes forming adjectives, prefixes forming verbs, suffixes forming nouns, suffixes forming verbs, suffixes forming adjectives, and suffixes forming adverbs. The strength of that study is he can explain the concept of class-changing affixes clearly and provide the explanation with example. The weakness of that study is the study only focuses on
class-changing affixes. The relevance of that study with this study is that the topic taken, namely about Morphology.

Another research relating to this study is a study done by Darma (2005) entitled *The Analysis of Derivational Suffixes in English with Special Reference to Red Leaves by Paulina Simons*. Forms of derivational suffixes in English and how derivational suffixes can bring a shift in the grammatical class of a base and possible change in meaning became the problems discussed in that study. Theory applied in that research were theory proposed by Laurie Bauer in his book entitled *English Word-Formation* (1983) and theory proposed by Randolph Quirk and Sidney Greenbaum in their book entitled *A University Grammar of English* (1973). The results of that research showed that there were some class maintaining derivational suffixes found, namely –hood, -ship, and –ette. There were class changing derivational suffixes found also, namely suffixes forming noun, verb, adjective, and adverb. Among these, there were suffix –ation, -ure, -al, -ary, -ize, -en,-able, -less, -ful, -ly, and –wards. The strength of that research is it is easy to understand as she presents the process of the word-formation and result one by one and clearly. The weakness of that study is only a few derivational suffixes found. The relevance to this study is the topic arose by the writer, namely about derivational suffixes.

There is also a study done by Natha (2010) entitled *The Analysis of Noun Class Maintaining Suffixes in English*. The problems discussed in the study were the form, function and meaning of noun class maintaining suffixes. The data were collected from novel entitled *the Eagle and the Dove* by Lewis Orde. The theory
used in analyzing the data were Laurie Bauer (1983) in his book entitled *English Word Formation* and Matthews (1974) in his book entitled *An Introduction to the Theory of Word Structure*. The result showed that there are a non-productive and a productive noun class maintaining suffixes. The productivity of the suffixes were determined by the number of base the suffixes can be attached. The noun class maintaining suffixes found were: -hood, -ship, -dom, -ocracy, -ery, -ster, -eer, -er, -let, -ette, -ess, -y, -ing, and –ful. The strength of that study is the analysis of this study is very deep. The weakness of that study is this study only focus on noun class maintaining suffixes. The relevance of that study to this study are the topic discussed, namely suffixes and the research questions discussed.

There is an article written by Fleta (2011) entitled *Suffixes in Word-Formation Processes in Scientific English*. The comparison of suffixes productivity between medicine and computer science registers and the difference in the behaviour of these suffixes in the specialized registers of medicine and computer science compared to a wider, more general corpus namely the *British National Corpus* (BNC) became the concern of that study. Theory applied in that study were theory proposed by Biber (1995) in his book entitled *Dimensions of Register Variation: A Cross-Linguistic Comparison* and Plag (1999) in his book entitled *Morphological Productivity: Structural Constraints in English Derivation*. The result showed that suffixes are a productive word-formation resource in scientific registers and that their productivity differs in the registers under study. Findings ranked in scientific registers is higher than the BNC in the case of productivity of abstract noun-forming suffixes like -ity, -ion and –ness.
The scientific corpora also showed that the suffix –ize is fully productive; values is higher than the ranking drawn from the BNC. On the other hand, the BNC showed an outstanding productivity rate of –free and -like, suffixes which proved to be fully unproductive in the scientific registers under study. The strength of that study is the writer can explain the discussion and the result clearly with the help of statistic. The weakness of that study is the writer does not state theory applied in that study. The relevance with this study are the topic discussed, that is suffixes and the data source used, namely corpus.

There is also an article written by Liu (2012) entitled A Corpus-Based Analysis of English Suffix –esque. That study discussed about the etymology, the semantic meaning, the formation rules, the orthographic properties, the productivity and the stylistic tendency of the English suffix –esque with the help of corpus. The theory applied to determine the productivity of the suffixes was theory proposed by Plag (2002) in his book entitled Word Formation in English. The result showed that, first, the suffix –esque originates from the French suffix –esque which means like, in the manner of. Second, the suffix –esque mainly possesses two semantic meanings, one is used with proper noun to make adjectives describing things relating to that noun and the other is used with some nouns to make adjectives describing things that have a particular quality relating to that noun. Third, the most common used base words of the suffix –esque are proper names, either names of people or places or even festivals. Fourth, hyphen is not a compulsory element in word formation of the suffix –esque, and the letter e at the end of a base tends to be deleted when the suffix –esque is attached to the
base. Fifth, the suffix –esque is productive. Sixth, the suffix –esque is more common to form new words in formal contexts, for example, in fictions, magazines, newspapers and also academic works; while it is used relatively less in spoken context. The strength of that study is the problem discussed is very deep. However, the weakness of that study is the topic discussed is too narrow. The relevance to this study are the used of COCA as the data source, the use of theory proposed by Plag (2002) and topic discussed, namely suffix.

1.2 Concept

There are some concepts that will be presented in this study, namely: the concept of word formation, morpheme, root, stem and base.

1.2.1 The Concept of Word Formation

Morphology can be divided into two main branches, inflectional morphology and word-formation – also called lexical morphology – (Matthews, 1991: 41). Word-formation can thus be defined as the ways in which new complex words are built on the basis of other words or morphemes (Plag, 2002:17).

1.2.2 The Concept of Morpheme

Morphemes are the minimal meaningful units which may constitute words or parts of words (Nida, 1949:1). In the previous chapter, morpheme has been divided into two types, namely free and bound morpheme. The example of free morpheme is run which is a verb. It could not be divided into smallest meaningful unit again, meanwhile if we add suffix /–s/ to the word run, the suffix /–s/ is
called bound morpheme because it would not have any meaning if it is not attached to a free morpheme. Suffix /–s/ there also called inflectional morpheme because it does not change the word class of the produced word. When run is attached by a suffix /–er/, it would become a noun. The suffix there is called derivational morpheme because it changes verb into noun.

1.2.3 The Concept of Derivational Morpheme

Bauer (1983:33) states that derivation is concerned with the formation of new lexemes by affixation. Derivation can be divided into class-maintaining derivation and class-changing derivation. A class-maintaining process of derivation produces lexemes which belong to the same form class as the base, while a class-changing process of derivation produces lexemes which belong to a form class other than the form class of the base.

According to Katamba (1993:49), Derivational morphemes form new words either by changing the meaning of the base to which they are attached or by changing the word class that a base belongs to.

1.2.4 Concept of Suffix

Suffix is one type of affixes. There are three types of affixes, namely prefix, infix and suffix. However, there is no infix found in English. Suffix, according to Katamba (1993:45), is affix attached after root or stem or base. For example, a word kindly has two morpheme namely, kind and ly. Kind here is a free morpheme and is the base word. While –ly is a bound morpheme and is a suffix. It attached after a base, namely kind, to form an adverb.
1.2.5 The Concept of Root, Stem and Base

A root, stem and base are terms used in linguistics. A root is a form which is not further analyzable, either in terms of derivational or inflectional morphology. A stem is a form that concerns only when it is dealing with inflectional morphology. A base is any forms to which any kinds of affixes could be added (Bauer, 1983:20-21).

For example, word *drive* is a root as there is no affix attached to it. If suffix –s is attached to it to indicate that the subject is third person singular in the simple present tense, the word *drive* is called a stem. If the word *drive* is attached by suffix –er and becomes *driver*, the word *drive* is called base.

1.2.6 The Concept of Discourse

Discourse is the organization of language above the sentences, or above the clause, thus it is the larger linguistic units (Stubbs, 1985). Discourse’s structures take the form of written or spoken communication or debate. A discourse’s structure is any set of connected sentence. Sentences in discourse are related one another.

1.2.7 The Concept of Corpus

A corpus can be described as a large collection of authentic texts that have been gathered in electronic form according to a specific set of criteria (Bowker, 2002:9). There are four important characteristics to note here: ‘authentic’, ‘electronic’, ‘large’ and ‘specific criteria’. If a text is authentic, that means that it
is an example of real ‘live’ language and consists of a genuine communication between people going about their normal business. A text in electronic form is one that can be processed by a computer. It could be an essay that you typed into a word processor, an article that you scanned from a magazine, or a text that you found on the World Wide Web. Basically though, ‘large’ means a greater number of texts than you would be able to easily collect and read in printed form. Finally, it is important to note that a corpus is not simply a random collection of texts. The texts in a corpus are selected according to explicit criteria in order to be used as a representative sample of a particular language or subset of that language.

1.3 Theoretical Basis

Theory applied in this study was theory of Morphology proposed by Plag (2002).

1.3.1 Form of Suffixes

According to Plag (2002), suffixes are divided into four forms, namely:

1. Nominal Suffixes

/-age/: This suffix derives nouns from verb or noun and are often monosyllabic such as leakage, spillage, voltage.

/-al/: A number of verbs take -al to form abstract nouns such as arrival, referral, and renewal. Base words for nominal -al all have their main stress on the last syllable.
/-ance/ : Attaching mostly to verbs. -ance creates action nouns such as absorbance, riddance, retardance. This suffix has variants such as -ence, -ancy and -ency.

/-ant/ : This suffix forms count nouns applicant, defendant, and attractant. Most bases are verbs of Latinate origin.

/-cyl, -cel/ : This suffix attaches productively to adjectives in -ant/-ent (e.g. convergence, efficiency, emergence), but also to nouns ending in this string, as is the case with agency, presidency, regency. Furthermore, adjectives in -ate are eligible bases (adequacy, animacy, intimacy).

/-dom/ : -dom attaches to nouns to form nominals such as clerkdom, studentdom, kingdom.

/-ee/ : It derives nouns from verbal bases such as in employee and standee, but nominal bases are not uncommon (e.g. festschriftee, pickpocketee).

/-eer/ : This is another person noun forming suffix, such as auctioneer, budgeteer, cameleer, mountaineer, pamphleteer. Many words have a depreciative tinge. The suffix -eer is auto stressed and attaches almost exclusively to bases ending in a stressed syllable followed by an unstressed syllable.

/-er/ : The suffix -er can be seen as closely related to -ee. The example of this suffix are teacher, singer, blender, mixer, diner.
-/ery/ : This suffix forms nouns from noun or adjective such as in bakery, fishery, greenery.

-/ess/ : This suffix derives a comparatively small number of mostly established nouns referring exclusively to female humans and animals (princess, stewardess, lioness, tigress, waitress).

-/ful/ : The nominal suffix -ful derives measure partitive nouns (similar to expressions such as a lot of, a bunch of) from nominal base words that can be construed as containers: bootful, cupful, handful, tumblerful, stickful.

-/hood/ : Similar to -dom, -hood also derives nouns from noun such as adulthood, childhood, beggarhood.

-/an/ : Nouns denoting persons and places can take the suffix –an as in Mongolian, Scandinavian, Anglican, Chomskyan.

-/ing/ : Examples of pertinent derivatives are abundant since -ing can attach to practically any verb as in begging, running, sleeping.

-/ion/ : Verbal bases are by far the most frequent as in personification and classification, but there is also a comparatively large number of forms where -ation is directly attached to nouns without any intervening verb in -ate. These forms are found primarily in scientific discourse with words denoting chemical or other substances as bases (e.g. expoxide - epoxidation, sediment - sedimentation).
/-ism/ : Forming abstract nouns from other nouns and adjectives, as in Parkinsonism, conservatism, revisionism, Marxism.

/-ist/ : This suffix derives nouns denoting persons, mostly from nominal and adjectival bases (ballonist, careerist, fantasist, minimalist).

/-ity/ : Words belonging to this morphological category are nouns from Latinate adjectives (e.g. curiosity, productivity, profundity, solidity). All adjectives ending in the suffixes -able, -al and -ic or in the phonetic string [Id] can take -ity as a nominalizing suffix (readability, formality, erraticity, solidity).

/-ment/ : This suffix derives action nouns from (mainly) verbs, with a strong preference for monosyllables or disyllabic base words with stress on the last syllable (e.g. assessment, endorsement, involvement, treatment).

/-ness/ : The suffix can attach to practically any adjective, and apart from adjectival base words as in kindness, happiness, sadness.

/-ship/ : Base words are mostly person nouns as in apprenticeship, clerkship, friendship, membership, statesmanship.

2. Verbal Suffixes

/-ate/ : There is a class of derivatives with chemical substances as bases. However, a large proportion of forms in -ate do not conform to this pattern, but show various kinds of idiosyncrasies, with -ate being apparently
no more than an indicator of verbal status. For example: methanate, mercurate.

/-en/ : The Germanic suffix -en attaches to monosyllables that end in a plosive, fricative or affricate. Most bases are adjectives (e.g. blacken, broaden, quicken, ripen), but a few nouns can also be found (e.g. strengthen, lengthen).

/-ify/ : This suffix attaches to base words that are either monosyllabic, stressed on the final syllable or end in unstressed /I/. For example: solidify, humidify, purify.

/-ize/ : Derivatives in -ize show rather complex patterns of base allomorphy, to the effect that bases are systematically truncated (i.e. they lose the rime of the final syllable) if they are vowel-final and end in two unstressed syllables. For example: standardize, criticize, hospitalize.

3. Adjectival Suffixes

/-able/ : The suffix chiefly combines with transitive and intransitive verbal bases, as in deterrable and perishable, respectively, as well as with nouns, as in serviceable, fashionable.

/-al/ : This relational suffix attaches almost exclusively to Latinate bases (accidental, colonial, cultural, federal, institutional, modal).
/–ary/ : -ary is a relational adjective-forming suffix, -ary usually attaches to nouns, as in complementary, evolutionary, fragmentary, legendary)

/-ed/ : This suffix derives adjectives as in broad-minded, pig-headed, wooded.

/-esque/ : The suffix -esque is attached to both common and proper nouns as in Chaplinesque, Hemingwaysque, picturesque, Kafkaesque. There is a strong preference for polysyllabic base words.

/-ful/ : Adjectival -ful is typically attached to abstract nouns, as in beautiful, insightful, purposeful, tactful, but verbal bases are not uncommon (e.g. forgetful, mournful, resentful).

/-ic/ : Being another relational suffix, -ic also attaches to foreign bases (nouns and bound roots). Quite a number of -ic derivatives have variant forms in -ical (electric - electrical, economic - economomical, historic - historical, magic - magical etc.).

/-ing/ : This verbal inflectional suffix primarily forms present participles, which can in general also be used as adjectives in attributive positions and as nouns. The grammatical status of a verb suffixed by -ing in predicative position is not always clear. In the changing weather the -ing form can be analyzed as an adjective, but in the weather is changing we should classify it as a verb (in particular as a progressive form).
/-ish/ : This suffix can attach to adjectives (e.g. clearish, freeish, sharpish), numerals (fourteenish, threehundredfourtyish), adverbs (soonish, uppish), and syntactic phrases (e.g. stick-in-the-muddish, out-of-the-wayish, silly-little-me-late-again-ish).

/-ive/ : This suffix forms adjectives mostly from Latinate verbs and bound roots that end in [t] or [s]: connective, explosive, fricative, offensive, passive, preventive, primitive, receptive, speculative. Some nominal bases are also attested, as in instinctive, massive.

/-less/ : Semantically, -less can be seen as antonymic to –ful. The example for this suffix are expressionless, hopeless, speechless, thankless.

/-ly/ : This suffix is appended to nouns and adjectives. For example: brotherly, daughterly, fatherly, easterly.

/-ous/ : This suffix derives adjectives from nouns and bound roots, the vast majority being of Latinate origin (curious, barbarous, famous, synonymous, tremendous).

4. Adverbial Suffixes

/-ly/ : The presence of this exclusively de-adjectival suffix is for the most part syntactically triggered and obligatory. Suffix /-ly/ is added totally productively to adjective. For example: Happily, Nicely, Badly.
/-wise/ : This suffix derives adverbs from nouns, with two distinguishable sub-groups: manner/dimension adverbs, and so-called viewpoint adverbs. For example: Crabwise, Clockwise.

1.3.2 Function and Meaning of Suffixes

Based on Plag (2002), these are the functions and meanings of suffixes:

1. Class Maintaining Suffixes
   a. Nouns Forming Nouns
      1) /-age/ means ‘a collective entity or quantity’ and ‘location of X’.
         For example: Volt + /-age/ = Voltage
                     Orphan + /-age/ = Orphanage
      2) /-cy/-/ce/ means ‘the status or position of’.
         For example: Chaplain + /-cy/ = Chaplaincy
      3) /-dom/ means ‘state of being X’, ‘the group of’, ‘domain, realm, or territory’.
         For example: Clerk + /-dom/ = Clerkdom
                     Student + /-dom/ = Studentdom
                     King + /-dom/ = Kingdom
      4) /-ee/ means ‘a person described as or concerned with’.
         For example: Refuge + /-ee/ = Refugee
      5) /-eer/ means ‘person who deals in, is concerned with, or has to do with X’.
         For example: Auction + /-eer/ = Auctioneer
      6) /er/ means ‘person or thing having to do with X’.
For example: Mix + /-er/ = Mixer
London + /-er/ = Londoner

7) /-(e)ry/ means ‘group of’, ‘the state of character of’.

For example: Machine + /-ry/ = Machinery
Slave + /-ry/ = Slavery

8) /-ess/ means ‘female’.

For example: Waiter + /-ess/ = Waitress

9) /-hood/ means ‘‘state of being X’, ‘the group of’, ‘area’.

For example: Child + /-hood/ = Childhood
Beggar + /-hood/ = Beggarhood
Neighbor + /-hood/ = Neighborhood

10) /-ship/ means ‘status’, ‘condition’, ’group’.

For example: Citizen + /-ship/ = Citizenship
Friend + /-ship/ = Friendship
Member + /-ship/ = Membership

11) /-ful/ means ‘the amount which noun contains’.

For example: Mouth + /-ful/ = Mouthful

12) /-an/ means ‘person having to do with X’, ‘being from X’, ‘being the follower or supporter of X’.

For example: History + /-an/ = Historian
Mongol + /-an/ = Mongolian
Chomsky + /-an/ = Chomskyan

13) /-ing/ means ‘the substance of which N is composed’.
For example: Panel + /-ing/ = Paneling

14) /-ist/ means ‘member of a party, occupation’.
For example: Violin + /-ist/ = Violinist

For example: Blonde + /-ism/ = Blondism
Parkinson + /-ism/ = Parkinsonism
Conservative + /-ism/ = Conservatism
Revision + /-ism/ = Revisionism
Marxist + /-ism/ = Marxism

b. Adjective Forming Adjective
1) /-ish/ means ‘somewhat’.
For example: Green + /-ish/ = Greenish

2. Class Changing Suffixes
a. Verbs Forming Noun
1) /-age/ means ‘the activity or result of’.
For example: Cover + /-age/ = Coverage

2) /-al/ means ‘action or result of’.
For example: Refuse + /-al/ = Refusal

3) /-ance/ means ‘the action or state of’
For example: Assist + /-ance/ = Assistance

4) /-ant/ means ‘a person or thing that’.
For example: Apply + /-ant/ = Applicant

5) /-ee/ means ‘a person affected by action’.
For example: Employ + /-ee/ = Employee

6) /-er/ means ‘a person or thing that’.
For example: Drive + /-er/ = Driver

7) /-(e)ry/ means ‘place where an activity is carried out’ or ‘place where a specific article or service is available’
For example: Bake + /-ry/ = Bakery

8) /-ing/ means ‘activity’ or ‘result of activity’
For example: Build + /-ing/ = Building

9) /-ment/ means ‘event’, ‘result of processes’ or ‘action of’.
For example: Manage + /-ment/ = Management

10) /-(at)ion/ means ‘event’, ‘result of processes’ or ‘action of’.
For example: Explore + /-ation/ = Exploration

b. Adjectives Forming Noun

1) /-ness/ means ‘state’ or ‘quality’.
For example: Kind + /-ness/ = Kindness
               Happy + /-ness/ = Happiness

2) /-ity/ means ‘state’ or ‘quality’
For example: Antique + /-ity/ = Antiquity
               Pure + /-ity/ = Purity

c. Suffixes Forming Verbs

There are four suffixes which derive verbs from other categories (mostly adjectives and nouns), -ate, -en, -ify and –ize.

1) /-ate/ means provide with X’ (ornative), or ‘make into X’ (resultative)
For example: Fluorine + /-ate/ = Fluorinate
   Methan + /-ate/ = Methanate

2) /-en/ means ‘make (more) X’ (causative).
   For example: Black + /-en/ = Blacken
   Strength + /-en/ = Strengthen

3) Both -ize and -ify are polysemous suffixes, which can express a whole range of related concepts such as locative, ornative, causative/factitive, resultative, inchoative, performative, simulative. Locatives can be paraphrased as ‘put into X’, as in computerize, hospitalize, tubify. Patinate, fluoridize, youthify are ornative examples (‘provide with X’), randomize, functionalize, humidify are causative (‘make (more) X’), carbonize, itemize, trustify and nazify are resultative (‘make into X’), aerosolize and mucify are inchoative (‘become X’), anthropologize and speechify are performative (‘perform X’), cannibalize, vampirize can be analyzed as simulative (‘act like X’).

d. Nouns Forming Adjectives

1) /-able/ means ‘capable of being X’, ‘liable or disposed to X’ or ‘characterized by X’.
   For example: Marriage + /-able/ = Marriageable
   Reason + /-able/ = Reasonable

2) /-al/ means ‘connected with’.
   For example: Culture + /-al/ = Cultural

3) /-ary/ means ‘connected with’
For example: Planet + /-ary/ = Planetary

4) /-ed/ means ‘having X, being provided with X’.
   For example: Wood + /-ed/ = Wooded

5) /-esque/ means ‘in the manner or style of X’.
   For example: Picture + /-esque/ = Picturesque

6) /-ful/ means ‘having X, being characterized by X’.
   For example: Beauty + /-ful/ = Beautiful
   Insight + /-ful/ = Insightful

7) /-ic/ means ‘connected with X’
   For example: History + /-ic/ = Historic

8) /-less/ means ‘without’.
   For example: Child + /-less/ = Childless

9) /-ly/ means ‘in the manner of X’, ‘like an X’, ‘temporal’ or ‘direction’
   For example: Brother + /-ly/ = Brother
   Day + /-ly/ = Daily
   East + /-ly/ = Easterly

10) /-ish/ means ‘belonging to’ or ‘having the character of’.
    For example: Child + /-ish/ = Childish

11) /-ous/ means ‘having the nature or quality of’.
    For example: Poison + /-ous/ = Poisonous

e. Verbs Forming Adjectives

1) /-ing/ means ‘make a person or thing become’
   For example: Bore + /-ing/ = Boring
2) /-ive/ (also –ative, -itive) means ‘tending to’ or ‘having the nature of’.

    For example: Affirm + /-ive/ = Affirmative

3) /-able/ means ‘able’ or ‘worthy to be V-ed’.

    For example: Read + /-able/ = Readable

f. Suffixes Forming Adverbs

1) /-ly/ means ‘in a… manner’.

    For example: Happy + /-ly/ = Happily

2) /-wise/ means ‘in the manner of’ or ‘as far as…is concerned’.

    For example: Crab + /-wise/ = Crabwise