Using Bilingual Thematic Dictionaries in African Language Pedagogy[1]

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Abstract

This paper makes a case for developing and incorporating bilingual thematic dictionaries in the African language pedagogy as an effective tool for teaching and learning. Their usage is considered advantageous in the learning of lexical items associated with a concept and allows users to find these items through their meanings (Byram and Hu, 2017; Corréard, 2006). Unfortunately, this resourceful material is lacking in the African language curriculum. Adopting the thematic clustering framework and the schema theory, this article argues that traditional bilingual dictionaries fail to adequately meet students' vocabulary needs and that a dictionary based on themes can serve as a valuable instrument and aid in facilitating vocabulary learning. It can encourage proper contextual and cultural usage. It can also foster innovation and diversity in teaching. Although this paper cites examples from Akan-Twi

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language, the points discussed can be equally relevant to other African languages.

Keywords: Akan-Twi;   Pedagogy;   Bilingual   Thematic Dictionary; Vocabulary Acquisition; Cultural Gap

Introduction

The teaching and learning of L2 vocabulary have received serious considerations from teachers and pedagogical theorists alike for many years, and traditional bilingual dictionaries (TBDs) play a significant role in this perspective. These dictionaries are regarded as the sine qua non for learners in their ability to master the vocabulary of the target language and communicate effectively and efficiently in the real world with native speakers. The TBDs are also viewed as the common reference material for researchers, teachers, travelers, translators, and businesspeople (Corréard, 2006; Ducroquet, 1994). However, these dictionaries are usually not sufficient in satisfying the vocabulary needs of students and the problems that arise in their usage include misuse of words in context, grammatical errors, misunderstanding of the verbal phrases, idiomatic expressions, and wrong usage of polysemous words. This means their usage hampers understanding and correct contextual usage of words which can negatively impact learning and teaching. Indeed, studies have, in recent years, highlighted the deficiencies and inadequacies of TBDs in their ability to enhance vocabulary learning (Stark, 2011; Fan, 2000). According to Fan, although some experimental studies have shown that TBDs are beneficial to beginners of L2, they still fall short in their capacity to function as a useful tool for foreign language learning (p. 124).

> The insufficiencies of this kind of dictionaries are that they provide limited information about L2 words, and more problematically, the focus on Ll and L2 equivalents will give learners the wrong message that there are perfect equivalents in two languages, thereby weakening their awareness to the important fact that different languages may have different semantic and stylistic characteristics (p. 124).

Fan (2000) further contends that these "straightforward bilingual dictionaries are too far removed from the target language and tend to encourage interference errors because they promote a mistaken trust in direct word-for-word equivalents" (p. 3). It is also argued in Stark (2011) that TBDs fail to present users with adequate information on vocabulary usage or provide descriptive examples (p. 16). In a similar vein, Ducroquet (1994) points out how these dictionaries are ineffective tools for translating one language into another (p. 48). These gaps are also seen in Twi bilingual dictionaries as well as other African bilingual dictionaries. Gaton (2008), in her study of problems associated with Zulu bilingual dictionaries, concludes "the user of a bilingual dictionary should not only know what to expect to find in a translation dictionary, but must also treat such a dictionary with caution and discernment" (p. 106).

Bilingual thematic dictionaries (BTDs) on the other hand, contain a diverse repertoire of vocabulary which aligns words to their relevant themes. In other words, lexical items that go together are grouped under a schema or theme and share associative and cultural features. BTDs are described as "a type of REFERENCE WORK which uses THEMATIC ORDER as an organizing principle" (Stark, 2011). They are also defined as "the systematic ARRANGEMENT of information in a reference work according to classes of topics" (p. 96). This differentiates it from TBDs which focus mainly on alphabetical ordering of unrelated words. The study of words based on themes has been adequately proven as an efficient and simpler way of learning a language. Numerous research works and experiments have demonstrated that learners of foreign language master vocabulary effectively when words are grouped together within a schema or theme (Aleeva and Safiullina, 2016; Gholami and Khezrlou, 2013/2014; Zargosh, Karbalaei and Afraz, 2013; Tinkham, 1997).

Thematic clustering and the schema theory in vocabulary acquisition

The thematic approach to the study of words is identified as thematic clustering, which is defined as "a group of words that share a similar scheme or frame" (Gholami and Khezrlou, 2013/2014). According to Zargosh, Karbalaei and Afraz

(2013), it is a concept "based on the psychological associations between clustered words and a shared thematic concept" (p. 110) by which learners of a language classify lexical items into specific themes in their mental lexicon based on prior knowledge (Gholami and Khezrlou, 2013/2014). For instance, *haunted*, *moonlight*, *ghost*, *groan*, and *yell* are considered thematically related and can be mentally identified with a *haunted house* which also serves as the schema (Allahverdizadeh, Shomoossi, Salahshoor and Seifoori, 2014). In an experimental work on the impact of semantic and thematic clustering on the study of vocabulary, Tinkham (1997) observed that the clustering of lexical items around a specific theme, promotes the learning of new vocabulary (p. 138). Following Tinkham, other researchers like Mirjalali, Jabbari, & Rezai, 2012; Al-Jabri, 2005, Gholami and Khezrlou, 2013/2014 and Zargosh, Karbalaei and Afraz (2013) have corroborated the usefulness of the thematic based approach in vocabulary learning. Zargosh, Karbalaei and Afraz affirm that bilingual learners performed better in learning new words categorized into themes (p. 109). The thematic clustering of words is supported by the schema theory which "states that all knowledge is organized into units. Within these units of knowledge, or schemata, is stored information" ("Schema Theory"). Furthermore, Rumelhart (1980), quoting from An (2013), indicates that the "schema theory is an explanation of how

readers use prior knowledge to comprehend and learn from text" (p. 130). Hence, lexical units can be arranged in the subconscious mind which correspond to "their participation within certain 'frames' or 'schemas', concepts which segmentize a speaker's background knowledge" (Tinkham, 1997, p.141). That concept can consist of *frog*, *hop*, *green*, *slippery*, *pond*, *swim* which are all different parts of a speech but are all related to one schema, which is *frog* (p. 141). Accordingly, it is when learners have established a framework or schema within which to decode information that they will be able to understand and learn constructively (Anderson, Pichert and Shirey, 1983 as cited by Cowan, 2012). Since lexical items grouped under themes promote vocabulary learning, there is no gainsaying the formidable role that a dictionary based on themes can play in benefiting learners in foreign language learning and the mastery of vocabulary.

BTD in vocabulary acquisition and language learning

It is an undeniable fact that the foundation to communicative competence in second language acquisition lies first and foremost in lexical competence (AlShaikhi, 2011). Furthermore, lexical competence can be achieved when learners have access to efficacious tools and materials to facilitate this objective. Aleeva and Safiullina (2016) reiterate that "linguistic teaching manuals comprise textbooks, work books, tests, teacher's book, but all of them are based on the

primary and most important element of the framework –
dictionaries, specialized and customized for the needs of the
pupils/students" (p. 2728). This notion was recognized by
Turner (2004) who acknowledged the necessity and
importance of creating an "alternative conception of
vocabulary acquisition, one based on the simple human
intuition which says that groups of lexemes are related in
sense" (p. ix). This recognition was borne out of the
frustrations of his student's inability to learn alphabetically
arranged, unrelated lexical items (p. ix). This prompted Turner
to put together a Persian bilingual thematic dictionary aimed at
complementing his new approach of teaching based on themes
(p. ix). Aleeva and Safiullina (2016) also affirm that thematic
dictionaries are a necessary tool "for the expression of an idea
or a concept" (p. 2728). They further stress the need for their
inclusion in "the frame of dictionary for learners" (p. 2728).

Even though BTDs are readily available in more
commonly taught foreign languages, as well as some Less
Commonly Taught Languages (LCTLs), the same cannot be
said regarding African languages. A recent study on availability
of dictionaries in West African languages produced mainly
bilingual dictionaries (Mavoungou, 2014) with no mention of
BTDs. Even if we grant a small possibility of the existence of
such dictionaries in some African languages, it remains
uncertain to what extent they are available and easily accessed

by both learners and researchers. To make the acquisition of vocabulary more innovative and learner friendly, it is imperative to fill in this missing gap in the African language pedagogy with the compilation, incorporation, and usage of BTDs. Indeed, the importance of a user-friendly dictionary that enhances the learning competence and abilities of students cannot be overstressed or downplayed. This perspective is buttressed by Gouws, Prinsloo and Dlali (2014) who state that:

> The genuine purpose of a dictionary implies that a dictionary is produced so that the target user who uses the dictionary in a typical usage context will have an instrument to assist [him/her] in achieving a successful dictionary consultation procedure by reaching the goals that motivated the search (p. 25).

Additionally, this positive objective can only be realized when users are able to look up words in a dictionary tailored to their specific needs (Gouws, Prinsloo and Dlali, (2014). BTDs can play an important role in enhancing African language learning by helping to minimize lexical and grammatical errors resulting from deficiencies in TBDs. Indeed, the ability of TBDs to help learners know the usage of lexical units and avoid unconscious errors and misinterpretation as well as enrich their lexical cognition has been called into question (Ng, 2016). Additionally, their ability to provide cultural knowledge and usage is also disputable.

Lexical issues in TBDs

In Akan-Twi, understanding the behavior and usage of verbal phrases, verbal idioms and some adjectives can be challenging when there is no template or framework to facilitate learners' understanding. They may therefore be obliged to depend solely on teachers or classroom teaching to be able to utilize them productively. For instance, verb phrases and adjectives expressing state, feelings, emotions, and personality traits are usually made up of nouns that denote body parts and verbs. The body part serves as the grammatical subject or object in a sentence, while the noun or pronoun denoting what would be the subject or object in the corresponding English sentence takes the possessive case (Christaller, 1875). That is, the nouns preceding the verbs must be syntactically formed as "possessed element in the possessive phrase in subject position" (Appah, Dua and Kambon, 2017) as well as in the object position as indicated below.

1) a. ani bere [ãnibɪrɪ]

   N'   ani   abere

   Poss   eyes   PERF- ripe

   His/her eyes have ripened

   "He/she is furious."

b. ani kumm [ãnikum]

  Yɛn   ani   kumm

  Poss eye PRES-kill

  Our eyes kill

  "We are/feeling sleepy."

c. ma ho so [mahʊsʊ]

  Ɔ   ma   ne   ho   so

  SUBJ PRE-raise   POSS body up

  He/she raises his/her body up

  "He/she is arrogant."

d. koko yɛ duru [kʊkʊjɛduru]

  Ne   koko   yɛ   duru

  Poss chest   PRES-be   heavy

  His/her chest is heavy

  "He/she is brave."

e. ho yɛ hare [hũyɛharɪ]

  Yɛn   ho   yɛ   hare

  POSS body PRES-be fast

> Our body is fast
>
> "We are fast."

Below are the entries of these verb phrases in a Twi-English English-Twi dictionary which show no additional information on contextual or syntactic usage.

2)   a. ani bere (v) to be furious

b. ani kumm (v) to be sleepy

c. ma ho so (idiom) to be arrogant, to be boastful

d. koko yɛ duru (v) to be brave

e. ho yɛ hare (idiom) to be fast, to be quick

(Kotey, 1998)

These entries fail to help learners understand the nature of their syntactic behavior and may therefore use their background knowledge on the usage of verbs to produce forms or sentences using subject pronouns instead of possessive pronouns[2] or omit the required possessive pronoun creating an ungrammatical and unnatural structure.

3)   a. Ɔani abere

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[2] The examples focus on pronouns, particularly the 3rd person singular and 1st person plural as they can be challenging to students.

He/she eyes have ripened.

b. Yɛani kumm

We eyes kill.

c. Ɔma ho so

He/she raises body up.

Again, the following are Twi translations of *happy* and *angry* in two Twi bilingual dictionaries.

4)   a. gye ani to be happy

(Kotey, 1998)

b. bo afu to be angry

(Hippocrene, 2015)

The equivalent in example (4a) can be used to form the following sentence:

5)   Me gye   m' ani [mɪʒɪmani]

I   catch my eye

"I enjoy myself."

The sentence provided using the entry in the dictionary shows that it does not express the state of being happy, that is, a current state of happiness. It means to enjoy oneself or make

happy. This can create an unconscious lexical error as learners are given the impression that it is the correct equivalent. Importantly, *ani gye* and *gye ani* cannot be used synonymously. The equivalent of *to be happy* is *ani gye,* a choice not made available in the dictionary.

6)   M'   ani   agye [manjaʒɪ]

POSS eye   PERF-catch

My eye has caught

"I am happy."

In example (4b), *bo afu* which is composed of the noun *bo* "chest" and the verb, appears as the infinitive equivalent of *to be angry* instead of the correct form *bo fu.* This entry is misleading as the verb comes with the present perfect tense marker /a/ which learners and users may not recognize and will not help them in using this form appropriately or meaningfully. An entry such as this can be used in constructing an incorrect sentence as shown in (7a) instead of the correct form in (7b) below:

7)   a. Kwame   bo   bɛ   afu

Kwame   chest   FUT   PERF-grow

Kwame chest will has grown

"Kwame will is angry."

b. Kwame   bo   bɛfu [kwa:mɪbʊbɛfu]

Kwame   chest   FUT-grow

Kwame chest will grow

"Kwame will be angry."

To help avoid these errors, these lexical units can be part of a sub-theme under the schema *human body* for instance, with relevant contextual examples. This can help learners looking up the equivalents in the BTD to observe the interconnection between the themes. It can also lead to a better understanding of their syntactic nature and patterns and their proper application in real context without depending only on the teacher. This viewpoint is supported by Kambon (2012), who maintains that the behavior of Twi serial verb constructions and how they work can be comprehended well when situated within a specific context (p. 15). Necessary grammatical information on a lexical unit can also be provided in the BTD and put in context to depict how they are applied in real life situations by native speakers. For instance,

8)   ani bere (v. intrans.), (with preceding poss. noun or pronoun) 'to be furious'

a. M'ani bereɛ ɛnora.

I was furious yesterday.

As a transitive verb, *ani bere* means to be jealous, greedy for something, or passionate about something.

9)   ani bere (v. trans.), (with preceding poss. noun or pronoun) 'to be jealous; greedy; passionate about'

    a. N'ani bere me.

        He/she is jealous of me.

    b. Kwaku ani bere sika.

        He is greedy for money.

    c. M'ani bere m'aduwma.

        I am passionate about my work.

Learners' recognition of a concept or theme enables them to systematize the interpretation of new information on the theme (Anderson, Pichert and Shirey, 1979). The relevance of a scheme in facilitating understanding when concepts are studied in relation to each other is again supported by Anderson, Pichert and Shirey who make the following observation:

    A major task facing a reader is to find an overall framework or schema within which to understand a text. The schema allows the reader to place the major themes, secondary themes, supporting themes, and

supporting details in relation to one another and may be integral to several other comprehension and memory functions (p. 4).

Another lexical issue worth raising is the lack of vowel nasalization on relevant lexemes. For example, the following words are contrastive in meaning due to the presence of a nasalized vowel which is an important distinctive or phonemic feature in Akan-Twi.

10)   a. afe [afɪ́] year; afe [afɪ̃́] comb

b. nsa [nsá] hand; nsa [nsɑ̃́] alcohol, drink

However, they appear as one entry in the Hippocrene Asante Twi dictionary & Phrasebook (2015).

11)   a. afe annual; year; comb

b. nsa beer, liquor, wine; arm; hand

The failure to distinguish this important contrast does not reinforce communicative competence. Thus, placing these words under thematic related schemata and adding extra information can encourage innovation in learning by giving learners more autonomy in their vocabulary acquisition, choices, and usage. In other words, learning will be learner-focused rather than teacher-centered.

Cultural gaps

Apart from the linguistic aspects, competence in a target language requires knowledge of its culture and its appropriate utilization. Kanagh (2000) points out that for communication in a language to be accomplished, it will depend upon a sufficient level of understanding of its culture and linguistics (p. 91). She adds further that "successful communication involves background knowledge, shared information about context, traditions, and attitudes, shared images in the mind's eye" (p. 101). Nonetheless, cultural information needed to fully comprehend the usage of culture bound words, particularly words with no equivalents in the SL, are usually not made available in TBDs. This point can be illustrated with the polysemous verb *to play* which appears as three different translations in two Twi bilingual dictionaries.

12)   a. di agorɔ, di ayensini

(Apraku, 2005)

        b. bɔ

(Hippocrene, 2015)

In example (12a), the comma between the two lexical units suggests that they are synonymous. Example (12b) also gives one word as the only translation equivalent. These representations are however erroneous as they are missing

important cultural information and are used in different cultural contexts. *Di agorɔ* has a general meaning of having fun as in:

13)   Mmofra no redi agorɔ [mɔfranʊrɪdiagʊrɔ]

         The children are playing.

Semantically and culturally, *di ayensini* connotes the act of fighting, grabbling together or wrestling for amusement or exercise (Christaller, 1881) and *bɔ* is used in the context of playing a sport like soccer, volleyball, tennis ball, ampe[3], video games or playing musical instruments.

14)   a. Ɔɔmobɔ futbɔɔl[4] [Ɔ:mʊbɔfʊtbɔ:l].

         They play soccer.

          b. Papa no bɔ sankuo wɔ asɔre.

         The man plays piano at church.

Again, in the Hippocrene Asante Twi dictionary & Phrasebook (2015) the words *agoo* and *ntosoɔ* are provided with the English equivalent *hello* and *bonus* without giving the actual context within which they can be used. Learners would therefore assume they can be applied as in an English language context.

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[3] A game played by girls.

[4] Borrowed from English.

For instance, *agoo* could be used in greeting or acknowledging a friend as in:

15)   a. Agoo Kwame, ɛte sɛn?

Hello Kwame, how are doing?

The Twi sentence would sound strange and amusing to a native speaker because of incorrect contextual usage. The two lexical words, *agoo* and *ntosoɔ*, do not have exact or one to one equivalent in English, contrary to what the entries in the bilingual dictionary suggest. The word *agoo* is an interjection that is specifically used as a salutation to announce one's presence when entering a house. It is also used to call people's attention during social gathering, when someone is in one's way or at a crowded place, especially at the market, and one would like them to step aside.

16)   Agoo Kwame.

Excuse me Kwame, let me by.

The usage of *ntosoɔ* is also peculiar to the market. A buyer after buying a type of produce, like cassava or tomatoes, can request for an extra as a gift from the seller.

The failure to include these important cultural details will not allow the user or learner to use these words in the right context. The need for knowledge on exact contexts to foster understanding and proper usage brings to the fore the

relevance of BTDs in serving as important alternative for learners to acquire the needed relevant information. In BTDs, these words can be placed in themes related to sports, music and entertainment, market, and visiting with cultural information provided, giving learners the ability to know and choose the appropriate equivalent. In fact, Stark (2011) points out that one of the "desiderata" of a BTD is that the information provided must be customized to meet specific needs of its user groups linguistically and culturally (p.21). In other words, BTDs can provide learners a "communicative equivalent" by including cultural components where necessary (Kavanagh, 2000, p. 101). Communicative equivalence is according to Mphahlele (2001),

> when the lemma is translated into target language forms without any shift or loss of meaning or usage possibilities. This means that an article of a dictionary has to display absolute equivalence between the source and the target language forms so that a user will be able to achieve communicative success (p. 1).

This point can be further illustrated with the verb 'to peel,' which has three equivalents in three Twi bilingual dictionaries.
    17)[5]

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[5] *Huan* is Akuapem Twi and Fante and *sinsen* and *gua* are Akuapem Twi. The Asante Twi equivalents are *hwane*, *sensene* and *dwa*

a. peel (v) huan [huan, hwan], hwane hwane [çʷanɪ,

huan [huan, hwan]

(Berry, 1960)

b. peel, to (v) sinsen [sɪnsɪn]

(Kotey, 1998)

c. huan [huan, hwan] (aburo), gua [gʷa] (brɔde),
dwo [dʒʊ] (abɛ), wae [waɪ]; werɛ [wrɛ]

(Christaller, 1909)

Examples (17a) and (17b) have only one entry as the translation equivalent, giving the impression that it is the only equivalent. However, this verb is expressed in different ways in Twi depending on what is peeled, the instrument involved and the method of peeling. In (17c), Christaller (1909) provides partial cultural information by including some food items that go with some of the verbs (p. 138) but fails to indicate the context of the last two words. In relation to the ineffectiveness of partial information, Hendriks (2003) writes:

It also happens frequently that when a translation equivalent can be found for the culture-bound lexical item, the translation equivalent will only be partially

which will be used as examples in this paper. Asante Twi, Akuapem Twi, and Fante are varieties of the Akan language and they are mutually intelligible.

> equivalent to the source language item.
> Communicative equivalence can be seriously impeded
> if such a relation of partial equivalence is presented
> without a proper explanation of the restrictions of
> usage (p. 28).

The verb *peel* can be translated as *sensene, dwa, yiyi… ho, hwane, twerɛtwerɛ … ho, werɛwerɛ … ho* and *dwo.* For instance, s*ensene* connotes removing the outer layer of fruit or produce with a knife placed against the fruit or produce and peeled similar to scaling fish. It is used for fruits, vegetables, and tubers that are peeled using that method like orange, pineapple, papaya, yam, potato, cocoyam, etc. Also, *dwa* is used for plantain and cassava. For plantain, it involves first slicing opening the thick skin with a knife and then removing this outer layer either with the knife or fingers. Cassava is hacked with a knife to remove the peel. When the fingers are used in peeling to remove husk or peel as with maize or banana, the verb *hwane* or *yiyi ... ho* is used. *Dwo* is used for palm nut. *Wae* and *werɛ* mean to peel off, scrape or scale a fish.

(18)
a.   Meresensene ankaa.

I am peeling an orange (with a knife).

b.   Dwa bankye ne borɔdeɛ no.

Peel the cassava and the plantain (with a knife).

c.   Hwane aburoo no.

Peel the maize (with fingers).

Since these words do not have direct translations in the SL, the BTD can play an instrumental role in enhancing understanding and correct usage when these words are placed under a theme such as food or cooking. Under this theme, all the important cultural information can be indicated and explained. Contextualizing them as shown in example (18) can help learners know the manner of usage. Illustrative examples can also be included where necessary to facilitate greater understanding of the culture of the TL.

Kavanagh (2000) in mapping out important steps in incorporating cultural information to entries in a bilingual dictionary suggests that "it is possible to include brief cultural points within the definition of a lexical item. An extra phrase or sentence may be sufficient" (p, 111). Undoubtedly, vocabulary learning and communicative competence can only be achieved lexically, syntactically, and culturally (Kavanagh, 2000 p. 101).

Conclusion

The limitations and insufficiencies in TBDs particularly in the Twi language and in African languages in general, call for the compilation and usage of a well-customized thematic dictionary that is student-centered and can serve as an effective teaching aid material. That is, a bilingual dictionary based on themes that are relevant to the real African life context and environment. This will enable students and researchers to have easy access to meaningful lexical items which are contextually controlled and structured under specific themes. Furthermore, to be part of the technological changes in language learning, this dictionary can be used both in print and online for accessibility. Alternatively, it can be developed into an app version that students can upload on to the phones and use. Integrating thematic based dictionaries into the African Language pedagogy we believe, will serve as an invaluable addition to the African language curriculum and material development promoting diversity in teaching. The first step in attaining language competence lies in the mastery of vocabulary and its meaningful usage with minimal lexical and cultural limitations. This can only be achieved with the availability and usage of adequate learning tools, including dictionaries. This is well summed up by Lew and Adamska-Sałaciak (2015) who write:

Dictionaries play a vital role in language learning and teaching, not least because they promote learner autonomy. Since asking the (human) teacher is not always an option, a well-chosen dictionary may well be the next best thing when it comes to tackling lexical problems encountered in the process of language learning. The ability to solve such problems quickly is generally believed to be the primary advantage of using dictionaries

(p. 1).

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