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Front Matter

THE GUILD SYSTEM AS AN ETHNOLINGUISTIC MARKER OF IDENTITY IN ẸDO

William Ighasere Aigbedo

Over the last four decades, several studies have originated on the premise of social identity, ideology and discourse structure. Based on the pioneering efforts of Tajfel (1974), Giles et. al. (1977), Tajfel and Turner (1986), Gumperz (1982), the different dimensions of situated talks and social constraint on language use have been explored. The present paper demonstrates some aspects of these linguistic situations in the Ẹdo society through the social institution of established crafts (trade professions) which we refer to as the {otu igun} in this study. This institution of the guilds have hitherto been under-represented due to a series of cultural restrictions and general misconception about their activities in the society. The guilds represent an extension of the Ẹdo socio-cultural and linguistic establishment serving as a mediator between the various symbols of social life and the populace. It is also the premier institution for the purity of Ẹdo language and cultural practices and as such its constitutions in terms of all these socio-cultural and linguistic features are imperative for a proper understanding of the Ẹdo language from an ethnolinguistic perspective. The paper employed primarily the qualitative method of data collection and analysis due to the nature of the objects of investigation. The method of content analysis was used to analyze the data obtained through interviews (with a view to portraying the linguistic identity and ideology characteristic of the guilds) while the performative translation methods were employed to analyze the data obtained through the non-participant observation. The study revealed that the guild system as practiced in the Ẹdo society constitutes a viable social group with its own variety of the Ẹdo language employed in the course of group interaction/discourse.

Keywords: Linguistics; socio-cultural practices; Eethnicity; Iideology; Vvariation; Performative   Linguistics; Translatology.

Introduction

This study investigates the ethnolinguistic features of the Ẹdo guild system as a marker of social identity within the Ẹdo speaking community. The study seeks to examine and illustrate the use of language by the group of craftsmen referred to here as 'the guild' in the course of communicating with their members and other members of the Ẹdo society. This paper therefore presents a general overview of the preliminary components of the study such as the settings, objectives of the study, the research problems and significance of the study.Since the advent of Anthropological Linguistics or Linguistics Anthropology, more attention has been given to the roles of culture in the treatment of language and languages-related phenomena.

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The overwhelming place of culture in linguistic orientation can be grasped from the famous Sapir-Whorf Hypothesis (Linguistic Relativity) in the 1950s. Previous studies on the guilds (Egharevba 1956, 1966; Osagie and Ikponmwosa 2015; Plankensteiner, 2008 amongst others) have treated the guild system from a purely historical and cultural perspective.

It has also been variously treated as an association of craftsmen and artists (Osagie and Ikponmwosa, 2015), social institution within a society responsible for the protection of cultural aspects of the economy (Plankensteiner, 2010) and as an offshoot of a socio-political institution (Egharevba, 1966). It is obvious from all these positions that this institution has a lot of influence on the socio-cultural, political and economic values of a group of people (society).

The Ẹdo society is highly structured and compartmentalized in a hierarchical with the Ọmọ Ne Ọba (Monarch) at the centre of political, socio-cultural and economic administration. The Ọmọ Ne Ọba and his chiefs constitute the principal administrative organ at the centre based in the Ogbe quarters of Benin City (the setting of the present study) while other towns and villages are administered by Enogie (Duke). Sometimes in the absence of an Enogie, an Ọdiọnwere (eldest man) becomes the administrator of such a village or town. These people owe allegiance to the Ọmọ Ne Ọba and his chiefs in Benin City. Politically, the Ẹdo society which centres around the Ọmọ Ne Ọba and his palace, is organized into three major departments or palace societies as they are popularly called as follows: Iwẹbọ, Iwẹguae and Ibiwe. These are powerful political, economic and social organs whose services ensure the effective administration of both the palace and the kingdom (Eweka, 1992:12).

These societies which also represent the major divisions in the palace (ugha) and the members known as (otu) are highly revered and their activities not open to the public as it is only the Ọmọ Ne Ọba that has free access to all of them. They are also institutions for the recruiting and training of personnels for specific assignments in the palace and the Ẹdo society at large. It is to these palace societies particularly those of Iwẹbọ, Iwẹguae and Ibiwe that the guilds in the Ẹdo society are affiliated. These guilds were initially set up to administer craftsmen who before then were scattered all over the ancient Benin Kingdom. So by organizing and situating them in different quarters in the City, it became easy to protect their trade and services to the palace with non-members firmly 'fenced out' (Plankensteiner, 2010). This act also helped the palace to maintain good standard of craft as a leadership hierarchy was introduced to supervise production. The different products from the guilds remained royal property and production only takes place through royal permission or decree.

The guilds held a monopoly of their products and services and membership was and is still hereditary (Egharevba, 1956). Their specialized services ensured that membership is not accessible to all. The rules of secrecy concerning their skills apply and tradition limits the exposure of details and restricts interference by non-members. There are several accounts and hence controversies surrounding the actual number of guilds that exist in the Ẹdo society. For the purpose of the present study, we will adopt the position of Plankeinsteiner (2010) which placed the total number of all the guilds under the three palace societies at forty-six (46).

Methodology

In line with the recommendations of Gumperz (1982) method for conducting research in social identity studies and Emerson et. al. (1995) model for conducting an ethnographic research, this study employed the research instruments of interview and Direct Non-Participant observation.A semi-structured interview was adopted in the study as a bridge between the structured and the unstructured interviews. The essence of this is to obtain a general structure that can be subjected to modifications at any point in time in the course of interaction with interviewees. This was also done to provide an avenue for insights into the socio-cultural world and orientation of informants. As a result of the nature of the present study and in the light of this research instrument, the population of persons interviewed therefore consist of four (04) principal Benin Chiefs (three of whom also doubles as the heads of the guilds being described) and twenty (20) other informants affiliated to these guilds in different capacities (4 supervisors, 3 elders and 13 apprentices). These informants were selected based on their wealth of experience in the affairs of the palace societies and the guilds in particular. The setting for the data collection was in the residences of the three (03) principal Chiefs who are heads of the guilds being studied. These residences also housed the workshops where the main activities of the guilds are carried and a collective point for the different members of the guilds.

The direct non-participant observation method was also used in this research through which, we were able to collect a substantial amount of data reflecting the different registers of the guild in the course of group interaction and functions in the guild's workshop which is a natural setting for the appraisal of their ethnolinguistic characteristics.

The interview conducted were analysed following a three-step procedure of: data reductions data display and conclusion (amalgamation of facts and discussions). The data transcript s a reflection of the first two steps as action was taken to remove superfluous and irrelevant details. The resultant information after the operation was then displayed as presented above. Haven presented the data transcript, we move on now to an appraisal of the information contained therein. It should be noted that the presentation of data on a paragraph by paragraph basis was a reflection of the level/extent of response to the different questions asked by the researcher. A paragraph therefore is a representation of a response to a research question on a question by question basis. The analysis that will now follow has its base on the ethnolinguistic identity theory with appraisal geared towards unveiling the ideological and identity components of the Ẹdo Guild discourse.

This paper is driven by two main theoretical precepts: that of 'Performative Linguistics' (Uwajeh, 2002) and the 'Ethnolinguistic Identity Theory' Giles and Johnson (1987). Performative linguistics was chosen due to its foundation on the tenets of Ferdinand De Saussure's Synchronic Linguistics Approach in the early twentieth century. The whole essence of this theory is to portray language as a doer of something with the ability to alter or affect a social state.

The translation model of Uwajeh (2007) 'Performative Translatology' was also employed in conjunction with the performative linguistics model (Uwajeh, 2002). This was done to represent

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and analyze the discourse data with a view to portraying the differences between the Guilds' expression and Common Ẹdo used by the general populace. To Uwajeh translation occurs when a communicator and the corresponding communicatee are assumed to, in addition to sharing the language of the communicator and a third party called the translator must be proficient in the use of both the language of the communicator and that of the communicatee.

One of the earliest references to the guild system was Egharevba (1956) where he wrote about the titles and chieftaincy affairs of the Benin Kingdom. The author in his work gave a brief account of the traditional honours and offices of the Ẹdo people and the socio-political structure of the Ẹdo society in general. He presents the different societies that exist within the palace (Iwẹbọ, Iwẹgua and Ibiwe) along with the different Chiefs that head them and the guilds affiliated to them. He was able to show that the hierarchy of socio-political responsibilities in the Ẹdo society starts from the Ọmọ Ne Ọba (King) down to the head of the village structure (Enogie and Ọdiọnmwere) which is the base of the political institution. In all, he identifies ten (10) guilds in the Ẹdo society associated with the different palace societies.

This work by Egharevba though very insightful as to the cultural and political structure that gave rise to the guilds in the Ẹdo society, did not give us any information as to the existence or not of a special communicative code employed in communication. The work also had some short comings in properly identifying the palace societies that regulate the activities of the guilds as well as the different guilds that exist in the Ẹdo society.

Plankensteiner (2010) records one of the most comprehensive accounts of the Ẹdo guild system and associated palace societies in the course of examining African Arts and Craft Culture. She identifies the different palace societies in Benin and the guilds affiliated to them on a chronological basis with detailed annotation of their duties, functions and headship. Her account shows that there are a total of forty-six (46) guilds in the palace distributed as follows:

2.

   a) Iwẹbọ = twenty-five (25)
   b) Iwẹguae = fifteen (15)
   c) Ibiwe = six (06)

The sum of all these shows that this indeed was a more comprehensive account of the numerous guilds found in the Ẹdo society. This is really impressive as the different accounts of the Ẹdo guild normally range between eight (08) to ten (10) guilds in the society. This can easily be seen as the most up to date account of the Ẹdo palace societies and guild system save for a few shortcomings that necessitated the emergence of the present research.

Ethnolinguistics

A lot of the investigations involving the ethnography of communication (ethnolinguistics) tend to center on the question of identity, ideology, nationalism, ethnicity and race relation. This term which has its root on the interdisciplinary link between ethnology and linguistics seeks to

account for the impacts of cultural practices on languages. It also involves investigating the question of language maintenance, vitality, endangerment and social distinction as the case may be. Yağmur and Extra (2005) for instance investigated the ethnolinguistic vitality perceptions and language revitalization in Bashkortan (a former Soviet territory). They examined the relationship between ethnolinguistic vitality perceptions and the language revitalization process of Bashkortan. They were able to observe the perception of Russian and Bashkir languages through the administration and analysis of a total of 250 questionnaires on Bashkir's informants. They observed from their investigation that the vitality of Bashkir is very high despite the perceived overwhelming influence of the Russian language as the predominant language during the Soviet era. It was finally observed that there is a strong revitalization movement in the Bashkortan.

Ethnographic researches have contributed greatly to studies in identity as it has moved from the traditional conception of it as a marker of such social categories as: class, age, ethnicity and others to some other category which in the words of Eckert (2000), "is what people do and not what they have (social action)". So it is not sufficient to say that identity is the social positioning of people in a particular setting based on age, sex and status but on what people are doing or the activities they are embarking on at that point in time. In other words, language use other than social or biological factors is therefore responsible for creating group identity. This is a reflection of the position of the present study which views the guild as an ethnolinguistic marker of identity by virtue of their functions as professional craftsmen whose activities have created a variation in the use of the Edo language.

This is an example of an ethnolinguistic investigation which in the light of the present study represents the attitude of the members of the different guilds to the activity and importance of their guilds vis-à-vis other guilds and the general public. Since it has been established here that ethnolinguistics deals with issues of language identity, ideology, vitality and others, more insight will be given in the subsequent evaluation of researches within the domains of ideology, identity and variation. These are different aspects of the scope of ethnolinguistics which are discussed in the sub-sections below.

Language ideology

The concept of language ideology has its origin in the North American Linguistic Anthropology as a framework within which to explore the "mediating links between social forms and forms of talk" (Johnson and Milani, 2010:4). This concept has gained a wider audience in linguistics investigation and a few of these are examined here as follow:

Stromberg (1990:42), sees ideology as an 'organized system of symbols which when one comes in contact with leads to a transformation of identity'. In other words, ideology as a manifested behavior of an individual as a result of the adherence to some set of organized symbols in a society, organization or groups, (Stromberg, 1990). He based his observation on the conversation analysis of actual symbols with the goal of showing how ideological language functions as a resource, which in enabling believers to come to terms with enduring problems of meaning in their lives, brings about the sense of having been transformed (Stromberg, 1990:43).

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Simpson (1993:5), treats ideology as the 'socio-political context in which a language functions'. That is, the sum total of the discourse contexts and social systems and institutions in which a language operates. He went on to say that a dominant ideology operates as a mechanism for maintaining asymmetrical power relations in the society. It is a common sense assumption of the way things are and the ways things should be which are ingrained into everyday discourse.

Schieffelin et. al. (1998:3) defines language ideology as the mediating link between social forms and forms of talk. According to them: "representations, whether explicit or implicit, that construe the intersection of language and human beings in a social world are what we mean by (language ideology)". They also argue that "language ideology is of anthropological importance not simply because of its ethnographic variability but because it is a mediating link between social forms and forms of talk (ibid). Ideology of language is not about language alone, rather it is about the ties of language to identity, to aesthetics, to morality and epistemology. Based on this, language ideology not only involve linguistic forms but also the idea of a person and a social group, and such fundamental social institutions as religious rituals, child socialization, gender relations, the nation-state, schooling and law. This is partly in line with the scope of the present study as our own conception of the guild ideology is one of religious rituals as a social group with direct link to the centre of the socio-cultural existence of the Edo people (palace societies).

Language identity

The impact of language on social identity has been examined in different domains over the world. For example in such domains as classroom, , in nation building, in the market place, in the refugee camp (Nwagbo, 2014), in the workplace in the online community. There exist an intricate relationship between language and identity which reflects the social division of individuals or groups in a community. There are several literatures devoted to this concept due to its relevance in the fields of interactional sociolinguistics, (Gumperz, 1982) and discourse analysis (Chew 2014). Some of these literatures on Identities and Social Identities are reviewed below:

In the conceptualization of national identity in the Arab Middle East, Suleiman (2003) links identity to the pervading cultural ideology of nationalism in the Arab world. He equates the question of language to the marking of national identity. He also advocates for the importance of symbolic meaning in the study of nationalism necessitated by the national identity question and makes a case for the use of the qualitative method as a tool for the analyzing issues of ideology and identity. He says this is as a result of the fact that "interest in quantitatively based analysis can easily be dismissed as bias and pseudo-scientific" (ibid:4). He goes on to say that identity is a collective thing with such variables as: genealogy, age, gender, sect, ethnicity, nationality or citizenship. All these factors in one way or the other evokes a sense of identity in a state or a society. His focus was on the Arabic national identity as defined by: race, religion and nationalism based on the following fundamental features:

1) A historical homeland or terrain
2) A common mass public culture
3) A common myths and historical memories

4) A common legal rights and duties for all members, and
5) A common economy with territorial mobility for members

The present paper agrees with Suleiman's position that the question of identity and ideology is not one to be subjected to a survey based investigation method (quantitative) but rather a descriptive one (qualitative). This is due to the issue of bias as many persons may not be forthcoming or enlightened enough to provide the appropriate responses. The present study though concerned with the creation of identity based on ideology sees identity as not restricted to age, gender, ethnicity and citizenship but also involves such group division as 'profession'. So this is a clear departure from the position of Suleiman on the collectivity of identity based on shared historical and religious heritage.

3.4   Ethnolinguistic identity, ideology and variation

The connection between ideology and identity can be seen from the perspective of Stromberg (1990) who examines the conversion experiences of Christians. He argues that this conversion is an ideological and identity transforming experience. He posits based on this that ideologies indeed create a sense of self-transformation because the subject (converted Christian) is able to use the ideological language to resolve enduring problems of identity. To him, ideology is an organized system of symbols and this can be used to change a people's identity when they come in contact with a particular group like Christian missionaries. He demonstrates this with ample illustration from the experiences of converted Evangelical Christians in a contemporary American society. In this case, the doctrines of the Christian faith conveyed by the bible represent the ideology while the membership of a Christian body constitutes the identity (Christ-likeness) of the group. While we agree with this position, evidence from our studies have shown that not all ideologies influence identity especially when multiple ideologies are at play. For example, many of the informants for the present study confessed to being baptized Christians but that this does not in any way affect the rites and rituals performed in the guilds.

We opine here based on the review of literatures so far that an invariable link exists between identity, ideology and variation in ethnolinguistic investigation. The study of the cultural values and policies of a society for instance portends the investigation of the identity structure of these people since identity and ideology are linked to language with the distinction between different social group in the course of communication constituting variation in ethnolinguistics.

Analyzing the language used by the Guilds

The data in the paper are presented on a guild by guild basis centered on the three guilds: Ematọn, Ẹrọnmwọ and Ogbelaka in that order. These data are presented against the background of the interactions in the different guilds workshop in the course of performing a specific task for the palace or other Benin traditional institutions. The data are presented in such a way as to reflect the variation in the register of the guilds and that of the Ẹdo (thereafter referred to as common Ẹdo) used on a day to day basis by other members of the society.

In line with the ethnolinguistic identity theory, this extract represents a collection of ideological opinion of these guilds. The opinion subsists by placing these guilds as one with the products

that sustain the Edo society, group whose services are indispensable to both the palace and the general society at large. In the first instance, the respondents went on and on about the fact that his guild '**ugboha**' was one of the original guilds in the Edo society basing this on the fact that the discovery of iron ore (the basic ingredient of iron works) led to the formation of different professional social groups of craftsmen in the Edo society. Appraising this position is the complex of ideological superiority and supremacy as this guild on the other hand strives to maintain a leading position which unfortunately is occupied by the bronze casters (**igun erọnmwọ**) guild. This is what referred to as 'Psychological distinctiveness' as a group strives to assert itself from others by placing itself at the head of others. In other words, this guild regards her profession as a dimension of comparison to others which we call 'outgroup'. As claimed by Oakes and Turner (1981), seizing an opportunity to adopt strategies of differentiation in an intergroup situation allows one a more positive self-concept as a result. We can therefore say that this group (**ugboha**) has a positive self – attitude and hence of vitality.

Igun Ugbọha *(The Guild of Blacksmiths)*

This is the guild of all iron and steel workers in the Benin society who in the pre-colonial era manufactured all the instruments of war, farming and other palace and households utensils that were extensively used then. Their activities are highly ritualized and organized due to their perceived role in the protection, defense and sustainance of the Ẹdo people and society then and even to some extent in contemporary times.

These craft associates in their professional activities also have a habitual variety of linguistic communication peculiar to their guilds which are used in special senses pragmatically with sentential constructs wherein meanings of such utterances are deduced contextually. Such lexical data include the following:

3(a). Gima ya rri ***itaemwi*** vbe eguae.

 [Lets us go eat gisting in palace-----------$\rightarrow$ Lexical Translation N.J

 [[Let us go and work in the palace]]--------$\rightarrow$ Literal Translation. G .I

 [Let us go and eat gist in the palace]-----$\rightarrow$ Free Translation. C. I

[itaemwi]------$\rightarrow$[work]-- ----$\rightarrow$[interpretation of special sense in context A

 R3 *R2*

*[**itaemwi**]*------$\rightarrow$[gist] -------$\rightarrow$[interpretation of common sense in context B.

 R3 R2

(b). Ye ***afian*** ya fien ematon ni yi eva.

[USE CHISEL TO CUT IRON THAT IN TWO] ----------$\rightarrow$Lexical Translation:

[[Use that chisel to cut the iron in two places]]----$\rightarrow$ Literal Translation:

[Use the chisel to cut that iron in two]--------------→ Free Translation:

    [Afian]---------- →*[Chisel]* -----→ interpretation of special sense in context

    [Afian]---------→**[To cut]**-----→interpretation of common sense in context B

(c). Idehẹn kakabọ *kpe ekwẹ* nii.

    [IDEHEN VERY WELL HIT BELLOWS THAT]----------→ Lexical. Translation:

    [[Idehen *hit* that bellows properly]]--------------→ Literal.Trans :

    [Idehen wash that bellows very well]------------→ Free Trans:

    [Kpe]---- →*[Hit]-----* → Interpretation of special sense in context

    [Kpe]----→**[Wash]-**→ interpretation of common sense in context

    [Ekwe]------→**[Bellows]--------**→ Interpretation of special sense in context A

    [Ekwe]-----→ **[Lexical Gap]------------**→Interpretation of common sense in context B

This is an excerpt of one of the conversations that normally ensue between the sole proprietor 'master' and his apprentice, instructing him during the performance and preparation of a piece of art work. The words in bold are the special codes used by the guild when carrying out an assignment in their workshops to prevent people who are not members of the guild and are present during such activities from knowing what is going on.

4(a). Eben rre odo oghe isekpokin, iran khian <u>*se*</u> ohian yo.

[SKIMETER IS THERE AT LEATHER WORKER, THEY WANT *FIX* LEATHER HANDLE]--→ Lexical Translation**:**

[[The skimeter is at the leather worker place they want to <u>*fix*</u> the leather handle on it]] Literal Translation:

(The skimeter is at the leather worker place they want to sew the leather handle on it)------→ Free Trans:

    [<u>Se</u>]------- →[Fix]----- →Interpretation of special sense in context A

    [Se]-------→**[Sew]---**→Interpretation of common sense in context B

    (e). Ye ava ya *dia* ematon nii.

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[Use spactular to shape iron that]---------------→ Lexical Trans:

[[Use the spactular to shape that iron]]----------→ Literal Trans :

(Use the spactular to stay that iron)--------------→ Free Trans :

      [*__Dia__*]-------------→[*Fix*]-------------→ Pragmatic sense of interpretation in context A

      [Dia]--------------→[Stay]-----------→ Interpretation of conventional thought in context B.

The use of language by this guild, 'igun ematọn' is seen to comprise of certain lexical items such as: iron, bellows and other steel-related activities prominent in their work as represented above. Such acts like hitting and fixing with tools such as tong, bellows and spatula base on the metallic nature of the job and due to some tedious aspect in their art of iron smithing.

Igun Ẹrọnmwọ (The Guild of Bronze Casters)

These guilds refer to the association of the brass and bronze casters and are organized and located at Igun Street off Sokponba road in Benin City. Their activities are deeply rooted in the ritualisation of bronze casting through the system of loss wax. The tools and materials used during bronze casting include: wax which is used for designing and beautifying, fire which is meant for melting in two different stages, chisel, file, iron brush which are meant to clean the object after the concentration and also for brighter look, anwa 'tung' which is used for picking the object from the fire, ukpẹ ' spatula' for designing and carving of shapes like the eyes, nose, ears or any structure or core of an object etc, other tools include ekwẹ 'bellows', fire wood, charcoal, kerosine, ughamwa 'axe', ọha ' a kind of a pincher' and san paper.

5(a). [Osaze   mue   onwon   nii ye oven nu *__gbe__*.

   [OSAZE   CARRY   HONEY THAT IN SUN TO SPREAD]---→ Lexical Translation

  [[Osaze carry that honey and spread it in the sun]] ----→ Literal Translation

  (Osaze carry that honey and beat it in the sun)--------→ Free Translation

[gbe]----------→[SPREAD] ---------→ For the guild's interpretation in context A

[gbe]--------→[BEAT/KILL]-----→ For the commoners interpretation in context B.

 (b). Efe   ye   onwon   nii   ya *__rue__* akpa   nii.

[EFE USE HONEY THE TO FOLD COIL THAT] ------→ Lexical Translation

[[Efe use the honey to fold that coil]]------------→ Literal Translation

(Efe use that honey to make it)-------------------→Free Translation

[*rue*]-------→[Fold]----------→ Pragmatic sense of interpretation in context A

[rue]------→[Make/Do]----→ Conventional thought of interpretation in context B.

 (c). Ya **_suen_** eken na   ya   gue ere.

[GO MIX   SAND THE TO COVER IT] ----→ Lexical Translation

[[Go and mix the sand to cover it]] --------→ Literal Translation

(Go and start the sand to cover it)--------→Free Translation

[sue]---------→[Mix]   -----→ For the guild's interpretation in context A

[suen]-------→[start] -----→ For the commoners interpretation in context B

 (d). Do mue   **_ona_** na ya **_khion_** ye erhen.

[AUX CARRY ATRWORK THIS IN   HEAT PUT FIRE] -----→ Lexical Translation:

[[Aux carry this artwork and heat it on the fire]]------→ Literal Translation:

(Aux carry [LG] and [LG] in fire)---------------------→Free Translation:

[khion]----------→ [Heat] --------→ For the guild's interpretation in context A

[Ona]-----------→[Artwork] -----→ For the guild's interpretation in context B.

[khion]------→[LG] -------→ For the commoners interpretation in context A

[Ona]--------------[LG] -----→ For the commoners interpretation in context B.

 (e). Osagie mue   iwina   ne o rre uwe erhen rre **_ovien_**   ne.

[OSAZE CARRY WORK THAT IS INSIDE FIRE BRING COOKED HAS]----→ Lexical Translation:

[[Osaze bring the work that is on the fire it is already cooked]]----→ Literal Translation:

_____

(Osaze carry the work that is on the fire [LG] already):-→ Free Translation:

[Ovien]------→[Cooked] ------For the guild's interpretation in context A

[Ovien]------→[Slave]--------For the commoners interpretation in context B.

(f). Mue   iwina   nii   ye uvun na *sai.*

[PUT WORK THAT IN HOLE SO CASTED] --------------→ Lexical Translation:

[[Put that work in the hole so we can cast it]]-----------→ LiteralTranslation:

(Put that work in the hole so we can burst it)-----------→Free Translation:

[sai]---------→[Casted] --------→ Pragmatic sense of interpretation in context A

[sai]-------→[Bust]--------→ Conventional thought of interpretation in context B.

(g). Etinosa ye olima do ya suen ya **nwien** ona na.

 [ETIOSA USE FILE TO DO START THE ARTWORK]------------ → Lexical Trans:

[[Etinosa use the file to start scraping or shining the artwork]]---→Literal Tran:

(Etiosa use the file to start and squeeze the artwork)------------→Free Trans:

[nwien]--→*[*Scraping & Shining] --→ For the guild's interpretation in context A

[nwien]--------→[squeeze] ---------→ For the commoners in context B.

 (h). Ya mue *ona*   ni ne   rre evba nu *kaloi* erhan ne rre vba kua.

[GO CARRY ART THE THAT IS THERE AND REMOVE WOODEN THAT IS THERE AWAY]------→Lexical Trans:

[[Go and carry the artwork that is there and remove the wooden rubbish therein away]]------→ Literal Translation:

(Go and carry the [LG] there and [LG] the wood therein away)--→ Free Trans:

[kaloi]-----→[remove] -----------→ For the guild's interpretation in context A

[kaloi]------→[LG   ]----------→ For the commoners interpretation in context B.

[Ona]------->[Artwork]-------->Pragmatic sense of interpretation in context A

[Ona]------>[LG]--------->Conventional thought of interpretation in context B.

(i). Wa guooghoe eken ne ore rhoo na mie eke na beghe emwi na *sai.*

[SUBJ+PL BREAK SAND THAT IS THERE SO THAT WE SEE THING WE CASTED] -->Lex Translation:

[[Subjs+Pl break the sand that is there so that we can see the casted object]]:- -->Literal Translation:

(Subj+Pl break the sand that is there so that we can see the thing that we bursted): Free Translation:

[sai]---------->[casted] ----> For the guild's interpretation in context A

 [sai]--------->[burst]-------> For the commoners interpretation in context B.

(j). Vue Ona nii ladian vbe oto.

[EXUME ARTWORK THAT OUT IN GROUND]-----> Lexical Trans:

[[Exhume the artwork from the ground]] ---------->Literal Translation:

(Rootout the artwork from the ground)----------->Free Translation:

[vue]----->[exume]----> For the guild's interpretation in context A

 [vue]------>[rootout]-------> For the commoners interpretation in context B.

 (k). Ze eken rre vbe vba ni ya *gbe* akpa.

 [TAKE SAND COME IN THERE TO BEAT/KILL COIL]------->Lexical Trans:

[[PICK SAND FROM THERE TO SPREAD THE COIL]] --------->Literal Trans:

(Pick Sand From There To Beat The Coil) :--------------> Free Translation:

[gbe]----------->[spread] ------> For the guild's interpretation in context A

[gbe]-------- ->[beat/kill] -----> For the commoners interpretation in context B.

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This communications are used in special senses pragmatically, though in different contexts patterned in line with the particular activities engaged in by the guild at any point in time. These constructs which are evidenceof the bronze casters line of linguistic communication are variants of the common Ẹdo used by other people and contextual in nature. This is because the real meaning of the thought conveyed in the text is external to the text itself so the text is just a physical envelope conveying the thought or idea expressed by the members of the guild**.**

Igun Ogbelaka (Guild of Royal Musicians/Dancers)

This guild consist of professionals in the performative art of singing, drumming and dancing, it is made up of active men who are the royal musicians. They perform only for the Oba 'King' in his palace during event or ceremonies as well as annual festivals which are usually marked in the palace like:Ugie Emọbọ, Ugie Iguọba, Ugie Odoodua and Ugie Urhoo. This guild is thought to perform in these festivals alongside another guild (not considered in the present study) 'Ihogbe' who are also present in these festivals except that of Odoodua. This last festival is performed by the Ogbelaka guild alongside the Osa and Osuan (two palace chiefs that normally holds the hands of the Ọba during ceremonies. Chief Obamwonyi is the head of this guild, the guild is made up of sixteen groups including Eleha, Eso Izegbo, Ewa, Ikpewini, Nekighudu, Oghagua and Igbe uzu, comprising the following Chiefs: Ohoba, Agbomwonba, Oyarioba, Obamẹdo ne Ogbelaka and Ẹfesọghọba as a collective effort.Such pragmatic use of language which is functional to their profession is in line with the following linguistic expressions shown below:

6 (a). Wa *fie emwi*
[hit drum]------------------→ LXT
[[Hit the drum]]----------------→LT
(Drive the drum)------------------→ FT
[Fie]---------- → *[Hit]--------* →Pragmatic sense of interpretation in context A (Guild Ẹdo)
 [Emwi]----- →*[Drum]-----* →Pragmatic sense of interpretation in context A

Fie]-------→**[Drive**]----→ Conventional thought of interpretation in context B (Common Ẹdo)
[Emwi]-----------→**[Something]**-----→Conventional thought of interpretation in context B.

(b). Wa *de obọ yi*.
[subj+pl stop drum]---- ----------------------------------→LXT
 [[Subj+Pl stop the drum]]-------------------------------------→LT
 (Subj+Pl hold your hands)-----------------------------------→FT
[De obọ yi]-- →*[Stop the drum]-* →Pragmatic sense of interpretation in context A (GE)

[De obọ yi]→**[Hold the hands]**→Conventional thought of interpretation in context B (CE)

(c). Ovbie *obọ* ne ọ*guan.*
[praises effect efficacy of drums]----------------------→ LXT
[[Praises of effect and efficacy of the drum]]-----------------→LT
(The child of the speaking hand)---------------------------------→FT
[Obo ne guan]--- →*[Effective drum*]--→Interpretation of special sense in context A (GE)

[Obo ne guan]--→[Speaking hand]--→Interpretation of common sense in context B (CE)

(d). Giẹ ima do sẹ odẹ ọghe***ogbe***.
[letsus come go road of   house] ---------------------------------------→LXT
 [[Lets go to the house]]-------------------------------→LT
 (Lets us go to the inner section of the palace)------→FT
[Ogbe]----- →[House]---- →Pragmatic sense of interpretation in context A (GE)

[Ogbe]→[Inner section of the palace]→Conventional thought of interpretation in context A

This conversation involves a guild supervisor and some apprentices after getting an assignment involving a particular iron work from the palace. It will be observed that in some instances there is no direct equivalence of the guild term in the common Ẹdo thereby constituting what is known in lexical semantics as a 'Lexical Gap (LG)' as in b-e. It is believed that these lexical items and the resultant LG in the corresponding common Ẹdo version is an aspect of functional variation between the guild and the common Ẹdo usage as these items are parts of the lexicon of the Ugbọha guild practitioners. While these expressions are generally used to obscure the activities of the guild from the eyes of the general guild, they also represent a demonstration of the professional outlook of their work.

As mentioned before now, the overriding reason for this usage is the cultural constraint on the activities of the guilds being disclosed to other members of the society (Ẹdo and non-Ẹdo alike) who are not members of the guilds.

There was a special emphasis on the fact that the guilds are distinct social groups in the Ẹdo society who are directly responsible to the **Ọmọ Ne Ọba**. In line with this therefore a positive ethnolinguistic identity is being portrayed as the monarchy to who the guilds are affiliated is held in high esteem by the Ẹdo people thereby giving the guild the reverence they get from the populace. The respondents also went on to say that the guilds' products are only for the Ọba and not for the public as this will constitute a breach of tradition hence the ideological constrain of the group.

Conclusion

We have shown in this study the creative use of the Ẹdo language by the guilds of Ugboha, Ẹrọnmwọ and Ogbelaka as illustrated. It was also shown that the lexical variation between the guilds interaction and the average Ẹdo discourse is one of professional variation which is necessitated by the need to mystify the activities of these professional bodies in the society as units of the socio-cultural and political institutions in place. It has also been observed that the existence of the guild is a case for the presence of a variety of Ẹdo language since the guild as a professional social group disguise their activities from the members of the public and one of the

ways to do this effectively is to employ a means of communicating that is not comprehensible to others who are not members of the guild.

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NOUN-NOUN COMPOUNDING IN ESAHIE

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Abstract

Noun-noun (N-N) compounds have been argued to constitute the commonest and most productive category of compounds cross-linguistically (cf. Downing 1977; Bauer 2017; Guevara & Scalise 2009) and this fact is well-established in Kwa languages as well (cf. Akan: Appah (2013), Lɛtɛ: Akrofi Ansah (2012), Ewe: Agbadah (2017), and Dangme: Lawer (2017), Lawer & Appah (2020)). However, the subject remains to be explored as far as Esahie, which also belongs to the Kwa group, is concerned. Based on data collected through documentary fieldworks conducted in Esahie-speaking communities in the Western North Region of Ghana, this paper examines the form and function of N-N compounds in Esahie, from a Construction Morphology (Booij 2010) perspective. Among other things, the study reveals that subordinate compounds are predominantly right-headed, while attributive-appositive compounds are predominantly left-headed, and that the former is the most productive compounding type. Coordinate compounds, on the other hand, tend to be dual-headed. Our findings on Esahie noun-noun compounds corroborate Booij's (1992) observation that there is a strong correlation between recursion and productivity. Furthermore, we show that semantic rather than formal features of compounds constitute the most reliable criterion for determining headedness in Esahie N-N compounds.

Keywords: Esahie, Noun-Noun compounding, headedness, recursion, Construction Morphology

1. Introduction

A compound, according to Bauer's (2001a: 40) is "a lexical unit made up of two or more elements, each of which can function as a lexeme independent of the other(s) in other context, and which shows some phonological and/or grammatical isolation from normal syntactic usage." Though the properties that a linguistic expression requires to be considered as a compound are highly controversial in the literature (cf. Ziering 2018; Nakov 2013; Lieber & Štekauer 2009; Štekauer & Lieber 2005), the present study adopts Bauer's (2001a) definition on grounds of scope and language-specific applicability.

Notwithstanding the vast putative lexeme pairings or permutations that are possible in compounding (such as adjective-noun compounding, verb-noun compounding, noun-verb compounding, verb-verb compounding, etc.), noun-noun (N-N) compounds have been argued to constitute the commonest and most productive category of compounds cross-linguistically (cf.

Downing 1977; Clark et al. 1985; Bauer 1998, 2001, 2008, 2009, 2017; Gagné 2002; Giegerich 2004; Gagné & Spalding 2006, 2010; Guevara & Scalise 2009; Libben et al. 2003). Booij (2018a) illustrates this point with the equivalent of the N-N compound 'blood pressure', which he shows to exist in several Germanic languages. Consider example (1).

(1) a. Afrikaans ***bloed-drukq***   f. Frisian   ***bloed-druk***
     b. Danish   ***blod-tryk***   g. German   ***blut-druck***
     c. Dutch   ***bloed-druk***   i. Icelandic ***blóð-þrýstingur***
     d. English   ***blood-pressure***   j. Norwegian ***blod-trukk***
     e. Swedish   ***blod-tryck***

(Booij 2018a: 2)

In Kwa languages too, N-N compounding is acknowledged to be the commonest compounding pattern (cf. Akan (Appah 2013, 2015, 2016, 2019); Lɛtɛ (Akrofi Ansah 2012); Ewe (Agbadah 2017); and Dangme (Lawer 2017; Lawer & Appah 2020)). However, as far as the Esahie language is concerned, the subject remains to be explored, hence, the need for the present work, which investigates the structure of various N-N compounds in Esahie (like subordinate compounds, attributive-appositive compounds, and coordinate compounds), with a view to highlighting their formal and semantic properties such as headedness, internal inflection, argumenthood, productivity, and interpretation. The study also discusses the nature of the semantic relation that obtains between the constituents of the compound and the compound as a whole.

The remainder of the paper is organized as follows: We discuss pertinent concepts in the subject of compounding in section 2: they include headedness, classification of compounds, compositionality, and productivity in N-N compounds. In section 3, we proceed to examine the structural and semantic properties of various kinds of N-N compounds in Esahie, comparing them with other African (as well as Indo-European) languages. Construction Morphology is then introduced as the theoretical framework for the study (in section 4). In this same section, the theory's formalization of Esahie N-N compounds is offered. The paper is concluded in section 5.

2. Some Pertinent Concepts

In this section, we explain a few concepts that are pertinent to the discussion of the subject of compounding. They include headedness (section 2.1), compound classification (section 2.2), and the productivity of N-N compounds (section 2.3).

2.1 Headedness

In most compounds, there are typically two categories of constituents, namely a *head* and a *non-head* (which may be a *modifier* or an argument of the head). The head functions as the lexical core and typically bears the essential semantic information, and determines the syntactic category as well as all morpho-syntactic features like *gender* and *number* (Neef 2009). A useful

criterion in determining headedness is the morphological criterion of *locus inflectionis* (locus of inflection), which has to do with the question of *what controls or determines inflection*. Cross-linguistically, the head tends to be the locus of inflection in compounds (Guevara & Scalise 2009). Consider the examples in (2) where the plural marker [-**s**] as an inflectional operator is attached to signal headhood in various compounds.

(2)		**Singular**	**Plural**
	a.	wall-clock	wall-clock**s**
	b.	legislative instrument	legislative-instrument**s**
	c.	desktop-computer	desktop-computer**s**
	d.	automobile-company	automobile-compan**ies**

Using the *locus inflectionis* parameter, therefore, we can tell that the headword in the compound *desktop-computer* in (2c), for instance, is the right-hand member *computer,* since it is the element that receives inflectional marking.[1]

Beyond the morphological criterion of *locus inflectionis,* one may also resort either to a syntactic criterion or a semantic criterion, or a combination of all three criteria. A compound's syntactic head is the member element that shares its formal features (i.e., lexical category and subcategorization frame) with the whole compound, so that the whole compound has the same syntactic distribution as its syntactic head (Scalise and Guevara 2006; Appah 2017; Broohm 2019a). A compound's semantic head, on the other hand, is the member element that shares its lexical conceptual information with the whole compound, so that the compound will be a hyponym of the semantic head (Scalise and Guevara 2006). In a compound that semantically-headed, the whole compound is usually a sub-type or subset of the denotatum/denotation or referent of its head. In other words, the semantic head is the element which the whole compound is a hyponym of. For instance, a *wireless mouse*, is a hyponym (or subtype) its semantic head, *mouse*, therefore, the compound *wireless mouse* passes the hyponymy test.

The constituent to be selected as the head of a compound may vary depending on the criterion used. A compound's syntactic head need not necessarily be the same as its semantic or formal head. This explains why the discussion of headedness in the literature distinguishes at least between a morphological head, syntactic head, and a semantic head; they may not necessarily coincide, although they typically do in endocentric compounds (cf. Bauer 1983; Guevara & Scalise 2009; Katamba 1993; Scalise; Bisetto & Guevara 2005; Scalise & Guevara 2006, Appah 2013; Broohm 2019a/b). In this work, we refer to both the syntactic and morphological heads as the *formal head*, following the traditional nomenclature.

Headedness has been acknowledged in the literature to bring about a distinction between two kinds of compounds, namely *endocentric* and *exocentric* compounds. In endocentric

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[1] Admittedly, the head is not always the *locus inflectionis* in compound as has been argued (see Guevara and Scalise 2009). The plural form for the compounds *mother in-law* [*mothers-in-law*] and *sore-throat* [sore-throats], for instance, show that at least the (semantic) head is not always the *locus inflectionis*.

compounds, the syntactic head tends to also be the semantic head (e.g., a *fireman* is a man). In exocentric compounds, on the contrary, the syntactic head is different from the semantic head, which is not explicitly expressed (e.g., *white-elephant* is commonly understood as something that cost a lot of money but has no useful purpose, rather than an elephant which is white-colored). Semantically exocentric compounds such as *black-sheep* tend to fail the hyponymy test since the connotation of *black-sheep* 'one whose actions/inactions bring embarrassment or shame to his or her family' is neither a type of *sheep* nor a type of *black*. What seems to straddle the two is the endocentric coordinate compound class, e.g., *driver-mechanic* 'a trained driver who is also a mechanic', where one could argue for two heads or no head at all (cf. Lieber, 2009).

A final issue closely related to headedness is compositionality. A compositional compound is semantically transparent with respect to the meaning of its constituents, whereby each constituent contributes to the intended meaning of a compound. In other words, with compositionality, the sum of the individual meanings of the constituents of the compound determines the meaning of the whole compound. Hence, lexicalized compounds, such as *ivory tower* with idiosyncratic meanings or whose constituents' composition only becomes transparent where there is sufficient etymological or linguistic background, could be considered as being non-compositional or semantically opaque. For example, the English compound *hotdogs* (i.e., sausages) is usually interpreted metaphorically. Thus, it is non-compositional. As we shall see (in section 3), Esahie compounds can be compositional or non-compositional.

2.2 Classification of compounds

Scalise and Bisetto (2009) observe that the distinctiveness of compounds lies in the fact that they are word-forms whose constituent elements are connected by the same grammatical relations that exist between elements of phrases where these relations are not overtly expressed, hence the similarity between the compound *apron string* and the phrase *string of apron*. Therefore, an important criterion in the classification of compounds is the grammatical relation that holds between the constituents of the compounds. In this regard, Scalise and Bisetto (2009) argue for three types of relations: *subordination*, *attribution* and *coordination*. These translate into three macro types – subordinate compounds, attributive compounds, and coordinate compounds.

We present Bisetto and Scalise's (2009) classification in the figure below, with a view to showing that the classes they propose are well attested in Esahie.

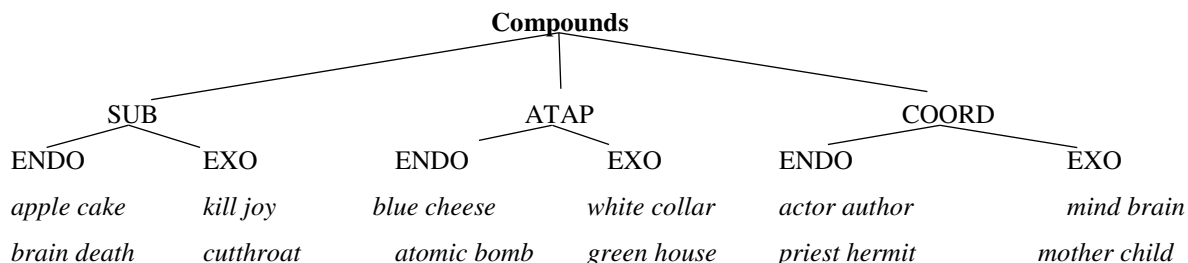|	**Compounds**				
SUB		ATAP		COORD	
ENDO	EXO	ENDO	EXO	ENDO	EXO
apple cake	*kill joy*	*blue cheese*	*white collar*	*actor author*	*mind brain*
brain death	*cutthroat*	*atomic bomb*	*green house*	*priest hermit*	*mother child*

Figure 1: Compound taxonomy by Bisetto and Scalise (2009)

With subordinate (SUB) compounds, the relation between the modifier and head is one of a *complement relation*, as shown in the compounds *alarm clock* (a clock with an alarm system) or *bus-driver* (the driver of a bus), which respectively instantiate two micro categories of SUB compounds, *ground* and *verbal-nexus* compounds. In ground compounds, which correspond to the traditional *root/primary* compounds such as *wind-mill*, *cookbook-author*, *gas price* and *mushroom soup*, "[t]he semantic relation is determined by the semantic-encyclopedic information associated with the component lexemes" (cf. Lieber 2009: 50-52). The verbal-nexus subgroup, alternatively referred to as *synthetic compounds* are characterized by the argument-taking property and presence of a (de)verbal noun as in *truck-driver*, *fresh-baked* or *well-preserved*.

The *attributive* and *appositive* (ATAP) compound class is an amalgamation of two related types of compounds, namely attributive and appositive compounds, both of which generally encode an *attribution relation* of sort, and this relation is signaled differently. Attributive compounds are characterized by a relation where the modifier in the compound describes a property or quality of the head. The modifier in an ATAP compound could be either an adjective as in *blue kiosk, long term*, *heavy weight*, and *barefoot* in which case it plays an attributive role (i.e., *attributive compounds*) or a noun which is used in a metaphorical sense as in *snail mail* 'a slowly delivered mail', in which case it plays an appositive role (i.e., *appositive compounds*). As Scalise and Bisetto (2009: 77) point out, the metaphoricity feature of the non-head constitutes the most reliable and distinctive criterion for distinguishing between [N-N] SUB compounds such as *taxi driver*, wherein there is a complement relation between the two constituents as against ATAP compounds *snail mail*, where *snail* is interpreted metaphorically, being construed as a "representation of the duration of the delivering the mail" whose relevant feature in the compound under observation is *shape*. (Wisniewski 1996 and Scalise, Bisetto & Guevara 2005) Other attributive compounds include adjectival compounds such as *funny peculiar, life-long* and *dog tired* (Lieber, 2009). Since most nominal compounds in English like *key word*, *sister node*, and *satellite nation* have a nominal modifier (i.e., appositive N-N compounds), ATAP compounds have been argued to constitute perhaps the most productive class (Lieber, 2009). Like SUB compounds, ATAP compounds have both endocentric and exocentric subtypes (Lieber, 2009).

The third class of compounds is the coordinate (COORD) class. Here, the relation between the constituents of the compound is considered as one of *conjunction*. The compound *poet painter* refers to an entity which is both a *poet* and a *painter*, and the compound *singer songwriter* refers to an entity which is both a *singer* and a *songwriter*. As Lieber (2009) notes, coordinate endocentric compounds are not common in English. Examples of this class include *spiderman, comedy drama* or *king emperor* for nouns, *blue green* and *deaf mute* for adjectives and *slam dunk* for verbs. A more productive class is coordinate exocentric compounds. As Lieber (2009) argues, in this class, the constituents are kind of co-hyponyms (e.g., humans or

grammatical relations). Examples of this class include *doctor patient* (*discussion*), *subject verb* (*agreement*) or *father daughter* (*dance*).

Adopting Bisetto and Scalise's (2009) classification, we discuss various macro-types of Esahie N-N compounds such as subordinate (SUB), attributive-appositive (ATAP) and coordinate compounds (COORD), as well as the various micro-types such as endocentric and exocentric compounds (section 3). We also resort to the structural input-output $[X+Y]_Y$ classification in our analysis of the data, where in addition to listing the individual members that make-up the compound, the syntactic category of the output is also spelled out.

2.3 Productivity of N-N compounds

As Dal and Namer (2017) note, no new words are created unintentionally or subconsciously, i.e., with little language awareness via an unproductive pattern. Productivity of a word-formation operation concerns the potential to form new words to express a concept with a given pattern or word-formation rule (see Bauer 2001b; Dal and Namer 2017; Plag 1999). Productivity is clearly a scalar concept ranging from fully productive patterns to unproductive ones.

Cross-linguistically, compounding as a word-formation operation has been acknowledged to be extremely productive since new words will often be coined through compounding. The productivity of compounding could be attributed to several factors. Firstly, it is influenced by the fact that the meanings of newly coined compounds, that are scaffolded by the meanings of the words to which their constituents are related, are much easier to understand than monomorphemic neologisms would be (Libben, Gagné and Dressler 2019). Secondly, the productivity of compounding is considerably greater than that of other word formation processes because typically, compounding has fewer restrictions on which elements can participate in the word formation process and which positions in a newly produced word these elements can occupy (cf. Libben 2014).[2] Thirdly, the productivity of compounding is partly influenced by its degree of recursiveness. A linguistic entity is recursive when it has a complex structure that can be decomposed into two or more entities of the same type (Radford et al. 1999: 295). A compound pattern that is recursive is more productive than one that is not.

As noted earlier, N-N compounds constitute the most productive category of compounds cross-linguistically (cf. Downing 1977; Clark et al. 1985; Bauer 1998, (2001, 2008, 2009, 2017); Gagné (2002); Giegerich (2004); Gagné & Spalding (2006, 2010); Guevara & Scalise (2009); and Libben et al. (2003)). More productive word-formation operations produce more new words than less productive ones. This relates to the profitability of an operation in both type and token frequency, whereby, if the $[\textbf{X-}\textit{er}]_N$ nominalization operation, for instance, is deemed productive than the $[\textbf{X-}\textit{ist}]_N$ operation, one should expect to find more tokens of $[\textit{-er}]_N$ derivatives or neologisms than $\textit{-ist}_N$ derivatives.

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[2] As Libben (2014) explains, even for the simplest of compounds (those with two constituents), the statistical opportunities produce staggeringly high levels of potential productivity. The potential productivity for two member compounds is defined as the number of permutations of n elements taken r at a time [i.e., *n!/(n2r)!*]. So, if a language possessed but 1000 monomorphemic nouns, and these could each serve as either compound heads or compound modifiers, those 1000 nouns could generate 1000!/(100022)! ¼ 998,000 distinct noun–noun compounds.

As we will show (in section 3), N-N compounds in Esahie show varying degrees of productivity; right-headed SUB compounds are more productive than left-headed ATAP, and COORD compounds are relatively less productive.

3. Noun-noun compounding in Esahie

As hinted earlier, various types of N-N compounds are attested in Esahie. They include subordinate (SUB) compounds, N-N attributive-appositive (ATAP) compounds, as well as coordinate (COORD) compounds. In what follows, we discuss structural properties of these compounds such as headedness, internal inflection, argumenthood, recursion and productivity. We also discuss the nature of the semantic relation that obtains between the constituents and the compound as a whole, as well as their interpretation. We begin with endocentric right-headed SUB compounds (section 3.1), and proceed to left-headed ATAP compounds (section 3.2) and exocentric ATAP compounds (section 3.3).

3.1 Subordinate (SUB) Compounds

This category of Esahie compounds is regular and typically compositional, and constitute the commonest subtype of N-N compounds. They include forms such as those in (4) and (5).

(4)　　a.　　***ngaen-anwa***　　　　　　b.　　***a-fofi-kyẽã***
　　　　　　　machine-oil　　　　　　　　　　　SG-celebration-day
　　　　　　　'petrol'　　　　　　　　　　　　　'holiday'

　　　　c.　　***a-tomvolɛ-braa***　　　　d.　　***a-tomvolɛ-biãã***
　　　　　　　SG-wedding-woman　　　　　　　SG-wedding-man
　　　　　　　'bride'　　　　　　　　　　　　　'groom'

(5)　　a.　　***ɛ-wɔfoɛ-sua***　　　　　　b.　　***nyɔfone-nzue***
　　　　　　　SG-guest-house　　　　　　　　　breast-milk
　　　　　　　'guest house/hotel'　　　　　　'breastmilk'

　　　　c.　　***bakaa-baa***　　　　　　　d.　　***a-man-yɔ-fe-kue***
　　　　　　　tree-child　　　　　　　　　　　SG-nation-build-fellow-group
　　　　　　　'seed'　　　　　　　　　　　　　'political party'

As shown in (4) and (5), this class of compounds is formed via the concatenation of nominal stems and full forms, which results in nominal compounds; i.e. [N+N]ₙ. A form like ***amanyɔ*** in (5d), for instance, is itself very complex, as it is a noun-verb compound. Given the paucity of inflection in Esahie (cf. Broohm 2017; Broohm and Rabanus 2018), semantic headedness, rather

than formal headedness[3], becomes the most reliable criterion for identifying the head in this class, since all the [N-N] compounds in (4) and (5) are semantically headed, and they are right-headed, much in agreement with the predominantly preferred head position in compounds (cf. Williams 1981a; Dressler 2006). In (5a), for instance, the relation between *ngaen* 'machine' and *anwa* 'oil' is one of subordination since the left-hand member *ngaen* 'machine' is in modification relation with the right-hand member *anwa* 'oil' (the head). The whole compound *ngaen-anwa* is a hyponym of the semantic head *anwa* 'oil'. This means that the compound *ngaen-anwa* 'petrol' is semantically endocentric.

As a typical root compound, the semantic relation in *ngaen-anwa* 'petrol' is determined by the semantic-encyclopedic information associated with the component lexemes. In this particular instance, the relation is one where *anwa* 'oil' is understood to be the (liquid) substance used to power machines.

Right-headed SUB compounds in Esahie tend to be recursive. Consider examples (6) and (7) which are recursive.

(6)	a.	[[*musue-dwirɛ*]	*ke~kã-nɛ-fʋɛ*]	'blasphemer'
		curse-matter	RED~say-NMLZ_{E/R}-NMLZ_{P/P}	
		blasphemy	'one who speaks'	
	b.	[[*nzɛmba-hã́-nɛ*]	*adwuma*]	'evangelism ministry'
		PL-good.news-say-NMLZ_{E/R}	work	
		evangelism		
	c.	[*kɔngoen-sukuu*	[*nikyee-sua-nɛ*]]	'Adult Education'
		night-school	thing-learn-NMLZ_{E/R}	
			'learning'	
	d.	[[*afupɔngɔ-nwiaa*]	*ataadeɛ*]]	'horse-hair dress'
		horse-hair	dress	
(7)	a.	[[*a-nan-groma*]	*talie*]	'knee-cap'
		SG-leg-joint	cap	
		'leg joint'		
	b.	[*a-bɔdeɛ-nu*	[*nyanza-penalɛ*]]	'science'

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[3] Given the isolating morphology of Esahie (cf. Broohm and Melloni 2020; Broohm and Melloni 2021), the pattern it displays typically involves the concatenation of two bare nouns, unlike N-N compounds in German and Dutch (cf. Booij 2010c; 2018b) for example, which are highly inflecting languages, especially in the nominal domain. In such inflecting languages, compounds typically contain the so-called *linking elements*[3], i.e., *case* and *number* suffixes, on the non-head member of the compound. See the morpheme [*-e-*] in the German example in (1) below.

(1)   *hund-e-futter*
        dog-SG-food
        'dog food.'

		SG-creation-inside	wisdom-seek-NMLZ_{E/R}	
		'creation-related'	'wisdom-seeking'	
c.	[[*a-man-yɔ*]	***nzɛm***]		'politics (lit. governance matter)'
		PL-nation-building	matter	
		'nation-building'		
d.	[[*nwãtĩ-hɔ-lɛ*]	***nekaa***]		'refuge (lit. hiding place)'
		run-go-NMLZ_{E/R}	place	
		'(act of) running'		

The examples in (6) and (7) also show an interesting dichotomy in N-N compounds in Esahie. We notice that there is both right and left recursion. In (6c), for instance, both elements of the compound are themselves compounds; whereas the head, ***nikyee-suanɛ*** 'education', is a (synthetic) compound, the modifier, ***kɔngoen-sukuu*** 'night-school', is a (root) compound.[4] Furthermore, the modifiers ***musue-dwirɛ*** 'curse word' and ***afupɔngɔ-nwiaa*** 'donkey hair', of the compounds in (6a) & (6d) respectively, are themselves root compounds. In a similar fashion, the modifier ***nzɛmba-hanɛ*** 'evangelism' in (6b), is a synthetic compound. Similarly, the modifier ***anangroma*** 'leg-joint' in (6a) is complex, while in (6b), the head (***nyanza-penalɛ*** 'wisdom-seeking') and modifier (***abɔdeɛnu*** 'creation-related') are both recursive. The modifiers ***amanyɔ*** 'governance' and ***nwãtĩ-hɔ-lɛ*** '(act of) running' in (7c) and (7d), respectively, are also recursive.[5]

Relatively speaking, however, the Esahie SUB N-N compounds are predominantly left-recursive. This observation is consistent with observations about cross-linguistically preferred patterns of recursion in compounds (cf. Dressler 2006; Krott et al. 2004). Krott et al. (2004: 89), for instance, in their study of German and Dutch, observed that left-branching compounds outnumber their right-branching counterparts. This implies that, in both German and Dutch, left branching recursion is the unmarked structure for the three-element compounds they analyzed. This observation is also true for Akan (cf. Appah 2013).

In terms of the semantic properties of the SUB N-N compounds discussed here, it appears that they are typically compositional and, in a few instances, lexicalized. This explains why compounds such as ***ngaen-anwa*** 'petrol' (4a), ***ɛwɔfoɛsua*** 'guest house/hotel' (5a), ***afofi-kyẽã*** 'holiday' (4b) and ***atomvolɛ-braa*** 'bride' (4c) are transparent in meaning, reflecting the meanings of the various constituents. The meaning of the compound ***ɛwɔfoɛsua*** 'guest house/hotel', for instance, derives compositionally from the meanings of the relevant constituents, ***ɛwɔfoɛ*** 'guest/visitor' and ***sua*** 'house'.

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[4] On the distinction between root and synthetic compounds, the latter tend to involve a V(erb) element that exhibits argument-taking properties, while the former does not. See (Ackema and Neelman 2004; Grimshaw 1990; Harley 2009; McIntyre 2015; Roeper and Siegel 1978) for more on this distinction.

[5] This puts Esahie in sharp contrast with languages such as Slovak (Štekauer and Valera 2007) in which recursion is completely banned, as well as some African languages such as Fongbe (Lefebvre & Brousseau 2002: 227) and Ngiti (Lojenga 1994: 162-3), where recursion is extremely restricted.

There are, however, instances where right-headed SUB N-N compounds may not exhibit full compositional semantics, where their meanings are not always transparently related to those of the constituents. Such cases involve forms such as **nyɔfone-nzue** 'breastmilk' which, to some extent, has a lexicalized meaning. The literal meaning of the head element **nzue** 'water' is not directly reflected in the meaning of the compound **nyɔfone-nzue** [lit. breast-water] 'breastmilk' because it is not literally a kind of **nzue** 'water'.[6] The semantic opacity of such compounds is due to the lexicalization phenomena typically occurring within the lexicon.

In terms of semantic opacity, another related sub-class of right-headed compounds are those with one member (usually the head) being what has been termed in the literature as an 'affixoid' (cf. Lieber and Štekauer 2009; Booij & Hüning 2014; and Hüning & Booij 2014). In the process of compound formation, some forms acquire specific meanings that are more abstract than the meaning of the corresponding word when used on its own in a sentence (Booij 2018a&b). In the literature, such forms have been technically called *affixoids*. Affixoids are words with more abstract meanings (usually of intensification) when embedded in compounds. Characterized by this tendency, their presence in the compound affects compositionality, especially so since in the case of Esahie, such forms are heads as could be observed in the examples in (8).

	Output		**Input**	
(8)	a. **atu-yile** 'gun powder'		**atu**	**eyile**
			'gun'	'medicine'
	b. **sona-bakaa** '(human) body'		**sona**	**bakaa**
			'human'	'tree'
	c. **anyea-kyiremvua** 'eyeball (lit. eye's egg)'		**anyea**	**kyiremvua**
			'eye'	'egg'
	d. **agyee-namonɛ**[7] 'gum'		**agyee**	**nain-monɛ**
			tooth	meat-fresh
				'fresh meat'

The compounds in (8) have meanings that are non-compositional because they are somewhat metaphorical or metonymical given that the most important semantic member of the compound, the head element, is an affixoid. The meaning of **eyile** 'medicine' in (8a) is abstract since it is not specific (or immediately identifiable) in the meaning of the entire compound **atu-yile** 'gun powder'; i.e., **eyile** 'medicine' acquires a special meaning, different from its original meaning in the language. This explains why there is nothing 'medicinal' about the meaning of the compound **atu-yile** 'gun powder'. In (8b) too, the head element **bakaa** 'tree' acquires an abstract meaning. So, although the human body has the shape and form of tree to an extent, strictly speaking, it is not a type of tree, hence, *tree* evokes a metaphorical reading. This implies, therefore, that the compound **sona-bakaa** 'body', fails the hyponymy test, although there seems to exist a sort of

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[6] Breastmilk is probably conceptualized as water because of its liquid form.

[7] The compound is right-recursive since the head constituent **namonɛ** 'fresh meat' is itself a compound.

subordination relation between the elements of the compound at an abstract level. The heads of the compounds in (8c) and (8d), **kyiremvua** 'egg' and **namonɛ** 'fresh meat' respectively also acquire restricted meanings than what they usually bear. Apart from the shape the egg, all other features of an egg are lost in the meaning of the compound **anyea-kyiremvua** 'eyeball'. This explains why **anyea-kyiremvua** 'eyeball' is not a type of **kyiremvua** 'egg'. Same can be said for **namonɛ** 'fresh meat', the head of the compound in (8d).

3.2 Attributive-Appositive (ATAP) Compounds

So far, we have shown that SUB N-N compounds in Esahie are typically right-headed, fairly recursive (and consequently productive), and exhibit compositional semantics. There is, however, a category of compounds that is made up of left-headed Attributive-Appositive (ATAP) compounds in Esahie. The compounds in this category, constitute a small subtype of N-N compounds in the language, are irregular and typically lexicalized in meaning. There are two sub-groups in this class, those made up of two nouns (N-N) and those made up of a noun and a numeral (N-Num) (as we shall see later in example (10) below). In both cases, however, there appears to be an apposition-attribution relation between their constituents. They include forms such as those in (9) and (10).

(9)   a.   **ngaen-kɔmea**
           machine-magician
           'computer (lit. magic machine)'

       b.   **maen-daen**
           nation-parent
           'region (of a country)'

       c.   **temuafoɛ-paen**
           judge-leader
           'Chief Justice'

       d.   **nyɔbo-taen**
           stone-parent
           'rock'

When we apply the *locus inflectionis* test, we are able to confirm that the left-hand members of the compounds in (9) are indeed the (formal) heads of the compounds. Consider the pluralized equivalents of the compounds in (10).

(10)   a.   **n-ngaen-kɔmea**
            PL-machine-magician
            'computer (lit. magic machine)'

       b.   **a-maen-daen**
           PL-nation-parent
           'region (of a country)'

       c.   **a-temuafoɛ-paen**
           PL-judge-leader
           'Chief Justice'

       d.   **n-nyɔbo-taen**
           PL-stone-parent
           'rock'

Semantic headedness also proves useful since the compounds pass the hyponym test, given that (9a), for instance, is semantically headed by ***ngaen*** 'machine', while that of (9b) is headed by ***maen*** 'nation'. For these compounds, semantic headedness coincides with formal headedness.

In contrast with the predominantly preferred (right) head position in compounds (cf. Williams 1981; Dressler 2006), the Esahie compounds in (9), like most Bemba and Italian N-N compounds (cf. Scalise 1994; Scalise & Fábregas 2010; Basciano et al. 2011), are left-headed. In (9a), for instance, the relation between the constituents ***ngaen*** 'machine' and ***kɔmea*** 'magician' is one of apposition, since the right-hand member ***kɔmea*** 'magician' attributively modifies the left-hand member ***ngaen*** 'machine'.[8] The whole compound ***ngaen-kɔmea*** 'computer' is a hyponym of the semantic head ***ngaen*** 'machine'. This means that the compound ***ngaen-kɔmea*** 'computer' is semantically endocentric. In (9b), also, the relation between ***maen*** 'nation' and ***taen*** 'parent' is one of apposition, since the right-hand member (i.e., the modifier), ***daen*** 'parent', modifies the left-hand member, ***maen*** 'machine' (i.e., the head). The whole compound ***maen-daen*** 'region (of a country)' is a hyponym of the semantic head ***maen*** 'nation'.

The degree of compositionality exhibited by these compounds is not as strong as the right-headed ones in section (4.1), since their meanings are to some extent lexicalized, an interpretational feature which they share with Bemba (Bantu) compounds.[9]

In Scalise and Bisetto (2009)'s classification, such compounds are appositive compounds given that the modifiers in these compounds are typically interpreted metaphorically. This explains the fact that the meaning of that the modifier ***kɔmea*** 'magician' in (9a) adds to the meaning of the compound is metaphorical rather than literal. A similar argument could be made for the modifier ***taen*** 'parent' in (9b), which also encodes a metaphorical meaning in the interpretation of the compounds.

As explained earlier, the second sub-group of left-headed N-N compounds have numeral right-hand constituents. Accordingly, they may be characterized as Noun-Numeral (N-Num) compounds. It is instructive to note that the categorial labelling of numerals remains a highly debated issue (cf. Corbett 1978; Hurford 1987; Corver & Zwarts 2006; von Mengden 2010; Verhoeven & Huyssteen 2013). With a broad conceptualization of nouns as names of things, places, persons, etc., we treat numerals as a class of nouns that name NUMBERs following (cf. Brainerd 1966; Brandt Corstius 1968; Appah 2013).

As noted earlier, these compound forms are lexicalized and, as a result, are not fully compositional. Let us examine the forms in (11), which constitute a special class since they are clearly exocentric. The compound form in (11a) is of the Bahuvrihi type (possessive compounds; *see* Andreou and Ralli 2015; Ralli and Andreou 2012; and Bauer 2010, Appah 2017a) with the

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[8] It instructive to note that attributive modification in Esahie takes the form of post-modification where the modifier follows the head in noun phrases. However, in right-headed N-N compounds, the canonical order of modification is reversed so that we have an instance of pre-modification rather than post-modification, since the head of the compound is the right-hand member.

[9] This interpretational feature puts them in sharp contrast with Italian compounds, which, though left-headed, have interpretations that are constrained along compositional lines (Delfitto and Melloni 2009; Basciano et al. 2011; Radimský 2013).

meaning 'a (deformed) baby with six fingers.' Similarly, the referent of the compound form in (11b) *ahen-gan* 'first born after the crowning of a King' is not necessarily a King.

(11)   a.   **n-za-nzia**   b.   **ahen-gan**
              PL-hand-six   king-first
              'a (deformed) baby with six fingers'   'first born after the crowning of a King'

Like their left-headed equivalents in Italian (cf. Basciano et al. 2011) and Akan (cf. Appah 2013), they are hardly recursive. The fact of their non-recursivity, coupled with their non-compositionality, ultimately affects the productivity of this subtype of left-headed N-N compounds.

Another class of ATAP compounds established in Esahie are those that are exocentric, wherein the compound as a whole is not a hyponym of its head. Examples are given in (12) below.

(12)   a   **ŋgondɩ̃ɩ̃-nzaa**   b.   **abilie-wura**
              fight-alcohol   dance-owner
              'one who incites people to fight'   'mantodea (a type of wasp)'

        c.   **akondaa-dadeɛ**   d.   **angolɛ-wura**
              in-law cutlass   play-owner
              'money given to prospective in-laws' 'praying mantis'

The N-N compounds in (12) fail the hyponymy test. For instance, the constituents of **ŋgondɩ̃ɩ̃ nzaa** in (12a) are **ŋgondɩ̃ɩ̃** 'fight' and **nzaa** 'alcohol' but the idiomatic meaning of the compound is 'one who incite people to fight' which is neither a type *fight* nor a type of *alcohol*. Indeed, one may argue that the causer-relation is the basis of the idiomatic meaning of the compound. Similarly, the literal meaning of the constituents **akondaa** and **dadeɛ** respectively are 'in-law' and 'cutlass,' but the compound refers to the monetary token given to the brothers of the bride rather than the cutlass given to prospective in-laws[10] of the groom.[11] Thus, the compounds are semantically exocentric.

The compounds in (12c-d) share a common right-hand member, **wura**, which literally means 'owner/lord'. However, having the characterization of an affixoid, **wura** no longer bears its literal meaning, since its use in the compound restricts its original meaning. Consequently, the affixoid status of the right-hand constituent affects the compositionality of the compounds and

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[10] The opacity in the meaning of the compound is probably a diachronic semantic bleaching or extension that has occurred in the lexicon. A reviewer has hinted that traditionally, the money was meant for the brother in-law to get a cutlass to guard the betrothed woman. I am grateful to a reviewer for pointing this out.

contributes to their exocentricity. This accounts for the idiomatic meanings of the compounds ***angolɛ-wura*** 'praying mantis' and *abilie-wura* 'a type of wasp' (lit. king of dancing), so that the referents of the compound ***angolɛ-wura*** 'praying mantis' is not necessarily an 'owner/king of play', neither is the referent of ***abilie-wura*** an 'owner/king of dance' in (12c-d), respectively. An important mechanism that underpins the interpretation of such compounds is metonymy where, like their Akan counterparts (cf. Appah 2017a), something is referred to by a word which describes a quality or feature of that thing. The compound ***angolɛ-wura*** 'praying mantis', for example, has to be interpreted metonymically since it is the 'folded foreleg characteristic property' of the insect *praying mantis*, the referent, that is used to represent the whole entity.

3.3 Coordinate Compounds

The last category of endocentric compounds we deal with in this section is the coordinate [N-N]$_N$ compound class. These compounds are dual-headed both semantically and syntactically. Semantically, the compound is a hyponym of both constituents. Syntactically, both constituents are nouns so it is difficult to attribute the syntactic category of the compound to a particular constituent. As Appah (2013) notes, sometimes, whether an N-N compound is analyzed as coordinate or otherwise is a matter of construal and perspectivization, depending on whether the relation between the constituents is seen to be symmetrical or asymmetrical. However, in a recent work, Arcodia (2018) proposes that, depending on the language, the criterion of *reversal of constituent order* may be applied as a test for their equipollent status. Arcodia (2018) further notes that, unless lexicalized, prototypical endocentric coordinating compounds tend to tolerate inversion of the constituents. This criterion proves useful in ascertaining the coordinate status of the N-N compounds in (13) given that the order of constituents in these compounds is amenable to manipulation. Let us examine (13).

(13)   a.   ***emumu***   ***asotiriwaa-niɛ***
               dumb   ear-block-NMLZ.SG
                          'deaf and dumb person'

        b.   ***kɔmeɛ***   ***dunze-niɛ***
               fetish.priest   herb-NMLZ.SG
                       'Herbalist-fetish priest'

To confirm further the equipollent status of both constituents of the compound, we resort to the *locus inflectionis* parameter by testing plural (number) marking in the compound. In the pluralized versions of the compound in (14), we observe that both constituents of the compound are independently inflected when pluralized, suggesting that they are of equal status. The compounds could therefore be said to be dual-headed.

(14)   a.   ***emumu-fuɛ***   ***asotiriwaa-fuɛ***

dumb-NMLZ.PL   ear-block-NMLZ.PL

'deaf and dumb persons'

b.   ***n-gɔmeɛ-dunʐe-fuɛ***
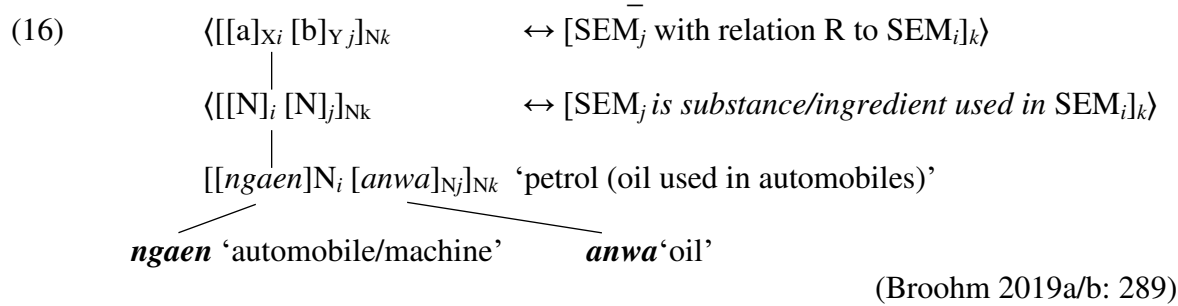
PL-fetish.priest-herb-NMLZ.PL

'Herbalist-fetish priests'

4. Construction Morphology

Construction Morphology (CM) is a product-oriented theory of morphology that evolved out of Construction Grammar (Michaelis & Lambrecht 1996; Goldberg 1995, 2006). CM aims at accounting for the shared and unshared properties of both word-level and phrase-level constructs (Booij 2010). There are three cardinal tenets of CM: a theory of the notion of *construction*, a theory of *word structure* and a theory of the *lexicon*. The notion of *construction* refers to a form and meaning pairing that is formed by means of a schema. Hence, in CM, both words and phrases are constructions, the latter being phrase-level form-meaning pairs, and the former being word-level form-meaning pairs. Morphological constructions are the products of schemas that abstract over sets of existing complex words, rather than of word formation rules. Schemas generalize over sets of existing complex words and simultaneously serve as a template for forming other words of similar formal complexity (Booij 2010). This is exemplified by the schema in (15) which generalizes over all right-headed compounds.

(15) $< [[a]_{Xi} [b]_{Yj}]_{Yk} \leftrightarrow [SEM_j$ with relation R to $SEM_i]_k >$ (Appah 2015: 363)

The upper-case variables X and Y stand for the major lexical categories (N, V & A). The lower-case variable *a* and *b* stand for arbitrary strings of sound segments, whilst *i*, *j* and *k* are indexes for the matching properties of the compound and its constituents.

With respect to the theory of the lexicon, the understanding in CM is that morphological constructions exist in the lexicon together with the schemas that they instantiate. In other words, schemas and their instantiating constructions co-exist in the lexicon. The lexicon in CM is conceptualized as a hierarchically stratified repository where two types of relations obtain; i.e., the relation which obtains between a schema and a construction that is formed by the schema, called an "*instantiation* relation" and the relation which exist between a construction and its constituents (sub-parts), known as the "*part of* relation". These relations are illustrated in (16), where a lower-level constructional schema is an instantiation of a higher level one, and the individual constituents, ***ngaen*** 'machine' and ***anwa*** 'oil' are 'part of' the compound ***ngaen-anwa*** [machine-oil] 'petrol'.

(16) $\langle[[a]_{Xi} [b]_{Yj}]_{Nk}$ $\leftrightarrow [\overline{\text{SEM}}_j \text{ with relation R to SEM}_i]_k\rangle$

$\langle[[N]_i [N]_j]_{Nk}$ $\leftrightarrow [\text{SEM}_j \text{ is substance/ingredient used in SEM}_i]_k\rangle$

$[[ngaen]N_i [anwa]_{Nj}]_{Nk}$ 'petrol (oil used in automobiles)'

ngaen 'automobile/machine'   ***anwa*** 'oil'

(Broohm 2019a/b: 289)

The hierarchical representation in (16) explains how instantiation works: the higher the schema, the more abstract it is, and vice versa. It is understood that constructions which share common features or constituents are also connected in the lexicon. For example, ***ngaen-anwa*** is linked with other schemas that contain either ***ngaen*** such as ***ngaen kɔmea*** 'computer', or the constituent *anwa* such as ***kube anwa*** 'coconut oil' (cf. Broohm 2019a.). The hierarchical ordering of schemas also indicates the possibility of default inheritance which allows us to account for sub-regularities within the morphological system (cf. Appah 2015; Appah & Broohm 2023). Here, we assume that the syntactic category of the compound is from the head.

The theory of word structure in CM is premised on the fact that CM is abstractionist and word-based in orientation. As such, the assumption is that the word is the minimal linguistic sign (i.e., a form-meaning pair). There are (at least) two dimensions to the structure of the word, namely the phonological form of the word and its morpho-syntactic properties. This means that a word is associated with three types of information – PHON(ological), SYN(tactic) and SEM(antic). In computing the properties of a construction, the grammar of the construction must accurately capture the systematic relations between these three components (Booij 2007; 2010c).

It is possible for a construction to bear properties that do not emanate from the properties of the constituents. An example is the (exocentric) compound *red herring* 'a piece of information intended to mislead or distract', whose meaning (semantic property) has nothing to do with neither the adjective *red* nor the noun *herring* (a type of fish). Such properties are termed *holistic* or *extra-compositional* properties of constructions (Booij 2010; 2012; Appah 2015; 2017).

4. 1 A CM formalism of N-N compounds in Esahie

In this section, we provide constructionist formalization of N-N compounding in Esahie, as discussed earlier. We begin with endocentric compounds (section 4.1) and then proceed to formalize exocentric compounds (section 4.2).

4.1.1 Endocentric compounds in Esahie

For the endocentric category, we examine compound types including right-headed SUB N-N compounds (in section 4.1.1), left-headed ATAP N-N compounds (in section 4.1.2), left headed N-A (ATAP) compounds (in section 4.1.3), as well as dual-headed COORD N-N compounds (section 4.1.4).

4.1.1.1 Right headed N-N Subordinate Compounds

Right-headed compounds in general can be captured by the schema in (17), where the compound is shown to be a subtype of the right-hand constituent with some relation R to the left-hand constituent.

(17) a.   *ɛwɔfʋɛ-sua*   ⟨[[N]$_i$ [N]$_j$]$_{Nk}$ ↔ [SEM$_j$ *for* SEM$_i$]$_k$⟩
            guest house
            'guest house/hotel'

      b.   *nyɔfone-nzue*   ⟨[[N]$_i$ [N]$_j$]$_{Nk}$ ↔ [SEM$_j$ *produced by* SEM$_i$]$_k$⟩
            breast water
            'breastmilk'

      c.   *bakaa-baa*   ⟨[[N]$_i$ [N]$_j$]$_{Nk}$ ↔ [SEM$_j$ *is produced by* SEM$_i$]$_k$⟩
            tree child
            'seed'

      d.   *amanyɔ fekue*   ⟨[[N]$_i$ [N]$_j$]$_{Nk}$ ↔ [SEM$_j$ *meant for* SEM$_i$]$_k$⟩
            politics group
            'political party'

In interpretating the compound ***ngaen-anwa*** 'petrol', the meaning of the right-hand constituent ***anwa*** 'oil' is linked to the meaning of the left-hand member ***ngaen*** 'machine (automobile) because oil is a substance used in automobiles. In keeping with the understanding that the actual interpretation of each compound depends on the meaning of the constituents and the encyclopedic knowledge one applies to the interpretation process, the relation **R** has to be spelled out separately for each instantiating compound. For each of the SUB N-N compounds below, the semantic relation between the constituents has to be specified to suit the relevant nuances of the compound. Therefore, although the meta-schema can abstract over all the compounds in (17), their actual realization is spelled out separately for each case.

Our discussion has shown that right-headed N-N compounds in Esahie come in various forms, and that in order to accurately capture the meaning of a compound, the semantic relation that holds between the constituents ought to be spelled out in finer details.

4.1.1.2 Left headed N-N ATAP Compounds

Left-headed compounds in general can be captured by the schema below, where the compound is a subtype of the left-hand constituent with some relation R to the right-hand constituent.

(18)   *Schema for left headed N-N ATAP Compounds*

        ⟨[[a]$_{Xi}$ [b]$_{Yj}$]$_{Nk}$ ↔ [SEM$_i$ with relation R to SEM$_j$]$_k$⟩
        |
        ⟨[[N]$_i$ [N]$_j$]$_{Nk}$ ↔ [machine which is a magician]⟩
        |

$|[\text{ngaen}]_{Ni}\,[[\text{kɔmea}]_{Nj}]_{Nk}$ 'computer'

$\qquad$ ***ngaén*** 'machine' $\qquad$ ***kɔmea*** 'magician'
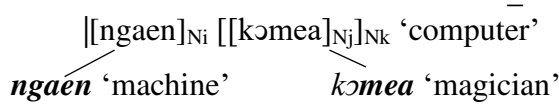
In the interpretation of the compound ***ngaen-kɔmea*** 'computer' the meaning of the left-hand constituent ***ngaen*** 'machine' is connected to the meaning of the right-hand member ***kɔmea*** 'magician'. Here, unlike the SUB N-N compounds previously discussed, the interpretation of each compound needs not be specified because the compound in (18), for instance, involves a 'classic' appositional relation, and more so since in CM each construction is seen as a particular pairing of form and meaning, which may share relations with other similar constructions.

(19) $\quad$ ***nyɔboɛ-taen*** $\qquad$ $\langle[[N]_i\,[N]_j]_{Nk} \leftrightarrow [\text{stone which is a parent}]\rangle$
$\qquad$ stone-parent
$\qquad$ 'rock'

4.1.1.3 Coordinate N-N compounds

The internal structure, the semantic relation between the constituents, and the syntactic category of such compounds can be captured by the schema below in (20), where the meaning of the whole compound captures the individual meanings of both constituents, hence the semantic component contains the indexes of both constituents.

(20) $\quad$ $\langle[[a]_i\,[b]_j]_{Nk} \leftrightarrow [\text{SEM}_{ij}]_k\rangle$ $\qquad\qquad$ Appah (2013: 302)

Having been formed, this schema becomes the template for forming other coordinate N-N compounds as those in (21) (see Arcodia (2011; 2018); Appah (2015) for more on the CM treatment of coordinate compounds).

(21) $\quad$ a. $\qquad$ $\langle[[a]_i\,[b]_j]_{Nk} \leftrightarrow [\text{SEM}_{ij}]_k\rangle$

$\qquad\qquad$ $[[N]_i\,[N]_k]_{Nk} \leftrightarrow [\text{an ENTITY which is both SEM}_i \text{ and SEM}_j]_k$

$\qquad\qquad$ $[[emumu]_{Ni}\,[asotiriwaaniɛ]_{Nj}]_{Nk} \leftrightarrow$ 'deaf and dumb person'

$\qquad$ ***emumu*** 'dumb person' $\quad$ ***asotiriwaaniɛ*** 'deaf person'

$\qquad$ b. $\qquad$ $\langle[[a]_i\,[b]_j]_{Nk} \leftrightarrow [\text{SEM}_{ij}]_k\rangle$

$\qquad\qquad$ $[[N]_i\,[N]_j]_k \leftrightarrow [\text{an ENTITY which is both SEM}_i \text{ and SEM}_j]_k$

$$[[kɔmeɛ]_i \ [dunzeniɛ]_j]_k \leftrightarrow \text{'fetish priest-herbalist'}$$

kɔmeɛ 'fetish priest'   **dunzeniɛ** 'herbalist'
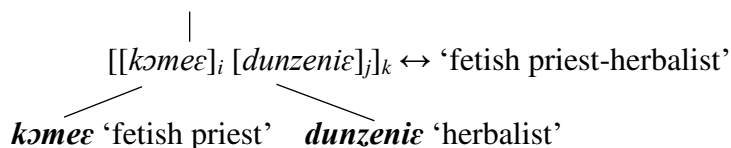
4.2 Exocentric compounds in Esahie

In this section, we deal with (ATAP) [N-N]$_N$ compounds forms which are exocentric compounds at a semantic level, or at both syntactic and semantic levels. Regarding the treatment of exocentric compounds in CM, Appah (2013: 237) posits that, if the meaning of an 'exocentric compound is in a way relatable to the meaning of either constituent or to their combined meaning, but the meanings of the constituents do not exhaust the meaning of the compound, the extra-compositional meaning may be represented as a semantic operator (i.e., the unindexed **SEM**) over the meaning of the compound, or the meaning of the relevant constituent'. This is captured by the disjunction (|) in the schema (22).
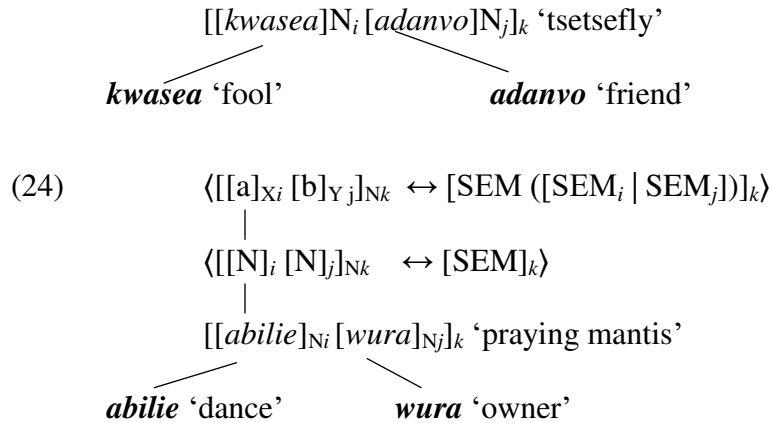
(22) $\langle[[a]_{Xi} \ [b]_{Yj}]_{Nk} \leftrightarrow [\textbf{SEM} \ ([\text{SEM}_i \ | \ \text{SEM}_j])]_k\rangle$ (Appah 2017: 154)

We proceed to discuss the various classes of exocentric compounds instantiating the meta-schema above.

4.2.1 ATAP [N-N]$_N$

ATAP [N-N]$_N$ compounds are semantically exocentric. In this class, we find cases where the compound has a meaning that is completely unrelated to the meanings of the constituents. An example of this is **kwasea-adanvo** 'tsetsefly' (**kwasea** 'fool', **adanvo** 'friend') for which there is no conceivable link between the (idiomatic) meaning of the compound and the meanings of the individual constituents, so that, there is no way to tell that the two constituents combined will/can refer to a particular insect. As such, its meaning has to be learned and stored in the lexicon of the Esahie speaker. Another example of this is **abilie-wura** 'praying mantis' (**abilie** 'dance', **wura** 'owner') for which there is also no compositional connection between the idiomatic meaning of the compound and the meanings of the individual constituents, and there is no way to tell that the two constituents combined will/can refer to a particular insect. Here, a typical property of dancing, is extended metonymically to refer to the entity that has the habit of dancing. This class of compounds may be represented in (23) and (24), where the parenthesized part of the semantic pole is not part of the meaning of the compound because the meaning of the compound is not related to the meanings of the constituents at all (cf. Appah (2017a)).

(23) $\langle[[a]_{Xi} \ [b]_{Yj}]_{Nk} \leftrightarrow [\text{SEM} \ ([\text{SEM}_i \ | \ \text{SEM}_j])]_k\rangle$

$\langle[[N]_i \ [N]_j]_{Nk} \leftrightarrow [\text{SEM}]_k\rangle$

–

$[[kwasea]N_i\,[adanvo]N_j]_k$ 'tsetsefly'

kwasea 'fool'   **adanvo** 'friend'

(24) $\langle[[a]_{X_i}\,[b]_{Y\,j}]_{Nk} \leftrightarrow [SEM\,([SEM_i\,|\,SEM_j])]_k\rangle$

$\langle[[N]_i\,[N]_j]_{Nk} \leftrightarrow [SEM]_k\rangle$

$[[abilie]_{N_i}\,[wura]_{N_j}]_k$ 'praying mantis'

abilie 'dance'   **wura** 'owner'

There are also some exocentric N-N compounds for which one may be able to link the meaning of the whole to the meaning of one or both of the constituents, but the compound still violates the hyponymy test. For example, the constituents of **akondaa-dadeɛ** (lit. the in-law's cutlass) are **akondaa** 'in-law' and **dadeɛ** 'cutlass,' but the idiomatic meaning of the compound which is 'monetary token given to prospective in-laws', is neither a type of in-law nor a type of cutlass. Nevertheless, the meaning of the left-hand constituent **akondaa** 'in-law' is still somewhat preserved in the idiomatic meaning of the compound, so that the metaphoric meaning of the compound **akondaa-dadeɛ** still has something to do with 'in-laws'. Since the 'monetary token' meaning component is not directly encoded in either constituent of the compound **akondaa-dadeɛ**, it has to be treated as a constructional property, and this meaning will be represented as an operator over the meaning of the constituent **akondaa** which is somewhat preserved in the meaning of the compound, as exemplified in (25).

(25) $\langle[[a]_{X_i}\,[b]_{Y\,j}]_{Nk} \leftrightarrow [SEM\,([SEM_i\,|\,SEM_j])]_k\rangle$

$\langle[[N]_i\,[N]_j]_{Nk} \leftrightarrow [monetary\ token\ meant\ for\ [SEM_i]_k\rangle$

$[[akondaa]_{N_i}\,[dadeɛ]_{N_j}]_k$ 'monetary token given to prospective in-laws'

akondaa 'in-law'   **dadeɛ** 'cutlass'
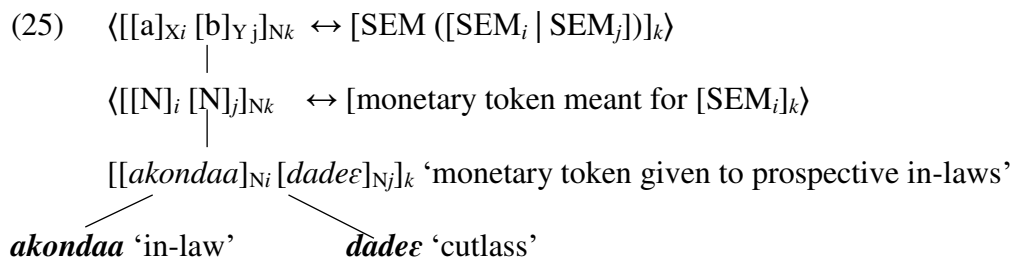
5. Summary and Conclusion

Our analysis of N-N compounds in Esahie has revealed interesting parallels with other languages as well as peculiarities in terms of structural and semantic properties. We have shown that compounds with internally inflected elements tend to be formally endocentric. As we have demonstrated, there are also instances where it is difficult to figure out the particular element from which the nominal property of a compound percolates, given the isolating typology of Esahie. Below in Table 1, we summarize some of the crucial formal and semantic properties of

Esahie N-N compounds such as headedness, recursion, argumenthood, interpretation, and productivity.

Table 1: **Summary of formal properties of Esahie N-N compounds**

		SUB N-N	ATAP N-N 1	ATAP N-N 2	COORD N-N
		a-saa-m-maa PL-hand- PL-child 'fingers'	*ngaen-kɔmea* machine-magician 'computer'	*kwasea-adanvo* fool-friend 'tsetse fly'	*emumu-aso-tiriwaa-niɛ* dumb-ear-block-NMLZ_{E/R} 'dumb and deaf person'
HEAD	**Formal**	Endocentric	Endocentric	Exocentric	Endocentric (right-headed)
	Semantic	Endocentric	Endocentric (but with an exocentric subgroup as in *nza-nzia* 'baby with six fingers')	Exocentric	Endocentric
	Position	Right	Left	-	Dual
INTERNAL INFLECTION		Yes	No affixes	Yes	No affixes
RECURSION		Yes	No	No	No
PRODUCTIVITY		Yes	No	No	No
INTREPRETATION		Compositional	Lexicalized	Lexicalized	Compositional

Apart from ATAP N-N 2 compounds, all other compounds pass the hyponymy test since they are semantically endocentric. Thus, semantic headedness provides the most reliable criterion for determining headedness in Esahie. In cases where a semantic head can be clearly established, we can argue further that the semantic head is also the formal head, since typologically, it is very rare that the two do not coincide. Moreover, since the canonical head position in Esahie is the right, the formal head is the rightmost in these cases. Overall, subordinate compounds are consistently right-headed, while ATAP compounds are consistently left-headed.

Finally, we have shown that the Esahie data also point to a strong correlation between recursion and productivity. This confirms Booij's (1992) observation that recursion enhances productivity in N-N compounds. Overall, right-headed subordinate N-N compounds are the most productive in Esahie.

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LEXICAL BORROWING: THE INFLUENCE OF LOANWORDS ON SEMANTICS OF KIHEHE

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This paper examined the influence of loanwords on the semantics of Kihehe as spoken in the southern highlands of Tanzania. It provides evidence from 1,152 loanwords collected through spoken texts and focus group discussion in two villages of Nzihi and Ifunda wards, namely Mibikimitali and Kalenga in Iringa District where the central dialect of Kihehe is mainly spoken. Cognitive Lexical Semantic Theory guided the collection and analysis of the data. The findings revealed that, in Kihehe, loanwords have origin in 11 languages which are Kibena, Kikinga, Kikimbu, Cigogo, Kiswahili, English; Arabic, Latin, French, Hindi, and Portuguese. These loanwords fall into five categories. The category which is borrowed most is nouns, while the category which is borrowed least is conjunctions. Nevertheless, the semantics of Kihehe is shown to have been affected due to loanword importation. The influence of borrowing is manifested clearly on semantic broadening, narrowing, shifting, additive borrowing, and innovation. It is, therefore, clear that while the importation of loanwords enriches the language by filling the lexical gap caused by cultural and technological differences between Kihehe and the source languages, it also affects the semantics.

Key words: Loanword, cultural borrowing, additive borrowing, semantic change

1.0 Introduction

Loanwords are linguistic units that occur in one language or a dialect as a result of borrowing from another language mainly when there is a linguistic contact (Myers-Scotton, 2002). In a recipient language, a loanword does not enter abruptly rather it is adopted gradually. According to Dworkin (2012), speakers begin to use a loanword with other words in their speech through code switching; then if the contact is prolonged, they often integrate and use it as native word. This, in fact, shows that 'code switching' is a necessary condition for a word to be borrowed.

Cross-linguistically, a loanword is identified on the basis of its synchronic description and novelty. The synchronic description enables linguists to analyse loanwords to see how they are integrated into the features of a recipient language, while novelty enables them to trace back their earlier stages to know when they were borrowed (Waldman, 1989). Besides, although the borrowing process occurs essentially to fill a lexical deficit caused by lack of some meanings in recipient languages, sometimes it can involve words whose meanings already exist; thus, duplicating words (Campbell, 1998). The former reflects basic or substitute borrowing, but the latter reflects cultural or additive borrowing. In Kihehe, the aspect of borrowing lacks the research-based information.

The semantics of a loanword in recipient languages is often adjusted; thus, making it to be unpredictable. This argument conforms with Bloomfield (1993) approach to meaning that it relates with two aspects. First, once a lexical item is borrowed, it undergoes semantic broadening which makes its meanings in a recipient language convey extra information than that in the source language. The second is that other borrowed items may undergo semantic shift by making their meanings change from what were in the source language to the recipient language. The adjustments of a loanword' semantics in a recipient language appear to be a phenomenon that is specific to languages. Pütz (1997:104) admits that semantic changes in loanwords are also expected-but not to be predicted-in the integration process, because in the contact situation competent bilingual speakers combine meanings to form meaning which may reflect or distort that of the source language. The focus of this study is, therefore, to examine loanwords and their influence on the semantics of Kihehe.

1.1 Kihehe

Kihehe is an Ethnic Community Languages (ECL[1]) spoken mainly in Iringa Region, in the southern highlands of Tanzania. As per Guthrie's (1967-71) classification, the language belongs to the Bena-Kinga language group, and it is categorised as G62. The population of speakers of Kihehe is estimated to be 1,425,000 (Ethnologue, 2020). Walsh (2004) points out that Kihehe is of three significant dialects namely the central dialect (constitutes pure Kihehe), Kosisamba dialect, and Kidzungwa dialect. Being the case, this study focused solely on the central direct which constitutes pure Kihehe, as per Madumulla (1995)'s statement.

1.2 Contact Situation

Kihehe being one of ECLs is spoken alongside other languages. Its speakers have been in contacts with neighbouring ECLs, Asians, and European languages since the past (Mumford, 1934; Illife, 1969; Nurse & Spear, 1985). The contact between Hehe and neighbouring ECLs begun to take place even before 8th century, when speakers involved in trade with neigbouring ECLs (Mumford, 1934). In 17th century, Hehe begun to come into contacts with Swahili; the aim being trading and spreading the Islamic culture (Nurse & Spear, 1985). These contacts gave Hehe an opportunity to learn Kiswahili. Mumford (1934) admits that Kiswahili served as lingua franca by Swahili and Asians trade intermediaries in caravans.

The literature is also evident that later on (i.e. in the late 18th century) Hehe began to have contacts with German[2] and English when their people involved in exploration, trade, missionary activities, and colonial relationships (Gower, 1952; Illife, 1969; Maliki, 1996). The British government encouraged the use of Kiswahili and English. In schools, these languages became

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[1] The government has been restricting the use of ECLs in formal domains due to fear of tribalism for more than three decades (from 1960s to 1990); hence, making them borrow words from English and Kiswahili.
(Blommaert, 2013).

[2] The Germans' regime in Tanganyika ceased latter on by putting Hehe under the British by the League of Nations, some Hehe had already had some conversance in German and Kiswahili (Maliki, 1996)

medium and important subjects; thus, giving opportunity to Hehe to borrow words (Blommaert, 2013). More spread of Kiswahili tends to have continued during the struggle for independence[3]. After independence (i.e., 1961), more recognition of Kiswahili and English by the government continued along with ignoring the use of ECLs like Kihehe for fear of tribalism and hardship in unifying the nation (Muzale & Rugemalira, 2008; Blommaert, 2013). However, this confirms another period when Kihehe borrowed massively words of different semantics to facilitate communication.

2.   An Overview of Studies on Semantic Borrowing

The importation of loanwords affects the semantics of the recipient languages by bringing aspect which did not occur prior to contact. According to Hoffer (2005) and Olah (2007), in Japanese, the semantics of a loanword may undergo up to three changes. The first involves preserving the meaning of the source language into Japanese (cf. the meaning loanword *jūsu*>juice/soft drink versus the meaning English word 'juice'). The second causes slightly change into recipient from the meaning expressed in the source languages (cf. the meaning of loanword *pēpā testuto*>, written test versus examination. The last leads into completely changing of meanings of loanwords based on what is expressed in the source language (cf. *baiku*>, motorbike versus bicycle).

Kayigema and Mutasa (2015) point out that in Kinyarwanda the meaning of loanword can be broadened to cover a wide range of meaning (cf. Kinyarwanda loanword *buku*>identity book versus the meaning of the English words 'book'). It is maintained also that its meaning can be distorted to express the meaning which is completely different from what is expressed in the source language (cf. Kinyarwanda loanword *gukopera*>cheat an exam versus the meaning of the French word *copier* 'to copy'). Moreover, its meaning to be narrowed (cf. Kinyarwanda loanword *ifarine*>wheat flour only versus the meaning of the French word *farine* any kind of flour). Therefore, while in Japanese, the meaning of a loanword can undergo up to three changes, in Kinyarwanda it undergoe in one extra changes

In Chichewa, loanwords modify both semantics and syntactic properties; and in some instances, displace indigenous expressions (Matiki, 2016). This is exhibited when loanwords such as *juzi*, *wochi*, *batiza*, and *fola* whose counterparts are English words 'jersey', 'watch', 'baptize', and 'queue from word follow' are borrowed along with meanings. Besides, the adjustment in the meanings of loanwords often leads into broadening category. It is specified that this is caused by importation of a massive terminology for concepts and objects not existed in Chichewa before the contacts owing to speakers' interest to the modern world, clothing, and grooming related concepts.

In Tanzania, loanwords appear also to adjust words and bring new meanings in ECLs including Kihehe. Nevertheless, the findings by Lusekelo (2014) shows that a loanword may adjust extra new meaning to a language; thus, conforming to semantic broadening. This aspect is displayed through the meaning of *omufumu* and medicine person in Ruhaya, Kijita, and Cirruuri. In this case, whilst the former meaning relates to words of each of the native languages, the use of the latter meaning is caused by borrowing from the English word 'doctor'. However, it is evident that speakers use them optionally, and / or may use the latter to refer the both.

According to Mapunda and Rosendal (2015), in Kingoni, a loanword may undergo semantic broadening and narrowing (cf. *peni* 'pen', and *chupa* 'glass bottle', and *chiviga* 'pot molded of clay soil 'and *lidenge* 'gourd'). In this case, due to widening the meaning of the loanword *peni* which means 'ink pen' it covers also both 'ink pen' and 'pencil'; and loanword *chupa* which means 'glass bottle' it also covers 'all forms of bottles including the those made of glass and plastic'. Similarly, due to narrowing the meaning of the loanword *chiviga* covers 'the pot which is molded of clay soil only', and the meaning of the word *lidenge* refers to 'gourd' only while several kinds of pots are made each having its own name, and different types of gourds have specific names in Kingoni.

Another instance, in which the meanings of loanwords tend to be adjusted relates to semantic innovation. Here, a language gets new native words whose meanings relate to the borrowed one. Lusekelo (2014) points out that in both Kinyakyusa and Chindali, a word may not be borrowed rather it can undergo innovation. This can be exhibited in the meaning of native word *umupuuti*

or *umupuuti* and counterpart English word 'priest'. The meaning of the word *umupuuti* or *umupuuti* has been derived from the Kinyakyusa or Chindali verb *puta*, that is, blow wind, though today it has senses that relate with powers priests have, that is, blowing away evil spirits instead of conveying the meaning which exactly refers to a 'priest'. These kinds of semantic representations seem to occur in several Bantu languages while in Kihehe the information lacks the research-based attention; thus, leaving the knowledge gap in this aspect.

3. Theoretical Framework Foundation

The Cognitive Lexical Semantic Theory guided the collection and analysis of the data for this study. This is one of the contemporary theories proposed by Geeraerts in 1980. The theory guided the researcher to detect the speakers' socio-cultural settings, historical background, and psychological situations which owing to reasons such as prolonged dominance of Kiswahili over Kihehe; and the change in language attitude by associating English with social advancements speakers attract loanwords; thus, affecting the semantics of Kihehe. Accordingly, Paradis (2012) argues that in lexical borrowing the Cognitive Lexical Semantic theory can guide in accounting for the semantic change based on the nature of meaning, ways in which the meaning of a word is learned and stored and causes for the change in meanings of words.

4. Methodology

The study was conducted in Kalenga and Mibikimitali villages located in Nzihi and Ifunda wards of Iringa district between April and September 2020. The selection of these villages relative to others depended on that they are under central dialect which constitutes pure Kihehe. To accomplish the study, the data were collected through the spoken texts and focus group discussion. Spoken texts enabled the researcher to interrogate various informants in the face-to-face interview in order to obtain critical information about words which are loan in different situations where Kihehe is spoken natively. This included areas such as funeral ceremonies, farms, bus stops, shops, households, markets, garage, and dispute-negotiating meetings. This method involved 40 informants based on saturation point.

To supplement to the data collected through spoken texts, to clarify some information that differed, and to explore the influence of loanwords on the semantics of Kihehe, 8 participants

were purposively selected based on their conversance to participate in the focus group discussion[4].

Table 1: Participants Involved in the Focus Group Discussion

Age (year)	Gender	Education	occupation	N
10 – 20	1 boy, 1 girl	—	students	02
40 - 50	2 females, 1man	cert. primary	peasants, nurse	03
55 – 90	2 females, 1 man	1 bachelor degree	retired teacher	01
		1 Grade 8	retired court messenger	01
		No formal education	peasant and garage work	01
Total				**08**

Besides, to ensure that the collected information is true loanwords, the length and morphosyntactic criteria were considered (Poplack, 1980). Ultimately, we obtained1152 loanwords. Nevertheless, to allow culminating the in-depth information, the data was then analysed qualitatively before being presented descriptively.

4.1   Ethical Concerns

The researcher attained research clearance from the University of Dodoma and went on to get informed consent from informants themselves.

4.2   Declaration of Interest

The authors declare that has no known competing financial interests that might have appeared to influence the reported data.

5. Results and Discussion

This section, presents a linguistic analysis and discussion of the findings on the influence of borrowing on the semantics of Kihehe. The information presented covers loanwords in terms of sources, categorical classes, and influence of loanwords on the semantics of Kihehe.

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[4] Focus group discussion is selected as it allows collecting a wide range of information within a minimal period; and allowing researchers to apply the follow-up techniques to participants (Liamputtong, 2011).

5.1   Sources of Loanwords

In Kihehe, loanwords have origin mainly in 11 languages which are Kibena, Kikinga, Kikimbu, and Cigogo; others include Kiswahili, English, Latin, Arabic, Hind, French, and Portuguese. Based on the degree of contacts with Kihehe, words were borrowed in two major routes, direct and indirect borrowings. Words were borrowed directly from ECLs and Kiswahili when speakers came into contacts for trade, administration, and education. Mumford (1934), Nurse and Spear (1985) maintain that Hehe have been in various contacts with neighbouring ECLs even before 8th century. Other words are revealed to be borrowed indirectly via Kiswahili or English from Arabic, Latin, Hindi, French, and Portuguese. This shows that since activities conducted by speakers of these languages such as trade and missionary did not allow intensive contacts, words were not borrowed directly.

5.2   Categorical Classes of Loanwords

The findings exhibited that in Kihehe, loanwords fall into five categories, namely the adverbs, nouns, conjunctions, adjectives, and verbs.

Table 2: Loanwords by Categorical Classes

S/N	Category	N	%	Examples
1.	Nouns	965	83.76	*umusinsala* 'messenger', *umusisita* 'nun', *italumbeta* 'trumpet', *ifulambeeni* 'frying pan'
2.	Adverbs	36	3.13	*itotolo* 'completely', a*pagaati* 'middle', *muumbele* 'behind', *kumangalibi* 'west side'.
3.	Verbs	90	7.81	*ibaatisa* 'baptize', i*funguula* 'open', uku*tembeela* ' walk', *ukupaasa* 'pass examination'.
4.	Conjunctions	4	0.26	*halakini* 'though', *ilabuda* 'perhaps', *alaafu* 'then'
5.	Adjectives	58	5.03	*uwusikini* 'state of being poor', *uwusafu* 'state of being prostitute or bad-mannered person', *alubayini* 'forty counts'.
	Total	**1152**	**100**	

From Table 2, it is apparent that while nouns whose amount is 83.76% of all investigated loanwords is the most borrowed word category, the conjunctions whose amount is 0.26% of the investigated loanwords are borrowed least. Moreover, the analysis involved sorting loanwords based on source languages and word categories. The result is summarised in Table 3.

Table 3: **Loanwords by Category and Source Languages**

Source Language	Noun	Adverb	Conjunction	Verbs	Adjective	Total	%
Hindi	3				1	4	0.34
Kiswahili	571	8		62	30	671	58.24
Portuguese	7					7	0.60
Kibena	8			2		10	0.60
Cigogo	3					3	0.26
French	2					2	0.17
Latin	7					7	0.60
Kikimbu	3			2		5	0.43
Arabic	43	9	3	6	24	85	7.37
English	317	17		17	3	354	30.72
Kikinga	1	2		1		4	0.34
Total	966	36	3	90	58	1152	100
%	83.85	3.13	0.26	7.81	5.03	100	

Findings in Table 3 are clear that Kiswahili contributed 52% of all investigated loan adjectives in Kihehe. On the other hand, Hindi contributed less 2% loan adjectives in Kihehe. Moreover, while the language that contributed the largest amount of loan nouns into Kihehe is Kiswahili, the languages that contributed the least amount loan nouns is Kikinga. In this case, while the amount of loan nouns contributed by Kiswahili is 59.10%, the amount of loan nouns contributed into Kihehe by Kikinga is only 0.10% of the investigated loan nouns. The language that has contributed the largest amount of loan verbs in Kihehe is Kiswahili with 68.88% of the investigated loan verbs. Similarly, the language that has contributed the least number of verbs is Kikinga with 1.11% of the investigated loan verbs. Moreover, English contributed the largest amount of loan adverbs by constitutes up to 47.22% of the investigated adverbs while Kikinga

contributed least loan adverb with only 33.33% of the investigated loan adverbs. Furthermore, only one language, Kiswahili has contributed all loan conjunctions in Kihehe. Baker (2003) points out that in the contact situation words are not borrowed equally. For instance, in German, most of the loanwords are nouns, adjectives, and verbs; and among them, nouns are the most borrowed words (Htay, 2014). While this amount seems to resemble to that of Kihehe, we can notice one difference. Unlike in Kihehe where loan conjunctions occur, German does not borrow conjunction. There are some similarities in the distribution of loanwords in Kihehe and Chichewa as well. For instance, in both languages, loanwords fall into nouns, verbs, adverbs, and conjunctions. The findings by Matiki (2016) show that nouns are the words borrowed most in Chichewa by constituting up to 91.82%, next to them are verbs with the amount of 7.42%, adverbs follow with the amount is 0.51% and conjunctions occur last with only 0.26% of the investigated loanwords.

This distribution of loanwords tends to relate to that of Kihehe. However, we can see that while in Kihehe some of the loanwords are adjectives, Chichewa does not have loan adjectives. The other difference bases on the amount of category of loanwords contributed. Kihehe has borrowed a larger number of both nouns, verbs and adverbs than the way Chichewa did. Moreover, in Kihehe, the amount of loan nouns corresponds to those of Kiswahili and Chasu. This is according to Schadeberg (2009) and Sebonde (2014) arguments that Kiswahili has borrowed five times more nouns than verbs and ten times more nouns than adjectives while in Chasu both core and non-core borrowings have contributed more loan nouns than other word categories. Therefore, as the amount of loan nouns surpasses other categories in Kihehe, there is correspondence in the distribution of loanwords on the basis of categorical class in these languages.

Moreover, the distribution of loanwords by categories displayed in Kihehe seems to resemble to those contributed in Romanian language. Schute (2009) admits that a large number of loanwords fall into nouns; next to them are verbs, adjectives, adverbs in Roman. As pointed out, in Kihehe, when the loanwords are sorted based on their categories, they do not follow this series rather than falling into nouns, verbs, adjectives, adverbs, and conjunctions. However, even though these languages are completely different, still we can notice some sort of correspondence in terms of

their borrowability by word category. Two reasons tend to account for variations in borrowability on the basis of word category among languages. Weinchrech (1953) assumes that nouns are borrowed more and easily because of lexical-semantic reasons, when he admits that the words referring to concrete objects (usually nouns) are pragmatically more important and salient than words referring to actions (usually verbs) or qualities (usually adjectives). This means as nouns are borrowed more and easily than other word categories because they refer to visible and concrete

objects; and are the first to be acquired in languages along with having fewer morphosyntactic markings than verbs, they are assimilated easily into this category. The eligibility of nouns to the borrowing process is also motivated by semantic roles of loanwords, as Hout and Mysken (1994) argue that, given that the reference is mainly expressed through nouns, they are borrowed most. However, in fact, nouns and verbs are numerous in natural languages as Baker (2003) argues. Therefore, since the likelihood of a certain lexical category to be borrowed seems to dependent happening frequency, they are borrowed most (Matras, 2007).

5.3   Influence of Loanwords on Semantics

The analysis displayed that loanwords affect the semantics of Kihehe whereby the influences are manifested in broadening, narrowing, shift, additive, and innovation. Nevertheless, in the course of the analysis, it was shown the ability to use a loanword whose semantic has undergone semantic change is dependent on speaker's age, level of education, and Cognitive Lexical Semantic Theory. Based on these factors, youth and educated speakers whom are exposed most to the recipient language (Kihehe) and major source languages (Kiswahili and English) were exhibited to use loanwords whose meanings have undergone into one or more of the aforementioned changes, while the elders and less-educated speakers maintain the use of proto terms.

The semantics of some words are shown to convey a wider range of meanings than those conveyed in the source language; thus, reflecting semantic broadening. This aspect is displayed in the meanings of loanwords *sibitali*, *ipelemendi, mudelefa*, *golikiipa*, and *lukaapo*. The meaning of a loanword *'sibitali'* denotes all forms of health centres while the meaning of the original 'hospital' in Both English and Kiswahili where it was borrowed it denotes only a place

where an ill or injured person is treated and cared. Also, the meaning of a loanword *ipelemendi* is related to all forms of sweets while in English where it was borrowed indirectly via Kiswahili word *peremende*, it denotes a hard white sweet which has flavour of peppermint. In addition, the meaning of a loanword *mudelefa* refers to all forms of operators of means of transportation such as bicycles, vehicles, and airplane while the meaning of the same word *dereva* in Kiswahili (including English, its original source language) it refers to only a person who drives motor vehicles.

Another instance of semantic broadening is on the meaning of the loan word *golikiipa*. For instance, in English, the word *golikiipa* refers to the kind of player who stands in the goal to stop other team from scoring in the context of football game. This is different in Kihehe because the meaning of the same word covers both the kind of player in the context of football game and a jobless wife (i.e., a wife who is not involved in any economic activities). Furthermore, in Kihehe, semantic broadening is demonstrated in the meaning of the loanword *lukaapo* which was borrowed from the English word 'lock up' via Kiswahili *lokapu*. The meaning of this word refers to all forms of prisons including jail and cell although in source languages its meaning is consistently related to a small prison-like room for keeping criminals in towns. The socio-cultural setting of Tanzania gives the youth and educated more opportunities to learn major source languages than the elders and less educated ones by making them attract loanwords easily. In fact, the meaning of a loanword in Kihehe is usually adjusted. This makes predicting it based on the meaning conveyed in source languages become complex; hence, corresponding to Pütz's (1997) statement that as competent bilinguals combine meanings to form meanings which may reflect or distort that of the source languages, the meaning of loanwords is usually unpredictable.

In Japanese, although the meaning of a loanword can undergo shifting and broadening, broadening is occurring most. Hoffer (2005) confirms that these aspects make the meaning of loanword *pēpā testuto* and *baiku* consecutively be 'written test' and 'motorbike' while in the source language (English), they are consecutively used to refer to examination and bicycle. In Kinyarwanda and Kingoni, the meaning of a loanword undergo change too. However, there are notable differences based on how it behaves in Kihehe and Japanese. Kayigema and Mutasa (2015) state that the meaning can be shifted maintained or adopted and that among these aspects,

broadening is common. For instance, in Kinyarwanda, the loanword *buku* means 'identity book' while the same word refers to the set of pages that have been fastened together inside the cover to be read or written in English where it was borrowed. Similarly, of the five changes that occur in the meaning of Kihehe loanwords, broadening dominates by generalizing loanwords' meanings to involve even the related ones. Broadening involves additive borrowing and narrowing in the meaning of Kingoni loanwords. Mapunda and Rosendal (2015) assert that it is usual for the meanings of a loanword to be broadening and replacing proto terms. This is evident in the loan term *likopo* which apart from being broadened to refer to relate meanings such as plastic and glass bottles it replaces the earlier term *lihorohoro*; hence, reflecting broadening through additive. This individuality in the meanings of loanwords demonstrates that predicting the meaning of a loanword is hard because speakers change so that they cope with their day-to day communication needs. This revelation,

however, is in the line with Lusekelo (2014) statement that the semantics of loanwords can become different things in recipient languages. The inconsistencies in the way the meaning of loanwords is handled by speakers of recipient languages suggests the importance of tracing both linguistics and nonlinguistic and non-linguistics in examining the semantic change.

In Kihehe, semantic narrowing involves retention of only a single meaning of a loanword. This means when a loan has more than one related meanings, speakers adopt only one most specific meaning by leaving the rest meanings. This aspect manifests itself in several loanwords in Kihehe including words such as *ikiteekisi*, *sisita*, and *ikilabu*. The word *ikiteekisi* means 'a small car often saloon type which has a driver whom you pay to take you somewhere' while in English where it was borrowed indirectly via Kiswahili word *teksi* its meaning includes 'any car which has a driver whom you pay to take you somewhere'. In addition, the loanword *ikilabu* means 'a building where local alcoholic drinks are sold'. This word was borrowed from English word 'taxi' via Kiswahili word 'teksi'. Therefore, since in source languages its meaning also refers to football club, bar, and pub it reflects narrowing.

Another instance where narrowing is exhibited is when the meaning of a loanword *sisita* refers to the nun, that is, a female member of a religious group. In English, where the word was adopted via Kiswahili word *sista* it covers a girl or woman who has the same parent as another person and / or a girl or woman who treats you in a kind way that a sister would. Therefore, as in Kihehe

only a single common most meaning of the term is maintained by leaving other meanings it suggests semantic narrowing. The change in the meaning of loanwords replicated through narrowing in Kihehe appears to occur in several other languages. However, its operation varies from one language to another; hence, corresponding to Pütz (1997) argument that the reason being the exclusivity of languages, there is a difference in the way loanwords are used. In Hadhrami Arabic, semantic narrowing makes a loanword undergo into four changes. These include retention of only one meaning where a loanword such as *dish* is used to refer to the satellite dish only; and restriction of the usage of a loanword by making it be used on a specific field where loanwords such as *baak* 'back', *kart* 'card' and *balanti* 'penalty' are used in the context of football only. In Kihehe, it is usual for a loanword to retain only one general meaning by ignoring the rest meanings. This is established when loanwords such as *ikilabu* and *umusisita* are used to cover only 'local alcoholic building' and 'nun or female member of religion'. In other loanwords, semantic narrowing

involves meanings and domains of use as well as narrowing of meanings and the loanwords themselves. The former occurs when a loanword speakers use words such as *kat* 'cut' in the context of playing the table-tennis only while the latter occurs when a loanword such as *tank* undergoes into three changes. These changes include aspects such as using it as *tanak* to mean water or kerosene tank, *tank* to mean a tin of cooking oil and *tank* to mean a car petrol tank (Bahumaid, 2015). In fact, the forms of narrowing displayed in this language demonstrate some similarities and variation concerning how they operates in Kihehe loanwords. For instance, in Kihehe when a loanword comprises more than one meanings its speakers adopt only one common most meaning while in the Hadhrami Arabic all meanings are in different contexts. In Kiswahili, narrowing is displayed when the meaning of loanwords such as *aya* refers to 'verse or paragraph only', while its original Arabic word *ʔa: ja* refers to verse, sign, mark and miracle. Akidah (2013) upholds that narrowing has become a normal aspect in Kiswahili such that loanwords can be subjected to changes that may involve acquiring narrower meaning than the meaning represented in source languages. Although the loanwords involved vary, the way narrowing is demonstrated in Kihehe tends to correspond with the way it applies in Kiswahili. This is evident when it involves conveying the erroneous meaning in both Kihehe and Kiswahili

(cf. meaning of Kihehe loanword *ikilabu* 'building where alcoholic drink is sold' versus the meaning of English word *klabu* 'football club, bar, and pub'; and the meaning of Kiswahili loanword *hamu* 'interest' versus the meaning of Arabic word *hamm* 'grief').

In Chichewa, the meanings of loanwords do not undergo narrowing; instead, they are broadened. Matiki (2016) admits that broadening of the loanwords' semantics is motivated by importation of massive English origin-terminologies and objects in the language which did not exist before the contacts. However, as pointed above, in Kihehe, the meanings of a loanword may undergo broadening or narrowing something that makes its speakers to pick out only one common meaning by leaving the less common meanings. This is shown when a loanword such as *umusisita* which has a wide range of meanings in the source language, it covers only a single meaning, that is, the nun or female member of the religion organization. Cross-linguistically, semantic shift has become one of the commonest aspects that occur when the meaning of a word in a recipient language begins to convey different meaning from what is referred in the source language (Crystal, 2003).

When this aspect occurs, a single word begins to have two meanings; the first, being that which occurs in the source language and the other meaning be that which is referred in the recipient language.

The analysis exhibited that, in Kihehe, there are several incidences where the meanings of words are shifted to convey different set of circumstances based on the meanings conveyed in the source languages. The meaning of the loanword *musalaba* is related to suffering or trouble while in the source language (Kiswahili), it refers to the cross or symbol of Christianity. Another instance of shift is exhibited when the meaning of the loanword *isaambi*, is related to sympathy or compassion. Speakers brought this word into Kihehe from Arabic word *danb* via Kiswahili word *dhambi* where it is consistently used to mean depravity or sin. Besides, in Kihehe, the loanword *uwusafi* means tendency of prostitute, while in the source language (Kiswahili), it denote the state of being clean, clear or pure. Moreover, the speakers use the loanword *kumbele* to mean 'behind someone or something' contrary to the source language (Kiswahili) where it

means 'in front of someone or something'. In addition, the use loanwords tends to apply inversely based on speakers' age and access to formal education. For instance, while elderly and the less-educated speakers use loanwords whose meaning reflects semantic shift, the youth and educated speakers use the loanwords along with preserving their source language meanings. This difference, in fact, suggests that adoption of a linguistic aspect can be determined by non-linguistic factors like age and education. Besides, the change in meanings displayed in the loanwords of this language is a confirmation that in a recipient language, a loanword becomes different thing, as Swilla (2000) and Lusekelo (2014) argues.

Additionally, in Japanese, the semantic shift involves distortion of the meaning of loanwords. This is evident when the meaning of a loanword such as *baiku* becomes 'motor bike', while in English (its source language), the meaning of the original word 'bicycle' does not relate to motor or engine (Hoffer, 2005). In Kihehe, the semantic change distorts meanings of some loanword. This makes convey the opposite meanings or new meanings. There are many cases where loanwords is display these aspects. For instance, while the meaning of the loanword *umusafi* is 'prostitute or bad mannered woman, its original Swahili word *msafi* is used consistently to mean 'clean or civilized person'. Besides, the loanword *itotolo* means 'completely', although in the source language

(English) where it was borrowed directly into Kihehe from the word 'total' its meaning is related to the sum of counting. While the way these adjustments operate display exclusivity of Kihehe, they tend to occur in other languages. In Kinyarwanda, for instance, the meaning of a loanword may change completely. This is evident when the meaning of the loanword *gukopera* is 'cheat exam' while the meaning in the same word in French (the source language) *copier* relates to the words 'to copy' (Kayigema & Mutassa, 2015). This does not occur other language such as Gikuyu because according to Kinyua (2016), semantic shift involves extension of earlier meanings of words. For instance, in this language, the meaning of loanwords *riĩko* includes 'gas cooker' while its original meaning is just 'heat'. In Kihehe, as in Kinyarwanda, the shift is reported to involve complete change of a loanword as it makes it begin to convey the new meaning (cf. meanings of the loanwords *saambi* > sympathy or passion versus Kiswahili word *dhambi* 'sin' or 'depravity'; and *musafi* >prostitute versus Kiswahili word *msafi* 'clean person').

Nevertheless, in Kiswahili, the changes in the meaning caused by the loanword can involve loosing aspects of the earlier meanings or taking its partial meaning but related ones. This evidenced when the meaning of the loan word *murua* is 'good, exciting, or attractive' while its original Arabic word *muru: Ɂa* means 'magnanimity generosity, or manhood'; and loanword *ushuru* means 'tax', while its original Arabic word *ʕuʃr* means 'one-tenth' (Akidah, 2013). In Kihehe, semantic shift makes the meaning of loanwords such as *musalaba* be 'suffering or trouble', though the same word in the source language (Kiswahili) means 'symbol of Christianity'. In fact, although the observed aspect of semantic shift does not suggest similarity between Kihehe and Kiswahili, there is incidence in which meanings of loanwords relate.

The findings also revealed that other loanwords bring foreign meanings in Kihehe words; thus, reflecting additive borrowing. This is exhibited in 11 fields of semantics namely travel and transportation, health and medicine, school and learning, house and building, agriculture, modern world, clothing and grooming, religion and beliefs, and car and repair. Additive borrowing enriches Kihehe by bringing in new terminologies. The technological difference between Kihehe speakers and speakers of source languages and prestigious reasons account for borrowing. Hehe being people whose technology is low in relation to those of source languages (i.e. Swahili and English) attract loanwords to fill both lexical and semantic gaps. Accordingly, Matiki (2016) argues that speakers in the developing countries adopt objects which are used in developed

countries that it turns affects their languages because of low science and technology. Besides, prestige of speakers towards the culture of speakers of source languages contributes in attracting loanwords including those whose semantics already occur. In Kihehe, this is justified when loanwords such as *umuganga*, *ikabuli*, *inyuumba*, and *isebule* whose counterpart native terminologies *umukoofii*, *changaa*, *liking'a*, and *daama* occur in Kihehe. The fact that speakers prefer using loanwords to the native terms suggests that the borrowed terminologies are perceived as more superior words than native words; thus, corresponding to Ross (2002) statement that perceiving a certain speaker as associated to success in a socio-economic aspect such as education, trade, or technology plays an important role in the borrowing. Therefore, as speakers of Kihehe relate the good attributes of speakers of the source languages to their words by perceiving such loanwords as better words than those of their own languages, they borrow massively; thus, bring into their language even words which have counterpart meanings.

In addition, bringing terminologies that have equivalent native terms in Kihehe, it has lead into replacement and maintenance of some of the proto terms. This makes terminologies such as *ulwiisi*, *lwang'anga,* and *changaa* which were used in the past be used along with the loan terminologies *umulyango, ilidisi*, and *ilikabuli* Additive borrowing by semantic maintenance allows proto and loan terminologies to be used. This form of borrowing was revealed to affect Kihehe because when two terminologies occur, speakers prefer using the loan terminology to the native one. In fact, this tendency is dangerous for perseverance of the language for it predicts abandonment of the proto terminologies in a near future. Besides, the use of the loan term involves use of just a few meanings leaving some of them to be used rarely or ignored completely. This means as the use of loanwords persist in Kihehe by leaves behind the meanings that are conveyed using a proto terminology, communicating using loan terms inevitably affects the semantics of Kihehe. For instance, speakers were shown to use the loan term *umuganga* to refer to the person who has medical knowledge to treat sick and injured people while its counterpart native term *umukoofii* refers to a person whose has medical knowledge to dig out medicine and treat sick or injured people. In the view of that, Mapunda and Rosendal (2015) argue that the sociolinguistic setting of Tanzania that allows borrowing from major languages (Swahili and English) into ECLs, affects the basic vocabulary of individual ECLs through substitutive borrowing. As a result of additive borrowing, like other ECLs, the semantics of some the Kihehe words is shown to receive

the influence which would not occur. In Kingoni, additive borrowing is evidenced in loanwords such as *pikipiki* 'motor cycle', *ligali* 'motor car', *ledyiu* 'radio' and *mawani* 'glass'. Mapunda and Rosendal (2015) maintains that the earlier term for *pikipiki* was *sekeni* whose source language is unclear while the earlier term for *ligali* was *motokaa* whose source is English word 'motor car'. In addition, whereas the term *ledyyiu* was borrowed indirectly into Kingoni from English word 'radio' via Kiswahili word *radio*, the term *mawani* was borrowed directly from Kiswahili word *miwani*. This form of additive, in fact, displays variation in relation to how it behaves in Kihehe where it is mainly demonstrated in cultural vocabulary. Nevertheless, as in Kihehe, additive borrowing involves the meanings that did not occur in the past, it resembles with the way it is applied in Kingoni. Additive borrowing manifests in two forms in Kihehe. The

first involves substitution of earlier terminologies on the favour of the loan terms while the other involves adoption of loan meaning. The former is evident when the terms *pikipiki* and *ligali* replace the earlier terms *sekeni* and *motokaa* while the meanings of loan terms *ledyiu* and *mawani* suggest adoption of loan meanings because they were borrowed along with loan terms *radio* and *miwani*. In Kihehe, additive borrowing does not involve replacement of earlier borrowings because speakers borrow words directly or indirectly from source languages via Kiswahili or English. Additive borrowing does not involve replacement of the earlier borrowings too. Mkude (2004) affirms that it has been usual for its speakers to use loanwords, such as *linanda* 'bed' and *liyayi* 'egg' in places where the native words *lifinga* and *ulili* could be used. Therefore, since the borrowing does not involve replacement of earlier loanwords, it corresponds to Kihehe. Nevertheless, understandingly, whether additive borrowing involves replacement of earlier terminologies or native terminologies it makes languages change based on how they were before. In this regard, Mkude (2004) states that importation of loanwords leads into language change whereby the usage of ECLs in rural areas decline because speakers are elderly, woman, and illiterate. In Kihehe, this aspect occurs in the speech of youths where due to lack of knowledge of their mother tongue, they inevitably borrow words easily.

Similarly, in Kihehe, there are native terms whose meanings did not occur in the past, but they have been created based on the meanings of loanwords; thus, reflecting semantic innovation. In the context of linguistic borrowing, innovation is a form of semantic change that occurs when a speaker create new native terminologies using the meaning of borrowed terminologies.

Lusekelo (2014) argues that based on the degree of contacts competent speakers may not adopt the loanword completely rather than using the meaning of the loanwords to form new terms. In Kihehe, this aspect manifests in several words. For instance, derived the term *mahomelo* from the native verb *homa* for 'throw a spear or a stone up to kill the enemy'. In this case, when the act of killing by using spears is done repetitively, that is, *kuhomanga* in a war-like fight, Hehe call it *mahomelo*. In addition, the term *ndabatila* has basis on the verb *labatila* means 'walk on'; as a result, all shoe-like things you can use to trample on (i.e. shoes) are called *ndabatila*. Besides, the term *muukofi* which has origin on the verb *kova* means 'dig out the medicine' reflects innovation as a medicine person whose activity is digging out medicines and treating ill or injured people is called *muukofi*. Semantic innovation applies differently in languages. In

Chindali, this aspect is exhibited in the loan term *umupuuti* or *umupuuti* 'priest'. In this language, this term is used natively among speakers, although it is reported to have been created from the Chindali verb *puuta* 'blow wind' whereby speakers relate the power of priests to blow evil spirits by calling the priest *umupuuti* or *umupuuti* instead of adopting the loan term priest itself. Therefore, even though Kihehe and Chindali are relatively different languages, the formation of the terms *umupuuti* or *umupuuti* appear to relate innovated terms such as *mahomelo* 'war', *lihombo* 'fare', and *mulamusi* 'judge' of Kihehe. This relatedness tends to confirm Lusekelo (2014) assertion that competent speakers adjust loanwords into new terms and meanings in recipient languages. What is put forward in this study is linguists should not generalize aspects of loanwords in languages because once a word is borrowed it becomes a new thing in a borrowing language.

6.   Conclusion

The analysis done in this paper has provided ample evidence regarding the influence of lexical borrowing on the semantics of Kihehe. More specifically, the study has shown loanwords have origin in Kibena, Kikinga, Kikimbu, Cigogo, Kiswahili, English; Arabic, Latin, French, Hindi, and Portuguese. These loanwords fall into five categories. Nouns are borrowed most while conjunctions are borrowed least. The study also revealed that loanwords affect the semantic resulting into broadening, narrowing, shift, additive, and innovation. This is consistent with Kiparsky's (2013) statement that when a loanword enters a recipient language, it often adjusts its grammatical aspects. As a result, the call that the present study appeals for the further research is the search of the influence of borrowing on other aspects of Kihehe to enrich the existing literature.

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THE SYNTAX AND SEMANTICS OF AKAN IDEOPHONES

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This paper examines the syntax-semantics of Akan ideophones. As part of the syntactic characteristics of ideophones, the study discusses the word class dynamism in Akan ideophones. Additionally, it looks at the verbal polarity and the group of ideophones that co-occur based on the polarity of the verb. This has become necessary because unlike other parts of speech, not much have been done on Akan ideophones in the literature. Therefore, aside from the contribution that this paper makes to the discussion on the syntactic dynamism in Akan ideophones, it also looks at the sensitivity of ideophones to the polarity of the verb in a sentence. This is against the backdrop that Saah (1995), Bodomo (2006) and Agyekum (2008) have dilated on the morpho-phonological and pragmatic characteristics of ideophones but not much on the syntax and semantics characteristics of Akan ideophones, especially its polarity sensitivity. Hence, this study examines the polarity sensitivity of Akan ideophones towards the categorization of ideophones into two, namely Affirmative Polarity Ideophones (API) that only collocate with positive verbs and Negative Polarity Ideophones (NPI) that only collocate with negated verbs. It shows that Negative Polarity Ideophones (NPI) collocate with negated verbs irrespective of the tense aspect mood. Progovac's (1993) theory of Entailment and Binding is employed to account for the polarity sensitivity of ideophones while the syntactic dynamism in the ideophones is tested on the X-bar theory.

Keywords: Akan, Ideophones, collocation, polarity, negation sensitivity

1.0 Introduction

Ideophones are marked group of words that have a direct relationship between sound and meaning. This direct sound to meaning characteristic of ideophones undermines the arbitrariness of language. However, according to Childs (2001) and Dingemanse (2012), ideophones are cross-linguistic phenomenon that is common in the world's languages, especially the African and Asian languages. This marked group of words has been described from the perspective of various scholars across languages from the earliest time. Some of the terms invented by scholars to describe this group of words and its sound symbolism include onomatopoeia, imitations, echoisms, and mimetics. However, the term ideophone coined by Dokes (1935) in the

description of imitative words has gained a wide acceptance in languages across the globe. Therefore, following Dokes

(ibid) this study adopts the term ideophone as a cover term for all forms of sound symbolism in Akan.

Aside from the direct sound-to-meaning feature of ideophones that violate the arbitrariness of languages, ideophones in the world's natural languages manifest a large variety of peculiarities. Some of these marked features of ideophones are phonological. For instance, the common phonotactic rules, tone, stress and length that apply to ordinary grammatical forms may be inapplicable concerning ideophones (Childs 1988; Klamer 2002). Other peculiar features of ideophones may reflect in the domain of morphology, syntax, semantics, and even pragmatics. Morphologically, reduplication is a striking feature of ideophones yet in many languages they are nonconcatenative. It is with this nonconcatenative property of ideophones that Zwicky & Pullum (1987) observed that ideophones are marked in the extent to which they conform to the conventional process of affixation and word formation. Moreover, the syntactic distribution and position of occurrence of ideophones in sentences appear to be constrained. In this regard, Diffloth (1972) notes that ideophones are predominantly effective in declarative sentences than non-declarative sentences, especially in the affirmative constructions. The general characteristics, usage and frequency of ideophones might not be applicable to all speech context. In a prosaic or an extremely official speech context, the frequency and properties of the ideophone may be less. However, it is an indisputable fact in the literature that ideophones reflect numerous feature deviations from regular grammatical forms. Thus, ideophones have striking characterizations that make them distinct from other word forms. In this line, Kita (1997) describes ideophones as a distinct representational mode of meaning that has direct contact with the sensory motor and affective information.

Like many other African languages, Akan has a widespread ideophones. Yet, many ideophones continue to be coined in informal speech to express iterative and affective concepts. Despite its prevalence in Akan and distinctive characteristics, not much have been done on Akan ideophones in the literature. It is against this backdrop that Agyekum (2008) began a morphophonological characterization of Akan ideophones such as its reduplicative features, high pitch levels and non-conventional phonotactics that kick against the arbitrariness of language. He further discusses the ethnographic context, syntactic category and how pragmatic use of ideophones stimulate sensual perceptions. Accordingly, Ofori (2010) expounds the morphophonological and metaphorical principles and processes involve in the formation of Akan ideophones. He establishes the frequency of vowels and consonants in Akan ideophones while metaphorically associating sound qualities to meaning. In effect, it attributes the breach of phonotactics as the penalty for capturing sound emissions vividly and undermining language arbitrariness but reduplication is ascribed to the effect of intensity. All these features of

ideophones make it a powerful device for achieving vividness. Thus, Sefa-Owusu (2013) discusses the aesthetic use of ideophones in narrative performance to arouse interest. However, this study is situated within the interface of the syntax and semantics properties of Akan ideophones. Thus, as part of contributing to the ongoing discussion on the syntactic class of ideophones, this study explores the syntactic dynamism in ideophones as a major word class. In this regard, it demonstrates that ideophones can pick up nominal functions as well as adjectival and verbal functions in a sentence. Additionally, the study examines the syntactic restrictions on the distribution of ideophones to the polarity of the verb collocating with a particular ideophone in a sentence. For instance, the English phrases; *at all, for years, in weeks, any, yet* and *never* collocate with only negated verb phrases in a sentence   (cf. Krifka 1995, Lawler 2007). Similar issues of collocation are noticeable within the distribution of Akan ideophones. This is shown in example (1) below.

(1a) *Kofi anka huute[1]*   "Kofi has not said anything"
(1b) **Kofi aka huute**   "Kofi has said anything"

Example (1a) is meaningful in Akan but its reversal in (1b) is unacceptable and obscured semantically. What accounts for the restriction and the breakdown in meaning? This and many other issues relating to collocations in ideophones and their dynamism in function as a major word class are the subjects of investigation in this study.

The rest of the discussion is done within the following sections. Section 1 presents a general introduction to the study and a brief description of the Akan language. Section 2 presents a brief background on the conceptual framework of ideophones in linguistic studies as well as the theoretical framework for the study. Section 3 contains the methodology employed for the study. Section 4 is a discussion on the syntactic category of Akan ideophones. This section is also devoted to the discussion on the collocations and polarity sensitivity in Akan ideophones within the theoretical framework of Progovac's (1993) Entailment and binding theory. The last issue in section 4 is a test of polarity sensitivity on tense aspect mood. Section 5 concludes the discussion.

1.1 The Akan Language

Akan as a descriptive characteristic refers to an ethnic as well as a specific linguistic group of people in Ghana and part of the Ivory Coast. In Ghana, geographically, this group of people predominantly occupy the southern (including the Oti enclave carved out of the Volta Region) and middle part of Ghana. The Akan people, with their various subdivisions, have an identical culture and a language with intricate relationships leading to mutual intelligibility. According to Agyekum (2004), the language consists of about ten (10) related dialects that include Asante, Akuapem, Fante, Agona, Assin, Ahanta, Akyem, Wassa, Bono and Gomoa. From the lists of

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[1] This is glossed as: **Kofi   a-n-ka   huute**
                    Kofi   PFT-NEG-say   anythingIDEOPH

dialects, it is only the three major dialects; Asante, Akuapem, and Fante that have achieved literary status. Nine out of the sixteen regions in Ghana are predominantly occupied by the Akans and they speak any of the dialects as their mother tongue. These regions are Central, Eastern, Ashanti, Western, Western North, Bono East, Bono, Oti, and the Ahafo regions. However, due to migration, Akan speakers can be found across the length and breadth of the country. It is for this reason that it is statistically estimated that a little over 50% of Ghana's over 30 million population either speak or understand any of the three major dialects as an L1 or a lingua franca (cf. Simons & Finnig 2017). Therefore, due to its dominance and wider coverage, it is not out of place to claim that Akan is the most widely spoken language in Ghana.

As in most Niger-Congo languages, the basic word order of Akan is SVO. This order is also known as the nuclear predication. This order may be subject to peripheral modifications mostly adverbial adjuncts (cf. Osam 2004). An example of the SVO structure is demonstrated in (2) below.

(2a) ***Kofi frεε Ama***   "Kofi called Ama"
(2b) ***Kofi frεε Ama nnora***[2]   "Kofi called Ama yesterday".

The sentence in (2a) is an SVO structure without any peripheral but (2b) has a peripheral modification. In Akan, the subject is omittable in imperative sentences and the verb is mandatory but the presence of the object and adjunct depends on the valency of the verb.

2. 0 Definition and Background of Ideophones

Cross-linguistically, several terms have been coined in the description of the phenomenon popularly known in today's linguistic literature as ideophones. Some of these terms were derived from the phonetic properties of the phenomenon. Among them is the compound word 'ideophone' which comprises idea + phone (sound) propounded by Doke (1935). Like ideophones, other terms derived from the phono-semantics of the concept include ideomatopoics (Alexandre 1966; Samarin 1971). Others are onomatopes (Sanderson 1922; Hulstaert 1934; Mamet 1960) and onomatopoetic vocables. Other terms like picture words, mots images in French by Burssens (1946) have been composed to describe the concept. However, among the phono-semantic terms and other morpho-semantic labels such as imitative, echoism, it is the term ideophone that has survived the test of time in the literature.

In this respect, Akanbi (2014) describes an ideophone as a kind of communicative device in which particular words are used to describe what is referred to in such a way that the hearer will picture what is being spoken about in mind. It is also seen as a vivid lexical representation of an idea in sound (Doke, 1935). Thus, an ideophone is a special group of words that resemble the noise or sound associated with the phenomenon those words represent. These are descriptive words connoting the noise of the described event. It shows that an ideophone can describe an

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[2] **Kofi   frεε   Ama   nnora**
   S   V   O   Adjunct

event by sound, manner, smell, action, or colour. This is due to the phonetic fact that an ideophone is mostly produced through a rise in pitch, stress, tone, sound germination, or reduplication of a component of the stem (Awoyale 1989; Kruspe 2004, Akita 2009). It is this reduplicative and high pitch feature associated with the production of an ideophone that qualifies it to be used to express the intensity of an experience.

From the foregoing, it is obvious that an ideophone has a level of phonological uniqueness. It is in line with this phonological uniqueness that Welmers (1973) described an ideophone as vocal images, which frequently contain sounds not otherwise noticed in regular lexical items. Assessing the phonological peculiarities of an ideophone leads to the plausibility that an ideophone is a product of a rise in tone especially among the tone languages of Africa. This is reinforced by the observation that the phonetics of an ideophone shows an abnormally high or low tone, tempo, or loudness as characterizing the production of that particular group of words but not the stylistics of the language (Cole 1955; Childs 1988). The auditory and phonetic properties of an ideophone in a language are noticeable because it deviates from normal phonotactic rules and the course of normal speech. These distinct physical features facilitate the iconicity of an ideophone in a language.

Aside from the marked phonology of ideophones, another striking morphosyntactic property is their reduplication. Samarin (1971) identified this characteristic among ideophones of the Bantu language. However, Dingemanse (2012, 2018) noted that reduplication is a feature of almost all ideophones among African and Asian languages. The reduplication in an ideophone could be a repetition of a sound, syllable, or either a part or a whole of the stem. In this regard, it is the extent of the reduplication coupled with the loudness of other physical features such as stress, pitch, tone, and tempo that determines the intensity of the description. As indicated in Agyekum (2008) all these marked phonological and morphosyntactic properties of ideophones are true among Akan ideophones. The sentences in example (3) reinforce this position.

(3a)   *Ɔbɔɔ no mu **tum***!   "S/he hit him hardly"
(3b) Ɔbɔɔ no mu **tumtum!**   "S/he hit him very hard"

Comparing sentence (3a) and (b), the only difference in meaning is in the intensity of the action. However, it is noteworthy that some Akan ideophones are derived from verbs. Doke (1947) treated such a derived ideophone as a deverbative ideophone in the Bantu language. A similar situation can be accounted for in the Akan context. However, in Akan, the relationship between such verbs and the derived ideophone is that of the action and the corresponding imitative sound associated with the action. The descriptive sound in the ideophone can be directly or indirectly linked to the verb. It is due to this semantic connection between the verb and the derived ideophone that probably permits the two to collocate in a sentence. The collocation of the derived ideophone and the source verb expresses a complete thought. Examples of deverbative ideophones and their collocation with the source verb in the Akan phrase include the following from Fante and Akuapem

(4a) ***Atsew tseee!***   "Tear"
(b) ***Awaw waa!,***   "Split"
(c) ***Dow no doee****!*   "İnject"

The final word in each phrase is an ideophone that represents the sound in these verbs. Similar issues of syntactic dynamism in an Akan ideophone and collocations based on verbal polarity are subsequently addressed in this study.

2.1 Theoretical Framework
2.1.1 Entailment and Binding
The discussion on the polarity of ideophones is formalised on the theory of Entailment and Binding (DE-BI). This theory of Entailment and Binding is a merger of the Entailment (EN) theory of Ladusaw (1980) and Progovac`s (1991) theory of binding. In this novel model, Progovac (1993) makes two central postulations suitable for an analysis on polarity sensitivity. The model calls for an identification of the element that licenses polarity especially the negative polarity item. In support of the licenser is the locality conditions which hold between the licenser and the polarity sensitive expression. Often, a polarity operator in the form of either a negator, negative quantifiers, comparative and superlative restrictors license a negative polarity item while a nil negation or a positive quantifier licenses a positive polarity item. Binding (BI) postulations foster locality conditions. Accordingly, binding is expected to be coreferential between the polarity sensitive item and its licenser. Therefore, they are clausemates and can be co-indexed within the same clause. Thus, the antecedent of polarity item could be a negator or an empty polarity operator. The following sentential comparison exemplifies the application of the various binding assertions.

(5a) (*I don't$_x$ know him at all$_x$/ yet$_x$.   vs   * I know$_y$ him at all$_x$ / yet$_x$*).
(5b) *(Ama is$_x$ here already$_x$/ rather$_x$ vs   *Ama isn't$_y$ here already$_x$/ rather$_x$).*

The rightward sentences for both (5a) and (5b) are odd and unacceptable. For (5a), the oddity is because without the negator, "*at all or yet*" is an unlicensed NPI and cannot occur in its rightward counterpart. For (5b), the rightward sentence is also unacceptable due to the faulty collocation or binding between the negator and the PPI; *"already or rather"*. The varying indexation shows the breach of polarity sensitivity and poor binding relationship. A resolution of the unacceptability requires a consideration of the polarity sensitivity of the items involved and their collocation accordingly. This fosters a proper binding relationship for acceptability.

However, unlike Upward Entailing /UE/ functions which are order preserving and closed under supersets, Downward Entailing /DE/ functions of entailment are order reversing and closed under subsets. Thus, DE functions of inference reversal from a set to subset incline expressions towards NPIs while UE functions incline expressions towards API/PPI (cf. Fintel 1999). Fintel (ibid) gives the following example assuming that Italian ice cream is semantically stronger than ice cream:

(6a). ***Mary ate Italian ice cream [entails] Mary ate ice cream***.

The above relation is a UE function meaning it is positive that *[Mary ate ice cream]* which is a superset because it could be any ice cream but the subset gives a stronger item *[Mary ate Italian ice cream]*. It is a modifier towards positivity and PPI`s.

Nevertheless, DE functions are inference reversal towards a deeper or specific negativity and NPI as in (6b) below.

(6b) ***Mary didn`t eat ice cream [entails] Mary didn't eat Italian ice cream***.

DE reverses from a set to subset because *Mary {didn`t eat {ice cream}* is superset and *{Mary didn`t eat Italian ice cream}* is a subset of ice cream (cf. Krifka 1990: 161; Fintel 1999: 2)
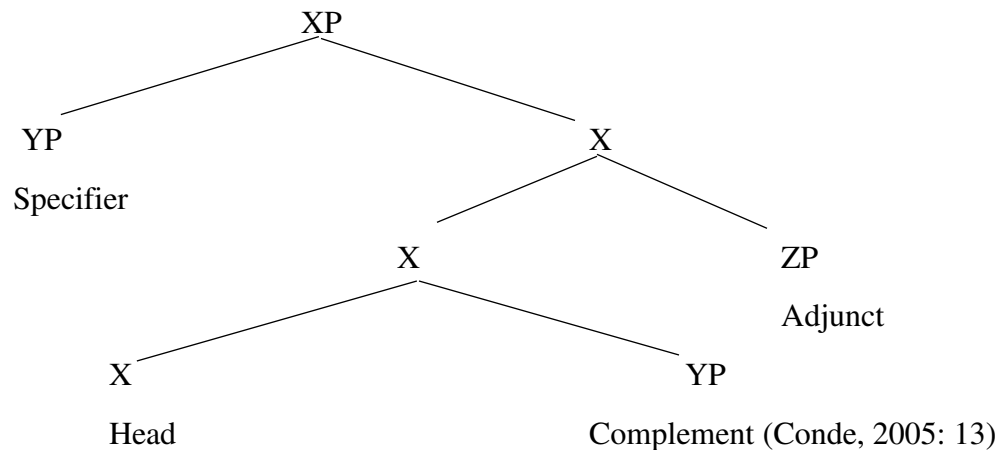
2.1.2 The X- Bar Theory

The x-bar theory encompasses the idea of cross categorial similarities which was developed into a theory to describe the generic form of any phrase. This theory is termed X- bar because it implies a number of projections of a certain level or bar (cf. Jacondoff 1977). It states that in a phrase of the form XP, where X is a lexical category, all X have the same properties. Any XP is a constituent having an obligatory element as the head of the phrase. The head is a category whose properties determine the structure of the phrase and dominate the other members in the constituent. The head projects a phrase (cf Chomsky 1989, Carnie 2013). Thus, the model employs fundamental phrase structure rules where a major element; its head develops to incorporate other elements that complement its meaning (cf. Conde, 2005).

The phrase structure rules

(7) (For any lexical category X, X^0 = Head)
   XP ------- Specifier X^1
   X^1---------X^0 Complement (= YP*)

The basic structure of a phrase (XP) is illustrated on Fig (1).

Figure 1: Illustration of basic Phrase Structure Rules

The discussion in this study is formalised on the X-bar theory as well as the Entailment and Binding model. The X-bar theory shows the dynamism in the functions and syntactic category of ideophones but Entailment and Binding (EN-BI) accounts for the polarity sensitivity in the distribution of ideophones. The adoption of the two models is suitable because the study is a syntax-semantics account on ideophonic polarity sensitivity and it fits into the aims of the EN-BI licensing approach. This approach intends to address the limitations in either a purely semantic or syntactic approach yet combining the strength of both.

3.0 Methodology

According to Duranti (1997), ideophones are used in speech to represent the speaker`s psychological inner state of affairs towards a given state or experience and the persons involved. This statement highlights the expressive nature of ideophones and their ability to be used to express the speaker's emotions such as pain, pleasure, sorrow, love, hatred, and the likes. The psychological use of ideophones in speech is very true in the case of Akan. It is as a result of these properties that Agyekum (2008) drew data from Akan concert parties, comedies as well as Akan oral and written literature.

Similarly, this paper draws its data from the Akan music industry, the Akan radio and television media space. In the quest of these industries to entertain, educate and inform vividly, the music and media industries are known for the use of emotive language to achieve their goal. Hence, this study draws excerpts of data extensively from Akan radio and television news presentation, reportage, and Akan song lyrics. An example is the midday and evening Akan news presentation on Angel TV/Radio tagged as "*orgasm news*" and the "*one-corner*" lyrics. This is supported by an excerpt of data on ideophones coined and used in people's daily interactions in casual speech and informal contexts. Radio/TV reporters, presenters and other informal users of ideophone contacted in the course of the study explained that, the device helps to achieve accuracy and paint a vivid picture of an event. It is from these industries and casual conversation with other people that the study derives varieties of Twi and Fante ideophones for the discussion.

4. Syntactic Category of Akan Ideophones

The debate on the syntactic category of ideophones continues to be a matter of divided opinion. In this debate, Dryer (1997), Croft (2001), Laughlin (2007), Haspelmath (2007), Beck (2008) among others identified ideophones in their various language of research as part of the other major lexical classes while other scholars such as Alpher (1994), Agyekum (2008), Kanu (2008), treated ideophones as an independent word class. In this section, we demonstrate the functional dynamism as well as the distributive relationship of Akan ideophone to make a case in support of Agyekum (2008) that ideophones form a distinct word class in Akan.

However, to discuss word classes, it suffices to indicate that word classes are generally determined through semantic, morphological, or syntactic criteria. Due to the pitfalls associated

with each of the criteria, Beck (2002) observes that adopting one single criterion for the determination of a word class is inadequate. This is because some word forms such as Akan ideophones are known to have multiple meanings, and for that reason, adopting the semantic criteria might be problematic.

Hence, we proceed to conduct a test for noun, verb, adjective, and adverb on Akan ideophones using the syntactic criteria. This is necessary because, according to Baker (2003), syntactic function and distribution tend to be the most effective criteria. Data (8) below shows a group of sentences labeled group A, B, C, and D for a test on noun, verb, adjective and adverb respectively.

(8)

Group A - Test for noun

a. **Me-te-e**   **timtim**   **nnora**.
  1SG[3]-hear-PST   IDEOPH   yesterday
  'I heard the sound yesterday'

b. **Abɔfra no**   **a-n- ka**   **boe**
  Child   DEF   PRF-NEG-say   IDEOPH
  'The child didn't say anything'

c. **Huute**   **mpo**   **papa**   **no**   **n-ni**
  IDEOPH   FOC   man   DEF   NEG- have
  'The man has nothing.'

d. **Kookoo**   **bi**   **a-ba**   **me**   **yam**
  IDEOPH   DEF   PRF-come   1SG   stomach
  'My stomach is stormy.'

e. **Twurododo mpo a-n-yɛ**   **toa**   **no**   **ma**   **na**   **kokoko**
  IDEOPH   FOC. PRF-NEG-do   bottle DEF   full   FOC.   drops IDEOPH
  'Even a continuous flow of water couldn't make the bottle full how much more mere drops.'

It is possible that Akan ideophones can pick up nominal functions. For instance, in group (A), the ideophones in the sentences (8a- e) occupy a nominal slot. That is, the ideophone *tintim* and

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[3] The abbreviations have been defined as follows: 1SG (First person singular), PST (Past), IDEOPH (Ideophone), DEF (Definite), PRF (Perfect), NEG (Negation), FOC (Focus), 2SG (Second person singular), LOC (Locative), PL (Plural), STAT (Stative), CONJ (Conjunction), FUT (Future), Fa (Fante).

boe in sentence (8a and b) respectively are in the object position in their various sentences. They, therefore, perform the role of an object to the transitive verbs in the sentences. That notwithstanding, an ideophone can perform a subject function in a sentence as in example (8c -e) where the ideophone swaps the subject position for emphasis. In this, the ideophone; ***kookoo*** (stormy), ***huute*** (nothing) and ***twurododo*** (waterfall) respectively function as subjects in the sentence (8c - e). This object and subject function of the ideophone is evidenced irrespective of the failure of the ideophones to inflect morphologically for number or case. This shows the syntactic dynamism and distinctiveness of Akan ideophones.

(9)   **Group B – Test for verb**

a.   **Abɔfra no   a-pupu   a-gu   hɔ**
Child   DEF   PRF.defecate IDEOPH   PRF.lie   there
'The Child has defecated over there.'

b.   **Obiara   bombom   fam**
Everybody sit heavily IDEOPH   floor
'Everybody is sitting on the floor.'

c.   **Maame no   bee   m-mɔfra   no**
Woman DEF   scorn IDEOPH   PL- child   DEF
'The woman scorned the children.'

d.   **Dɔkota   no   de   paneɛ no   doee   Kofi   to**
Doctor   DEF   use   syringe DEF   inject IDEOPH   Kofi   buttocks
'The Doctor used the syringe to inject Kofi's buttocks hardly.'

In group B, a similar set of ideophones are now seen occurring in a verbal slot in their respective sentences. These ideophones signify action or a state of being. This is usually the sound or noise associated with the action that is eventually replacing the actual verb as a synonym. For instance, the ideophones in the examples (9a-d) connote an action. The verb in example (9a) symbolizes the farting sound made when defecating while (9b) symbolizes the noise in bouncing the buttocks on the floor while (9c, d) represent the sound of a shout and the yell of pain respectively. For these symbolisms, they have been creatively used as verbs hence their ability to occupy the verb slot in examples (9a- d). Ideophonic verbs can be transitive as in examples (9b-d) having a direct object and intransitive as in example (9a).

(10)   **Group C - Test for Adjective**

a. **Me-m-pɛ   nanteɛ   dwondwondwon   no**
1SG-NEG-like   walking   aimless IDEOPH   DEF
'I don't like aimless walking.'

b. **Ne   tiri - m   a-yɛ   hee!**
    3SG   head –LOC   PRF-make   noise IDEOPH
    'S/he is confused.'

c. **Gya   hoo   wɔ   fie**
    Fire   bounty IDEOPH   be.STAT   house
    'There is a bounty of fire in the house.'

Moreover, the ideophones in group C take up an adjectival function. Some are attributive and others predicative. In this regard, the ideophone; *hee* (noisily) in example (10b) is functioning as a predicative adjective but *dwondwondwon* (aimless walking) and *hoo* (bounty) in example (10a) and (10c) respectively are functioning as attributive adjectives that modify the noun head.

(11)   **Group D – Test for Adverb**
  a. **Abaa no   a-bu   penpen!**
    Stick   DEF PRF-break   noisily IDEOPH
    'The stick had broken noisily.'

  b. **Tam   no   tse-e-w   tseee!** (Fa.)
    Cloth   DEF. torn-PST   IDEOPH
    'The cloth torn apart'

  c. **Kofi   a-di   sotorɔ   wam!**
    Kofi   PRF-eat   slap   IDEOPH
    'Kofi was slapped heavily.'

Finally, the ideophones in group D assume one of the functions of an adverb. In this context, the ideophones qualify the verb. For instance, the ideophone; *penpen* (noisily) in example (11a) is an adverb of degree that indicates the frequency of the action in the verb but *wam* (heavily) in example (11c) shows the gravity of the slap. From the above illustrations, it is obvious that Akan ideophones have a wide syntactic distribution that affects their function in a sentence. The set of sentences from groups A – D illustrate the variety of syntactic functions and distribution in Akan ideophones. We then proceed to further demonstrate this distribution on the X-bar theory.

4.1 The Distribution of Akan Ideophones
In highlighting the distribution and relationship between various words in a sentence, the X-bar model which focuses on the stringing of words together and projections to form various phrase constituents and other units can be useful. Thus, in the quest to demonstrate the distribution and

grammatical relationship within some of the sentences in Group A-D, we adopt the X-bar model below for this purpose. However, except in Fig. (2), intermediary nodes are avoided in the subsequent diagrams. This is on grounds of simplicity and emphasis on the dynamism and switch from the various lexical categories in the final nodes. Figure (2) below shows the relationship and function of the various lexical items involved in one of the sentences from group (D).

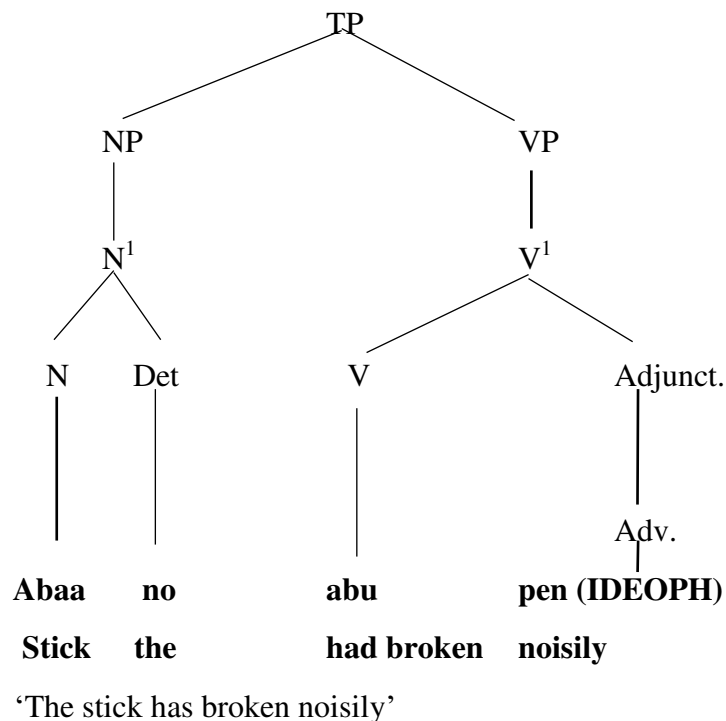'The stick has broken noisily'

Figure (2): **Ideophone functioning as an Adverb**

As illustrated on figure (2) above, the sentence is made of a Noun Phrase (NP) and a Verb Phrase constituent. The NP constituent has the determiner *no* (the) and the noun head; **Abaa** (stick) occupying the subject position in the sentence. The predicate component has the VP constituent which comprises the verb head; **abu** (had broken) and a modifier. The modifier to the verb head in the post-verbal slot is an adjunct in the realization of an ideophone; **pen** (noisily). This ideophone modifier functions as an adverb of manner that underscores the intensity of the verb. This ideophone and the others in group D are adjunct in a post-verbal slot. Thus, by modifying the verb, they can be said to be performing one of the functions of an adverb in their respective

sentences. Aside from functioning as a modifier to a verb, an ideophone can undertake nominal functions. This is illustrated on figure (3) below.
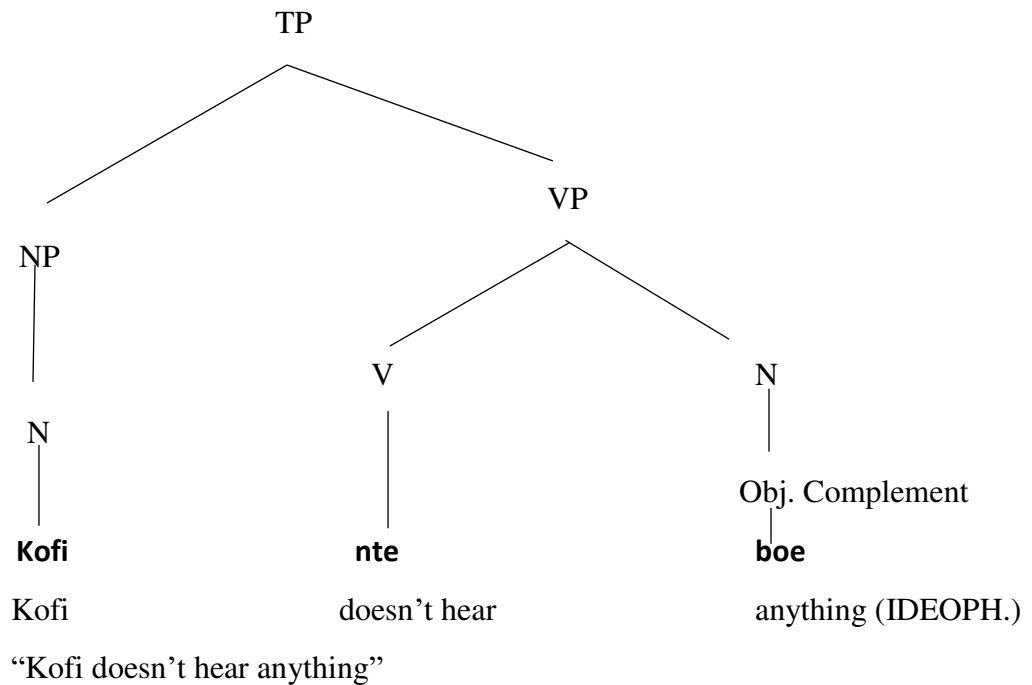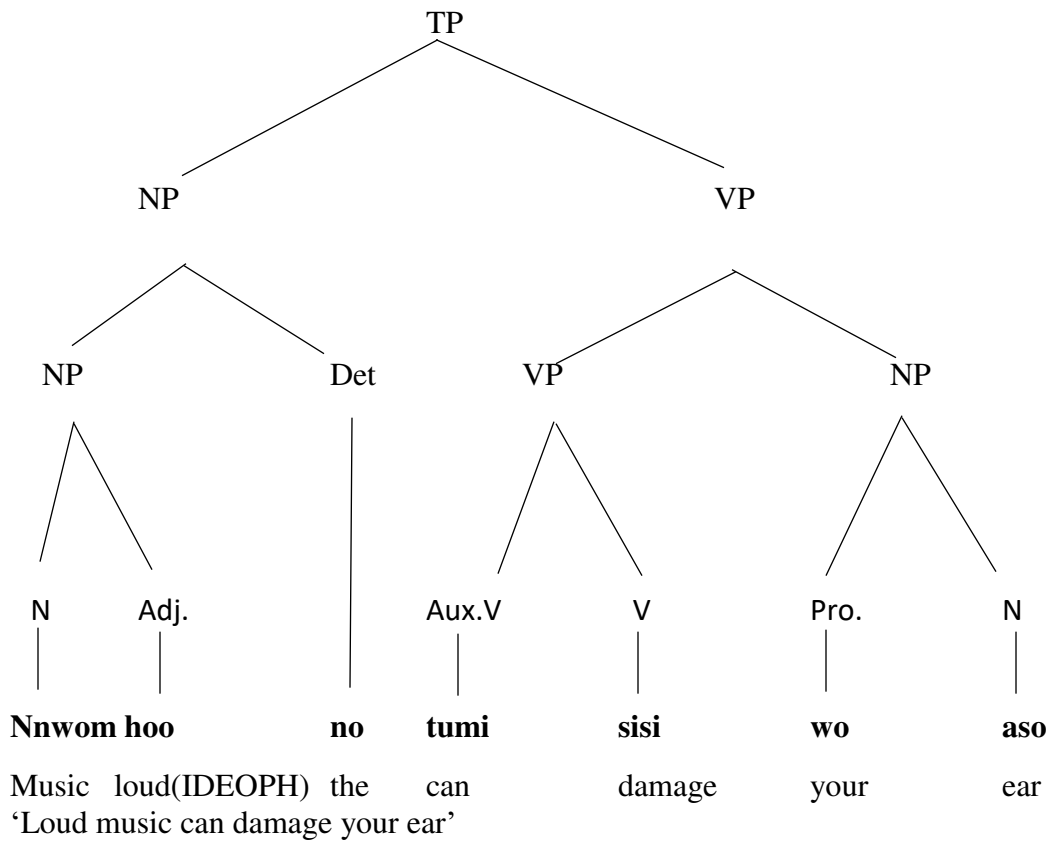
```
                              TP
                    ┌──────────────────┐
                  NP                    VP
                   │              ┌──────────────┐
                   N              V              N
                   │              │              │
                                            Obj. Complement
                 Kofi           nte             boe
                 Kofi        doesn't hear    anything (IDEOPH.)
```

"Kofi doesn't hear anything"

Figure (3): **An illustration of an ideophone functioning as a noun**

The above figure exemplifies that an ideophone can function as a noun in a sentence. This is evidenced in the VP constituent that is made of an NP. The VP has a transitive verb; *nte* 'does not' as its head. Therefore, as usual of transitive verbs, the (V) requires a nominal complement to support the transfer of the action in the verb. With nominal qualities, the ideophone; *boe* 'anything' tends to fill that slot as an object to the transitive verb; *nte* 'does not' in the sentence. Similar ideophones in group (A) above, such as *timtim* 'sound' in example (8a) and *boe* 'nothing' in example (8b) function as the object to the verbs in their respective sentences. Meanwhile, *huute* 'nothing' and *kookoo* 'stormy' in example (8c) and (8d) respectively are subjects. This reinforces the assertion that some Akan ideophones have nominal functions. Next,

the adjectival function in Akan ideophones as exemplified in Group (C) example (10c) is illustrated on figure 4 below.

TP
NP   VP
NP   Det   VP   NP
N   Adj.   Aux.V   V   Pro.   N

Nnwom hoo   no   tumi   sisi   wo   aso

Music   loud(IDEOPH) the   can   damage   your   ear
'Loud music can damage your ear'

Figure (4): An Ideophone functioning as an adjective

Figure (4) shows the relationship between the words involved in the sentence; ***Nnwom hoo no tumi sisi wo aso*** 'The loud music can damage your ears'. On this diagram, it is demonstrated that apart from the NP constituent in the object position, there is another NP constituent preceding the main verb. This second NP is functioning as the subject in the sentence. However, modifying the nominal head in the NP is an ideophone; ***hoo*** 'loud' that stresses the loudness of the noun head. As an attributive modifier, the ideophone stands adjacent to the noun head it modifies. Similar relational analysis can be made on example (10a) in group C which has another ideophone;

dwondwon 'aimless' in attributive function. Nevertheless, the ideophone in example (10b) in group (C) is predicative. This further reinforces the adjectival dynamism in Akan ideophones.

The final possible major word class role that an ideophone takes up is the verbal function. This verbal function is exemplified in the sentences in group (B) above. Therefore, Figure (5) below illustrates the verbal function of an ideophone as stated in example (9a).
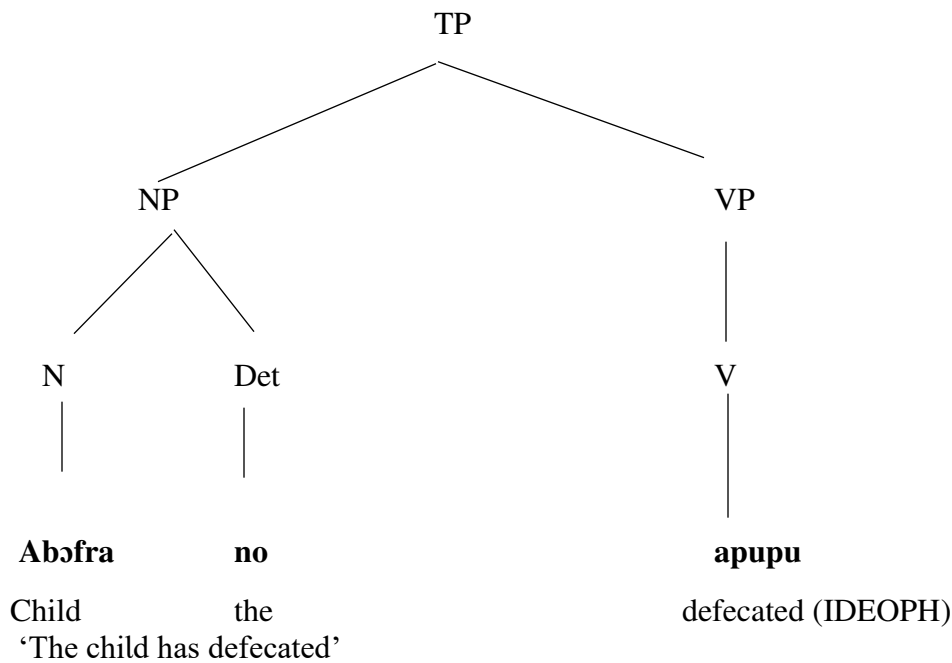
```
                              TP
                   ┌───────────┴───────────┐
                  NP                        VP
               ┌───┴───┐                    │
               N       Det                   V
               │        │                    │
             Abɔfra     no                  apupu
             Child      the          defecated (IDEOPH)
              'The child has defecated'
```

Figure 5: **An illustration of ideophone functioning as a verb**

Figure (5) shows that an ideophone can play a verbal function in a sentence. In this illustration, the head verb in the VP constituent is an ideophone; ***apupu*** 'defecated'. As indicated earlier, this is the farting sound associated with the action of defecating. Hence, through sound symbolism, it creatively functions as a synonym to the actual verb. This shows the ability of the ideophone; *pupu* 'defecate' to fill the predicate slot in the sentence as the principal verb. Similar connotative analysis and sound symbolism can be drawn on the other verbs in Group (B). Thus, the verbal function adds up to the nominal and other modifying roles that Akan ideophones can play. It is therefore not misplaced that Schachter (1985) postulates that a key criterion for defining a part of speech is their grammatical function but not the semantic senses. Accordingly, from the exemplification in Group A- D, and the subsequent distributional analysis on the various tree diagrams, it is shown that Akan ideophones do not have a single general function. In this respect,

an ideophone can function as a noun, adjective, verb, or even an adverb. The multiplicity of function among Akan ideophones from noun to verb, adjective, and then an adverb role reinforces the syntactic dynamism in Akan ideophones. It is therefore difficult to subsume all Akan ideophones under any particular major class. Neither will it be easy to categorize them into four.

In summary, the discussion has shown that ideophones can perform nominal and verbal functions. Moreover, it can assume the functions of an adjective as well as one of the functions of an adverb. This syntactic dynamism together with its rare arbitrariness highlights the distinctiveness in Akan ideophones. Again, new forms of ideophones continue to be creatively introduced to increase the existing stock. Therefore, following Agyekum (2008), Akan ideophones should be treated as a unique independent major word class than integrate it as part of the existing part of speech. That is, with their unique features, Akan ideophones constitute an independent class with multiple functions.

4. 2 Collocations in Akan Ideophones
Many scholars such as Childs (1994) and Dingemanse (2012) have asserted that ideophones are mostly relevant in declarative sentences. However, Akan ideophones can occur both in affirmative and non-affirmative sentences. For this reason, Akan ideophones can be syntactically categorized into two major groups depending on their sensitivity to the polarity of the verb that collocates with it in a sentence. The two categories of ideophones that we derive based on polarity sensitivity are; Affirmative or Positive Polarity Ideophones (API/PPI) and the Negative Polarity Ideophones (NPI). This type of ideophonic classification is not misplaced because according to Akanbi (2014), ideophones have their form of verbs that collocate with them in a sentence. In Yoruba for instance, Akanbi (ibid) opines that the tone of the ideophone determines its verbal collocant. Consequently, a change of tone in the ideophone affects the type of verb to be selected in a Yoruba sentence.

However, in Akan, it is rather the polarity of the verb that determines the selection of a particular type of ideophone to collocate with in a sentence. As already indicated, it is based on these collocations that Akan ideophones can be categorized accordingly. The first category is the type that only accepts or co-occurs with positive verbal items in the affirmative polarity. Such ideophones are often stringed with affirmative verbs in a sentence. As a result, a negative inflection in the verb affects the acceptability of the sentence. That is, an Affirmative or Positive Polarity Ideophone dominantly requires an affirmative verb to collocate with it in a sentence, and failure to collocate with a positive verb renders the sentence unacceptable, odd and subject to several inferences. Sometimes, the demand for an affirmative verb is so dominant that when an API collocates with a negated verb, the sentence still maintains its affirmative meaning despite the negation in the verb. An alternative meaning that the unintended negation could bring to the sentence is that the action in the verb occurred but perhaps not in the manner or intensity as captured by the ideophone. Thus, negation in a verb collocating with an API becomes recessive, failing to nullify the affirmative dominance and the gravity expressed by the verb. Hence, this type of ideophone known as the Affirmative Polarity Ideophone is sensitive to the polarity of the

verb collocating with it in a sentence. For this reason, it often requires an affirmative verb to collocate with it.

The above syntax-semantics description fittingly identifies the following ideophones as part of the API category. This includes; ***kumm, sam, puw, twom, tsimm, hoo, kimkim, ha, suu, booboo, doe, wam, koow, bam, torom, dwee, hamham, toe.*** These ideophones usually function as an adverb of degree or manner. According to Biber & Finnegan (1988) and Rhee (2016) adverbs of degree and manner are subjective speaker-oriented adverbs but infer specificity in positive polarity than in negation on the sense continuum. That is, a verbal negation for an API results in an increasing sentential vagueness. In this regard, the following group of sentences further illustrate that Affirmative Polarity Ideophones (API) collocate with affirmative verbs in a sentence and negating the verb affects the acceptability and precision of the sentence. Illustrating the polarity sensitivity of API, we test its collocation with positive verbs in affirmative sentences as in (12a -i) against its negated counterparts in (13a -i).

(12) Collocation in Affirmative Polarity Ideophones

AFFIRMATIVE SENTENCES

a. **W-a-bɔ**   **Ama**   **asom** **too!**
   3SG-PRF-hit   Ama   cheek IDEOPH
   'S/he has slapped him hard`

b. **Ɔ-de**   **nsu**   **a-gu**   **ne**   **ho**   **sam!**

   3SG-hasPST   water   PRF-pour   3SG   REFL   IDEOPH
   'S/he has completely poured the water over herself'

c. **Ɔ-bu**   **mmɔre**   **no**   **mu**   **waa!**
   3SG-break   corn dough   DEF   LOC   IDEOPH
   'S/he completely breaks the corn dough.'

d. **Ɔ-nante**   **kimkim!**
   3SG-walk.STA   IDEOPH
   'S/he walks majestically.'

e. **Aboa**   **no**   **ka-a**   **no**   **doee!**
   Animal   DEF   bit-PST   3SG   IDEOPH
   'The animal bit him hard`

f. **Yaw** **a-hwe**   **fam**   **timm!**
   Yaw   PRF-fall   down   IDEOPH

'Yaw has fallen hard'

g. **Kofi a-bɔ   fam   kumm!**
    Kofi   PRF-hit   down IDEOPH
    'Kofi has fallen hard.'

h. **Wɔ-a-gye   torom   kɔ**
    3PL-PRF-give   IDEOPH   go
    'They had run away.'

i. **Akua mene   fufu   no   kwan!**
    Akua swallow.STA fufu   DEF   IDEOPH
    'Akua hurriedly swallows up the fufu.'

(13)   NEGATED SENTENCES

a. **Ɔ-a-m-bɔ   Ama   asom   too! (Fa.)**
    3SG-PRF-NEG-hit   Ama   cheek   IDEOPH
    'S/he had not slapped her hard.'

b. **W-a-m-fa   nsu   a-n-gu   ne   ho   sam!**
    3SG-PRF-NEG-take   water PRF-NEG-pour   3SG   REFL IDEOPH
    'S/he had not completely poured the water on herself.'

c. **Ɔ-m-mu   mmɔre   no   mu   waa!**
    3SG-NEG-break   corn dough   DEF   LOC   IDEOPH
    'S/he does not completely break the corn dough.'

d. **Ɔ-n-nante   kimkim!**
    3SG-NEG-walk   IDEOPH
    'S/he does not walk majestically.'

e. **Aboa   no   a-n-ka   no   doee!**
    Animal DEF PRF-NEG-bite 3SG   IDEOPH
    'The animal didn't bite him hard.'

f. **Yaw   a- n-hwe   fam   timm!**
    Yaw   PRF-NEG-fall   down IDEOPH
    'Yaw had not fell down hard.'

g. **Kofi a-m-mɔ   fam   kumm!**
    Kofi PRF-NEG-hit   down IDEOPH
    'Kofi had not fallen hard.'

h. **Wɔ-a-n- nye   torom   a-n-kɔ**

      3PL-PRF-NEG-take IDEOPH   PRF-NEG-go
      'They have not run away.'

  i. **Akua a-m-mene   fufu   no   kwan!**

     Akua   PRF-NEG-swallow.STA   fufu.   DEF   IDEOPH
     'Akua did not hurriedly swallow up the fufu.'

From the constructions above, the affirmative sentences in (12a- i) are more acceptable and relatively unambiguous than in (13a- i) which are unacceptable and relatively ambiguous. For instance, example (13i) can mean, he/ she swallowed the fufu but not *kwan* 'hurriedly' as in the manner described by the ideophone but maybe *wom!* 'once', *kukuro* 'heavily', *hamham* 'fast'. Any of the three inferences make it ambiguous yet the possible interpretation that the swallowing event did not happen at all cannot be ruled out especially in the context of a quick retort to deny a swallowing allegation in that description. Several other extrapolations can be done as a result of the poor verbal polarity and adverb collocation which widens the continuum of inferences.

It is apparent from (13a- i) that, except the negation, the sentences have the same constituent as its counterpart in (12a- i). This suggests that the ideophones are sensitive to the polarity of the verbs. Thus, omitting the ideophone to derive; *Akua ammene fufu no* 'S/he didn't swallow the fufu' produces a simple and relatively acceptable version. However, *Akua ammene fufu no kwan* is vague, odd and perhaps ambiguous as compared to; *Akua amene fufu no kwan* which is unambiguous and precise. The implication is that the set of ideophones in sentence (12a -i) are Affirmative Polarity Ideophones which perform better in a positive environment. Consequently, API collocate or co-occur with verbs in a positive mood for acceptability and precision. This is possible because the negated counterparts of the positive sentences in (12a - i) are vague. The ambiguity is probably because the presence of API type of ideophones in the sentence conflicts with the negative property of the verb. On this account, sentences in (12a -i) are relatively acceptable and unambiguous than their negated counterparts in (13a - i).

Since the ideophones are functioning as adverb of degree or manner in (12a- i), they are bias evaluatives and can be analysed as speaker-oriented adverbs that better collocate with PPIs. This position is plausible because PPI-status and adverbs operate on referentiality and speaker commitment. (cf. Ernst 2008; Giannakidou 2008). In this view, without proper affirmative verb correspondence to the adverb of degree/ manner (i.e API/ PPI), the collocation turns to be faulty. This is the case in example (13a- i), whereby the sentences lack speaker commitment and proper referentiality. For this reason, example (13a- i) are vague and under-specified to describe what actually happened. Nevertheless, with proper affirmative verb correspondence to adverb of degree/manner (i.e API/ PPI) as in example (12a- i), the sentences have proper speaker commitment and referentiality. For this reason, example (12a- i) is unambiguous, precise and more acceptable than example (13a -i).

Owing to the vagueness in example (13a- i), several meanings or extrapolations can be deduced. As briefly indicated above, one of them is the idea of word negation otherwise known as the semi-negation type of interpretation identified by Cygan (1974). In this negation, the interpretation is that the action in the verb happened or is still in the affirmative only that perhaps it did not happen in the intensity as described by the ideophone but in another manner[4]. In this interpretation, negation only affects the ideophonic modifier and it is this same interpretation that Amfo (2010) terms as the narrow negation. In Akan structure, the negator skips the affixed verb but rather affects the modifier. This underscores the affirmative dominance in the API of sentences in (13a- i) and the inability of the negation in the verb to fully nullify the affirmative dominance. Additionally, this interpretation shows that the API is sensitive to the polarity of the verb and only collocates with affirmative verbs. Failure to do so brings vagueness in the sentence.

The other possible meaning that can be deduced from the sentences in (13a -i) requires the omission of the redundant API. This removal will do away with the conflict between the API and the negated verb. In effect, sentence (13f) will read; *Yaw anhwe fam* meaning 'Yaw did not fall down'. This interpretation without the API is relatively clearer and allows the negation in the verb to operate fully on the verb. This other interpretation is under the assumption that the action in the negated verb is empty or did not happen. This will then render the ideophone redundant. This meaning is identified by Xiang et. al (2014) as explicit negation. According to Xaing et al (ibid) explicit negation refers to the negation expressed as part of the asserted meaning (sentence meaning) of an utterance. Adopting the morphological merger negation account of Saah (1995), the negative phrase is projected before the verb as a complement. The focus is therefore on the overt inflectional negation affixed to the verb to mark negation in (3Ai-ix). That is, the overt negation in (3Ai-ix) is binding on the adjoined verbs but not the API. Thus, the interpretation could be that the negator affects only the API modifier. This allows the verbs to be positive. The other

interpretation is borne out of the view that the negator affects only the verb making the API redundant because its inclusion brings vagueness. The latter interpretation drops the redundant or conflicting API. This simplifies the sentence from being too wordy and odd. That is; *wammɔ n`asom* 'S/he didn't slap him', *Wamfa nsu angu ne ho* 'S/he didn't pour the water on himself'. This interpretation eliminates the redundant yet conflicting API because the negation in the verb makes the API unwanted.

However, the addition of the API; *too!, sam*! to the sentence in (13a, b) respectively reinforces the dominant affirmative sense over the recessive negation in the verb. This re-introduction of the API suggests the semantic sense that the action in the verb is positive but perhaps carried out in a different manner of intensity than the one in the ideophone. This is usually the case in the

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[4] The omission is necessary to resolve the oddness resulting out of the poor API to negated verb collocation. The resolution get rid of the redundant API for an explicit negation (cf. Xaing et. al 2014).

context of a quick retort that targets to negate only the API but without ample time to provide an alternative ideophone.

Aside from the drop of the redundant API to resolve the vagueness for explicit negation, Xiang et al (2014) recommends the strategy of constituent clefting. This strategy is also described in Ampofo (2015), as constituent negation. The strategy works on the latter interpretation deduced from (13a- i) whereby the negation affects only the API leaving the verb positive. This strategy of constituent clefting introduces another negation item on one API constituent to fully clamp down on the affirmative dominance while introducing another free API to describe the different manner in which the action occurred. Applying this constituent negation, sentence (13a and i) respectively will produce (14a-b):

(14a) N-yɛ   **too**   na   ɔ-bɔɔ   n'-asom   na

       NEG.STAT.be   IDEOPH.   CONJ. 3SG-PST.beat 3SG-cheek   CONJ.

       mmom   **wam**!

       FOC.   IDEOPH.

       'S/he didn't give him a resounding slap but a dirty one.'

(14b).   N-yɛ   **kwan**   na   ɔ-men   fufu   no   na

       NEG.STAT.be   IDEOPH.   CONJ. 3SG-swallow fufu   DEF.   CONJ.

       mmom   **wom.**

       FOC.   IDEOPH

       'S/he didn't only swallow the fufu hurriedly but at once.'

Constituent clefting or negation as applied above only negates the focus constituent to fully nullify the affirmative sense in one API while introducing another free API to better describe the gravity of the action. This resolves the vagueness because other than describing the intensity of the slap as *sew!, fam!, paa! too!,* the clefting provides a precise description as *wam!.* Similarly, the other sentences in (13a- i) can be subjected to the constituent clefting resolution strategy. As indicated, the other alternative resolution strategy is the removal of all ideophones from (13a- i) sentences so that the negation affects only the verb.

However, the polarity sensitivity of the API/ PPI in (12a-i) can be formalised on the Entailment and Binding theory (EN-BI) of Progovac (1993). This theory makes two central postulations that are applicable to the polarity sensitivity of the ideophones in this context. It states that for a Positive Polarity Item (PPI) to occur in a sentence, it needs to be licensed by a zero negation in the verb. Moreover, the PPI and the positive verb are clausemates and reside in the same clause as the locality domains for a proper binding relationship. Consequently, the PPI and the positive verb can be co-indexed as clausemates to foster the referential relationship (cf. Ladusaw 1980;

Progovac 1991; 1993). Failure of the PPI to adhere to the affirmative polarity of the verb affects the acceptability and precision of the sentence.

This polarity sensitivity can be illustrated on (UE-BI) by matching the sentences on API in (12a-i) to their counterparts in (13a- i) as done below in (15) and (16).

(15)

a. Aboa   no   kaa$_x$ no   doee$_x$!

   Animal DEF.   bitePST   3SG.   IDEOPH

   'The animal bit him hard.'

b. Kofi   a-bɔ$_x$ fam   kumm!$_x$

   Kofi   PRF-hit   down   IDEOPH

    'Kofi has fallen hard.'

(16)

a. * Aboa   no   a-n-ka$_y$ no   doee$_x$!

   Animal   DEF. PRF-NEG-bite 3SG   IDEOPH

   'The animal didn't bite him hard.'

b. *Kofi   a-m-mɔ$_y$ fam   kumm$_x$!

    Kofi   PRF-NEG-hit down   IDEOPH

        'Kofi has not fallen hard.'

Unlike the vague sentences in (16a-b), the examples in (15a-b) are precise and acceptable. This is because the ideophones are API/PPI functioning as an adverb of degree under strong speaker subjectivity (cf. Ernst 2008; Giannakidou 2008). That is, the API is bias for a positive verb and requires zero verbal negation to license its usage as in the negation free environment in the sentences in (15a-b). Therefore the API; *doee!, kumm!* in the examples in (15) are licensed and comfortably binds on the affirmative verb in the same clause as it locality domains. Thus, the positive verb and the API are coreferential, binding on each other to show speaker commitment and therefore bear the same co-indexation. The API and the affirmative verb collocation are licensed with a polarity acceptable agreement.

However, the examples in (16a-b) are vague, odd and perhaps unacceptable. This oddity originates from the fact that the API; *doee!, kumm!* is unlicensed on a negated verb. The negation in the sentences in (16) is a violation of the APIʾs biasness for affirmative verbs. Though clausemates in the same locality domains, there is no proper binding relationship or agreement between the API and the negated verb due to the polarity sensitivity violation. The poor binding relationship, the violation and its resultant disagreement is highlighted with the varying indexation on the negated verb and the API. Thus, the sentences in (16) are relatively vague and unacceptable. It is the agreement in polarity sensitivity that renders all the other sentences in (12a- i) relatively acceptable than its odd counterparts in (13a-i) that breach the polarity sensitivity of the API. The unacceptability and oddity can be resolved through an omission of the unlicensed API or constituent clefting as indicated above.

However, like Upward Entailing (UE) functions which preserve or enhance inferences from set to superset, the positive predisposition in the API as a degree modifier enriches the affirmative inference. In the context of the examples above, the API; *doee!* and *kumm!!* indicate the extent to which the action occurred for a strong speaker commitment. Below is an exemplification on UE:

(17) *Aboa no kaa no doee!!* [entails] *Aboa no kaa no.*

This comparison in (17) shows inference from a relatively specific and positive subset *[Aboa no kaa no doee!]*   to a general yet still positive superset *[Aboa no kaa no]*. This is a UE inference showing that API/PPIʾs are licensed in a UE environment. The UE relation on the rightward sentence confirms the explicit negation possibility as in **Aboa no anka no doee*! [entails] *Aboa no anka no**. The alternative meaning could be that the action in the verb occurred in another manner.

4.3 Negative Polarity Ideophones (NPI)

Examining the sensitivity of Akan ideophones to the polarity of the verb has produced the type of ideophones labeled as the Affirmative Polarity Ideophones (API) that collocate with affirmative verbal items. Still assessing the sensitivity of the ideophones to polarity identifies another category of ideophones known as the Negative Polarity Ideophones (NPI). This group of ideophones syntactically co-occur with negated verbs in negative sentences. It is due to their syntactic behaviour of collocating with negated verbs that make them fit for the description as Negative Polarity Ideophones (NPI). According to Penka & Zeijlstra (2010), negative polarity items refer to words or expressions that can only occur in a context that is in some sense negative. If such ideophones occur in a syntactic environment without negation, the sentence becomes odd and unacceptable. That is, NPIs are constrained to collocate with only negated verbs rather than affirmative verbs. Their syntactic occurrence is closed and is predictable. Though ideophones are often used spontaneously in an informal context, it is for this fixity and predictability of their environment that makes them seem idiomatic. Unlike other parts of speech,

ideophones hardly have an independent semantic or denotational meaning (cf. Bodomo, 2006). Owing to this feature, they usually require to be contextualized to determine meaning. It is in line with this semantic property that the meaning of an NPI need not be derived in isolation unless fixed in its appropriate context of a negated verb phrase environment. Consequently, ideophones are rarely captured in the lexicography to be assigned a literal denotative meaning. Subsequently, in the definition of Lawler (2007) negative polarity items apply to all lexical items, fixed phrases, or syntactic construction types that demonstrate an unusual behaviour around an affirmative sense. This unusual behaviour in NPI regarding affirmation is attributable to its inherent polarity sensitivity towards negated items. Therefore, with this seeming fixity of expression and predictability of occurrence, NPI fit the description as negative polarity item. Examples of such NPI in Akan include: *aga, hwee, huw, baw, taw(u), atsen, gyina, fi, huute, agyei, tsee , boe* among others. The set of sentences below testifies to the assertion that NPIs collocate with negated verbs in negative sentences and are most acceptable in their negated syntactic environment. In testing for the polarity sensitivity of NPI, the syntax-semantics of the negated group of sentences in (18a- f) are compared to their affirmative counterparts in (19a- f) below:

(18) Collocation in Negative Polarity Ideophones

NEGATED SENTENCES

a. **Araba**   **n-nim**   **tee**
Araba   NEG-know   IDEOPH
'Araba does not know anything at all.'

b. **Abɔfra**   **no**   **n-te**   **boe**
Child   DEF   NEG-hear   IDEOPH
'The child does not understand anything at all.'

c. **Obiara**   **re-n-yɛ**   **mo**   **huute**
Nobody   PROG-NEG-do   2PL.   IDEOPH
'Nobody will do anything to them.'

d. **Nnɛ**   **yɛ-a-n-kɔ**   **baw**
Today   1PL-PRF-NEG-go   IDEOPH
'Today we didn't go anywhere at all.'

e. **Abɔfra**   **no**   **a-n-sua**   **huw**
Child   DEF   PRF-NEG-learn   IDEOPH
'The child didn't learn anything at all.'

f. **Wɔ-a-n-ka**   **agyei**   **ana**   **o-ru-wu (Fa.)**
3SG-PRF-NEG-say   IDEOPH   before   3SG-PROG-die
'S/he didn't say anything at all before s/he died.'

(19)   AFFIRMATIVE SENTENCES

a. **Araba**   **nim**   **tee***
Araba   know   IDEOPH
'Araba knows anything at all.'

b. **Abɔfra no**   **te**   **boe***
Child   DEF   hear   IDEOPH
'The child understands anything at all.'

c. **Obiara**   **re-yɛ**   **huute ***
Nobody   PROG-do   IDEOPH
'Nobody will do anything to them.'

d. **Nnɛ**   **yɛ-a-kɔ**   **baw***
Today   1PL-PRF-go   IDEOPH
'Today we went anywhere at all.'

e. **Abɔfra no**   **a-sua**   **huw***
Child   DEF   PRF-learn   IDEOPH
'The child learnt anything at all.'

f. **Wɔ-a-ka**   **agyei**   **ana**   **o-ru-wu (Fa)***
3SG-PRF-say   IDEOPH   before   3SG-PROG-die
'S/he said anything at all before s/he died.'

From the above sentences, it is obvious that the sentences in (18a- f) are more acceptable than their counterparts in (19a-f). The acceptability in (18a-f) is attributable to the existing syntactic environment whereby the occurring NPI rightly collocates with their corresponding negated verbs as collocants. As a result, the sentences in (18a- f) are acceptable. However, the counterparts in (19a-f) are unacceptable. What is undermining the acceptability of sentences in (19a- f) is the absence of negation in the verbs co-occurring with the NPI. The underlying reason for this unacceptability is the fact that the NPI has a dominant negative sensitivity. On this account, the NPIs demand negation in the verb as prerequisite for its occurrence in a sentence. This demonstrates that NPIs are more sensitive to negation but recessive to affirmative verbs. Negation is obligatory for meaning in NPI occurring sentences. Thus, in the absence of negation

as a collocant for NPIs, the acceptability of the sentence breaks down and affects its meaning. This is illustrated in the affirmative sentences in (19a-f) above.

Like the APIs, entailment and binding theory of Progovac (1991; 1993) can account for the polarity sensitivity of the NPIs. As indicated, Progovac (1993) observes that for an NPI to occur in a sentence, it requires a negator on the verb as its licenser. Also, the NPI and the negator are to reside in the same clause as the locality domain for proper binding relationship. Thus, the licenser and the licensee are clausemates to fulfill locality domain conditions. Accordingly, the NPI and the negated verb can be co-indexed to highlight the binding and referential relationship. A violation of the negative polarity sensitivity of the verb affects the acceptability of the sentence.

The negator and its corresponding NPI modifier acts as an inference reversal on the verb. This triggers DE functions which are inference reversal from set to subsets. This probably inclines the expression towards NPI and deepens negativity (cf. Fintel 1999).

However, on the binding framework, the polarity sensitivity can be demonstrated through the matching of negative sentences on NPI in examples (18a-f) to their affirmative counterparts in (19a-f) as exemplified in (20) and (21) below.

(20)

a. **Araba** **n-nim$_x$** **tee$_x$**

  Araba   NEG-know   IDEOPH

  'Araba does not know anything at all.'

b. **Abɔfra** **no** **n-te$_x$** **boe$_x$**

  Child   DEF   NEG-hear   IDEOPH

  'The child does not understand anything at all.'

(21)

a**. *Araba** **nim$_y$** **tee$_x$**

  Araba   know   IDEOPH

  'Araba knows anything at all'

b. ***Abɔfra** **no** **te$_y$** **boe$_x$**

  Child   DEF   hear   IDEOPH

'The child understands anything at all'

From the comparison above, it is obvious that the sentences in (20a-b) are acceptable than (21a-b). Nevertheless, except the negation in (20), they share the same constituent. The acceptability of (20a-b) stems from the fact that the occurrence of the NPI; *tee, boe,* is licensed by the negator in the VP. The NPI presupposes negativity and as a result requires an equal negator to warrant its occurrence. This fulfills Progovac (1993) condition that the licenser of an NPI is a negator in the verb. Moreover, the negator and the NPI resides in the same clause and that satisfies the locality domain condition. Consequently, there is adequate binding relationship and correspondent between the negator and the NPI. Therefore, to highlight the referentiality and binding correlation, the negated verb and the NPI are co-indexed. The co-indexation shows the agreement between the negated verb and the NPI as collocants. Due to the fulfillment of the licensing condition as well as the locality domain condition and binding relationship, the sentences in (20a-b) are acceptable. It is the same rule satisfactions that make all the other sentences in   (18a-f) acceptable.

However, sentences in (21) are flawed with a violation of the licensing rule. Hence the sentences are unacceptable and odd. The violation of the licensing condition originates from the zero negation in the verb. Therefore, the NPIs in the sentences in (21) are unlicensed and uninvited. This results in a conflicting polarity sensitivity and disagreement between the affirmative verb and the NPI. This is shown by the varying indexation of the positive verb and the NPI. Though locality domain is fulfilled, the breach of the polarity sensitivity of the NPI makes the sentences in   (21a-b) odd and unacceptable. It is this breach that affects the acceptability of all the other sentences in (19a-f).

Also, DE reversal inferences are triggered by the negation in the verb and the NPI that increasingly deepens negativity downward from a set to subset. This can be demonstrated on the DE relations below:

(22) ***Araba nnim*** [entails] ***Araba nnim tee***.

This relation shows inferences from a relatively general and negative superset; *[Araba nnim]* to a deeper negative inference as a subset *[Araba nnim tee]*. This is DE inference showing that NPI`s are licensed in a DE environment. This is because same DE inference relation cannot be drawn from the sentences in (21a-b) as shown below: **Araba nim* [entails] *Araba nim tee** This latter relation is conflicting.

4.4 The Negative Polarity Ideophones (NPI) and Tense Aspect Mood (TAM)

According to Carnie (2013), tense refers to the time of an event relative to the time at which the sentence is either spoken or written. Like the negation, the Akan tense aspect inflection is not

segregated from the verb. Thus, assessing the polarity sensitivity of NPIs, it is also essential to note that the licensed NPI is only ready to collocate with any verbal phrase (VP) in the tense aspect mood having a negative component. In effect, the NPI objects to the affirmative mood as well as any affirmative tense aspect mood. Any affirmative sense in a verbal phrase irrespective of the tense aspect violates the syntactic condition for co-occurrence with an NPI. The NPI and any variety of affirmative tense are therefore impermissible in a sentence. In this regard, it is plausible to indicate that the licensing NPI demands negation in the VP as well as all other negative tense aspects mood. Differently put, the NPI sensitivity prevents any tense aspect mood devoid of negation. The NPI cannot bind any other tense aspect of the VP unless it is negated to command a binding relationship between the negated sense and the NPI. The implication is that the NPI is open to only verb forms in their various tense aspect having a negated inflection while it blocks all non-negated tense aspect mood (TAM). Dataset (23 - 30) below illustrate this point. In the data, all sets of sentences under group (A) are in the affirmative mood of the tense-aspect while their counterparts under the (B) group are negated.

(23) AFFIRMATIVE PROGRESSIVE TENSE ASPECT : GROUP A

  a. **Abɔfra**   **no**   **re-hu**   **huute***
   Child   DEF   PROG-know   IDEOPH
   'The child is knowing anything at all.'

  b. **Obiara**   **re-sua**   **boe***
   Everyone   PROG-learn   IDEOPH
   'Everyone is learning anything at all'

  c. **O-ru-twa**   **tsew**   **wɔ**   **skuul* (Fa.)**
   1SG-PROG-score   IDEOPH   LOC   school
   'S/he is scoring anything at all in school'

(24) NEGATED PROGRESSIVE TENSE ASPECT: GROUP (B)

  a. **Abɔfra**   **no**   **re-n-hu**   **huute**
   Child   DEF   PROG-NEG-know   IDEOPH
   'The child will not know anything at all.'

  b. **Obiara**   **re-n-sua**   **boe**

   Everyone   PROG-NEG-learn   IDEOPH
   'Everyone is not learning anything at all.'

  c. **O-ru-nn-twa**   **tsew**   **wɔ**   **skuul (Fa.)**

   1SG-PROG-NEG-score   IDEOPH   STAT.be   school

'S/he is not scoring anything at all in school.'

It is apparent from the set of sentences in the progressive tense that while the affirmative progressive tense in (23a- c) are unacceptable and obscured in meaning, its negated progressive counterparts in (24a-c) are acceptable and meaningful.

(25)   PERFECT TENSE ASPECT IN AFFIRMATIVE: GROUP A

   a. **Kyerɛkyerɛnyi no   a-kyerɛ   tsew** (Fa)**

     Teacher   DEF   PRF-teach   IDEOPH

     'The teacher taught anything at all.'

   b. **Kofi a-ka   agyei   mpo****
     Kofi   PRF-say   IDEOPH   FOC
     Kofi   said anything at all.'

   c. **Wɔ-a-tɔ   tee   wɔ   dwa no   mu****
     3PL-PRF-buy IDEOPH   STAT.be   market DEF   LOC
     'They bought anything at all in the market'

   (26)   NEGATED PERFECT TENSE ASPECT : GROUP B

   i. **Kyerɛkyerɛnyi   no   a-nn-kyerɛ   tsew (Fa.)**
     Teacher   DEF   PRF-NEG-teach   IDEOPH
     'The teacher didn't teach anything at all.'
   ii. **Kofi   a-n-ka   agyei   mpo**
     Kofi   PRF-NEG-say   IDEOPH   FOC
     'Kofi even didn't say anything at all.'
   iii. **Wɔ-a-n-tɔ   tee   wɔ   dwa   no mu**
     3PL-PRF-NEG-buy   IDEOPH STAT be   market DEF LOC
     'They didn't buy anything at all in the market.'

Moreover, it is obvious from the set of sentences in the perfect tense aspect that while the affirmative perfect tense in (25a-c) are unacceptable and obscured in meaning, its negated perfect tense counterparts in (26a-c) are acceptable and meaningful.

(27) FUTURE TENSE ASPECT IN AFFIRMATIVE (Fa) **:** GROUP A

   a. **Asɛm no   be-si   huw***
     Case   DEF   FUT-end   IDEOPH
     'The case will end anything at all.'

b. **Ɔ-bɛ-yɛ   huute***
   3SG-FUT-do   IDEOPH
   'S/he will do nothing at all.'

c. **O-bo-twa   tsew***
   3SG-FUT-score   IDEOPH
   'S/he will score anything at all.'

(28) NEGATED FUTURE TENSE ASPECT : GROUP B

   a. **Asɛm no   nn-ke-si   huw (Fa)**

     Case   DEF   NEG-FUT-end   IDEOPH
     'The case will not end anything at all'

   b. **Ɔ-nn-kɛ-yɛ   huute (Fa)**

     3SG-NEG-FUT-do   IDEOPH
     'S/he will not do nothing at all.'

   d. **O-nn-ko-twa   tsew (Fa)**

     3SG-NEG-FUT-score   IDEOPH
     'S/he will not score anything at all.'

Also, it is evident from the set of sentences in the Fante future tense aspect that while the affirmative future tense in (27a-c) are unacceptable and obscured in meaning, its negated future tense counterparts in (28a-c) are acceptable.

(29) PAST AFFIRMATIVE TENSE ASPECT: GROUP A

   a. **Obi   ka-a   fe   mpo   wɔ   ha***
   Somebody say-PST   IDEOPH FOC   STAT.be   here
   'Somebody said anything at all here.'

   b. **Ama hunu-u   boe   wɔ   sukuu***
   Ama   Know-PST   IDEOPH   STAT.be   school
   "Ama   knew anything at all in school.'

(30) NEGATED PAST TENSE ASPECT : GROUP B

   i. **Obi   a-n-ka   fe   mpo wɔ   ha**
   Somebody   PRF-NEG-say   IDEOPH   FOC STAT.be   here
   'Somebody didn't say anything at all here.'

ii. **Ama   a-n-hu   boe   wɔ   skuul (Fa.)**
Ama   NEG-know   IDEOPH   STAT.be   school
'Ama did not know anything at all in school.'

It is obvious from the above sentences that the affirmative sentences in group A, that is (23, 25, 27, 29) are unacceptable and obscured than their reversed counterparts in group B (24, 26, 28, 30). The unacceptability in group (A) sentences stems from the fact that those sentences have no negated inflections in the VP. The absence of the negation undermines the syntax and semantics of the sentences in group (A) irrespective of the variety in the tense aspect. This solidifies the conclusion that negation in the VP is obligatory for the NPI to properly function. Again, it shows that the licensing negation collocates with the NPI. With the provision of negation, the sentences in the group (B) are bound to be acceptable irrespective of the tense aspect. Also, the binding locality condition for negation is between the NPI and the negated VP head in the same clause. On this account, there is an agreement between the licenser and the licensee and within the binding locality domains. It is in line with this that Ampofo (2015) notes that the relationship between the sensitive item and its collocants is crucial to the acceptability of the sentence. In this context, the sentence breaks down if it fails to respond rightly to the polarity sensitivity of the NPI. In summary, the illustrations and comparisons, demonstrate that it is syntactically obligatory for NPIs to collocate with negated VP irrespective of the tense aspect. Negation is a must to match with an NPI in a sentence.

5. Conclusion

The paper has outlined the syntax-semantics features of ideophones in Akan. It contributed to the discussion on the word class of ideophones. It was demonstrated that syntactically, ideophones commonly function as modifiers to verbs. However, they do function as nominals, verbs, and also as predicative and attributive adjectives. The various tree diagrams and the phrase constituents in the X-bar theory established this syntactic relationship. This shows that Akan ideophones exhibit some morphosyntactic dynamism. Owing to the multiplicity of function in ideophones, it will be misplaced to subsume all Akan ideophones under a particular word class as either adverb, adjective, nouns, or verbs. Therefore, with these syntactic peculiarities and multiplicity of function, Akan ideophones should be treated as a distinct autonomous word class that has multiple function depending on the context of usage.

Besides, the conclusion that ideophones in Akan form a dynamic word class, it was also demonstrated that ideophones in Akan have a sensitivity to polarity. A close examination of polarity in ideophones led to the assertion that ideophones in Akan can be categorized into two based on their polarity sensitivity. The first category is the Affirmative Polarity Ideophones (API) which only collocate with non-negated (affirmative) verbs. The other category is the Negative Polarity Ideophones (NPI), which only collocate with negated verbs in sentences. Accounting on the theory of entailment and binding, it was proven that the failure of an API to

collocate with a non-negated (affirmative) verb makes the sentence vague. This shows that there is a syntax-semantics distortion in the vague sentence that subjects it to several interpretations. Again, API has a strong dominance for an affirmative sense and therefore calls for an affirmative verb. Thus, it objects to any form of verbal negation irrespective of the tense aspect mood. The implication is that, negation is recessive or completely absent in API-occurring sentences. Where there is an API type of ideophone in a sentence, the verb in the predicate is expected to heed to the polarity sensitivity of the ideophone by being in the affirmative sense. Failure to do so results in a vagueness that can be resolved through constituent clefting.

Conversely, if an NPI collocates with an affirmative verb, the sentence breaks down syntactically. Hence, it was confirmed that API collocates with only non-negated verbs in a sentence while NPI collocates solely with negated verbs regardless of the tense aspect. NPI is dominant to negation but recessive to affirmation, which makes negation mandatory for an NPI to be stringed in a sentence. As shown in Progovac (1993) postulations on the entailment and binding theory, NPI licenses by predicting and selecting a negated VP as its collocant whiles an API licenses by predicting the selection of a positive verb as its collocant.

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