The Role of Lwidakho on English Word Stress Perception and Production

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ARTICLE INFO	ABSTRACT
	Lwidakho is a tonal language that lacks word stress; instead, the meaning of each syllable in a word is determined by the pitch at which it is pronounced. The language is different from English- a stress timed language- which relies on syllable stress to determine the meaning of words. It is against this background that the paper commented the extent to which Lwidakho influences the ability to perceive and produce English word stress. of form three secondary school Lwidakho speaking students, in Ikolomani Sub-County, Kenya, using Transfer theory, the paper examines the role of Lwidakho on English word stress perception and production. The paper used descriptive research design to identify and obtain information on how Lwidakho affects the learning of English word stress perception and production. Using simple random sampling, the paper sampled out 144 form three students out of 1440 students in day secondary schools. Eight (8) secondary schools were sampled out purposively out of the twenty (20) day secondary schools in Ikolomani Sub-County. Structured interviews were used to elicit data among the respondents. The paper considered the word as a unit of analysis and therefore, thirty (30) English content words were purposively sampled out for analysis. The results of the study reveal the non-existence of word stress in Lwidakho which is assumed to be the cause of errors in English word stress perception and production among Lwidakho speaking form three secondary school students. The study recommends the inclusion of English language activities and/or materials in the listening and speaking lessons among form three students in secondary schools in Kenya. This inclusion would help such students improve their skills in word stress perception and production.

1. INTRODUCTION

Lwidakho is a member of the *Luhya* macro-language. According to Lewis, Gary & Charles (2015) *Lwidakho* is classified within the Niger-Congo family as a narrow Bantu, Central J language. The language is closely related to other immediate bordering *Luhya* languages such as *Lwisukha* and *Lutirichi*. According to Were (1967), there are six major clans that comprises the speakers of *Lwidakho* namely; *Shikulu, Ngalori, Shiangala, Musali, Kasam* and *Masaba.* Geographically, speakers of *Lwidakho* are spread across twelve Sub-Counties of Kakamega County namely *Lugari, Likuyani, Navakholo, Malava, Lurambi, Khwisero, Ikolomani, Shinyalu, Mumias, Mumias East, Matungu,* and *Butere.* However, as

Lidonde (1978) notes, many of *Lwidakho* speakers come from *Idakho* location in Ikolomani Sub-County.

Most children born in Ikolomani Sub-County acquire *Lwidakho* through constant interaction with caregivers, parents, siblings and other speakers found within their linguistic environment. *Lwidakho* is, therefore, a first language to students learning English as a Second Language (ESL) within Ikolomani Sub-County. Such speakers have internalized the tonal patterns of words in *Lwidakho* during their first language acquisition. Consequently, learning English word stress for such students entails acquisition of a new set of linguistic habits. Tahreen (2015) observes that, although English language shares some linguistic aspects with some of the Bantu languages, its

phonological systems differ quite considerably from those of African languages.

It is against this argument that this paper presents the *Lwidakho* tonal patterns, English word stress and syllable structures; and English word stress perception and production. Further, a brief discussion on first language transfer is also provided. The paper further provides a description on how *Lwidakho* affects English word stress perception and production among form three *Lwidakho* speakers in day secondary schools in Ikolomani Sub-County, Kenya.

2. LITERATURE REVIEW
2.1 *Lwidakho* Tonal Patterns
Several studies have been conducted on *Lwidakho* language such as Savala, 2012; Mocho, 2015 and Ebarb, 2012. According to Savala (2012), *Lwidakho* is a tonal language, with the meaning of each syllable determined by the pitch at which it is pronounced. This is illustrated by examples (1 and 2) below:

1) *khu-tsɪ* / 'xu- tsɪ/.
   'I have died'.
2) khu-tsi /xu-'tsi/
   Let us go.

When high tone is placed on the first syllable, that is, '*khu-tsɪ* /'xu - tsɪ /, the word means 'died' while a high tone on the second syllable as in *khu'tsɪ* /xu- 'tsɪ /, changes the meaning to 'go'. From this example, *Lwidakho* speakers do not recognize stress in words in their pronunciation; they instead rely on tone to decode meaning.

Pronouncing the words in *Lwidakho* with high tone on the wrong syllable changes the meaning of the uttered word or affects the understanding of the word by the native *Lwidakho* listeners. The native *Lwidakho* listeners are therefore likely to decipher the wrong meaning of the words during conversations when stress is marked on the wrong syllable. Such a situation would impede communication.

2.2. *Lwidakho* Syllable Structure
A syllable is defined as the way in which vowels and consonants are joined to form various patterns (Roach 2002). *Lwidakho* syllable types are presented as follows: Firstly, *Lwidakho* has CV syllable type. This syllable type consists of a consonant and a vowel. Consider the *Lwidakho* word in example (3) below

3) /mu-sa-la/
   'Tree'

The word has a CV syllable structure with the consonant and vowel sounds; /m,u/, /s,a/, /l,a/.
Secondly, *Lwidakho* has the CCV syllable type. It mostly consists of a consonant in the onset followed by the bilabial approximant. This syllable type is also common in *Lwidakho* words, consider example (4) below, where, the first syllable has a CCV structure.

4) /mwɪ-xo/
   'Relative'

The above word has two consonants /m,w/ and a vowel /ɪ / joined to form the first syllable in /mwɪ-xo/. The second syllable in the above word has the consonant /x/ and a vowel /o/.
Lastly, *Lwidakho* language has the V syllable type in which the V place is occupied by a vowel. Example (5) below illustrates the same

5) /ɪ-tʃɪ-lɪ-ʃɪ/
   'Bull'

Example (5) above shows a polysyllabic word, with four syllables and the first syllable is made of a single vowel (ɪ). As a general rule, *Lwidakho* has an open syllable and does not allow codas.

2.3 English word stress
Word stress refers to the emphasis put on a given syllable of a word (Underhill, 1994). It is identified in words by the level of vowel duration, loudness, and or pitch height in pronunciation of syllables (Ladefoged, 2005). Word stress is significant when processing speech whereby native speakers of English rely on word stress patterns to perceive the meaning of words (Field 2004).

Underhill (1994) supports the view that spoken lexicons with correct sounds but wrongly stressed syllables are hard to understand than words with correctly stressed syllables, but wrongly pronounced. As a result, second language learners' inability to acquire English word stress patterns is one of the many pronunciation errors which lead to misunderstandings in spoken English language contexts (Ur, 2003).

According to Roach (1992), English word stress can either involve the perception or production of a word. Word stress perception involves the recognition of the stressed syllable in word when pronounced. For example, when the first syllable in the word *object* /'ɒb.dʒɛkt/ is stressed, the word becomes a noun, alternatively, when the second syllable is stressed /ɒb'dʒɛkt/, the word becomes a verb. On the other hand, word stress production involves the pronunciation of English words with emphasis on the correct syllable.

2.4 English and *Lwidakho* syllable structure
English language has six syllable patterns (Barrie,2015). These are: (ØVØ), (CVØ), (ØVC), (CVCVCV), (CCCVC) and (CVC). The table below provides examples words with the above syllable patterns:

Table 1: English syllable structures

English syllable pattern	Examples of words	English transcription
ØVØ	Eye	/aɪ/
CVØ	Bar	/bɑ:/
ØVC	Eat	/i:t/
CVC	Book	/bʊk/
CVCVCV	Banana	/bə.næ.nə/
CCCVC	Split	/splɪt

From the Table (1) above, an English syllable may be a vowel only, as in the pattern (ØVØ), for example /or/ transcribed as /'ɔ:/, this type of syllable is known as a minimum syllable. The syllable which is not closed by consonant, with such a pattern (CVØ), as in /be/and transcribed as /b'i:/ is called an open syllable. Further, the pattern (ØVC) indicates a syllable type in which a vowel precedes a consonant, for example up /ʌp/. The other syllable pattern is CV as in the word Canada, /kæ.nə.də/. Also, we have the CCCVC syllable pattern as in the word spleen/spli:n/. The last syllable pattern comprises of a vowel enclosed by consonant sounds, as in teach, /ti:tʃ/. It is the syllables that can either form a word or be joined to form a word in English. Therefore, if one stresses the wrong syllable in a word, he or she will not communicate the intended message, or will be misunderstood.

Lwidakho language has the following syllable patterns:, CV, VCV, CCV, and V. The table below summarizes the above *Lwidakho* stress patterns.

Table 2: *Lwidakho* Syllables Structures

Lwidakho syllable structure	Examples of words	*Lwidakho* transcription
CV	mwiya	/mwɪa/
VCV	inzi	/ɪnzɪ/
CVCCV	butswa	/ßʊtswa/
CCVCV	khotsa	/khotsa/

From the table above, *Lwidakho* has a CV syllable structure pattern, as in the word *mwiya* (newly married), CCV as in the word *khotsa* (uncle), and VCV for instance, *inzi* (I).

English language has its distinctive syllable structure, far away from what exists in *Lwidakho* language. From the two languages' syllable patterns discussed above, the pattern V only exits in *Lwidakho* and not English. On the other hand, CVC syllable pattern only exits in English and not *Lwidakho*. Therefore, form three students, who are *Lwidakho* speakers, in secondary schools in Ikolomani Sub-County, can tend

to transfer their L1 word syllable structures to the English word syllable patterns, thereby inhibiting their mastery of English language.

2.5 Language Transfer

Transfer is the influence resulting from similarities and differences between the target language and any other language that has been previously acquired (Odlin, 2001). Faerch & Kasper (1987) define transfer as the process by which second language learners' active first language knowledge is used in developing or using their inter-language, and they also pointed out that the process may either support or defect from learning.

The acquisition of second language phonology is generally a complex process (Roach,2002). An understanding of how learners acquire a new phonological system must consider linguistic differences between the mother tongue and the target language systems as well as universal facts of phonology. Phonology is both similar to and different from other linguistic domains. It is similar in that some of a learner's pronunciation of the second language is clearly attributable to the first language, whereas some are not. It is different in that not all of the concepts relevant to syntax are applicable to phonology. For example, avoidance is a common L2 strategy used when a syntactic construction is recognizably beyond one's reach. Thus, if a learner wants to avoid passives, it is relatively easy to find an alternative structure to express the same concept.

Not only are sounds of a language transferred, but there is also evidence that learners attempt to maintain their mother tongue syllable structure during the acquisition of a target language. When the target language permits syllable structures that are not permitted in the native language, learners will make errors that involve altering these structures to those that would be permitted in the native language (Broselow, 1987).

Further, Selinker & Gass (2008) on language transfer argue that, the learners' native language will negatively or positively affect their second language acquisition. Moreover, when there are similarities between the native language and the target language, transfer functions positively, and when there are differences, it functions negatively, hence positive language transfer occurs when first language habits facilitate second language learning, while negative transfer occurs when first language linguistic characteristics interferes with target language learning. Therefore, language transfer occurs when first language linguistic units facilitates second

language learning, but when first language linguistic units impedes second language learning, it then becomes first language interference on second language.

In the next section of this paper, we present the research design, sampling procedures in which both human respondents and words were sampled, how data was collected and analysed, and the research findings.

3. METHODOLOGY

The present paper used descriptive research design to identify and obtain information on how *Lwidakho* affects the learning of English word stress perception and production. Using simple random sampling, the paper sampled out 144 forms three students out of 1440 students in day secondary schools, eight secondary schools were sampled out purposively out of the twenty-day secondary schools in Ikolomani Sub-County. The paper also considered the word as a unit of analysis. Thirty English content words used in the present research had stress on the ultimate syllable, penultimate syllable and antepenultimate syllables.

Table 3 English word list

Ultimate	Penultimate	Antepenultimate
Play	Abuse	Revelation
Novel	Reported	Character
Forms	Father	Advertisement
Poem	Student	Information
Pulleys	Legend	Biography
World	Internet	Paragraph
Person	Library	Composition
Words	Money	Technology
Little	Doubler	Studying
Time	Contrast	Supporting

These words were sampled using simple random sampling techniques. They were obtained from form one, form two, and form three Excelling English secondary school, students' course books. This course book was one of those recommended for use at secondary schools in Kenya, by Kenya Institute of Curriculum Development. The sampled form three (*Lwidakho* speakers) students in day secondary schools were subjected to a structured interview.

To test the respondents' perception of word stress, students were asked to write and mark on sheets of paper the stressed syllable of the words that they heard being pronounced from a digital voice recorder LCD screen directed laptop. This happened in a classroom. During the production test, the researcher offered the test to students singly in the same class. He wrote English word stress production test word list on the chalk board and asked each respondent to get inside

the classroom and read out loudly the fifteen words written on the chalkboard. Each word was read once. Each learner was given an average of ten minutes to read the word list, meanwhile, the researcher audio-recorded the *Lwidakho* form three students' readings using a smart phone and also made notes from what he heard being read out by the students to complement the recorded data as presented in the findings below:

4. RESULTS AND DISCUSSION
4.1 Stress Perception Test

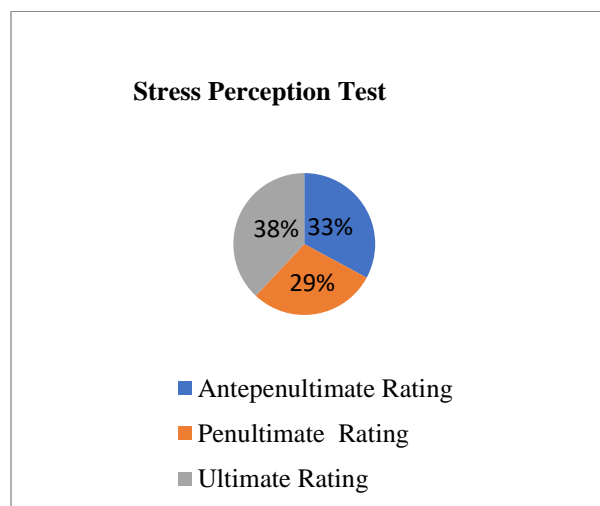Figure 1 below presents the results of the Stress Perception test.

Figure 1 Stress perception test

A total of 144 respondents took part in the perception exercise. Basing on the sample size used, the correct scores were; thirty-eight percent (38%) identified words which had stress on antepenultimate syllable, thirty-three percent (33%) identified penultimate stressed syllables in words and only twenty-nine percent (29%) were able to identify words which had stress on the ultimate syllables. The discrepancies in scores of the English content words stressed on the ultimate, penultimate and antepenultimate syllables indicates that the respondents made more word stress placement errors with words with stress placement on the last syllable than with words with the stress placement on the second and third syllable from the last. This could be resulting from guess work among the respondents, since it does not exist in English language and also their mother tongue.

4.2 Stress Production Test

Figure 2 below presents the stress production test results:

Stress Production Test

37%

63%

■ Correct Stress Placement
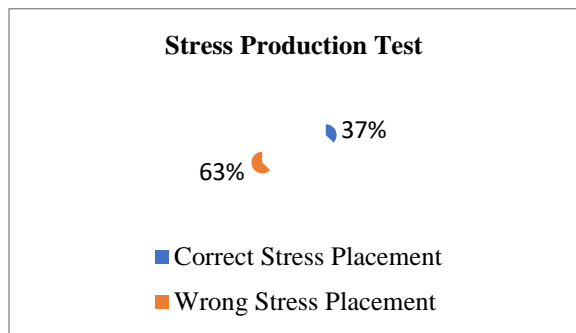
■ Wrong Stress Placement

Figure 2 Stress production test

The data in Figure 2 above shows that in the production exercise, thirty seven percent (37%) of the respondents read the given words with correct stress placement, whereas sixty-three (63%) percent either stressed the whole word or placed stress on the wrong sounds in the stressed syllables. These learners did not understand how to read the English words given to them.

Generally, data from the present research indicates that *Lwidakho* affects English word stress negatively. *Lwidakho* speakers in form three-day secondary schools in Ikolomani Sub-County were unable to write fifteen (15) English content words read to them, marking the stressed syllable. Only thirty three percent (33%) of the sampled size was able to perceive English Word Stress correctly. Consequently, the remaining sixty seven percent (67%) did not perceive English Word Stress correctly. To add on, the same respondents were subjected to a production test, which involved reading of fifteen English content words by each respondent in a secluded room. The production test scores in figure 2 above indicated that twenty-seven percent (27%) passed whereas seventy-three percent (73%) failed the test.

4.3 Effects of *Lwidakho* on English word stress

The low scores in the tests above attributed to the role played by *Lwidakho* as the learner's first language on their pronunciation, specifically syllable stress in words. *Lwidakho* being a tonal language, as quoted in Savala (2012), does not recognize word stress as one of its supra-segmental features in its phonology. The form three *Lwidakho* speakers in mixed, day secondary schools communicate in their mother tongue outside the school environment, and therefore do not easily notice stress patterns in their words. Such students encounter word stress during the learning of English (foreign language) in secondary schools. These students find it difficult to express English word stress, they thus read English words stressing wrong

syllables, and also do not realize the stressed syllables in words pronounced in Received Pronunciation.

Consequently, this paper supports the view that positive transfer occurs when the same stress patterns exist in first language and target languae, and does not cause difficulties, while negative transfer means that a word will be difficult to stress since it does not exist in the learners first language. In the perspective of the present paper, negative transfer took place, in that *Lwidakho* negatively affected *Lwidakho* speakers English Word Stress Perception and Production.

4.4 Implications of negative *Lwidakho* transfer on English word stress

As earlier noted, *Lwidakho* is a tonal language (Savala 2012), and tone operates lexically to vary meaning. The tones are pitch variations and are also linked to syllables. For example, the sequence /*mu-xo- ɲe/* in *Lwidakho* can be pronounced with two different tones whereby each of the them will have a specific meaning realized as; /mu-'xo-ɲe/ 'help', and /'mu-xo- ɲe/, 'sugar cane', /ma-βe-le/ on the other hand it can be pronounced with variations in tone either as /ma-'βe-le/ to mean 'milk', or /'ma-βe-le/ 'sorghum'. This is completely different from the English language.

The English stress pattern is related to syllable length, loudness, and pitch. There is a distinction between stressed and unstressed syllables in words, with stressed syllables being longer, louder, and with a higher pitch. English uses sentence intonation, a continuous changing of the pitch, to express meanings. From the present paper, *Lwidakho* learners have problems with the alternation between stressed and unstressed syllables in English. Accordingly, *Lwidakho* form three learners tended to produce every syllable with the same amount of stress, or simply to delete the unstressed syllables as a result of perceptual influence.

5. CONCLUSION

The paper sought to determine the role of *Lwidakho* on English Word Stress Perception and Production among Form Three Secondary School students. The research reveals that, *Lwidakho* as the respondents' first language played a negative role on their English Word Stress Perception and Production. The respondents do not have stress patterns in their mother tongue unlike English language which is a stress timed language. Thus, hearing stress and articulating stress are dependent from each other. Most of the respondents in the study who perceived stress wrongly also produced it wrongly, both attributed to influence of *Lwidakho* on English word stress perception and production.

There is need to include language activities and/or materials in the listening and speaking lessons among form three students in secondary schools in Kenya. This inclusion would help such students improve their skills in word stress perception and production. Furthermore, teaching Form Three *Lwidakho* students of English to perceive and produce both the stressed and unstressed syllables of English words could help them improve their word stress perception and production skills. This can be complimented with more oral English exercises in the classroom in addition to grammatical and lexical knowledge. The aforementioned strategies shall enable *Lwidakho* students of English to be comprehensible in English oral communication.

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