

CHAPTER II

LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Word Formation Processes by Laurie Bauer (1988)

As noted earlier, this study applied the theory of word formation processes by Bauer. He clearly mentions various processes by words can be built. He divided it into nine processes which are; using affixes, reduplication, modification the base, cases involving shortening base, processes involving several lexemes, alphabet based formation, unique morph, and suppletion.

2.1.1.1 Word-building processes using affixes

So far the most common way of building new words in the languages of the world is by using affixes. In the case of affixation, a word is joined by a morpheme, which alters its sense (Shortis, 2001). Morphemes are the smallest meaningful units into which you can divide word. Bauer (1988) divided word-building processes using affixes into:

1. Suffixes are elements added at the end of word. Suffixes are used for all purposes in morphology. They are used derivationally as in: *constitute + ion + al + ity*
2. Prefixes are elements added at the beginning of word. Prefixes, co-occur in the same word with suffixes, and all possible combination of derivational and inflectional are found in such cases:

Un + thank + ful

(deriv) (deriv)

Re + think + s

(deriv) (infl)

3. Circumfixes. In some cases a prefix and a suffix act together to surround a base. If neither of these affixes is used on its own, and the two seem to realize a single morpheme, they are sometimes classed together as a circumfix. This can be illustrated from German, where the past participle of weak verbs is made by adding a prefix *ge-* and simultaneously, a suffix *-t*. That is, the base is enclosed in affixes, neither of which can occur on its own in the forms in question. This is illustrated below:

*Film + en 'to film' ge + film + t 'filmed'**Frag + en 'to ask' ge + frag + t 'asked'**Lob + en 'to praise' ge + lob + t 'praised'***Ge + film* etc do not occur**film + t* etc do not occur in this meaning but only as 3rd person singular present tense forms.

4. Infixes. An affix inserted into the middle of word is called by 'infix'. Since infixes create discontinuous bases, the rarity of a discontinuous morphs also account for the relative rarity of infixation (the use of infixes) in the languages of the world. Consider the following example from Tagalog, a language of the Philippines:

Sulat 'write'

S + um + ulat 'wrote'

S + in + ulat 'was written'

5. Interfixes. A rather special kind of infix can be found, for example, in many of Germanic languages where there is a linking element which appears between the two elements of a compound. This can be illustrated from German:

Element 1	Element 2	Compound	Gloss
<i>Bauer</i>	<i>Frau</i>	<i>Bauer+s+frau</i>	'farmer's wife'
<i>Jahr</i>	<i>Zelt</i>	<i>Jahr+es+zeit</i>	'season'
<i>Tag</i>	<i>Licht</i>	<i>Tag+es+licht</i>	'day light'

6. Transfixes. Another special kind of infix involves not only discontinuous affixes but also discontinuous bases. There are affixes which occur throughout the base, and they are thus termed transfixes. Transfixes appear only in the Semitic languages:

<i>'katab</i>	<i>'he wrote'</i>	<i>'daras</i>	<i>'he studied'</i>
<i>'jiktib</i>	<i>'he will write'</i>	<i>'jidras</i>	<i>'he will study'</i>
<i>mak'tuub</i>	<i>'written'</i>	<i>mad'ruus</i>	<i>'studied'</i>
<i>mak'taba</i>	<i>'bookshop'</i>	<i>mad'rasa</i>	<i>'school'</i>
<i>ma'kaatib</i>	<i>'bookshops'</i>	<i>ma'daaris</i>	<i>'schools'</i>
		<i>dars</i>	<i>'lesson'</i>
<i>ki'taab</i>	<i>'book'</i>		

'kaatib *'clerk'*

mu'daris *'teacher'*

2.1.1.2 Reduplication

Reduplication, essentially it is a repetition process, where the whole or part of a word stem is doubled (Burrige, 2002). Reduplication is far more common across languages. If the entire base is reduplicated, reduplication resembles compounding. Reduplication can also form types of affix. That is, the part of the word which is repeated may be added to the end or the beginning of the base.

1. Whole word being reduplicated (the example are from Afrikaans)

Amper *'nearly'* *amper+amper* *'very nearly'*

Dik *'thick'* *dik+dik* *'very thick'*

2. Reduplicated prefixes as well as whole word reduplication (the example are from Motu, a language of Papua New Guinea)

Tau *'man'* *ta+tau* *'men'*

Mero *'boy'* *me+mero* *'boys'*

meromero *'little boys'*

memeromemero *'little boys'*

3. Reduplicated part is used as a suffix (the example are from the Maori)

Aahua *'appearance'* *aahua+hua* *'resemble'*

Hiikel *'step'* *hiikei+kei* *'hop'*

Maakuu *'moisture'* *maakuu+kuu* *'rather moist'*

Bauer (1988) stated that reduplication is frequently used iconically. By this, it means that the form of the word in some way reflects its meaning. So reduplication is frequently used to indicate plurality, intensity and repetition.

2.1.1.3 Word-building by modification of the base

The most common method is to make some kind of phonological change to the base. The change may be segmental or suprasegmental. In segmental modification, a change from a voiceless fricative to voiced fricative causes a change from noun to verb in English: e.g. *mouth* > *mouth*, *sheath* > *sheathe*, *strife* > *strive*, *thief* > *thieve*, *wreath* > *wreathe*. In suprasegmental modification, change of stress of pattern occurs, as in '*discount* > *dis*'*count*, '*import* > *im*'*port*, '*insult* > *in*'*sult*.

2.1.1.4 Relationships with no change of form

There are many instances to be found where, although there appears to be an inflectional or derivational relationship between two words, they have precisely the same form; e.g. *deer* (*singular*) > *deer* (*plural*), *fish* (*singular*) > *fish* (*plural*), *better* (*adjective*) vs *to better* vs *a better*. According Shortis it occurs when a word changes its word class. For example, a noun becomes a verb (fax) or an adjective become noun ('floppy' from the clipping of 'floppy disk').

2.1.1.5 Cases involving shortening bases

1. Backformation

Backformation is where a word loses part of itself to spawn a related word in a different word class. The lost piece of the word has been treated as if it were a morpheme (Shortis, 2001). Stockwell and Minkova (2001) stated what is called as backformation is like *edit* from *editor*, where the final *-or* is wrongly analysed as a suffix (like the *-er* of worker, employer, builder). Bauer (1988) added, there is one very important point about backformation: in retrospect, it is invisible. It is only noticeable when the backformed word (this is an example of backformation) is unfamiliar. This has led some linguists to deny that backformation has any synchronic status as a morphological process. But it must be remembered that backformation continues to be synchronically used to produce new lexemes, and thus must be included in any synchronic grammar.

2. Clipping

Clipping is the process of shortening a word without changing its meaning or part of speech (Bauer, 1988). Stockwell and Minkova (2001) stated that in many cases it is apparent that they are deliberate shortenings to save time. As will be clear from the examples given below, clipping frequently does change the stylistic value of the word. As far as is known, there is no way to predict how much word will be clipped off in clipping, nor even which end of the word

will be clipped of. Neither is it possible to say that any given syllable will definitely be retained in clipping. Some example are given below:

<i>Binoc(ular)s</i>	<i>Binocs</i>
<i>Deli(catessen)</i>	<i>Deli</i>
<i>(De)tec(tive)</i>	<i>Tec</i>
<i>(head-)shrink(er)</i>	<i>Shrink</i>
<i>Op(tical) art</i>	<i>Opart</i>
<i>Sci(ence) fi(ction)</i>	<i>Scifi</i>

2.1.1.6 Processes involving several lexemes

The formation of new lexeme by adjoining two or more lexemes is called compounding or composition. According Shortis (2001), Compounding refers to the process where two or more words, or free morphemes, are placed together to make a compound word. Compounds can be left as individual words, hyphenated, or even pushed together without hyphenation. It seems that no known language is without compounds, and in many languages compound are the main types of new lexeme. Some random examples are given below:

Finnish

<i>kirje + kuori</i>	<i>letter + cover</i>	<i>'envelope'</i>
<i>maa + talous + tuotanto</i>	<i>land+economy+production</i>	<i>'agricultural production'</i>
<i>huone + kalu + tehdas</i>	<i>room+article+factory</i>	<i>'furniture factory'</i>

2.1.1.7 Alphabet-based formations

Some ways of creating new lexemes (but not ways of creating new word-forms of lexemes) depend upon the existence of a writing system. They are thus not universal, since not all languages are written. In particular, two types are relevant here, blend and acronyms.

1. Blends

According Shortis (2001) blend is word formed by two or three free morphemes combined and shortened to form a new word which incorporates the meanings of the constituents. Bauer (1988) stated that blends are also called *portmanteau* words, because there are two meanings packed up into one word. In some cases two word are simply merged where they overlap, so that no information is lost, but repetition of letter combinations is avoided.; e.g. *glass + asphalt > glasphalt, war + orgasm > wargasm, slang + language > slanguage*. in most cases, however, there is no overlap, and the new word is created from parts of two other words, with no apparent principles guiding the way in which the two original words are mutilated, e.g. *flimsy + miserable > mimsy, parachute + balloon > paraloon, hawk + dove > dawk*.

2. Acronyms

Acronyms are words coined from the initial letter of words in a name, title or phrase. They are more than just abbreviations, because they are actually pronounced as new words. In many cases the acronym may actually precede the title which it intends to abbreviate, or at least, the title may be manipulated

in order to give an acronym which is considered suitable for the group concerned. This is particularly the case with pressure groups which are in the public eye, e.g. *BASIC* < *Beginners' All-Purposed Symbolic Code*, *SALT* > *Strategic Arms Limitation Talks*, *WASP* > *White Anglo-Saxon Protestant*.

2.1.1.8 Unique morphs

Unique morphs are morphs that only occur in one fixed expression in the language under discussion. Occasionally unique morphs can look like potentially free morphs. Even here, though, the morphs are bound to this particular collocation. More frequently there are unique morphs which look like obligatory bound morphs, e.g. *-ter* in *laughter*, *-ert* in *inert*, *luke* in *lukewarm*, *cran* in *cranberry*. Because of this last example, such items are sometimes called cranberry morphs.

The status of unique morphs is determined by parallelism with other morphs which are not unique. The *-ter* in *laughter* is seen to be a suffix because of parallels with things like *arrive-al*, *marri-age*, *inter-jection* which also have a verb in first position, where the meanings are relatable, and where there are clearly repeated suffixes in parallel constructions. *Cran* is considered to be some kind of root because of parallels with *blackberry*, *blueberry*, *cloudberry*, *snowberry*, *waxberry* and the like. We must demand parallels of a general type before we analyze a unique morph in order to avoid analyzing a unique morph *h-* in *hear*.

2.1.1.9 Suppletion

Although morphologists are continually seeking regularities in the pattern of language, there comes a time when they have to admit defeat, when word-forms of what appear to be the same lexeme are so different from each other that they can not be derived by general rules at all. Suppletion is shown in English in the lexeme GOOD with the two forms *good* and *better*, and the lexeme GO with the two forms *go* and *went*.

2.1.2 Warcraft III: Dota Allstar

The development of computer online game in Indonesia takes an important aspect in which the online gaming community was firstly used. The first online game *Nexia* contributes to the development of online gaming community in Indonesia, other games like *Counter Strike* and *Warcraft III* also lift the popularity of multiplayer online game to gain success among game players.

The player can play the game through various places. Firstly is through *Battle.Net* where, it is open to everyone in the world. Secondly it is in private league or servers, and last is LAN (Local Area Network) cafes and other local gaming hotspots. Of the three places, the private league or servers is the most attracting site among Indonesian players. It is *Battlenet server Indogamers* which provides player a place to participate the game through internet connection.

Multiplayer online games connect few game players through some kinds of game lobbies or matching services, and have death match or some modified version of that type of game. The players generally play few rounds with those

players in a little arena or level of some kind, when the game is over, everything is end and players may have a score from that game.



Figure 1. The General Interface: A game of *Dota Allstar* in progress.

Defence of the Ancients (DotA) is a custom scenario for real time strategy computer game Warcraft III: Reign of Chaos and its expansion Warcraft III: The Frozen Throne. Probably, it has been one of the most popular “free, non supported game modifications in the world” (Walbridge, 2008). It is set up as an epic, ten players battle that takes place over the course of about an hour-long game. There are ten players at a time, split into two teams of five. Each player takes control of one hero (See figure 1.A), and the teams fight it out across the battlefield with the

help of computer controlled units and structures until one destroys their opponent, Ancient. The Ancients are heavily defended structures situated in the middle of each base (“Introduction”, 2010).

To start the game, the player should pick one character or a hero and select the first hero’s ability then shopping for starting items. (“The complete DotA Guide”, 2008). The maximum level is 25 and each team gets 5 heroes. There are over 70 heroes to choose from (Walbridge, 2008). Each of the heroes has unique ability which is used to defeat enemy. This ability is called ‘spell’ (see figure 1.C). A hero is generally blessed with various four spells. The spell of heroes consists of three casual spells and one spell which has the greatest effect from those spells called ‘ultimate’ which is different between one hero to others.

The item or inventory is needed to maximize hero’s performance (see figure 1.B). Items have various abilities including damaging opponent, healing allies, protecting allies from further damage, and so on. There are two kinds of item, basic items and recipe items. A basic item is needed to make a recipe items. Recipe item is shaped through combination of basic item or recipe scroll. Both of them can give active or passive ability. Item with active ability can be activated by pressing keyboard and item with passive ability automatically works without pressing keyboard.

At precise and frequent intervals, each base sends a set of computer-controlled called ‘creeps’ towards the enemy base. Players control heroes who receive money as time passes and for killing enemy creeps and enemy heroes. The strategy focuses on levelling, getting hero kills, pushing the enemy’s base with the

player allied creeps and defending against the same. There are also a large number of items for purchase, some coming from ‘recipes’ that mix multiple items to make single powerful items, a necessity since each hero has only 6 slots (Walbridge, 2008).

While a game player is playing game, a communication with his allies also considered important to win a game. Communication through in-game chat is an effective tool to gain information with allies. To engage conversation in-game chat, a player simply press ‘enter’ from computer keyboard, then player will be able to send messages to his allies. By pressing ‘enter’ and ‘shift’ simultaneously, player will be able to send messages to his allies and his opponents

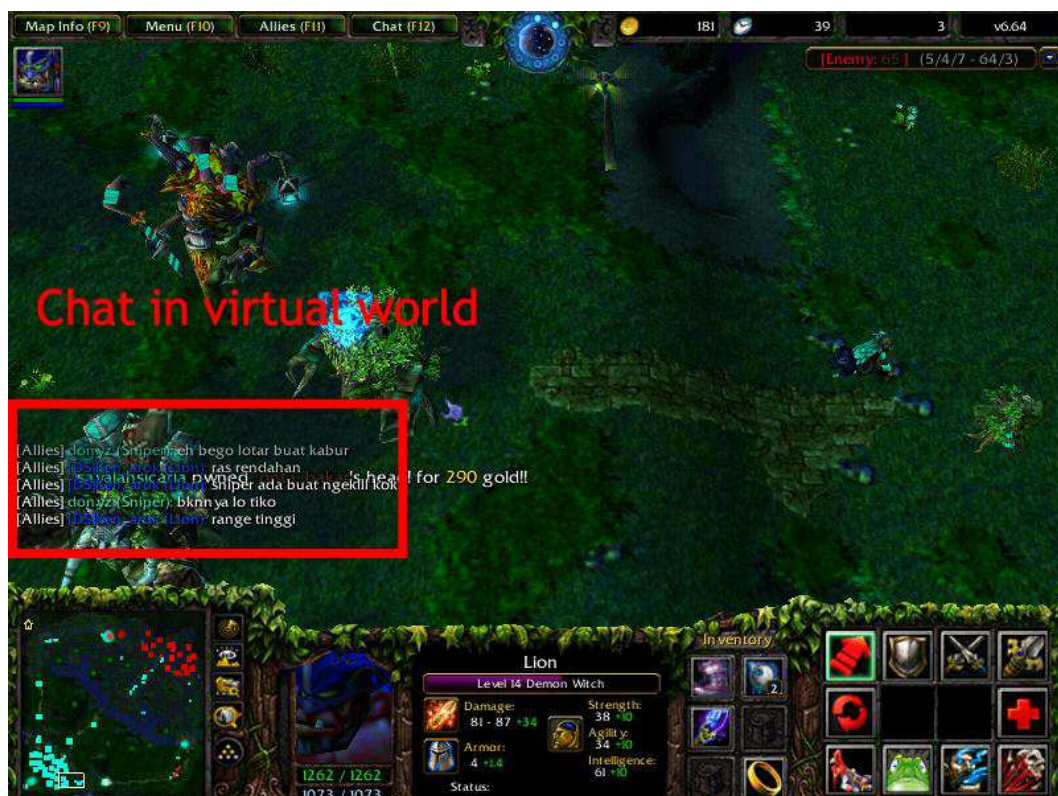


Figure 2. In-game chat: a chat dialogue in progress

Figure 2 shows dialogue between players in in-game chat DotA Allstar. The characteristic of text chat is similar to convention written dialogue online in chat session.

2.1.3 Gaming word

Gaming word is a unique word that used by gamer to communicate with other gamer while they are playing a game. The categorization of the lexicon which is exclusively to the gaming words in Warcraft III: DotA Allstar is examined based on <http://playdota.com>. This is the official website of DotA Allstar. The term which listed in this website is in English. The typology of game talk which was introduced by Wright et al (2002) is also helpful to find out information of gaming word. They identify the typology of game talk into five general categories. There are several creative game talks such as game conflict talks, insult or distancing talks, performance talks, and game technical or technical talks. In essence, this typology of game talk is used to gather information in collecting gaming words since there is still blur identification of gamer's language.

To be more effective, interviewing with the game veteran who has experienced in playing this game is also helpful to identify and determine the gamer's word in Warcraft III: DotA Allstar. Game veteran is a game player who has been playing the game for four years and considered as a professional gamer. Based on informal interview, there were many words produced exclusively made by DotA player such as 'Imba' for imbalance, 'firstblood', 'killer', and so on.

Some terms are also borrowed from internet culture like 'afk' for away from keyboard, 'brb' for be right back, and so on.

2.2 Review of Related Studies

There have been many studies about computer game which are considered as part of game study. Study of computer game was done by Kartika Kusuma Wardani in her master theses *entitled 'Representasi Identitas Orientalisme Visual Image Massively-Multiplayer Online Role-Playing Game (MMORPG)'*. Wardani (2008) uses visual culture approach in semiotics hemisphere to reveal oriental identity which is represented in the game's screenshot. She found that orientalism's identity which is used in MMORPG not only became a bridge between West and East's cultures, but also became the bridge between East's cultures which is chained with the presence of *the global village* term. Nevertheless, like the representation of culture, a culture always shows the form cultures whether it is assume to be strongest or weakest.

Moreover, there is a game study which examined the types of textual (in-game chats) that record all chat between the players in online multiplayer games. Wright et al (2002) attempt to understand the social character of online first person shooter games in the game *Half-Life: Counter-Strike*. They identified particular subcategory creative player actions practiced by those that engage in this game. From the variety of talk forms and creative game actions, it reveals a complex social world that participants enter wilfully.

In these and other way, both of these studies examined the phenomenon resulted in computer game. Thus, they are similar to object of this study that is the phenomenon resulted in computer game. Both of those studies have distinction with this study. As can be seen, Wardani (2008) uses visual culture approach in semiotics hemisphere, while Wright et al (2002) were busy to make patterns of game talk. In contrast, this study merely focuses on morphology processes on in-game chats on a real time strategy game *Warcraft III: DotA Allstar* by applying the theory of word formation processes by Laurie Bauer to see some patterns in the way new words are made by the players. From broader perspective, related to game study, through collaboration of linguistics, the study of word formation processes is expected to give value design knowledge for the academic community. However, through the study of word formation processes, this study reveals the characteristic of game players in group level.