## Vocabulary Instruction in Kenyan Pre-Schools: A Semantic Field Theoretical Approach

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### **Abstract**

Vocabulary teaching has always been a keystone in English language teaching. However, the best vocabulary instruction strategy to be used by language teachers has always been a herculean task. Against this background, this study explores vocabulary instruction on the basis of the Semantic Field theory, which looks at the semantic relatedness and its effects in the development of second language lexical repertoire. The study adopted a survey research design because the focus was on collecting Gîkûyû songs that could be used to highlight the applicability of the Semantic Field theory in vocabulary acquisition. A sample of 12 adult respondents who learned English as a second language using Gĩkũyũ as their mother tongue in rural primary schools assisted in the collection of songs. After four Gĩkũyũ songs were collected through tape-recording, purposive sampling was employed to select three songs that the research deemed the most appropriate for the teaching of English lexical items. The study also conducted interviews with two Kenyan linguists in order to gain an in-depth understanding of the Semantic Field theory in the acquisition of lexis. Content analysis, which is within the qualitative research paradigm, guided the analysis of the songs in order to identify the parts of the songs that were relevant to the achievement of the research objective. The study found that learning words with the same semantic field allows learners to connect different connotations and meanings of the lexemes. The study concludes that the Semantic Field theory is an effective strategy that provides learners with a cluster of words that are related in their meanings. The study recommends that teachers should find appropriate words to set up semantic fields of the vocabulary and at the same time make presentation of vocabulary an interesting learning process for the learners.

**Key words:** Gĩkũyũ, learners, Semantic Field theory, songs, vocabulary.

### Introduction

Vocabulary instruction and acquisition is an area of study that has elicited a lot of research (Sanaoui, 1995; Stoffer, 1995). However, learning vocabulary is a complex process (Nagy & Scott, 2000) and most teachers, therefore, ignore vocabulary teaching and focus on phonics, phonemic awareness, fluency and comprehension (Berne & Blachowicz, 2008). In addition, unlike the learning of grammar and phonetics, vocabulary learning is an incremental and unending task for any language learner and needs to be taken seriously (Guo, 2010). Thus, the task of every teacher should be to enlarge learners' vocabulary since the size of a learner's vocabulary directly affects the 'development of his/her linguistic competence' (Gao & Xu, 2013: 2034). According to Guo (2010), vocabulary is of vital importance in language study because it is the essence of a language. In other words, vocabulary is central to language and it is, therefore, of crucial importance to the language learner.

Although studies on vocabulary acquisition done in Kenya have underscored the effectiveness of vocabulary teaching and learning through various activities or tasks (Ngumo, 2007; Njoroge & Ndung'u, 2009; Orwenjo, 2009; Nyamasyo, 1992), the teaching of vocabulary in Kenyan pre-schools still remains the elephant in the room. This is because first, we do not have a framework that explicitly guides teachers in vocabulary instruction in Kenyan pre-schools. Second, as Read (2004) reveals, there is a worldwide lack of research on issues concerning classroom-teaching of vocabulary. Consequently, finding an effective method for vocabulary learning has always preoccupied curriculum developers and linguists for a long time (Bogaards & Laufer-Dvorkin, 2004; Read, 2000; Richards & Renandya, 2002). Thus, in order to successfully enhance learners' vocabulary knowledge and skills, second language teachers need to consider vocabulary learning strategies (Nation, 2005).

The Semantic Field theory (SFT) has gained currency as a relevant strategy of vocabulary instruction. The SFT was developed by German scholar J. Trier in the 1930s, whose version is seen as a new phase in the history of semantics (Guo, 2010). The SFT has been advocated by many scholars in the field of lexical semantics (Hashemi & Gowdasiaei, 2005; Hatch & Brown, 1995; Machalias, 1991). The proponents of the SFT argue that teaching second language vocabulary using semantic fields is an effective method of vocabulary instruction (Aitchison, 1994; Carter & McCarthy, 1989; Lewis, 1997). Other advocates of presenting vocabulary in semantic fields include Amer (1986), Channell (1981, 1988, 1990), Liu and Zhong (1999) and Maiguashca (1984).

According to Gao and Xu (2013: 2031), a semantic field is a grouping of words that 'interact, dominate, distinguish and depend on each other'. Different terms are also used to refer to this type of grouping; lexical fields, semantic mapping, semantic clusters, semantic fields, semantic sets, and lexical sets (Gholami & Khezrlou, 2014: 152). The advocates of the SFT claim that the theory is in compliance with brain theories which suggest that there is a good organization of semantic fields in the human brain (Aitchison, 1994; Carter & McCarthy, 1988; Rogers, 1996). In other words, the SFT discourages the conceptualization of a lexicon as a mere aggregation of idiosyncratic items (Kittay & Lehrer, 1992). Guo (2010), for example, posits that the semantic field theory is of pedagogical significance in that it helps to enlarge learners' vocabulary by constructing paradigmatic relations of new items and deepens learners' mastery of vocabulary; mainly connotation and collocation, by constructing syntagmatic relations of the new items.

In order to apply the Semantic Field theory in the teaching of English as a second language, teachers should, therefore, pick out words belonging to the same semantic field. Thus, the primary objective of the present study is to discuss the applicability of the SFT in addressing the question of learning semantically related words in a coherent manner. This is because vocabulary is problematic to teach and, a fortiori, difficult for second language learners to comprehend due to the complexity of some word forms. The objective of the study was therefore, to collect Gĩkũyũ songs that could be used to highlight the applicability of the Semantic Field theory in vocabulary acquisition. Gĩkũyũ is a language in the Central Bantu branch of the Niger-Congo family spoken primarily by the Agikuyu of Kenya. Gikuyu forms one of the five Bantu languages of the Thagichu subgroup, which stretches from Kenya to Tanzania. Guthrie classified it as E 50 language 51 (Guthrie, 1971: 43).

### **Research Methodology**

The study adopted a survey research design because the focus was on collecting Gikūyū songs that could be used to highlight the applicability of the Semantic Field theory in vocabulary acquisition. A survey research design is defined as 'the collection of information from a sample of individuals through their responses to questions' (Check & Schutt, 2012: 160). Therefore, 12 adult respondents who learned English as a second language using Gĩkũyũ as their mother tongue in rural primary schools were sampled to help in the collection of songs. This sample was purposively sampled on the basis of what Murphey (1992: 55) refers to as the 'song-stuck-in-my-head phenomenon'; that is, on whether the participants could remember the songs that they used in the language lessons and through which they acquired English lexical items. After four Gikũyũ songs were collected through taperecording, purposive sampling was employed to select three songs that the research deemed the most appropriate for the teaching of English lexical items. Thus, the three Gĩkũyũ songs:

*Ungienda guthoma* 'If you want to read'; Kiongo, ciande, maru na ciara 'head, shoulders, knees and toes'; and Mwarimũ witũ 'our teacher' were selected.

Content analysis, which is within the qualitative research paradigm (Creswell, 2008), guided the analysis of the songs in order to identify the parts of the songs that were relevant to the achievement of the research objective. Researchers regard content analysis as a flexible method for analysing text data (Cavanagh, 1997; Rosengren, 1981). The choice of content analysis was also premised on the fact that it goes beyond merely counting words or extracting objective content from texts to examine meanings, themes and patterns that may be manifested in a particular text (Patton, 2002). The researcher, therefore, did a word by word, line by line analysis of the content in the songs, as presented in the research findings in order to discuss the semantic sets underlying the three Gĩkũyũ songs.

The researcher also conducted interviews with two Kenyan linguists in order to gain an in-depth understanding of the implications of the Semantic Field theory in the acquisition of lexis. According to Borg and Gall (1989), interviews are normally flexible and are capable of producing data of great depth. The two linguists were supposed to respond to the following interview questions: 'What are the implications of the semantic field theory in the acquisition of vocabulary?; and 'In your opinion, what would you recommend teachers / curriculum developers and other stakeholders in education to do to make the Semantic Field theory effective in Kenya?'

## **Application of Semantic Field Theory to the Teaching of English Vocabulary**

The study uses the Gikuyu songs below *Ungienda guthoma* 'If you want to read', *Kiongo*, ciande, maru na ciara 'head, shoulders, knees and toes' and Mwarimũ witũ 'our teacher' to illustrate how semantically related lexical items facilitate the process of vocabulary acquisition. The English equivalent is given in italics.

# Song 1: *Ungienda güthoma* 'If you want to study'

| Gĩkũyũ                              | English                                    |
|-------------------------------------|--|
| Ũngĩenda gũthoma 'Primary' cukuru   | If you want to study in the primary school |
| Wambîrîrie 'nursery' ügîe na ümenyo | start in the nursery and gain knowledge    |
| 'Teacher' nî mwarimũ                | Teacher is a teacher                       |
| 'Chair' nĩ gĩtĩ                     | Chair is a chair                           |
| 'Window' nī ndiricha                | Window is a window                         |
| 'Arm' nĩ guoko                      | Arm is arm                                 |

Song 2: Kĩongo, ciande, maru na ciara 'head, shoulders, knees and toes'

| English          | Gĩkũyũ            |
|------------------|-------------------|
| Kĩongo           | Head              |
| Ciande           | Shoulder          |
| Maru na Ciara x3 | Knees and toes x3 |
| Kĩongo           | Head              |
| Ciande           | Shoulder          |
| Maru na Ciara x3 | Knees and toes    |
| Ritho            | Eye               |
| Gũtũ,            | Ear,              |
| Iniūrū,          | Nose              |
|                  |                   |

Kanua

Mouth

# Song 3: Mwarimũ witũ 'our teacher' Gĩkũyũ

Mwarimũ witũ 'teacher' Nîweka ũru 'bad' Nîkwîra ciana 'children' Ithiī mūgūnda 'garden' Ikaune mbembe 'maize' Itarī na rūtha 'permission'

## **English**

Our teacher You have done bad To tell children To go to the garden To cut down maize Without permission

The songs presented above can be employed in the teaching of English vocabulary in Kenyan pre-schools. In the song *ũngĩenda gũthoma* 'If you want to study' above, six lexical items 'primary', 'nursery', 'teacher', 'chair', 'window' and 'arm' are introduced to the learner. All the words are nouns and easy for learners to remember. The vocabulary in this song is also simple, natural and used in the meaningful school domain. Therefore, it is possible for the learner to form a pattern of semantic interrelated words in his/her mind. In this semantic field, the concept of the school environment represents the genus, or in other words, general concept while lexical items 'primary', 'nursery', 'teacher', 'chair', 'window' and 'arm' represent species or specific concepts. This is in consonance with advocates of the Semantic Field theory (for example, Amer, 1986; Channell, 1990) who believe that the simultaneous teaching of semantically related words is a natural way of establishing complex lexical networks. However, although the lexical items occur in a school context, the words 'chair' and 'window' might form a separate semantic subfield of the furniture category. In addition, the word 'arm' which may sound like being semantically unrelated with the other lexical items may be argued to be that of the learner.

In the second song Kiongo, ciande, maru na ciara 'head, shoulders, knees and toes', images of body parts are evoked. The song involves repetitive actions that are orally based and simple enough for children to understand what is expected of them. Since the words in the song are repeated several times, this combination makes the song memorable. In this song, four lexical words kĩongo, ciande, maru na ciara 'head, shoulders, knees and toes', form a semantic field under the common concept of body parts. In this semantic field, body parts represent the genus, while kĩongo, ciande, maru na ciara 'head, shoulders, knees and toes' represent species or specific concepts. This is in line with Maiguashca's (1984: 282) argument that the 'whole lexicon of a language can be described as a huge network, a macrosystem, formed by many micro-systems of decreasing order, until the minimal unit of meaning, the word, is reached'. The four words appear to share certain aspects of meaning and can be understood in relation to each other. The two linguists interviewed in this study noted that a learner exposed to semantic fields would readily recognize the 'apparent relatedness among the words'. This strategy is, therefore, advantageous since by learning items in sets, the learning of one item can be reinforced by the learning of another.

In the third song, the effectiveness of semantic sets is also underscored. Just like in the two songs above, the vocabulary in the song is simple, natural and used in a school domain. All the six words in the third song can be understood in relation to each other. Given such words as, for instance, mwarimũ 'teacher', ũru 'bad', ciana 'children', mũgũnda 'garden', mbembe 'maize' and rũtha 'bad', everyone would readily recognize the apparent relatedness among the words, and in this way, probably grasp the notion of fields. As noted earlier, interrelatedness of lexical items is one of the key traits of the Semantic Field theory. Thus, the six lexical items can be integrated into a larger semantic field of the school environment. Further, among the words composing this song is a word-pair 'teacher' and 'children' which can be a key factor in influencing the learning of such corresponding wordpairs. When words are learned in such sets, 'the learning of one item can reinforce the learning of another', as well as facilitate understanding because 'items that are similar in meaning can be differentiated' (Seal, 1991: 300).

It is important to note that on the one hand, linguists like Gao and Xu (2013), Haycraft (1993), Hashemi and Gowdasiaei (2005), Seal (1991), and Stoller and Grabe (1995) speak in favour of presenting new words in semantic sets on the basis that it is an effective way of presenting new words, and possibly reflecting the natural organization of the mental lexicon (Aitchison, 1994). The linguists also argue that teaching vocabulary using the semantic field theory saves time and achieves better pedagogical results. However, on the other hand, other linguists like Finkbeiner and Nicol (2003), Nation (2000) and Tinkham (1997) argue that if similar words that share common elements and a super-ordinate concept are introduced at the same time, these words may interfere with each other and have a negative impact on their retention due to cross-association and possible overloading in the short term memory.

## **Implications**

The findings of this paper indicate that the use of the Semantic Field theory could have implications in the teaching of English vocabulary. The findings could, therefore, persuade teachers, teacher trainers and curriculum developers to work together and ensure the use of the SFT in vocabulary teaching. As is evident from the above discussion, the idea of introducing second language vocabulary in semantic sets is a relevant idea designed for the systematic treatment of second language lexis. One of the linguists interviewed in this study had this to say:

Teachers of English as a Second Language should undergo in-service programmes to train them on the formation of semantic fields since many teachers do not have sufficient knowledge about the Semantic Field theory as many teacher training programmes do not train on the use of semantic fields in language teaching. Teachers should present vocabulary items grouped in semantic clusters since the acquisition of one word can assist the learning of its semantically related words.

Based on the above statement, the linguist recommends that teachers should, therefore, find appropriate words to set up semantic fields of the new items, and at the same time make the presentation procedure of vocabulary an interesting learning process for the learners. Further, curriculum writers should also design the curriculum in such a way that teachers of English are able to present words in semantic relations and contrasts to other words.

### **Conclusions**

From the findings and discussion of this paper, certain conclusions are drawn. First, the study concludes that it is easier to teach vocabulary items that belong to the same semantic field because the learner will be able to form a pattern of interrelated words in his/her mind. In other words, the lexical content of a language is best treated not as an aggregation of independent words, but as a collection of interrelating networks of relations between words. Second, the paper concludes that it is feasible to enlarge vocabulary gradually and deepen the understanding of vocabulary items on the basis of the Semantic Field theory. Therefore, words in the same semantic field can be taught together. This study, therefore, strengthens previous research findings about the role of semantic fields in teaching English vocabulary to young learners. However, it is important to note that this study was very limited regarding the number of participants and the number of songs under study. Further research with more scientific categorization of other semantic relations like polysemy, homonymy, antonymy,

synonymy (and other sense relations) which play vital roles in vocabulary learning and teaching, therefore, also deserve researchers' further exploration.

### References

- Aitchison, J. (1994) Words in the mind: An introduction to the mental lexicon. Oxford: Blackwell.
- Amer, A. A. (1986) Semantic field theory and vocabulary teaching. *English Teaching Forum*, 24 (1) 30-31.
- Berne, J., & Blachowicz, C. (2008) What reading teachers say about vocabulary instruction: Voices from the classroom. The Reading Teacher, 62 (4) 314-23.
- Bogaards, P., & Laufer-Dvorkin, B, (2004) Vocabulary in a second language. Amsterdam: John Benjamins Publishing Company.
- Borg, W., & Gall, W. (1989) Educational research: An introduction. Toronto: Longman.
- Carter, R., & McCarthy, M. (Eds.) (1989) Vocabulary and language teaching. New York: Longman.
- Cavanagh, S. (1997) Content analysis: Concepts, methods and applications. Nurse *Researcher*, 4, 5–16.
- Channell, J. (1981) Applying semantic theory to vocabulary teaching. ELT Journal, XXXV (2), 115-122.
- Channell, J. (1988) Psycholinguistic considerations in the study of L2 vocabulary acquisition. In R. Carter & M. McCarthy (Eds.) Vocabulary and Language Teaching (pp. 83-96). London: Longman.
- Channell, J. (1990) Vocabulary acquisition and the mental lexicon. In J. Tomasczyk & B. Lewandowska-Tomasczyk (Eds.) Meaning and lexicography (pp. 21-30). Amsterdam: John Benjamins.
- Check, J., & Schutt, R. K. (2012) Survey research. In J. Check & R. K. Schutt (Eds.) Research methods in education (pp.159-185). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2008) Educational research: Planning, conducting, and evaluating quantitative and qualitative research (3<sup>rd</sup> Edition). Upper Saddle River, NJ: Pearson Education, Inc.
- Finkbeiner, M., & Nicol, J. (2003) Semantic category effects in second language word learning. Applied Psycholinguistics, 24, 369-383.
- Gao, C., & Xu, B. (2013) The application of semantic field theory to English vocabulary learning. Theory and Practice in Language Studies, 3 (11) 2030-2035.
- Gholami, J., & Khezrlou, S. (2014) Semantic and thematic list learning of second language vocabulary. The Catesol Journal, 25(1) 151-162.
- Guo, C. (2010) The application of the semantic field theory in College English vocabulary instruction. Chinese Journal of Applied Linguistics, 33, 50-62.
- Guthrie, M. (1971) The classification of Bantu languages. London: Dawsons of Pall Mall.
- Hashemi, M., & Gowdasiaei, F. (2005) An attribute-treatment interaction study: Lexical set versus semantically-unrelated vocabulary instruction. RELC Journal, 36, 341-361.
- Hatch, E. & Brown, C. (1995) Vocabulary, semantics, and language education. New York: Cambridge University Press.
- Haycraft, J. (1993) An introduction to English language teaching. Malaysia: Longman.
- Kittay, E., & Lehrer, A. (Eds.) (1992) Frames, fields, and contrasts: New essays in semantic and lexical organization. Hillsdale, NJ: Erlbaum.
- Lewis, M. (1997) Implementing the lexical approach: Putting theory into practice. London: Language Teaching Publications.
- Liu, D., & Zhong, S. (1999) Acquisition of culturally loaded words in EFL. Foreign Language Annals, 32(2) 177-188.

- Machalias, R. (1991) Semantic networks in vocabulary teaching and their application in the foreign language classroom. Babel: Journal of the Australian Modern Language Teachers' Associations, 26 (3) 19-24.
- Maiguashca, R. U. (1984) Semantic fields: Towards a methodology for teaching vocabulary in the second-language classroom. Canadian Modern Language Review, 40 (2) 274-
- Murphey, T. (1992) The discourse of pop songs. TESOL Quarterly, 26, 770-774.
- Nagy, W. E., & Scott, J. A. (2000) Vocabulary processes. In M. Kamil, P. Mosenthal, P. D. Pearson & R. Barr (Eds.) Handbook of reading research: Volume III (pp. 269–284). New York: Longman.
- Nation, I. S. P. (2000) Learning vocabulary in lexical sets: Dangers and guidelines. TESOL Journal, 9 (2) 6-10.
- Nation, I. S. P. (2005) Teaching vocabulary. Asian EFL Journal, 7(3) 47-54.
- Ngumo, C. (2007) An evaluation of presentation of vocabulary in Kenyan standard four English textbooks. Unpublished MA thesis, Kenyatta University, Kenya.
- Njoroge, M. C., & Ndung'u, R. (2009) Acquisition of English vocabulary: Challenges and implications for classroom teaching practice. In L. Makalela (Ed.) Language teacher research in Africa (pp. 65-78). Colorado: Teachers of English to Speakers of Other Languages, Inc.
- Nyamasyo, E. (1992) A corpus-based study of grammatical and lexical characteristics of the writing of the Kenya pre university students. Unpublished doctoral dissertation, University of Lancaster, UK.
- Orwenjo, O. (2009) Lexical innovation in child language acquisition. Frankfort: Peter Lang. Patton, M. Q. (2002) Qualitative research and evaluation methods. Thousand Oaks, CA: Sage.
- Read, J. (2000) Assessing vocabulary. Cambridge: Cambridge University Press.
- Read, J. (2004) Research in teaching vocabulary. Annual Review of Applied Linguistics, 24, 146-161.
- Richards, J. C., & Renandya, W. A. (Eds.) (2002) Methodology in language teaching: An anthology of current practice. Cambridge: Cambridge University Press.
- Rogers, M. A. (1996) Beyond the dictionary: The translator, the L2 learner and the computer words. In G. M. Anderman & M. A. Rogers, (Eds.) Words: The translator and the language learner (pp. 69-95). London: Multilingual Matters.
- Rosengren, K. E. (1981) Advances in Scandinavia content analysis: An introduction. In K. E. Rosengren (Ed.) Advances in content analysis (pp. 9-19). Beverly Hills, CA: Sage.
- Sanaoui, R. (1995) Adult learners' approaches to learning vocabulary in second languages. Modern Language Journal, 79, 15-28.
- Seal, B. D. (1991) Vocabulary learning and teaching. In M. Celce-Murcia (Ed.) Teaching English as a second or foreign language (pp. 296-311). Boston, MA: Heinle & Heinle.
- Stoffer, I. (1995) University foreign language students' choice of vocabulary learning strategies as related to individual difference variables. Unpublished doctoral dissertation, University of Alabama, USA.
- Stoller, F. L., & Grabe, W. (1995) Implications for L2 vocabulary acquisition and instruction from L1 vocabulary research. In T. Huckin, M. Haynes & J. Coady (Eds.) Second language reading and vocabulary learning (pp. 24-45). Norwood, NJ: Ablex Publishing Corporation.
- Tinkham, T. (1997) The effects of semantic and thematic clustering on the learning of second language vocabulary. Second Language Research, 13(2) 138-163.