Music And Language:  
A Stress Analysis of English Song Lyrics  
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Abstract

Music especially a song has a stress pattern of musical rhythm. In the first bar, there is a strong beat called accent. Like a music, English is often described as stress-time language. There some rules of the language in pronunciation. The purpose of this study is to know the tendency English stress pattern applied in English song lyrics viewed from the stress pattern of music rhythm. This study is a quantitative one by using musical approach. Sample of this study uses two song analysis is used. And to discuss the finding analysis the musical approach especially music composition is applied. The results of this study are (1) most of the syllables of English stress pattern are matched to the stress pattern of the musical rhythm in which have different meter signature, 78.15 % in Song 1 and 97.31 % in Song 2. (2) most word classes whose syllables of word stresses are matched to the stress pattern of musical rhythm are nouns, 52.27 % in Song 1 and 67.27 % in Song 2. Based on the result suggestions in this study are that it is important for composers to consider to the two important elements of the English song, lyric and beats or meter signature, to get good song, and other study related to this study are needed in order that this finding can be generalized to all of English song.

Key words: language stress, accent, beat, lyric, musical rhythm,

A. Background of the Study

Musical works fall into two categories based on their performance, namely instrumental music and music accompanied by lyrics or sometimes called a song. A musical work is called a song if only the existing sequence of melody is completed with song texis (lyrics). It is in the form of a musical notation which is completed with song texts. The song texts are arranged into a song. An instrumental music, on the other hand, is a song without song texts

A song, as an artwork, is actually a form of spiritual exposition of the artist (the song writers). Song writers work hard to expose the aesthetic sense which will
produce songs with good quality. Songs of good quality, needless to say, have some criteria, including having exquisite melody and harmony, and a well-balanced song theme, melody and texts.

The song text is an extremely important part of song. A good song text should be harmonious with the melody of the song that will bring the listener to delightful and pleasant mood. On the contrary, song texts which is not exquisite, and do not go well with the melody flow nor with the song theme, will produce an unappealing song to hear, and sometime potential to make the listener get bored, irritated, or even angry. Many of this kind of song we see and hear in the radio or TV.

Musical works are actually forms of language, i.e. language produced by composers, arrangers, or song writers. Any musical work always meant to have meaning, even in those without song texts. Certain kind of musical work called sonata, for example, have parts named movement, in which movement has its meaning. If all the parts of the musical works are performed, they will transform into a great and beautiful narrative in the form of melody streams and harmony of the song.

Like all great musical works such as sonata, a naturally simpler song, have certain kind of pattern. The pattern will shape the song according to the kind of the pattern. For example, a song with $AB$ pattern consists of two musical sentences, A and B. Each sentence has two phrases. The first phrase usually functions as the question (antecedent while the second acts as the answer (consequent). A phrase ends in chords built in fifth note of the scale (dominant chords) take charges as the question for the unfinished impression of the chord and harmony. The incomplete impression will be concluded by the next phrase which ends in $V7-I$ chords (movement from dominant septim to tonika), and often called cadens perfek. Major scale based songs generally conclude in note $do$ while minor scale based ones finish of in note $la$.

Musical works which is a language expression of the writer, actually have symbols. The symbols are music notations which have principle like a language. In music, motif is known as melodic or Aythnucal idea which can be developed to a good composition. The song motif is usually appear in parts of song. The parts may be in the beginning, middle, or in the end of the song. Motif is sometimes called
theme of the song which can be used as a base of the composition. Making a good motif will make the development of the melody in the composition process become a good one. Thus, like a language, the musical works are the compositions which have meaning.

A complete song is a combination of some elements namely melody, harmony, and song text or lyric. The sequence of melody is actually a language, music language. Because the song text consist of words, phrases, or even sentences that have meaning. Both language, music language and lyric language are one united meaning. That is why in every composition process the writer should consider the two elements (music and language). The two elements must be suitable in rhythm, melody, and harmony. If one element moves without other one, then it can not be harmonious. Usually, the text in a song is a beautiful language or literary language. However, the beauty of the language can be meaningless if the melody is not suitable among theme, melody, rhythm, and harmony.

Because the text is a language then the process of composition should follows principles of the language. English song text has a unique principle which is different from any other song text of other language, for instance Indonesian. In English, there is a rule that every word i.e. noun, adjective, verb, adverb has a tress in its fixed syllable. The word type is called content words. In the contrary, the other type called structural words, there is no stress in each word. The words belonged the structural words are pronoun, preposition, article, conjunction, and auxiliary verb (Gimson, 1974: 33).

We can be sure that in music the first beat of the measure must be strong accent or stressed. We can also see the character of the song by seeing and feeling the measure type. Every type has different character. Based on the two character between language, especially English and music song, some problems are appear. Do the patterns of language especially in song texts (lyrics) follow die beat patterns of music and vice versa? Can the stress patterns (the measure type) influence the song texts? To what extent is the English stress pattern applied in English song lyrics viewed from the stress pattern of musical rhythm and soon. The questions stimulate me to research it.

The objectives of the study is to know the tendency of English stress pattern applied in English song lyrics viewed from the stress pattern of musical rhythm.

B. Review of the Related Literature
1. Function of the Lyric in the Music
Actually, a music composition is not always a sequence of melody with a lyric. The composition without a lyric on its melody is called instrumental music. On the contrary, the one with a lyric is called song.

The music composition performed by song contains an attractive aspect. The attractive aspect is a language. The language which consists of a sequence of words gives new dimension in the music which can not be found in the other composition, instrumental music (Sitompul, 1997:97) The lyric in a song is actually non musical aspect. However, besides giving a new unique dimension, their presences in music are not only as an embedded elements but also as part of the music. Many songs are created from texts or beautiful poems which can attract listeners or readers to always enjoy it. That is why the songs should express the atmosphere that conform to its their lyrics. Even, sometimes, the beauty of words or sentences is smoothly reflected in its rhythm. The blend of elements, lyrics and its music can make new dimensions. One example of songs to show the blend is O Angin by Cornel Simanjuntak of which lyric is taken from Sanusi Pane's poem. In the song composition the writer blends the two subtle elements, between lyrics and melody. A deep sense of longing is expressed by a composer with subtle melody and good arrangement. A piano accompaniment which pictures the sound of smooodi wind is reflected in this composition. The important sentence is expressively focused in its melody.

It is clear that to face the musical works such as song music, musicians do not only learn the melody or music but also learn its lyrics as a source of the study to find interpretation and expression of the song (Sitompul, 1997: 99). The sound of the lyrics can give a colour to the song and beautify the sound of the song.

Lyric in a music composition can be made together or separated with its melody. However, bodily aspects are actually related to each other. To make a good lyric the song writers or composers usually consider rhythm, harmony, theme, even me fluctuation of die melody (M. Soeharto, 1991: 110). It can be more considered in English because the placement of die rhythm must be concordant of stress or even rhythm of the lyric. The 'rule' is very different from the one in Indonesian in which lyrics does not has a fixed stress in each word.

The lyric must match other elements of the song. The strength of the lyric depends on the harmony between the type of rhythm melody, even the character and the writer and cultural background. That means that a song if the lyric is substituted by other language, the effect can be different from the original song. The substitution of the language in the song, however, can not always picture the content of the original song.
As a language presented with words, lyric has meaning. According to Susanne Lo Ludice (2000), song's lyrics often add meaning to the story or are used to represent a character's feelings, usually taking one of two forms. Often they can be much like dialogue, literary singing words that could be spoken. In such situation they are often expressing an emotion, for example in a love song where the lyrics are usually more expressive of character's emotion. The lyrics can also telling a story or anecdote — simply replacing a form of speech (Http://bonza.rmit.edu.au/essays/ 1998/ musicals /lyrics.html).

2. The Basic Musical Elements in Music Song

The musical elements in this term are those have basic musical elements namely rhythm, melody, harmony, lyric, form, and texture. The all elements can be a great unit of composition called song.

Everything that human do naturally and gracefully one do rhythmically. There is rhythm in the way the one walk, swim, ride a horse, etc. According to Perrine (1974: 195) rhythm refers to any wavelike recurrence of motion or sound. In speech it is the natural rise and fall of language.

Rhythm in music, according to Kennedy and Bourne (1996) in Concise Oxford Dictionary of Music covers everything pertaining to the time aspect of music as distinct from the aspect of pitch, i.e. it include the effects of beats, accents, measures, grouping of notes into beats, grouping of beats into measures, grouping of measure into phrase, etc. It is the measured or accented movement of similar tones-groups; that is, the effect produced by the regulated and systematic grouping of tones both in their accentuation and in their succession as equal or unequal in time value. A rhythm is, therefore a tone-group serving as a pattern for succeeding identical groups.

The human ear seems to demand the perceptible presence of a unit of time or beat; even m the 'free rhythm' of plainsong this can be felt, though in such music the grouping into measure is not present. Seashore (1939: 138) calls this term as objective rhythm in which the grouping is actually marked, as in music and poetry. If a long series of quarter notes were played with absolute uniformity in time and stress, the listener would inevitably hear them divided into measure and would actually hear the appropriate notes accented.

Rhythm is an important element in melody, whether it be the prose rhythm of primitive music, plainsong, and compositions of some modern composers, or the metrical rhythm of most other music. Indeed this element is so much a governing factors in the effect of a melody that if, while the notes of popular melody are left
intact, the rhythm is drastically altered, it becomes difficult to recognize the melody.

The second musical element is melody. Melody is a succession of notes, varying in pitch, which have an organized and recognizable shape. Melody is 'horizontal', i.e. the notes are heard consecutively, whereas in harmony notes are sounded simultaneously ('vertical') (www.jp.classicalarchives.com/dict/rhythm.html). This definition is in line with Safrina (1999: 196) where defines that melody is a series of notes with a various rhythm expressing one theme or felling of the song writer. In a song, a lyric usually attaches to the melody. It is a arrangement of musical notes in a pleasant or ordered way. That means that the melody of the song is its rhythm with its rising and falling of the notes.

The series of notes may be played or sounded with voice or musical instrument. Therefore melody (1995: 729) denotes the main part or theme within a piece of music written for several instruments or voice. That is why that melody is a musical part of song, contrasted with the words or lyrics (Hornby, 1995: 729).

As defined above harmony is the simultaneous sounding (i.e. combination) of notes, giving what is known as vertical music, contrasted with horizontal music. The combination heard vertical in this notion is called as a vertical music by Kennedy and Bourne (1996).

The base to make the harmonious note is three notes or chord or triad (Jamalus, 1989: 30). A chord according to Ottman (1961: 8) is a group of different notes, usually three or more, sounded simultaneously or in rapid succession. As Ottman, Kennedy and Bourne (1996) point out that chord denotes any simultaneous combination of notes, but usually of not fewer than 3. Further, Kennedy and Bourne explain that the combination is simultaneously performed, and even when the main process in the composer's mind. is a weaving together of melodic strands he has to keep before him this combination.

Lyric is simply a words of a song. The lyric roles not only as complement of the song but also as an important part of the musical element which determents the theme, character, and mission of the song. It can also make sense be stable. To know the sense of the song we can feel the rhythm and melody, harmony and voices of the singer by singing the song.

Lyric, actually, denotes non musical element of a music song. However, it makes the song a new unique dimension and enriches its music performance (Sitompul, 1986: 96). It is a part of the song which has important role to express composer's feeling.

The next element of the song is form. Form is a structure and design of composition. Musicians are committed to explore sounds of varying pitch, duration,
loudness and timbre that will relate to the listener. The composer, in simplest terms, has four compositional techniques he can utilize in the creation of his music he may state a musical unit, and then repeat it, vary it, or introduce a new one; that is, he may follow an idea with one that is the same, varied, or entirely different (Crist and Delone, 1975: 7).

To get the form of expression above the composers create many forms of music composition. Actually, the form always develop following the time, style of the composer or even tend of the century. In the 16 and 17 centuries instrument compositions were usually very brief whereas in the 19th century they were frequently long, e.g. a sonata or symphony movement of the later Beethoven, Bruckner, and Mahler. This implies an enormous growth in the understanding of the principles of form and in mastery of the application of those principles (www.jp.classicalarchives.com. /dict/form.html)

The last element is texture. Texture, in music, describes two areas of musical phenomena, (1) melodic and harmonic relationships, and (2) the density of the simultaneous layering of different musical components. The simplest and most traditional use of the term texture in music deals with describing the construction of music. The typical constructions are: (1) a single melodic line (monophony or monophonic texture), (2) two or more melodic lines of equal complexity, and sounding simultaneously (polyphony or polyphonic texture), and (3) a single melodic line with an accompaniment of harmony (homophony or homophonic texture). Thus, texture in music is the way in which a piece of music is constructed with regard to the way in which its part or lines are combine which produces quality of certain sound of music.

3. Stress and Accent in English language

The term stress has been used in different and confusing ways. Many linguist uses the word stress the same as accent. Sometimes, it has been used simply to refer to syllables (or vowels made prominent for linguistic purposes either in words or in sentences. But, stress has also often been used to mean 'breath-force or loudness' the implication being that this is the principal means whereby syllables are made prominent. This second type of usage is misguided since, as indicated in the last paragraph, loudness generally plays a minor role in producing prominence (Cruttenden, 1986: 16). Further, he states that commonly implies that such prominence is principally associated with pitch. However, he discriminate the term that stress is being used in the more general, less specified, way. He, in particular, uses of the word stress in three areas. Firstly, the term word-stress is used to refer to those syllables which would be marked as stressed if stress were marked in a lexicon or dictionary and which therefore have a potential for accent in utterances. Secondly,
studies within the tradition of generative onomatology have preferred the term stress even for sentences. Thirdly, it has been suggested that the rhythm of certain language (the so called 'stress-timed' ones) is depend upon the regular occurrence of stressed syllable in connected speech.

That is true that the stress word may has high pitch means that the word has also high frequency. According to Gilbert (wy : 12) in English stress system has three ways to signal stress. All three signals are used at the same time, in order to make absolutely clear which syllables are stressed. The three signals of stress are: (1) pitch change, (2) length of vowel, and (3) vowel clarity.

The most powerful signal of stress is a change of pitch on the vowel. For example, the stressed-syllables in this words : seven, twenty, contrast, present are rising pitch. Besides pitch change, another signal of English stress is length. In English, some syllables are short and some are long. Syllables are extra long when they are stressed. The extra length of the vowel gives time to hear the pitch change, showing stress. The duration (length in time) of the syllable so, in the word 'sofa', for instance, is heard longer that other syllable English has two kinds of vowels namely clear and unclear. The contrast between clear and unclear vowels is essential to the language. In English stressed syllables always have clear vowels. Unstressed syllables usually have unclear vowels. The word 'semester' is written with three letter 'e' vowels. But only one 'e' is said with a full, dear sound. The other two letter 'e' are said with a reduced, unclear sound. This means that all stressed vowels are clear. Besides, it can be concluded that the clear vowels are always full or long, can be stressed, but, on the contrary the unclear vowels are always reduced or short and cannot be stressed.

To know which syllables are potentially accent able in utterances stressed in words we have to know which syllables are stressed in words. We have to know which syllables are accented in utterances because accented syllables form the frame work for intonation (Cruttenden::1986:19). English words may be divided into stems and affixes. The stems includes not only single free morphemes like 'blood', 'imply' and 'survive' but also that part of a word remaining when an affix is remove, even though such a part cannot stand on its own, e.g. ephemeral, tremendous, and kaleidoscope (Cruttenden, 1986: 19).

In English, actually, distribution of stress in word cannot be predicted. This means that, in English, each word has its own stress pattern (word-stress), which should be known together with its meaning. That is why it is advisable to consult a dictionary in case of doubt especially to the words which have irregularity in the

English has general rules for predicting stress. Unfortunately, rules for English stress are very complex. To learn a new word, a learner will generally have to learn its stress by listening carefully to a native speaker or by looking it up in dictionary.

When words arranged in a sentence they usually maintain their own word-stress. However, only one of them gets the primary stress, that is, the one that is most important in the mind of the speaker.

Although it has been said that all the words in phrase or sentence maintain their own stresses, it does not mean that all of the are equally stressed. Gimson (1974: 42) explains that the words which are most likely to carry a strong accent are those which we most important for the meaning, e.g. verbs, adverbs, nouns, adjectives called lexical items or content words. The other are grammatical words (often called form words) such as articles, prepositions, pronouns, auxiliary verbs, etc.

4. Stress and Accent in Music or Song

According to Oxford Advanced Learner's Dictionary (1995: 1180) stress is an extra force used when making a particular sound in music. The term extra force in music or song actually is occurred in the first beat of a measure or bar. A beat is a unit of musical time A beat may be represented on staff by any note value. The first beat or pulse in each bar always has extra force or emphasis or strong accent. Sometimes it is called accent. Christ and DeLone (1974: 54) point out that emphasis on particular note or beat louder than others through the use of dynamic accent.. The song which its meter signature is %, the first beat in each bar is more emphasized then the two other beat. The following is an example of accentuation in line of music or song.

\[
\begin{array}{cccc}
> & - & > & - > \\
5 | 3 & 3 & 23 & 4 . 65 | 4 & 4 & 34 & 5 . .
\end{array}
\]

In music notation, the accent symbols (>) are used to show that the note are accented or emphasized. Usually, the accent sing placed on above or below the head of note to indicate that note should receive additional stress.

C. Method of Study

1. Type and Strategy of the Study

This type of this study is quantitative which uses percentage as its analysis.
That is why this study is called percentage descriptive. Quantitative analysis is used to analyse data that can be observed and measured directly by counting (Hadi, 1983:60). In this study quantitative analysis will be used for calculating the frequency of the stress. Besides to know the tendency of stress whether it follow to music (melody of the song) or follow the lyrics, it also to know the percentage degree of the tendency of the stress.

2. Technique of Data Gathering

Type of this study is quantitative research which uses quantitative data, therefore the technique of data gathering is content analysis. The use of the content analysis because the sources of data are documents. The documents used in this research are the English songs.

3. Technique of Data Analysis

To identify the tendency of the stress and types of words which mostly get the stress based on metrical units system of music, lyrics of English song and metrical unit system of musical as units of analysis.

To be able to identify the tendency of the stress and classify the words of English song lyrics which mostly get the stress, steps which are taken are 1) making matrixes, 2) writing notation, 3) identification the stresses, 4) calculating, and 5) classification.

D. Finding and Discussion

1. Accuracy of all English Stress Pattern toward Stress Pattern of Musical Rhythm in Song "Morning Has Broken" and "In the Morning"

Based on descriptive data, show that most of syllables in the lyrics of the two songs are matched. In Song 1 (Morning Has Broken), there are 78.15 % syllables, both stressed and unstressed syllables are suitable with the stress pattern of the musical rhythm. Even, in Song 2 (In the Morning) almost syllables (97.31 %) are suitable. It can be said that the songs have good lyrics. In measure 3, the syllable -ken is put on the first beat which gets strong heat or accent. We can feel that the beat is not comfortable, especially the one who can feel the stress of the word. It is also in noun phrase. According to word-stress rule, stress is always on the head of the phrase (Cruttenden, 1986:19). Accordingly, the syllable black as in black, bird (measure 7),
for instance, should not be put on a strong beat except the words are compound words which are stressed on the first syllable. It is better if the syllable "birds" is put on the strong beat and the weak beat 'black' can be put on the third beat of the measure 6 like syllable 'first' in noun phrase 'first bird' in measure 10 and measure 11. The 'first' syllable in the phrase has functions as modifier. It is an adjective which has function to modify or clarify the head. The syllable 'first' in the song is situated on the third beat which is weak beat This means that the placement of the syllable is suitable. Moreover, the function of words in the sentence is actually as a verb where the syllable 'stand' is a stressed one.

It is true that to apply and match the English stress pattern to the stress pattern of musical rhythm is very difficult. Moreover, if the composer must match the lyric after finishing the melody. However, it can be concluded that the two songs have good lyrics especially if viewed from the accuracy of English stress pattern and stress pattern of musical rhythm although, actually in music it is subjective. There is no absolute rule in music, for instance in harmony rule. Moreover in composing the melody or lyric, creativity can change the rule. Although there is no special rule to put the lyric on the song melody. The length of percentage of the two song is very wide. In the Song 2, the composer may be more careful than the composer of the Song 1 to match the two elements, song and lyric, that is actually very related to each other.

Considering the accuracy of English matched syllables toward stress pattern of musical rhythm of the Song 1, it shows that most syllables put on strong beats are matched (68.18 %). As explained above, the function of the lyric in a composition is not only as a complement but it has an important role because the strength of the song can be also seen through the lyric such as theme, mission, message of the song writer. Song sometimes is created to certain mission and it has a certain message. The strength of the song can be felt through its rhythm, melody, harmony, and even the lyric. They are unit of composition which cannot be separated.

Even, in Song 2 the number is bigger than the Song 2, because there are 50 (90.91 %) syllables of stressed syllables (55) which are matched. It shows that the composer applies and blends seriously the two elements, lyrics and musical stress. It is difficult to say that the rhythm of song is not harmonious The one who can feel the music, and understand the stress of language will say that the song is good to listen to.
2. Kinds of Word the Stresses are matched and not Matched Viewed from the Stress Pattern of Musical Rhythm in Song "Morning Has Broken" and "In The Morning"

In this study I classify the words in two categories namely me words belong to content words such as nouns, adjectives, verbs, and adverbs. This is why that the words located on the accented beats and the words stress are on the strong beats. They are called matched syllables. On the contrary the syllables will be unmatched if they are put on the strong beats when the syllables belong to functions words such as prepositions, pronouns, conjunction, etc.

There are some kinds of words whose the stresses are matched namely nouns, adjectives, verbs, and adverbs. Meanwhile the types of "mistake" that the stresses are not matched are wrong stresses of two-words nouns, affix - tion, wrong stresses of verbs, preposition, and wrong stresses of noun phrases.

Based on data analysis in Song 1 and Song 2, the stressed syllables of nouns which are the most one get matched accent. In Song 1, there are 46 Syllables (52.27%) of nouns. Meanwhile in Song 2 the nouns which are matched are 37 syllables (67.27%).

It is important to analyze why the word class, nouns, are bigger number than the other content words. It can be concluded that most of the word class in the songs are nouns. According to the language theory (Leech, 1986: 41) noun is one of the open words (content word). It known as open word because we can readily coin new words to add to them.

The more important thing is that the function of the noun in a sentence. In the clause or sentence the word may be a word or noun phrase. The phrase can be a subject, object, complement, and adverbial. Thus, it is true most of word class in a song are nouns because of the function of the words. Of course, it imply that actually lyrics of song are full of nouns meaning that they are also full of stressed syllables. The composer must be careful to put the stress syllable on the melody of the song.

In Song 1 and Song 2, there are some kind of syllable that are not matched as said above. Some of them are syllables of two word noun and noun phrases, verb phrases, prepositions, affixes, etc. The syllable of two-word noun and noun phrase have been explain above that the syllables which has no stress in English stress pattern be some unmatched syllable if it putted on the strong beat of the music. Thus,
prepositions, and affixes such as in Song 1 and Song 2 are parts of the statement If we feel the beats, it can be said that the syllables -tion in Song 1 (measure 14) and by in Song 2 (Measure 17) which are put on strong beat make the beats not steady because the syllables are close words which have no stress in English stress pattern which are put on the strong beats of musical rhythm.

E. Conclusion
Based on the data analysis conclusions of this study are:
1. Most of the syllables of English stress patterns are matched to the stress pattern of the musical rhythm in the lyrics of song "Morning Has Broken" and "In the Morning". Most syllables in the lyrics of the two songs are marched. In Song 1, there are 78.15 % syllables, both stressed and unstressed syllables are suitable with the stress pattern of the musical rhythm. Even, in Song 2 almost all syllables (97.31 %) are suitable. It can be said that the songs have good lyrics.
2. Most word classes whose syllables of word stresses are matched to the stress pattern of musical rhythm are nouns, 52,27 % in Song 1 and 67.27 % in Song 2.

Suggestions
Suggestions in this study based on the finding are:
1. It is important for composers to consider to the two important elements of the English song, lyric and beats or meter signature, to get good song.
2. Other studies related to this study are needed in order that this findings can be generalized to all of English songs for instance the study about other stress songs which have various meter signatures, and different types of tempo, and types of music such as reggae, rock, slow rock, etc.

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