AN ANALYSIS OF WORD FORMATION PROCESS AS FOUND IN ELECTRONIC PRODUCT IN SHARP CATALOGUE 2010

THESIS

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known by society. Thus, the new words are not only the part of its software and hardware but also its brand. The brand of LG, SHARP, SAMSUNG, and Panasonic have attracted the customer through the name of their product. Therefore, the names of the product including the tools have involved the word formation process.

The words being used in the electronic product brands, software, and hardware or electronic tools are mostly English. It is in order to make the product is internationally known by others. Some examples of the words used in the electronic field are *woofer, booster, digital, calculator*, and the name of the product itself are *aquamagic, showcase, silvermagic*, and so on. Therefore, as stated by Katamba, as the umbrella of morphology, the analysis has to throw light not only on the structure of established words, but also on that of freshly coined neologisms like *snail-mail* (meaning the postal service, as opposed to modern electronic mail). (Katamba, 1993: 65). It means that several newly coined words appear and going to be agreed by social convention.

Common people could know and even remember the name of the product if the words are created simply and unique. The words could be the combination of words and even a new word which is not found yet in the dictionary. But in term of knowledge necessity to the English language properties, the process behind word-production should be understood. It prefers to know the name and the process behind as well as a linguist necessity. By knowing how the words are processed, arranged and modified, the relationship between linguistics study to others could be observed, such as in economical and entrepreneurship.

1. 2. Questions of the Research

1. What are the types of word formation process found in electronic product in *SHARP* catalogue 2010?
2. How are those words formed?

1. 3. Objective of the Study

The objectives of the study are to find out the types of word formation process in electronic product brands of *SHARP* concerning to the tools, software, and some the name of the product itself and then to describe the processes of creating words. The data is analyzed basically based on the theory proposed by Aronoff (1976) about word formation in generative morphology. He proposed a morphological theory that is consistent with the word based hypothesis suggests an interesting way of refining morphological rules and formulates a number of restrictions on WFR`s in order to constrain their power. Then, the supporting analysis is taken by Scalise (1984) which also discusses about generative morphology compiling inside some theories to explain the development of generative morphology. Bauer`s theory (1983) is applied to support analysis about productivity, compounding, and other discussion related to data. Besides that, Stageberg`s theory (2000) is also presented to define his eleven word formation processes.

1. 4. Scope of the Study

The scope of the study is in case of morphology, especially in term of word formation process. The analysis concerns to the words existed in electronic catalog product, especially *SHARP* products. The words include the electronic tools, part of software, and even the names of the product. The words are analyzed mainly based on Aronoff theory by applying word based hypothesis in the analysis. Then, there are some sources from Bauer`s theory, and Stageberg`s.

1. 5. Methods of the Study

In the analysis, the words of electronic tools are listed firstly based on the category and then finding the identical words and put in the same classification. The process is suitable with metode padan intralingual by Mahsun (2005). He stated that if the analysis is compared and discussed according to internal elements of word including the meaning so it is defined as *metode padan intralingual*.

1. 5. 1. Collecting the Data

1. 5. 1. 1. Source of the Data

The data is taken from yearly catalog of *SHARP*. It is limited in the year of 2010. There are many products launched along this year including the continuation of the previous. The data are the words which are found in the catalog concerned to electronic tool words. The words contain in the pages of TV, washing machine,

refrigerator, oven, air conditioner, and camera. The parts of software and even the words of product name are analyzed as included in the catalog. It means the words related to electronic term which exist in the catalog are to be data.

1. 5. 1. 2. Procedures

Previously the data are chosen only one of the products, for instance, only TV page, but the case is the words found are little. Thus, the consideration is getting the words related to electronic tools in all pages including TV, washing machine, oven, refrigerator, air conditioner, and camera. The words of software and product names are also analyzed.

1. 5. 2. Analyzing the data

In analyzing the data, the used words which relates to electronic term are underlined and then taken out. After that, the words are listed firstly based on the same category. The words are classified into the groups, for instances: Datum 1 is the analysis of words with suffix *–er*, and so on. The words are processed based on Aronoff theory (1976) by using *word formation rules*. Aronoff concerns to the internal structure of words and also called as word base hypothesis. This concern encompasses two distincts but related matters: first, the analysis of existing composite words, and second, the formation of new composite words. For instance, by using word formation rules, the word *digital* is analyzed as:

Digital [[digit]$_N$ + al]$_A$

Besides that, the process of derivation and some compounding will be analyzed then. The theory of compounding proposed by Bauer (1983) is in order to see the elements that construct those words (including noun, adjective, verb, adverb, affixes, and so on). For instance, *soakmagic* is the construction of;

soak (N) + magic (N) → soakmagic (N)

Further explanation, the interpretation to *soakmagic* is included to *transparent* than *opaque*. *Transparent* if it is clearly analyzable into its constituent morphs and knowledge of the morphs involved is sufficient to allow the speaker-listener to interpret the lexeme when it is encountered in context. As so in *soakmagic*, the interpretation allows speaker-listener comes to the context.

Then, relating to the types of new words, such as *blu-ray, bluetooth, X – bass*, Stageberg (2000) with his eleven types of word formation, classify them into *invention* or in other word as *new coined words*. Finally, making a conclusion about what types of word found in electronic tools including the software which is limited in SHARP catalog 2010 and how the process runs.

1. 5. 3. Presenting the Result of Analysis

The writer presents the result of analysis by using words or natural language. The writer explains the types of word formation which exist in SHARP catalogue concerning to the tools and names of the product. Then, the explanation is also about the processes of forming word and the elements that construct those words. There are also symbols which are used in analyzing data.

selective-selectable, but for *adapt*, it could not be *adaption* but *adaptation*. So the word is added +*ation* not +*ion* from the very base.

On the contrary, the different analysis comes to the word '*sense'*. Since the dominant base words are verb but no in '*sense*'. *Sense* is noun. That is why the analysis comes to be different. Based on the list above, *sense* is blocked when transformed into +*ion, +ive, +able*. For *sense*, it should be +*ation* so that it becomes ***sensation***. Actually from the very base *sense*, there are some possibilities of transformation;

Sensation sensible sensibly sensibility sensitive

Thus, relating with earlier analysis in the form of +*ion, +ive and +able*, for *sense* it becomes sens*ation*, sens*itive*, and sens*ible,* not *sension, sensive,* and *sensable.*

Finally, the finding of third datum, the words which is also found in electronic tools and it has different forms of previous analysis are:

Monitor

Motor

These both words are different with previous. Since the previous ones could be simplified into base forms, while *monitor* and *motor* are the very base of the words. –*or* of the words is not suffix like other but the form of the word itself.

Monitor	*monite	*monitorize	*monitorist
*motor	*mote	motorize	motorist

communication, Brand naming, Global brand. (http://www.tdtm.com.cn/dongtai/news/17_0004.htm.). Therefore, by seeing on how the Chinese brand names processed from the six aspects, the comparison to analysis of word formation in electronic tools especially in SHARP catalog is shown.

The second study is proposed by Wang Aiguo (2003). He entitles the article with "A Comparison of Word-formation between Chinese and English". He studies and analyzes various ways of Chinese and English word-formation so that similarities and differences are found between the two languages. Through comparison, Chinese or English learners could have a better way of acquiring either or both of the two languages concerned.

The key terms of the study are lexicology; compound; derivation; affixation; conversion; blending, and loans. The objective of the study is through studying and analyzing rules of Chinese and English word formation, both Chinese and English learners can also enlarge their native language vocabulary in addition to finding out the similarities and differences between the two languages concerned. The specific learner target groups, which could maximize such a contrastive approach will be left for others to determine and is beyond the scope of this paper, but nevertheless may represent a very worthwhile follow-up endeavor.

Compounds of Chinese and English

Phonetic forms of Chinese compounds	English compounds
(1) noun + noun >> compound:	noun + noun >> compound noun:
lu + xian >> luxian	air + line >> airline
(road thread way)	air + port >> airport

mei + mu >> meimu	eye + brow >> eyebrow
(eyebrow eye appearance)	eye + sight >> eyesight
shou + zu >> shouzu	foot + ball >> football

Therefore, by comparing between compound nouns of Chinese and English, and classify them, thus the way to analyze compound process in electronic terms is also applied.

The third study is proposed by Anke Lüdeling (2005). He entitles the study with "Neoclassical Word Formation". Neoclassical Word Formation is word formation with elements of Greek or Latin origin. In the European languages neoclassical word-formation is found 'next to' native word formation. In these languages neoclassical elements combine productively with each other (cf. *automobile, morphology, hydrophobic*) and with native elements.

A neoclassical word or element is not simply any element that is etymologically Latin or Greek. Since Latin (and partly Greek) was the European lingua franca and the official language in many countries for many centuries, then it is no wonder that many Latin and Greek elements found their way into the European languages. Elements that were borrowed early are often phonologically and morphologically assimilated and show no structural differences to native words (examples are German *Fenster* 'window' from Latin *fenestra* which became trochaic and lost the full vowel in the last syllable or English *market* from Latin *mercatus*). Such elements behave in word formation just like native elements.

In addition, it is often difficult to determine the origin of a morphological element because many elements reach a language via other languages. The question

appears whether an originally Latin element that reached English via German and has perhaps undergone changes on its way among Germanic or classical. Therefore 'neoclassical' (or 'latinate' or 'learned') refers to structural properties of some elements that distinguish them from 'native' elements in the base language. These structural differences can be:

(a) Phonological: neoclassical affixes may attract or bear stress, cf. *cèremony – ceremònious*, *sincère – ìnsincere*, while Germanic affixes do not. Neoclassical words may have sounds that are not phonemes in the base language.

(b) Morphological and morphophonological: neoclassical elements tend to combine mainly with other neoclassical element

(c) Orthographic: neoclassical elements may contain graphemes (for example <ph> in *philosophy*) that are not part of the grapheme inventory of the base language.

(d) Use: neoclassical elements are often used in 'higher' or 'learned' registers.

In a simple morphological model which distinguishes between affixes and stems the status of many neoclassical elements is difficult to determine. Semantically, they behave like stems but often they appear only as bound forms. Examples are *psych(o)-, hydr(o)-, morph(o)-* or *-(o)phob*, *-(o)log-*. Lüdeling & Evert (2004) show that neoclassical element like non-medical *–itis,* has become productive within the last decade. Therefore, by the study, knowing some words of Greek and Latin, thus it helps analyzing data which uses these words.

2. 2. Definitions of Key Terms

2. 2. 1. Word formation

Word formation is a process which contributes to make English word properties becomes richer. One of the best illustrations of multiple processes of word formation surrounds the word *hamburger*. The word is originated from the name of a town, *Hamburg*, Germany. After establishing itself as the word for a type of *sandwich*, the word *hamburger* is interpreted as a compound, with *burger* acquiring its own status as a morpheme. Then, it led to the development of a number of new words such as *bacon burger, fish burger, and cheeseburger*. (Stageberg, 2000: 126).

2. 2. 2. SHARP

SHARP Corporation is a Japan-based company engaged in the manufacture and sale of electronic telecommunication devices, electronic machines and components. (http://in.reuters.com/money/quotes/companyProfile?symbol=6753.T)

2. 3. Theoretical Frameworks

Morphology concerns to the analysis of *internal structure of words*. Morphology treats words as *signs*: that is, not just as forms, but as meaningful forms. This concern encompasses two distinct but related matters: first, the analysis of existing composite words, and second, the formation of new composite words (Aronoff, 1975: 1). The simplest task of morphology is the enumeration of the class of possible words of language.

Aronoff in his theory called by *word-based morphology* stated that all regular word-formation processes are word-based. A new word is formed by applying a regular rule to a single already existing word. Both the new word and the existing one are members of major lexical categories. The rule that he applied is called *word formation rules (WFR)*. The rule specifies a set of words on which it can operate. Every WFR specifies a unique phonological operation which is performed on the base. Every WFR also specifies a syntactic label and subcategorization for the resulting word, as well as a semantic reading for it, which is a function of the reading of the base (Aronoff, 1975: 22).

Adjustment interacts with the conception of WFR. Two sorts of adjustment rules are *truncation* and *allomorphy*.

2. 3. 1. Truncation Rules (TR`s)

A truncation rule deletes a morpheme which is internal to an affix, in the following general manner:

$$[\,[\,\text{root} + A\,]_X + B\,]_Y$$

$$1 \quad 2 \quad 3 \rightarrow 1\ \varphi\ 3$$

Where X and Y are major lexical categories

2. 3. 2. Allomorphy Rules

The rule which effects a phonological change, but which only applies to certain morphemes in the immediate environment of certain other morphemes, such as in +ation, +ition, +tion, and +ion.

Word formation is a process which contributes to make English word properties becomes richer (Stageberg, 2000: 126). For Stageberg, there are eleven processes of word formation including *compounding, derivation, invention, echoism, clipping, acronymy, blending, back-formation, folk etymology, antonomasia, and reduplication.*

2. 3. 3. Compounding

Compounding is simply the joining of two or more words into a single word, as in *hang glider, cornflakes, breakfast, long-haired*, etc. Compounds maybe written as one word, as a hyphenated word, or as two words.

2. 3. 4. Derivation

Derivation is the forming new words by combining derivational affixes or bound bases with existing words, as in *teleplay, counsellorship, emplane*, etc.

2. 3. 5. Invention

The new words are totally invented, such as *Kodak, nylon*, etc.

2. 3. 6. Echoism

Echoism is the formation of new words whose sound suggests their meaning, as in *hiss, peewee*, the meaning may also produces the sound, such as *moan, click, murmur, thunder*, etc.

2. 3. 7. Clipping

Clipping means cutting off the beginning or the end of a word, or both, leaving a part to stand for the whole, as in *lab, dorm, prof, exam, gym, prom, math*, etc.

2. 3. 8. Acronymy

Acronymy is the process whereby a word is formed from the initials or beginning segments of a succession words, as in *NATO, NBA, FIFA,* etc.

2. 3. 9. Blending

Blending is the fusion of two words into one, usually the first part of one word with the last, as in *gasohol, (gasoline and alcohol), brunch (breakfast and lunch)*.

2. 3. 10. Back-formation

Back formation is the formation of new word from one that looks like its derivative, as in *hedgehop* from the noun *hedgehopper*.

2. 3. 11. Folk etymology

Folk etymology is the process of changing word in part or in whole to make it understandable and familiar, though based on inaccurate view of its origin, as in *let ball*, it is not *net ball* as the origin.

2. 3. 12. Antonomasia

Antonomasia is the formation of a common noun, a verb, or adjective from the name of person or place, as in *Frisbee* comes from the *frisbie bakery* in Connecticut, noun likes a lover, as in a *Romeo, Don Juan, or Casanova*.

2. 3. 13. Reduplication

The last is reduplication. It is the process of forming word by doubling a morpheme, usually by changing vowel or initial consonant, as in *pooh-pooh, tiptop, tinky-winky*.

According to Bauer, "compounding is the process of putting two words together to form a third, as in *oil-paper, paperclip, wallpaper*, etc. A compound must contain at least two roots if one of the potential stems that makes up the compound is itself compound, the resultant form of course contain more than two roots, as in *wastepaper basket*. (1983: 23).

2. 3. 14. Transparent

A lexeme is said to be *transparent* if it is clearly analyzable into its constituent morphs and knowledge of the morphs involved is sufficient to allow the

speaker-listener to interpret the lexeme when it is encountered in context. For instance, *coverage* is clearly analyzable into *cover* + *age*. *–age* shows a nominalization from other words like *cartage, postage, coverage* is also interpretable.

2. 3. 15. Opaque

In contrast, *carriage* is not clearly analyzable into *carry* + *age*, although there is the etymology of the word, so it is not transparent but *opaque.*

Compound noun can be further subdivided into four groups according to semantic criteria. They are *endocentric, exocentric, appositional*, and *dvandva* (Bauer, 1983:30). The examples are *beehive, armchair, redskin, highbrow, and maidservant*.

2. 3. 16. Endocentric Compound

Beehive is a kind of *hive* and *armchair* is a kind of *chair*. This type is *endocentric compound* because the second constituent is a kind of the first`s.

2. 3. 17. Exocentric Compound

A redskin is not a type of *skin*, nor is *highbrow* a type of *brow*. This type is *exocentric compound* because the second constituent is not kind of the first`s.

2. 3. 18. Appositional Compound

Then, *maidservant* is a hyponym of both *maid* and *servant;* a *maidservant* is a type of *maid* and type of *servant*. This type is *appositional compound.*

CHAPTER III

AN ANALYSIS OF WORD FORMATION PROCESS AS FOUND IN ELECTRONIC PRODUCT IN *SHARP* CATALOGUE 2010

In this chapter, the writer analyzes word formation process in electronic tools, including the software and some of the name of the product, especially *SHARP*. In analyzing the data, the words used which relates to electronic term are underlined and then taken out. After that, the words are listed firstly based on the same category. The words are classified into the groups. The words are processed based on Aronoff theory (1976) by using *word formation rules*. Besides that, the process of derivation and some compounding will be analyzed then. The theory by Bauer about compounding (1983) is in order to see the elements that construct those words (including noun, adjective, verb, adverb, affixes, and so on). Then, relating to the types of new words, Stageberg (2000) with his eleven types of word formation, classify them into *invention* or in other word as *new coined words*.

3. 1. The use of suffix *–er*

(1). Speaker
Booster
Computer
Amplifier

The words in the list (1) are all noun. In order to analyze data, the words are simplified into the base form in order to see the comparison as in (1.1):

(1.1). Speak
Boost
Compute
Amplify

These four base forms are all kind of verb (V). As being composed in (1), the words in (1.1) are constructed by adding *suffix –er* so that the words derive from verb (V) becoming noun (N).

The formula is $[\ [\ \text{word}\ ]_V + \text{er}\ ]_N$.

After being isolated, -er can not stand alone as independent words as speak, boost, compute, and amplify because it has no meaning. While analyzing (1.1), the form of V#s, V#d, V#ing are trying to be applied as in the following (1.2);

(1.2).	Speaks	spoke	speaking
	Boosts	boosted	boosting
	Computes	computed	computing
	Amplifies	amplified	amplifying

Thus these three forms (V#s, V#d, V#ing) show the inflectional affixes since it is generally viewed as encompassing the purely grammatical markers. It means there is no changes in classes of word. It just remains the same as verb (V). But, one peculiarity is that it is *paradigmatic*. It is shown in the V#d of *speak*. The word becomes *spoke*. The verb *speak* exhibits that it is called *suppletion*.

Therefore, distinguishing the (1) and (1.1) when the verbs encounter as in the case of the *suffixation*, the words could be derived and inflected as well. Derivational morphology is not paradigmatic; it does not show any suppletion. The suppletion only occurs in inflectional words, while derivation does not concern itself with phonologically dissimilar as in inflection but semantically related form because the meaning of the word itself will changes. For instances; the word *compute* '*v* calculate something' is derived becoming *computer* '*n* electronic device that can store, organize and find information, do calculations and control other machines'. The definition shows the meaning that class of word changes from '(v) to calculate something' becoming '(n) a device'.

Besides those four words which have been analyzed above, the other words which are found on electronic tools limited in the SHARP catalog 2010 are in (2):

(2).	Decoder	dispenser
	Equalizer	buzzer
	Purifier	inverter
	Freezer	copier
	Deodorizer	blender

Analyzing these words, the base form could be isolated as in (2.1):

(2.1).	Decode	deodorize
	Equalize	dispense
	Purify	buzz
	Blend	invert
	Freeze	copy

These four base forms are all kind of verb (V). As being composed in (2), the isolating words in (2.1) are constructed by adding *suffix –er* so that the words derive from verb (V) becomes noun (N).

While analyzing the (2.1), the form of V#d, V#ary, V#ation, V#ant could be applied as in the following (2.2):

	(a).	(b).	(c).	(d).
(2.2).	Decoded	*decodary	*decodation	*decodant
	Equalized	*equalizary	equalization	*equalizant
	Purified	*purifiary	purification	*purifiant
	Blended	*blendary	*blendation	*blendant
	Froze	*freezary	*freezation	*freezant
	Deodorized	*deodorizary	deodorization	deodorant
	Dispensed	dispensary	dispensation	*dispensant
	Buzzed	*buzzary	*buzzation	*buzzant
	Inverted	*invertary	*invertation	*invertant
	Copied	*copiary	*copiation	*copiant

According to the list, the words V#d or (a) are inflectional. There are no changes in classes of word but one exceptional word that is paradigmatic in (a). That is *froze*. The word *froze* exhibits *suppletion*. On the V#d, *freeze* does not change into *freezed* in past but *froze*. Therefore, it proves that inflectional words involve suppletion paradigm not derivational such in (b), (c), and (d).

In the changes of V#base form into V#ary, V#ation, and V#ant, there are blocked words which is not found in the lexicon, for instances;

*decodary – *decodation – *decodant

*blendary – *blendation – *blendant

*Invertary – *invertation – *invertant

*copiary – *copiation – *copiant

When comparing to V#base form, especially on the word of *dispense*, the changes form into V#ary and V#ation suit to the lexicon, but not in V#ant because it gets blocking, as in;

Dispensary – dispensation - *dispensant

In the form of *V#ary*, although there are many words blocked but the only word which is required and that is *dispensary*. While the others like *deodorizary, decodary, blendary*, etc are blocked. When the words have nominal *–ation*, there are few words are acceptable. They are equalization, purification, deodorization, and dispensation. While the others like *decodation, blendation, freezation,* etc. are eliminated. It concludes that not every verb could be combined with +ation as the process happened in verb to explain noun. There are few which are unacceptable such as current words.

Then the other words such as in (2), exactly *deodorizer* which is syntactically in base form written in $[[deodorize]_{V}pres]_{V}$, in changing to V#ant, it does not become *deodorizant* as in *descendant*. The transformation of *descendant* would be $[[descend]_{V}pres]_{V}$ *+ant]n*. It is quite dissimilar with transformation of *deodorant*. The change is not to be *deodorizant*, nevertheless becoming *deodorant*. The *–ize* as in *deodorize* is eliminated or deleted. *Deodorant* is the exception form. The term to analyze is truncation rule. Truncation rule deletes a morpheme which is internal to an affix. The truncation rules (TR`s) has the following general form;

$[\,[\,\text{root} + A\,]_X + B\,]_Y$

1 2 3 =

1 φ 3

Where X and Y are major lexical categories

Thus, by applying the rule, the process of *dedorant* is shown in analysis below;

Dictionary	[deodor + ize]
WFR	[[deodor + ize] + ant]
TR	φ
Output	[deodorant]

The class of *deodorant* is +*ant* class. There are two subdivides of the class;

(a). Those items whose related verb is of the form X +ate, such as *officiant* and *negociant*.

(b). Those whose related verb is unsuffixed, such as *descendant* and *complainant*.

Officiate	*officiatant	officiant
Negotiate	*negotiatant	negociant
Lubricate	*lubricatant	lubricant
Deodorize	*deodorizant	deodorant
Descend	descendant	
Complain	complainant	

Truncation rule is also applied in the words *officiant*, *negociant*, and *lubricant*. The processes are in the following;

2. Dictionary [office + ate]

   WFR [[office + ate] + ant]

   TR φ

   Output [officiant]

3. Dictionary [negot + ate]

   WFR [[negot + ate] + ant]

   TR φ

   Output [negociant]

4. Dictionary [lubric + ate]

   WFR [[lubric + ate] + ant]

   TR φ

   Output [lubricant]

As in (a), the form of X *+ate* transformed to *+ant*, the words *officiate* and *negotiate* do not become *officiatant* or *negotiatant*, but *officiant* and *negociant*. *+ate* is deleted and *t* final letter in the word *negotiate* changes into *c*. Then, in *officiant*, before *+ant*, vowel *e* in base form *office* changes into *i*. Getting back to *deodorant* case, the transformation seems to be like *lubricate* case. Both morpheme of *deodorant* and *lubricant* is deleted *(-ize* and *–ate*). The case is of course morphologically unique marked by the final morpheme *+ate*. *+ate* is the one of morphological type which is

especially productive with the suffix *+ant*, while *deodorant* is the only one exception word which is related to *+ize*. That is why based on group of *V#ant* above, the only word which is acceptable is *deodorant*, while the others are eliminated.

One term which is interestingly to be discussed is in the case of the following word;

Amplifier	amplify
Purifier	purify

The main class of the term includes in *+ation*, while as noted in SPE, verbs in *+fy* and *+ply* generally have nominal in *–ication*, not *–ation*, such as *amplify* and *imply* in the following;

Amplify	*amplifiation	amplification	*amplificate
Purify	*purifiation	purification	*purificate
Imply	*impliation	implication	implicate

Thus, from the list, the word amplify, *purify*, and *imply* do not exist in the lexicon if the nominal is in *–ation*, but it is in *–ication*. Then, the word *amplification* could not be simplified into *amplificate* as the base form. On the contrary, the word *implication* could be simplified into *implicate*. It is semantically related form. *Imply*, on the other words '*v* suggest that something is true without actually saying it', while *implicate* is '*v* show or suggest that somebody is involved in a crime'. Then, according to the formula, *+fy* has nominal in *–ication*, it is also applied to the word *purification*. The

word is found in the lexicon. But, if simplified to the base *purificate*, it is unidentified.

When reanalyzing the word *purifier*, another word which is found in electronic tools is *humidifier*. The word is closely related analysis.

Pure	purity	purifier	purify
Humid	humidity	humidifier	*humidify

The very base form of *purifier* and *humidifier* are *pure* and *humid*. Classified into class of word, these words include as adjective. The case is, in catalog, data which is found are *purifier* and *humidifier*. It causes in taking conclusion to simplify the data, the preliminary base form of those words are *purify* and *humidify*. Otherwise, in the lexicon, there is no word *humidify* yet, while purify is exist.

Nevertheless, the other forms of these words are *purity* and *humidity*. These words exist in the dictionary. The case of both words is not 't' letter changed to 'f' so it becomes *puritier* or *humiditier* but according to data, the words found are *purifier* and *humidifier*. Therefore, the rule is not involving *+ty* that has nominal in *–er* causing *+ty* become *+fy,* but the formation of *humidify* looks like its derivative. It means the formation of new word from one that looks like its derivative. The other example is *hedgehop* from the noun *hedgehopper*. It includes the definition of *back-formation* based on Stageberg in *eleven processes of word formation* (2000) which is the formation of new word from one that looks like its derivative. Thus, *humidify* could exist because of noun *humidifier*. The case is different when the word *negotiate*

becomes *negociant*. A letter 't' before stem *+ate* changes onto 'c' before nominal *–ant*.

The next analysis is on the following words;

Purifier	purify	purification	purificatory
Humidifier	humidify	humidification	*humidificatory
Amplifier	amplify	amplification	*amplificatory

The word *pure* as the base form is productive. From one word could product several classes of word. *Pure* is *adjective*, *purify* is *verb*, *purification* as the process purify is *noun*, and *purificatory* is *adjective*. On the other hand, the word *humid* as the base form is potentially to be productive as *pure* is. *Humidify* is not found in the lexicon yet, but it could be exist because the word of *humidifier*. It is the formation of new composite word which looks like its derivative. *Humidify* is exist because of *humidifier*. In the classes of word, *humid* is *adjective*, *humidifier* is *noun* as 'a machine used for making the air in a room less dry', thus *humidify* is potentially to *be verb* to make air in a room less dry. Then, *humidification* is *noun* as the process making the air in a room less dry. While *humidificatory* is still in doubt whether could be formed or not, but still based on the formation, the *affix +ory* is derived from the nominal *X +ation*. It is proved in the word, *purification – purificatory*, but questionable in *humidification – humidificatory* because of non-existence in the lexicon. Then, differently on the case of *amplify*. Since the base form is *verb amplify*, it is dissimilar with *pure* and *humid* which is *adjective*. Therefore, the word *amplificate* does not exist because *amplify* has occupied as *verb* but it could be

transformed into *amplification*, and not to be *amplificatory*. Thus, for its word, the rule *affix +ory* could not be derived from the nominal *X +ation*.

Next, the word also found as the data of electronic tool is *moisturizer*. In order to analyze it, the recent words need to be tagged as the following (8):

	(a)	(b)	(c)
(3).	computer	computerize	computerization
	Equalizer	equalize	equalization
	Deodorizer	deodorize	deodorization
	Moisturizer	moisturize	*moisturization

Based on the list, there are words that could still be simplified, as in (b);

Computerize	comp.
Equalize	equal
Deodorize	deo
Moisturize	moist

The words are not all full words. It means there are clipped words, they are *comp* and *deo*. By the time, many words appear in certain jargon and the formation is various. Thus *comp* and *deo* include into *clipping* words which is cut off on the end of the word leaving a part to stand for the whole. *Comp* stands for *computer* and *deo* stands for *deodorize*. The development of creation new words paralyzes with new products launched so that for the customers, the words pronounced or written sometimes could

be cut off on the end or beginning, leaving a part to stand for the whole. It is in order to make the product is familiar through the words so that it becomes the convention of society. But, the analysis is not too deep with how the product to be unique, but concerned more on the word process behind.

Besides clipping words above, there are *equal* as the base form of *equalize* and *moist* as the base form of *moisturize*. In class of word, both of *equal* and *moist* are *adjective*. Thus, according to the case, the nouns former (*equalizer* and *moisturizer*) are transformed from *adjective* word. These words (comp, equal, deo, and moist) are productive. From a word could form several words after. While in inflection, the process is to be past form or continues in which syntactically not changing the class of word.

Analyzing these four words in (b), nominal *–ize* after *noun* and *adjective* process verb. Starting with *computerization*, the noun is simplified into *computerize (v)*. the formula is computeV +erN #izeV +AtionN. It is still more into *computer (n) – compute (v) – comp. (clipped word)*. From *comp* as the simplest in fact could transform several formations. As in (3), the word could be *computerization*. It follows the rule of *+ation* that have nominal *–ize*. *Compute* as the simplest form semantically relates with *computerize*. In class of word, both of them is verb and has each meaning. *Compute* means 'calculate something' and *computerize* means 'provide a computer to do the work of something'. Both *compute* and *computerize* could be matched in *+ation*, as in:

Computation	*computize	*computization
Computerization	computerize	

Nevertheless, the differentiation of both words is that *computerize* has nominal *–ize* while *compute* does not. It could not be c*omputize* and even in nominal *+ation*, *computization*, although both c*ompute* and *computerize* is same as verb.

Then, analyzing *equalizer*, the simplest form of the word is *equal*. It is different case with *compute* and *computerize*. In class of word, both *compute* and *computerize* is verb, while *equal* is adjective and *equalize* is verb. There is nominal *–ize* which is added. Therefore, the one is adjective and another is verb. Compared with *compute*, the word could not be added nominal *–ize* directly as in *equal*. *Compute* needs to change to *computer* becoming noun firstly, and then it could have nominal *–ize* as in *computerize*. Coming back to (3), the process of nominal *–ize* in *equalize* could also be added *+ation* as in *equalization*. Based on class of word, *computerization* is same with *equality* from *equal*. Thus, both equalization and equality are acceptable to explain noun.

Then, the unique case is in the word *deodorizer*. The word involves *clipping* process. It means the word is cut off in the beginning or the end of the word leaving a part to stand for the whole, so that the word becomes the simplest *deo*. *Deo* includes the new word category. It is new in lexicon. In the utterance, people often say just *deo* for the word *deodorizer* as in deo`s powder advertisement. But the analysis is not so focused on it. The existing word is *deodorize*, while in the electronic product tools the found word is *deodorizer*. *Deodorize* as the base form could also be added *+ation*

becoming *deodorization.* It is in doubt whether the word *deodorization* is potential to be a word. But in some dictionaries the word is still not found.

Next word is *moisturizer*. The base form of the word is *moist.* In class of word it is adjective. The verb of the word is *moisten* 'become or make something moist'. The analysis could be semantically related. Since the word *moisturizer* currently exists, so that the formation of the word *moisturize* as the verb is possible. Although in the lexicon, there is no word *moisturize* yet, but the case could be referred to *back-formation* process. Back formation is the process of formation a new word from one that looks like its derivative. Thus, *deodorize* exists because of the word *deodorizer.* Getting back to the list (3), in the form of *V#ation*, the only word which is eliminated is *moisturization*. It explains that not all verb could be matched in nominal +ation, but for moisturization, there is possibility to exist.

As in (1) – (3), the former noun is verb, thus, the next analysis comes to noun as the former noun.

The formula is $[\ [\ \text{word}\ ]_N + \text{er}\ ]_N$.

The electronic product of SHARP concerning to the tools which is found in the catalog are:

(4). Juicer

Woofer

Tweeter

Tuner

In order to analyze the data, the words need to be simplified into base form and then there is another formation of the words, as in:

Juice	juicy	*juiceful
Woof	*woofy	*woofful
Tweet	*tweety	*tweetful
Tune	*tuny	tuneful

Compared with data in (3), the former noun comes from verb, while this (4), the former noun comes from noun. The data in (4) is simplified into base forms in order to see whether the other formations and combinations exist in lexicon or even there is possibility to exist. Based on the case, the base form of the words have nominal *–y* so that in class of word it changes into adjective as so nominal *-ful*. Nevertheless, not all the formations could be added those nominal, such as; *woofy – woofful*. Marking *woofy* as an adjective, there is possibility of the word to exist, for instance in a sentence, "the sound is woofy", or unless, the sentence only uses the base form, "the sound looks like woof". While in term of *woofful*, the word is unidentified or not found in the lexicon. Then, the word, *tweety*, the case is similar with *woofy*, since the differentiation is only in the meaning, *woof* 'word used to describe the sound made by a *dog*, while *tweet* 'short high sound made by a *small bird'*, thus the potentiality of the word to exist is possible. *Tweety* is also a name of a bird of an anime`s character. So many people know the name refers to it. Then, *tweetful* is also not found in the lexicon yet.

The formation of *tune* becomes *tuny* is so queer. The nominal *–y* after base form is not appropriate to explain adjective. Thus, *tuneful* is the word which is suitable to explain the adjective class. In comparison, the case is contrary in *juicy* and *juiceful*. The word *juicy* is adjective of juice, though, *juiceful* is not found in the lexicon yet but *juicier* and *juiciest*, in the utterance the word *juiceful* is ever heard. Thus, there is possibility of the word to exist though for now a word to mean 'containing a lot of juice' still refers to juicier or juiciest.

The next tools which are found in SHARP catalog as in (5):

(5). Toner
Heater
Cooker
Crisper

The former noun of three data (5) is noun and the one is adjective.

The formula of the word is $[\ [\ \text{word}\ ]_A + \text{er}\ ]_N$.

In order to analyze the productivity of the words, the data need to be simplified into base form and followed by the possibility of the words to be extent;

Tone	*tony	*tonery
Heat	*heaty	*heatery
Cook	*cooky	cookery
Crisp	crispy	*crispery

The word which has more than one class of word is *cook*. Based on the sentence, *cook* could be verb and also noun. Dominantly, *cook* is marked as verb. The word to express person who cooks food is not cooker but just *cook*. While *cooker* is a device for cooking food by heating it. Unlike the other verbs, such as read, then the person who reads is reader, and so support, then the person who support one team is supporter. The suffix *–er* is marked as former noun of the verbs. Otherwise, it is unlike *cook*, the person who cooks food is not cooker but also *cook*, while cooker is the device. The ambiguity of the word could appear. The case is syntactically or semantically arbitrary forms. Looking another example like *police* as in the sentence, "The police have arrested six people already", the verb shows us that the noun is plural from the verb *have arrested.* If the noun is singular, the verb would be *has arrested*, but it never appears. Unlike a word like *sheep* which is ambiguous between singular and plural, the word *police* never appears in a singular context.

The exception of the list is the word *crisp*. The class of *crisp* is adjective. The extension of *crisp* could be *crispy*. The formation adding *+y* in the end of the word forms adjective becoming *crispy*. But, it is not dealt with other three words, tone, heat, and cook. It never appears in the form of *tony, heaty, and cooky*. Then, when the words are still in *–er*, it could be also added by suffix *+y to* explain noun, as in *cooker* becoming *cookery*. Semantically, *cookery* means???meanwhile, it never appears in other three words, *tonery, heatery, and crispery*.

As the comparison, since the word crisp is adjective, there are also tools relating with it, as in:

(6). Dryer

Softer

Crisper

These three words are noun which is formed by adjective class of word. The word *dryer* semantically means the tool or machine that dries something. *Dryer* gets closed meaning with hair dryer. But sometimes, people just say dryer not hair dryer. Relating with electronic tools, dryer is not only as hair dryer but also a part of washing machine device to dry clothes when it is washed so that the clothes are not too wet when it is finished. Then, the word *softer*, based on data, it is not comparative degree class as in *soft – softer – softest*. Nevertheless, *softer* here is a device to make something soft. *Softer* is a part of washing machine device to give softness to the clothes after dried on the process.

In the word formation process, these three words could be compared as in:

Dry	*dryy	dryly	dryness	*dryen
Soft	softy	softly	softness	soften
Crisp	crispy	crisply	crispness	*crispen

Though these three words (dry, soft, and crisp) are adjective, at the every formations, there is word which is impossible and never to be in that formation. For instance, when *crisp* and *soft* could be added suffix *+y*, the condition is not suitable for *dry*. It is never to be *dryy*. *Crisp* and *crispy* are both adjective. On the sentence, it is possible crisp or crispy to tell adjective, while impossible for *dryy*. It is enough for *dry* to

represent adjective. Then, the third column, the words are *dryly, softly, and crisply*. These words exist in the lexicon to represent adverb *+ly*. As so in fourth column, the rule of adjective words *+ness* forming noun, *dryness*, *softness*, and *crispness*, is appropriate and no other words in data to deny it. The case appears when these adjective words, *dry, soft, and crisp* form verb. The rule which is used is adjective *+en* or it could be *+en + adjective*. Based on data, after transformed, the words become *dryen, soften, and crispen*. It is only one word which is acceptable and that is *soften*. For *dryen* and *crispen*, it is also not be *endry* or *encrisp*. Then both words (dry and soft) in the base could actually be verb.

From overall data, the words found in electronic tools limited in SHARP catalog, few words which are different with before and they are listed on the following (7);

(7). Filter

Louver

Power

Cylinder

Laser

Observing preliminarily, the words also have *–er* at the end. It is also noun. Nevertheless, the comparison of the words (7) with other are so clear when simplified to base form as be done on the previous data, such as;

dryer – dry

Softer – soft

Crisper – crisp

On the following, data (7) try to be simplified by eliminating suffix –er as in;

Filt

Louv

Pow

Cylind

Las

In fact, from data, coming to the conclusion that not all every words ending with *–er* could be simplified more. The three formulas could not be applied to the words. Proved by *filter*, *-er* of the word could not be separated, as on *louver, power, cylinder, and laser*. The words could not become *louv, pow, cylind, and las*. In fact – er of the words is not suffix but the way the words itself. *–er* could not be said as the former noun of verb, noun, or adjective like previous analysis. These *–er* as an unition of existing word. If *–er* is eliminated then there are no meaning of the words. Thus, from the case, the words are impossible and never to be simplified more. *–er* could not be isolated.

Concluding overall of datum 1, the words of electronic tool in the form of *–er*, is the former noun. The base form could be verb, adjective, and noun. In fact, the rule is disturbed by few words causing *–er* is not suffix but the unition of existing word. It means *–er* could not be separated from the words as on *filter, louver, power, cylinder,*

and laser become *filt, louv, pow, cylind, and las*. *–er* is part of the words which is disseparatable.

3. 2. The use of suffix *–al*

In the second data, the analysis concerns to the words having nominal *–al*. The formation nominal *–al* is taken from base words becoming noun and adjective. The base form of the words could be noun, adjective, and verb. The data are still taken from the words of electronic tools limited in SHARP catalog 2010. The words are listed on the following (1);

(1). Digital
Optical
Removal
Terminal
Material
Signal

In order to analyze data, the words need to be classified because the former of these nominal *–al* are various. There are noun and also adjective as the base words. Then, the class of these *–al* are also noun and adjective.

Digital	digit
Optical	optic

The formulas are:

Digital	[[word]$_N$ +al]$_A$
Optical	[[word]$_A$ +al]$_A$

Both words (*digital* and *optical*) are adjective. When simplified to base form, digit is noun and optic is adjective. On the following list, there are comparison words which are also found as data (a);

(a).	Digital	digit	digitally	*digitalian
	Optical	optic	optically	optician
	External	extern	externally	*externalian
	Internal	intern	internally	*internalian
	Optional	option	optionally	*optionalian
	Virtual	*virtu	virtually	*virtualian

The class of nominal *–al* words above is all adjective. But when simplified to base form, there is word semantically related. That is the case of *intern*. For *intern*, though the word exists in lexicon but no relationship both *internal* and *intern*. It is questionable whether *internal* should be simplified to *intern* as the base form or not. *Internal* means of or on the inside, while *intern* means, the first is to put somebody in prison during a war or for political reasons, the second is junior doctor at a hospital, student or graduate getting practical experience of a job. In Indonesian language, *internal* and *intern* are loan words. The words get same meaning in the language. It

means of or on the inside. There are no semantically related forms, while in English; the analysis to the semantic term is applied.

Then, the case of *external*, the base word could not also be *extern* as *internal*. *Extern* is also unidentified in English lexicon although in other languages like Indonesian, *extern* and *external* could be the same such *intern* and *internal*. Beside that, *virtual*, if the word is simplified, the possibility word is *virtue*, but coming back to meaning, there is no relationship each of them. Virtual means; the first is almost or very nearly the thing described, the second is made to appear to exist by the use of computer software. Related to electronic tool, *virtual* is matched with *virtual memory*. Therefore, *virtual* itself is base word. It could not be simplified again and not added suffix *–al*.

Though data (a) in the part of *–al* are all adjective and in the base form are noun and adjective, there is still formation of the word that is impossible to exist. For instances; *digitalian, externalian, internalian, optionalian, and virtualian*. The formation that has nominal –ian is referred to the word *optician*. In order to explain person who makes or sells glasses and contact lenses, *optic* as the base added suffix *–ian*. In fact, it is not applied to the rest words (*digitalian, externalian, internalian, optionalian, and virtualian*), in order to explain person who responsibles for something, the words are not applicable.

Then, as an adjective class of word, the words in (a), especially in –al form, most of the words are possible to add *+ly* to explain adverb, such as *digitally,*

internally, externally, and virtually. Nevertheless, there is still a word which is questionable and that is *optionally*. The word does not exist in some of the lexicon.

The second classification besides noun and adjective as the base form, there is also verb, as in;

Removal	remove
Signal	sign

The formula is [[word]$_V$ +al]$_A$.

The variety of nominal *–al* is not only added by noun and adjective base form, but also verb. It is shown by the words *remove* and *sign*, while *sign* could be actually noun and also verb.

In fact, the finding of this datum, the words ending by *–al* could not be always separated into base words and suffix. It is shown by the following words;

Virtual	*virtu
Terminal	*termin
Material	*materi

The three words exist by the condition. It means without decreased or simplified. *–al* in ending words sticks on the rest. –al is not separatable in the words. Thus, the three formulas applied at the previous could be used. It is unlike *optional* becomes *option* or *digital* becomes *digit*. There is no *virtu* or *termin* or *materi* found in lexicon and it never appears, although, one word which is detected in Indonesian lexicon, and that is

materi. In Indonesian language, *materi* and *material* exist. *Materi* could be said as the simplest form of *material*. Therefore, In conclusion, coming back to English, not always ending –al words could be simplified, but there are few words that are formed fully with its –al in the end of the words and based on data the words *are virtual, terminal, and material*. If –al separated, there is no independent word.

3. 3. The use of suffix *–or*

The third data which are found in electronic tools based on SHARP catalog 2010 are ended suffix *–or*. The words are in the following list;

Evaporator	sensor
Generator	refrigerator
Pulsator	indicator
Calculator	selector
Detector	adaptor
Actuator	

The suffix *–or* forms noun word. Most of the former noun is constructed by verb as in the base form;

Evaporate	refrigerate
Generate	indicate
Pulsate	select

Calculate	adapt
Detect	actuate

The formula is [[word]$_V$ +or]$_N$.

Besides those verbs, according to data, in fact there is noun as the base constructing noun words and that is *sense*.

Sense	sensor

The formula is [[word]$_N$ +or]$_N$.

Since there is noun as noun former, the words formation to another is also different as shown in the following;

Evaporate	evaporation	evaporative	*evaporatable	evaporable
Generate	generation	generative	*generatable	generable
Pulsate	pulsation	*pulsative	*pulsatable	*pulsable
Calculate	calculation	calculative	*calculatable	calculable
Detect	detection	detective	detectable	detectable
Actuate	actuation	*actuative	*actuatable	*actuable
Sense	*sension	*sensive	*sensable	*sensable
Refrigerate	refrigeration	*refrigerative	*refrigeratable	*refrigerable
Indicate	indication	indicative	*indicatable	*indicable
Select	selection	selective	selectable	selectable
Adapt	*adaption	adaptive	adaptable	adaptable

From the list above, although the former noun in the base form is verb, in fact in other formations of the word, there are still blocked words. It means the words are non-existence in the lexicon. The case of *pulsator* is quite different. On the beginning, the base form of the word '*pulsate*' exists and does not '*pulsator*'. Then, the word appears on the jargon of electronic. When the analysis is referred to back-formation, the case is just the same with *hedgehop* exists because of *hedgehopper*, while *pulsator* exists because of *pulsate*.

Then, the truncation rule appears for few words. They are;

Evapor*ate*	evaporable
Gener*ate*	generable
Calcul*ate*	calculable

a. Dictionary [evapor + ate]
   WFR [[evapor + ate] + able]
   TR φ
   Output [evaporable]
b. Dictionary [gener + ate]
   WFR [[gener + ate] + able]
   TR φ
   Output [generable]
c. Dictionary [calcul + ate]
   WFR [[calcul + ate] + able]
   TR φ
   Output [calculabe]

In order to change to *+able*, the form of X +ate in the words is deleted. The words could not be *evaporatable, generatable or calculatable*, but *evaporable, generable, and calculable*. Thus, *+ate* should be deleted. The case of course is different on the words *pulsate, actuate, refrigerate*, and *indicate.*

Pulsate	*pulsatable	*pulsable
Actuate	*actuatable	*actuable
Refrigerate	*refrigeratable	*refrigerable
Indicate	*indicatable	*indicable

Although they are in *+ate* form, the truncation rule is not appropriate and not used to analyze it. Even when the fully words are transformed to +able such as *pulsatable, actuatable, indicatable*, and *refrigeratable* (no +ate deleted) or *pulsable, actuable, refrigerable, and indicable* (truncation rule), the words are still no existence and blocked in the lexicon.

Then, several words could be transformed fully to +able without truncation rule, they are;

Detect	detectable
Select	selectable
Adapt	adaptable

The words are productive because there is no blocked in the form of *+ion, +ive*, and *+able*. They fulfill the lexicon as in *detection-detective-detectable, selection-*

selective-selectable, but for *adapt*, it could not be *adaption* but *adaptation*. So the word is added +*ation* not +*ion* from the very base.

On the contrary, the different analysis comes to the word '*sense*'. Since the dominant base words are verb but no in '*sense*'. *Sense* is noun. That is why the analysis comes to be different. Based on the list above, *sense* is blocked when transformed into +*ion,* +*ive,* +*able*. For *sense*, it should be +*ation* so that it becomes *sensation*. Actually from the very base *sense*, there are some possibilities of transformation;

Sensation sensible sensibly sensibility sensitive

Thus, relating with earlier analysis in the form of +*ion,* +*ive and* +*able*, for *sense* it becomes sens*ation*, sens*itive*, and sens*ible,* not *sension, sensive,* and *sensable.*

Finally, the finding of third datum, the words which is also found in electronic tools and it has different forms of previous analysis are;

Monitor

Motor

These both words are different with previous. Since the previous ones could be simplified into base forms, while *monitor* and *motor* are the very base of the words. –*or* of the words is not suffix like other but the form of the word itself.

Monitor	*monite	*monitorize	*monitorist
Motor	*mote	motorize	motorist

That is why *monitor* and *motor* are the base form because it still could be transformed to another formation. For instance; when the word is changed to verb, thus *+ize* is necessary to be added. It deals with *motor*. *Motor* has formation into *motorize* but no for *monitor*. *Monitorize* is blocked. For *monitor,* in order to explain verb, it is enough in the word *monitor* without adding *+ize* because it could be noun and verb. Then, on the form of *+ist*, as the morpheme to explain subject or person who does something, for *monitor* could not be said as *monitorist*. On the contrary, for *motor*, the word could be *motorist* as the person who drives a car.

3. 4. The use of suffix *–able*

The next data which are found in SHARP catalog 2010 are ended suffix +able. The words are in the following list;

Playable	programmable
Turntable	washable
Durable	reversible
Compatible	renewable
Portable	

The words are not all pronounced *+able* in the last but also *+ible*. *+able* or *+ible* comes to explain adjective. In order to separate the explanation, there are three classifications of the words and it will be analyzed by simplifying the words to the base form. The first explanation is;

Playable	play
Portable	port
Renewable	new
Programmable	program
Washable	wash
Reversible	reverse

When seeing the base form, suffix *+able* which forms adjective is coupled by various classes of words. They are from verb as in *play, renew, wash,* and *reverse*. The formulas are;

$Play_V+abl_A$, $renew_V+abl_A$, $wash_V+abl_A$, $reverse_V+ibl_A$

Then *+able* is also followed by noun as in *port* and *program* and adjective as in *new* as the very base of verb *renew*. The formulas are;

$Port_N+abl_A$, $program_N+abl_A$

For *new*, it directly has no existence changed into *newable. New* as adjective needs to be changed to verb by adding prefix *re-* as in *renew* and after that the word becomes adjective again by adding *+able* as in *renewable*. Prefixes modify the lexical meaning of the base. Generally they do not alter the word-class of the base. For instances; un- (unfair, unfamiliar, unusual), im- (impossible), in- (incapable), re- (recover, recollect). The exception is for the word renew. Re- changes the class of

word from adjective becoming verb. The semantic role or lexical meaning is directly applicable because it changes the meaning of the base.

Play	playable	*playal	playful
Renew	renewable	renewal	*renewful
Wash	washable	*washal	*washful
Reverse	reversible	reversal	*reverseful

Although fourth words are verb, then onto other formations, there are still misappropriate words and impossible to be. In the form of *+al*, in order to explain noun, the words deal with *renewal* and *reversal*, but not for *playal* and *washal*. Then, continuing to *+ful*, there is only *playful* to explain adverb class and not for *renewful, washful,* and *reverseful*.

Then, the second explanation, there is exactly word unrelated with *+able*. The word is actually compound and that is *turntable*. *Turntable* consists of two words; *turn* and *table*. *Turn* is verb and *table* is noun. Thus, if the words are combined so it becomes noun with a single meaning.

The third is the comparison words which are the finding of this datum. There are words which could not exist when *+able* is deleted or uncoupled. They could not be separated each other and not be having suffix *+able*. The words are;

Durable	*dure
Compatible	*compate

In fact, the words having *+able* on the last could not always be separated or even simplified. There is no independent words if isolated. There is some that *+able* is all of the part of the word. The words are the unition sticking on the rest. It is shown on the words *durable* and *compatible*. This *+able* could not be deleted so that it becomes *dure* or *compate*. The words are no existence in lexicon. Thus, this *+able* is not suffix. It is all part of the words and the base forms and could not be isolated.

3. 5. The use of prefix *anti-*

Since the previous data includes suffix, but then, the following ones involve prefix. The productivity of prefix *anti-* is marked. Based on SHARP catalog 2010, the words related to electronic tools are gathered. It is the list of the words;

Anti-shock	Anti-microbial
Anti-rust	Anti-distortion
Anti-bacterial	Anti-dew glass door
Anti-deodorant	

The prefix *anti-* is coupled by various classes of word. The formulas are;

Anti-shock:	[[anti + [shock]$_N$]$_N$
Anti-rust:	[[anti + [rust]$_N$]$_N$
Anti-bacterial	[[anti + [bacteria]$_N$ +al]$_A$]$_A$
Anti-deodorant	[[anti + [deodor]$_{stem}$ +ant]$_N$]$_N$

Anti-microbial	[[anti + [microbe]$_N$ +al]$_A$]$_A$
Anti-distortion	[[anti + [distort]$_V$ +ion]$_N$]$_N$
Anti-dew glass door	[[anti + [dew]$_N$ + [glass }$_N$ + [door]$_N$ }$_N$

The analysis shows that independent words added prefix *anti-* could form adjective and even noun. Functionally *anti-* seems having no rule to change the classes of word but semantically the prefix modifies the lexical meaning of the base. When *shock* in class of noun is attached with *anti-* then the word class is still noun, but the lexical meaning changes to the contrary. The word means not causing or affecting *shock*. As in *bacterial*, the word class is adjective. Then coupled by anti-, the word class is still adjective but the lexical meaning changes not to appear *bacteria*. The internal process just happens to the word. *Bacteria* have to change to *bacterial* when added *anti-*. The process causes word class changing from noun into adjective. If coupled with *anti-*, the word could not be *anti-bacteria*, but *anti-bacterial*.

Then the process of vowel deletion is applied to *bacterial*. The process just looks like truncation rule by using φ as symbol of deletion and it processes once.

Bacterial →	dictionary	[bacteria + al]
	V. Del.	Φ
	Output	[bacterial]

The case which looks like *anti-bacterial* is *anti-microbial*. In order to be coupled with *anti-*, *microbe* as the base has to be added *+al* since there is no *anti-microbe*. The process causes word class changing from noun into adjective. After

added *anti-*, the word class is still adjective because prefix modifies the lexical meaning of the base becoming not to affect *microbial.* Generally *anti-* does not alter the word-class of the base.

The comparison of element *anti-* occurs to the word *anticipate*, *antics, antihistamine*, and *antique*. Though the words are out of electronic term, they are still used as the comparison to previous words. When *anti-* on *anti-rust, anti-shock, anti-bacterial i*s affix but no on *anticipate, antics*, and so on. In fact, *anti-* which exists on *anticipate* and the other are no affix. It is all part of the words which is disseparatable. Functionally, *anticipate* is to explain verb class. It is never grammatically to be *anti + cipate* or *anti + cs* or *anti + histamine*. For *antics,* the word is to explain noun, while *antihistamine* is noun and *antique* is adjective.

3. 6. The use of prefix *multi-*

The next prefix which is found in electronic term especially in limited catalog 2010 is *multi-*. *Multi-* modifies the lexical meaning of the base. It explains more than one or many. Generally *multi-* does not alter the word-class of the base.

Multimedia	Multi-angle
Multi-language	Multi-crystal
Multi-subtitle	Multi-playback
Multi-zonecode	

Prefix *multi-* forms adjective and noun word-class when combined with another. The formulas of the words above are in the following;

Multimedia	[[multi + [media]$_N$]$_A$
Multi-language	[[multi + [language]$_N$]$_A$
Multi-subtitle	[[multi + [subtitle]$_N$]$_A$
Multi-zonecode	[[multi + [[zone]$_N$ + [code]$_N$]$_N$]$_A$
Multi-angle	[[multi + [angle]$_N$]$_A$
Multi-crystal	[[multi + [crystal]$_N$]$_N$
Multi-playback	[[multi + [[play]$_V$ + [back]$_A$]$_V$]$_A$

From the rules above, a word that explains noun class is *multi-crystal*. That is because *multi-crystal* is concrete thing, while the others are abstract. The other words are out of electronic term which explain noun in which the base in *V#ing*, such as *multi-skilling* and *multitasking*. Generally *multi-* does not change the word-class of the base and modifies the lexical meaning to be *more than one or many.*

Then compound words also exist after prefix *multi-*. The words are *zonecode* and *playback*. Compounds are not always written as single words, such as: *zonecode* and *playback,* but also separated and combined by a *hyphen,* such as: *dry cleaner and on-line*. The processes applied to the words *zonecode* and *playback* are:

Zonecode	[[zone]$_N$ [code]$_N$]$_N$
Playback	[[play]$_V$ [back]$_A$]$_V$

Both words are in different or contrary analysis. For *zonecode*, it involves the "IS A" condition (Allen, 1978: 105).

The rule is $[\,[\quad]_X[\quad]_Y]_Z$

The formulation is intentionally ambiguous with regard to syntax and semantics. From the point of view of syntax, the process means that the entire compound Z is of the same category as the second constituent Y, as can be seen in the following examples:

X	Y	Z	
N	N	N	cable television
A	N	N	blue jay
P	N	N	underarm
P	V	V	overshoot

While, from the point of view of semantics, the process indicates that a semantic subset relationship holds between the compound Z and the compound constituent Y, as the following examples:

Black board	IS A	"board"
Mailman	IS A	"man"
Fire truck	IS A	"truck"

Analyzing *zonecode*, the "IS A" condition is applied.

X Y Z

N	N	N	zone code
Zone code	IS A		"code"

Functionally the entire *zone code* is of the same class as *code* and it is noun. While semantically, a subset relationship holds between *zone code* and *code* because *zone code* refers to *a code*.

On the contrary, the case is different to *playback*. The "IS A" condition is not applicable to the process.

X	Y	Z	
V	A	V	playback
Playback	IS NOT A		"back"

Functionally the entire *playback* is not the same class as *back*. When *playback* is verb and *back* is adjective, thus they are no same classes each other. While, semantically, a subset relationship does not hold between *playback* and *back* when *playback* does not refer to *back* and *playback* is not *back*. Therefore, the "IS A" condition is not applicable to analyze *playback* case.

The other words which is out of electronic term including *multi-* as the component are not always prefix. Prefix means it could be separated as morphemes, but the following words are not;

Multiple	≠	multi + ple
Multiply	≠	multi + ply

Multitude ≠ multi + tude

The three words are the exception because they could not be divided to morphemes. *Multiple* could not be divided into *multi* + *ple* and so in *multiply* and *multitude*. *Multi-* as the full element of the words sticks on the rest. The three words are single morpheme and the base.

3. 7. The use of prefix *micro-*

Next analysis comes to prefix micro-. The lists of words of electronic term in the catalog are the following:

Micro-hole	Microwave
Micro SD	Micro-bacteria
Microphone	Micro-hydro

Prefix *micro-* explains class of noun. It is so productive to combine with other noun. The usage of *micro-* is commonly known for the word *microscope*. *Micro-* is a prefix of Greek origin which defines an object as being smaller than scale of focus. The prefix is a part of neo-classical word formation because it uses element of Greek origin. Like other prefix, functionally *micro-* does not alter the word-class of the base and modifies the lexical meaning of the base.

Then, few words above could be analyzed in WFR`s while the rest or second constituent firstly should be processed internally.

Micro-hole	[[micro + [hole]$_N$]$_N$
Microphone	[[micro + [phone]$_N$]$_N$
Microwave	[[micro + [wave]$_N$]$_N$
Micro-bacteria	[[micro + [bacteria]$_N$]$_N$

All of the components to form noun by using *micro-* is noun class. There is no altered word-class of the base but the lexical meaning of the base is modified. Semantically *micro-hole* means hole which has smaller diameter and then *micro-bacteria* means directly to the *bacteria* which has smaller size, but *microphone* does not means semantically as phone with slower or downer volume. The word is not strictly defined as before but a device for recording sounds or for making your voice louder when you are speaking to audiences.

The case is just the same with *microwave*. The word is not defined as *wave* which has little movements or wave on lower frequency but a type of oven that cooks or heats food very quickly using electromagnetic waves rather than heat. Thus, both words (*microphone* and *microwave*) is not so related with altering word-class and modifying lexical meaning of the base caused *by multi-*, but in fact the words within single meaning each other. *Multi-* could be removed so that there are two morphemes but semantically the meaning is not appropriate anymore to the nature.

Continuing the analysis to the next word, there is *micro SD*. *SD* has lexical meaning as *Secure Digital*. The word is the process of *initialism* by putting or leaving only the initial of the words. For *SD*, *S* stands for *secure* and *D* stands for *digital*.

Relating to affixation, *SD* is coupled by prefix *micro-*. The case adds the property of how *micro-* can combine with. Except full written words as in *hole* and *bacteria*, in fact *micro-* could combine with initial word and it is applied on the word *SD*. Within *micro SD*, the prefix does not alter the word-class of the base from noun and modifies the lexical meaning of the base becoming *SD* on small size.

Then, the last word from this data is *micro-hydro*. In the lexicon, *hydro* is in the words such as *hydroelectric, hydrofoil, or hydrogen*. All of the content is the form of water. Semantically *hydro* behaves like stem but often it appears as bound forms. If the word *micro-hydro* exists that means *hydro* is a bound form because it can stand alone. *Hydro* is a part of neoclassical word formation because it is the element of Greek origin which defines water. Except Greek, Latin is also inside of neoclassical. Analyzing the word *hydroelectric*, the component of *hydro-* could be removed or isolated because *electric* also could be independent. Nevertheless, for *hydrofoil* and *hydrogen*, the words have single meaning fully until the rest so that *foil* and *gen* could not be isolated as independent word. It means there is no meaning for *foil* and *gen*. In fact, *hydro* is productive and flexible because it could be put on the earlier or the end of the word.

Hydroelectric	=	$[\,[\,\text{hydro} + [\,\text{electric}\,]_A\,]_A$
Hydrofoll	≠	$[\,[\,\text{hydro} + [\,\text{foll}\,]_\varphi$
Hydrogen	≠	$[\,[\,\text{hydro} + [\,\text{gen}\,]_\varphi$

Then, coming back to *micro-hydro*, the formula could be generalized as:

Micro-hydro [[micro + [hydro]$_N$]$_N$

3. 8. The use of compound: Identical Word -*magic*

Next analysis involves compound words. Several words found in electronic term limited in catalog 2010 of SHARP and they are:

Aquamagic

Silvermagic

Soakmagic

Brightmagic

The identical element of the words is *magic*. Then, with what this *magic* is coupled is analyzed in the following process:

a. Functionally the processes are:

Aquamagic [[aqua + [magic]$_N$]$_N$

Silvermagic [[silver]$_N$ [magic]$_N$]$_N$

Soakmagic [[soak]$_N$ [magic]$_N$]$_N$

Brightmagic [[bright]$_A$ [magic]$_N$]$_N$

Based on follower words of *magic* or the words before *magic,* there are several word-classes such as *silver* and *soak* as noun and *bright* as adjective. While *aqua* is loan word from *Greek* which defines water. On the process, aqua does not occupy word-class because no existence in lexicon. *Magic* is a morph to explain noun and after

combined it does not alter the word-class of the base but it modifies the lexical meaning.

b. Semantically the analysis is:

The analysis of the words is not separated semantically. They have lexical meaning. There are *transparent* and *opaque* interpretations (Bauer, 1983: 19). *Transparent* if it is clearly analyzable into its constituent morphs and knowledge of the morphs involved is sufficient to allow the speaker-listener to interpret the lexeme when it is encountered in context. Relating to the words above, *soakmagic* and *brightmagic* include in *transparent* because the meaning is predictable. Based on context, *soakmagic* is used in *washing machine* working. When the word is analyzed literally, it means the soak activity that has magical spirit. It is not appropriate because there is context behind it. So, *Soakmagic* is analyzed non-literally. The word refers to the strength when clothes are soaked. So the magic refers to the strength.

In term of *brightmagic* is the word of adaptor product. Literally *brightmagic* means the magic that gives *bright*. Relating to the context, since it is *adaptor* product, so non-literally *brightmagic* means *adaptor* that has optimal capacity to conduct electricity.

Then, *opaque* interpretation occurs when the word is not clearly analyzable, although that is the etymology of the word. Relating to data above, *aquamagic* and *silvermagic* are opaque. When *aquamagic* literally is defined as the magic of water, but it is not so clearly analyzable. *Aqua* has two meaning semantically. It could be a

kind of color, the closed color to light blue, and it also defines water because aqua is loan word from Greek. Contextually, *aquamagic* is language of electronic term especially in *washing machine*. Relating to the context, *aquamagic* means affecting or resulting fast, pure, and clean water when washing. Or, the meaning could be a variant or color of washing machine and according to data the color is aqua or light blue.

Then, *silvermagic* is also opaque when literally means the magic of silver. So, what the meaning of silver is, not clearly analyzable. In fact, by knowing the context, *silvermagic* refers to the variant or color of washing machine and that is silver. Therefore, however the processed is analyzed functionally or grammatically; it could not be still separated with the meaning and the context because every word has its form and meaning.

3. 9. The use of compound: Identical Word *-case*

Next analysis is still in compound words. There are few words in electronic tools which produce new compounding and by the time the words could be the convention. The words are in the following:

Fresh-case

Bottle-case

Showcase

Freezer-case

The identical word of the data is *case*. Thus the *case* is the referred word. The word-class of the base is noun, thus, although it is followed by another, the class is still noun. Compound noun can be further subdivided into four groups according to semantic criteria. They are *endocentric, exocentric, appositional*, and *dvandva* (Bauer, 1983: 30). Nevertheless, analyzing the words preliminarily, three groups which are matched to data. They are; *endocentric, exocentric, and appositional compound.* The process functionally the compound words do not alter the word-class of the base is:

Fresh-case	[[fresh]$_A$ [case]$_N$]$_N$
Bottle-case	[[bottle]$_A$ [case]$_N$]$_N$
Showcase	[[show]$_N$ [case]$_N$]$_N$
Freezer-case	[[freezer]$_N$ [case]$_N$]$_N$

The formulas show that the compound noun is formed by $A + N$ and $N + N$. Analyzing further based on the subdivision, the words are grouped into three; *endocentric, exocentric, and appositional compound. Endocentric* occurs when compound is hyponym of the grammatical head, such as a *beehive* is a kind of *hive*, an a*rmchair* is a kind of *chair*. When compound is not a hyponym of the grammatical head, such as *redskin* which is *not* a type of *skin* is called *exocentric*.

Filling four words into the groups, thus, *bottle-case* is part of *endocentric*. *Bottle-case* is kind of *case* to store bottled drinks. While *freezer-case* joins appositional compound because freezer-case is a hyponym of both freezer and case; a

freezer-*case* is a type of freezer and also type of case. Then, for *fresh-case* and *showcase* are parts of *exocentric*. *Fresh-case* is not *case* which is in *fresh* condition but more in the thing to store something to make it fresh. While *showcase* is not a *show* of the *case* or the *case* for *showing* something, but especially for storing bottled drinks within low temperature to make it fresh. So, in order to analyze the words, it is not sufficient to see just on the form or functionally but also in meaning or lexically because words have it both.

3. 10. The use of compound and blending

The process of next analysis still involves compound words and blending. Compounding is simply the joining of two or more words into a single word, such as *hang glider, cornflakes*, and *breakfast*, while *blending* is the fusion of two words into one, usually the first of one word with the last, as in *gasohol* (gasoline and alcohol), *brunch* (breakfast and lunch), *motel* (motor and hotel) (Stageberg, 2000: 126). The words of data are the following:

Space-saving

Water-saving

Energy-saving

Eco-saving

The identical word found is *saving*. It is in the second stem. The compound words are combined by a *hyphen* (-). Functionally, the forms of the word-process are:

Space-saving	[[space]$_N$ [saving]$_N$]$_N$
Water-saving	[[water]$_N$ [saving]$_N$]$_N$
Energy-saving	[[energy]$_N$ [saving]$_N$]$_N$

The compound words are constructed by noun stems producing compound noun. The second stem as referred word does not alter the word-class and modifies the lexical meaning. Nevertheless, the usage of *saving* is specified to each words and it is different.

In order to see the meaning, according to subdivision, the words could be grouped into two; *endocentric* and *exocentric.*

Endocentric	*exocentric*
Water-saving	space-saving
Energy-saving	

In order to analyze the words, the lexical meaning of referred word is firstly defined. On the case, the word is *saving*. Contextually, the using word is applied to the product of *refrigerator.* Thus, the meaning is not separated from the term of refrigerator. Based on the list, *water-saving* and *energy-saving* is grouped into *endocentric*. *Water-saving* is a kind of *saving* to store safe water circulation in refrigerator. So the product, especially refrigerator really cares for costumer safe for the using. Then, *energy-saving* is a kind of *saving* to minimize the used energy so that it is economic in charge. While *space-saving* is included in *exocentric* because it is

not a kind of *saving* but specifically to give more space to the goods. It means the size of refrigerator inside is wider.

The last word of data is *eco-saving*. The word-process seems to be twice. Saying the process is *compounding*, then first stem is not full word. In order to analyze it more specifically, it is not separated contextually. Referring to context, *eco-saving* is word which is found in *refrigerator* product. So *eco-* could be referred as *economic*. Thus the explanation is product which could minimize the using of charge and electricity. Therefore, the compound word could be *economic-saving*. Functionally the rule is describes as:

Economic-saving [[economic]$_A$ [saving]$_N$]$_N$

But, the written data is not the word, but *eco-saving*. It means the end of the word is cut off leaving a part and it is *eco-*. *Eco-* stands for the whole of *economic*. Thus, it is the process of *clipping* whereas the beginning or the end or even both of the word is cut off leaving a part to stand for the whole. After clipped, *eco-* is followed by *saving*, thus the words are *combined*. Arguing the process is *compounding*, one stem is not full word like *energy-saving*. Thus, the process is next to *blending*. *Blending* is the fusion of two words into one, usually the first of one word with the last, as in *gasohol (gasoline and alcohol), brunch (breakfast and lunch*). While, the case is, the word which is blended is only the first word but the last one is not. Therefore *eco-saving* processes blending process such as *afro-American* from *African* + *American*.

Marking the productivity of *eco-*, it also appears in other words in electronic term as in:

Eco-sensor

Eco-power

Eco-drum

Productive if the process of word formation can be used synchronically in the production of new forms, and non-productive if it cannot be used synchronically in this way (Bauer, 1983: 18). Thus, except *eco-* appears on *eco-saving*, it also exists in new forms of *eco-sensor, eco-power*, and *eco-drum*. But the process is still not separated semantically and contextually to look for the meaning. *Eco-saving* is the core of this analysis because both words are productive.

Eco	*saving*
Eco-sensor	Water-saving
Eco-power	space-saving
Eco-drum	energy-saving

Referring *eco-* as clipped word of *economic*, functionally the rule of process is:

Eco-sensor	$[\,[\,\text{eco} + [\,\text{sensor}\,]_N\,]_N$
Eco-power	$[\,[\,\text{eco} + [\,\text{power}\,]_N\,]_N$
Eco-drum	$[\,[\,\text{eco} + [\,\text{drum}\,]_N\,]_N$

The process is like the words of *anti-shock, multi-crystal*, and *micro-hole* which the base occupy the second element (shock (N), crystal (N), and hole (N)) so that it does

not alter the word-class of the base. For *eco-sensor,* the base is referred to sensor that explains noun. When *multi* is prefix and the word-base is *crystal*, so *multi-* does not change the *crystal* class and *multi-* modifies the *crystal* meaning becoming more than one or any *crystals.* Then, if *eco-* is said as prefix, thus *sensor* could be word-base. *Eco-* is clipped from *economic* that explains adjective word-class. *Eco-* is new forms of clipped word to be prefix and it is productive.

Eco-sensor, eco-power, and *eco-drum* appears on the term of washing machine. Thus the meaning is not separated to this term and not strictly defined literally since it is related to the context. *Eco-sensor* means sensor as part of washing machine device which is not used complicatedly but simple sensor to run washing machine easier. If analyzed literally, the meaning could be a sensor which is bought low price, but it is not as so simple analysis.

Eco-power means the power used is not wasting high electricity so that it needs high price also to spend it, but it is economically paid with optimal voltage. Then, *eco-drum*, if analyzed literally, it could be drum which is bought with low price or reachable price, but relating to the use of word, in the washing machine term, *eco-drum* is a single drum inside washing machine to make washing process easier and simpler. There is no need to move wet clothes to another drum to dry it, but just waiting the processes automatically in a single drum until the clothes are dry and ready to be moved out.

3. 11. The use of new coined words or inventions

Next analysis involves last data which is found in electronic term limited in 2010 SHARP catalog. New forms of words are appeared. The words could be a new word and also the existing words but modified. The words are in the following:

Blu-ray	TruSurround	X - gen
Bluetooth	TruMotion	X - bass
		X - pression

By the rapidly development of science and technology, more frequent the intercommunication among people is being conducted each day so that new words and the expressions are pop up. The new words are being spread every day with very high speed through media. The words could be really new or some are the modification. For instances: *Wi Fi* blended from *Wireless Fidelity*, *Hi Fi* blended from *High Fidelity*, and also *3-G* as acronym for *Generation Three*.

Relating to data which are found, the words categorized into *newly-coined words* are the following;

a. *Blu-ray*

Analyzing *blu-ray* functionally, it is quite difficult because the word should be seen lexically. *Ray* which is referred to noun is followed by *blu*. While *blu* is the form phonetically of *blue /blu:/* adj 'color'. Denoting the word *blue-ray*, it means ray in blue color. Nevertheless, on the context, *blu-ray* is the highest quality of video`s appearance. Visually the image and the movement are clear.

So the meaning is in contrary literally. But, in the necessity of social, the word is spread, well-known, and acceptable. Thus, *blu* is adopted from its phonetic symbol and it is a new language phenomena of how new words now are created.

b. *Bluetooth*

The word is functionally written as:

Bluetooth [[blue]$_A$ [tooth]$_N$]$_N$

Following the process grammatically, the word is noun. While looking the meaning literally, it is not appropriate to the fact. Literally means the tooth in blue color. Grouped into subdivision of compound noun, it is either *endocentric* or *exocentric*. In fact, the use of *bluetooth* is used in laptop or other cellular phone as software to receive or send data digitally. On the certain distant, the image or song could be received or sent. It concludes that new word formation could not be analyzed just literally but contextually in order to get the real meaning.

c. *TruSurround* and *TruMotion*

The words (*TruSurround and TruMotion*) are created on the same way with *blu-ray* case. *Tru* in the words, maintain the phonetic symbol of *true*. It is written as */tru:/*. By adopting the phonetic, thus process of new words such *TruSurround* and *TruMotion* comes to be productive. The deletion process is

on the symbol ':'. The words appear on the product of television. *TruSurround* means the sound of television speaker is really surrounded. The speakers are around border of TV, so the sounds are pure and echo. While *TruMotion* means the appearance of television image or visual really move softly without blur.

If the *blu* and *tru* are productive by then, the possibility of the rules could be:

Blu-ray	[[blu + [ray]$_N$]$_A$
TruSurround	[[tru + [surround]$_N$]$_N$
TruMotion	[[tru + [motion]$_N$]$_N$

d. *X – gen, x – bass*, and *X – pression*

X – Gen and *x – bass* are new words which are found. *X- Gen* is stated on the television page, "premium full HD X – Gen panel" (SHARP, 2010: 4), then as the comparison statement, "premium full HD ASV panel", (SHARP, 2010: 5). From the comparison, *X – Gen* is concluded as a kind of panel or type of panel. It could be the name of the panel on the screen. Then, *X – bass* is a kind of sound production of the speaker.

Finding X on the beginning of the word is a new way of creating words. The existing word even is modified. It is shown on the word *X – pression*. Adopted from *expression,* the advertisement needs to modify the word. The creator changes the word to be uniquely written. The process concerns to "X",

whereas the actual /ex/ becomes /x/. So it just looks like simplifying word when it is written.

The process of "X" above is distinguished into two and also compiled with other new words appearing which is out of electronic term as the following:

X combined with other word	*X as the modification of /ex/*
X – Gen	X – pression
X – Bass	X – tra
X – File	X - plosion
X - Code	

The first group is "*X which is combined with other word*". They are *X – gen, X – bass, X – file*, and *X – code*. The first two has been discussed. While *X – file* could also not be defined as file that has the folder`s name as "X", but more specifically to secret file known by certain person. As in *X – code*, literally means letter "X" as the code, but more into secret code which is not many people know it, just certain person.

Then, the second group is *"X" as the modification of "ex"* which is actually written. The words include *x – pression, X –tra*, and *X – plosion*.

Expression → *X - pression*

Extra → *X - tra*

Explossion → *X - plosion*

On the recent words, there are *expression, extra*, and *explosion*. Thus, the process seems to be modifying the existing words. These three words are the recently found in advertisement language to promote products. It is still possible for another form to be appeared. Therefore, in accordance to need, social context, and formational patterns, thus the clusters of derivatives, compounds, and blending develop around words and bases.

CHAPTER IV

CONCLUSION

The speaker always has a capacity to make up new words. Thus it remains the task of morphology to tell what sort of new words a speaker can form. The processes include two distinct terms but related matters: first, the analysis of existing composite words, and the second, the formation of new composite words. The analysis concerns to one of the famous electronic product, that is SHARP. The words which are analyzed are not only the part of its software and hardware or the tools but also the name of brand itself.

The data is analyzed morphologically in word formation process. Based on data which are found, in creating the words, there are word classifications like; combining derivational affixes or bound bases with existing words, combining two words into a single one (compounding), the fusion of two words into one, usually the first part of one word with the last (blending), the formation of new word from one that looks like its derivative (back-formation), the new words totally invented (inventions); proposed by Stageberg (2000), and even modifying existing words.

The data is processed basically based on the theory proposed by Aronoff (1976) about word formation in generative morphology. He proposed a morphological theory that is consistent with the word based hypothesis suggests an interesting way of refining morphological rules and formulates a number of

restrictions on WFR`s in order to constrain their power. Then, Bauer`s theory (1983) is applied to support analysis about productivity, compounding, and other discussion related to data.

The analysis is also developed by three previous studies. The first one is about *Chinese Brand Names and Global Brand Names: Implications from Two Corpus Analysis.* The two corpus analysis of brand names is concerned. By the study, the analysis of word formation of SHARP gets the comparison of how the words are processed. The process includes compounding pattern and semantic factors which the words have. Then, the second study is about *A Comparison of Word-formation between Chinese and English.* It analyzes various ways of Chinese and English word-formation so that similarities and differences are found between the two languages. From the study, the points which are underlined about the compounding pattern, derivation, affixation, conversion, blending, and loans. After that, the last study is about *Neoclassical Word-formation.* Neoclassical word-formation uses Greek or Latin origin in creating new words. Thus from the study, the point is got to the thesis development is knowing the greek and latin words which are used in word formation process.

Finally, concluding the processes which are found in electronic term concerning to the words limited in SHARP catalog 2010, the derivational affixes is the more frequent process which are used. Then following compounding, new coined words or invention, and some of blending, and back formation.

BIBLIOGRAPHY

Aiguo, Wang. 2003. *A Comparison of Word-formation between Chinese and English.* Civil Aviation University of China, Tianjin: Asian EFL Journal.

Aronoff, Mark. 1975. *Word Formation in Generative Grammar*. Cambridge: The MIT Press.

Baayen, R. H. 2001. *Word Frequency Distributions*. Dordrecht: Kluwer.

Bauer, L. 1983. *Introducing Linguistic Morphology. (2nd ed.).* London: Edinburgh University Press.

Bauer, L. 2001. *Morphological Productivity*. Cambridge: Cambridge Univ. Press.

Booij, G. 2002. *The Morphology of Dutch*. Oxford: Oxford Univ. Press.

Chan, Allan. K. K., Yue Yuan Huang, & David X. Wu. 2007. *Chinese Brand Names and Global Brand Names: Implications from Two Corpus Analysis.* Beijing: Hongkong Baptist Univ. Press.(http://www.tdtm.com.cn/dongtai/news/17_0004.htm.). (Accessed on March 10, 2010).

Hornby, A. S. 1995. *Oxford Advanced Learner`s Dictionary of Current English. (5th ed.).* London: oxford University Press.

http://in.reuters.com/money/quotes/companyProfile?symbol=6753.T (Accessed on March 10, 2010).

http://www.kulinet.com/baca/micro-sd/1170/. (Accessed on July 19, 2011).

Katamba, Francis. 1993. *Morphology*. London: Macmillan Press Ltd.

Lüdeling, Anke. 2005. *Neoclassical Word-formation*. Berlin: Humboldt-Universität zu Berlin. http://www.linguistik.hu-berlin.de/korpuslinguistik/. (Accessed on July 19, 2011).

Mahsun, Prof.Dr. 2005. *Metode Penelitian Bahasa: Tahapan Strategi, Metode, dan Tekniknya*. Jakarta: PT RajaGrafindo Persada.

Nida, E. A. 1949. *Morphology: the Descriptive Analysis of Words. (2nd ed.)*. Ann Arbor: University of Michigan Press.

Petropoulou, E. & P. ten Hacken. 2002. *Neoclassical Word Formation in an Electronic Dictionary*. In A. Braasch & C. Povlson (eds.), *Proceedings of the tenth Euralex International Congress*, Copenhagen.

Plag, Ingo. 1999. *Morphological Productivity: Structural Constraints in English Derivation*. Berlin: Mouton de Gruyter.

Scalise, Sergio. 1984. *Generative Morphology*. Dordrecht: Foris Publications.

Stageberg, Norman C. & Dallin D. Oaks. 2000. *An Introductory English Grammar*. Orlando: Harcourt,Inc.