Hyponymous relationship of verbs of cooking in Igbo

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Abstract

This study investigated verbs of cooking in Igbo Language using hyponymy as a tool of descriptive analysis of the subject matter. Its specific objectives were to examine the relationship of inclusion within a semantic field of the verbs of cooking in Igbo and selectional restrictions on their co-occurring elements. It was found that the verb isi ('to cook') is a generic super-ordinate term which embeddes the meaning of other verbs of cooking of variety of items in Igbo. This is possible from the dialects or varieties of Igbo Language. We identified nine hyponyms which are co-hyponyms and selectional restrictions of the verbs in terms of their co-occurring element or cooked items. It was concluded that Igbo verbs of cooking are rich in hyponymy and that they exhibit strict selectional restrictions of their co-occurring elements. Igbo language speakers' knowledge of verbs of cooking involves the meaning of the verb in relation to its co-occurring cooked item or element.

Keywords: Sense relations, the Igbo verb, selectional restrictions, hyponymy.

INTRODUCTION

Language as a means of communication has been graded into different levels ranging from phonology, morphology, syntax and semantics (to pragmatics). This study focuses on semantics and is an analysis of an aspect of morph-syntax, which is the verb. First. semantics according to Nweze (2011) is a preferred term to other terms such as semasiology, semiotics, semology, sememic, etc that were previously in use by scholars and authors not so long ago. It is a term that is concerned with principally meaning. Bierwisch (1970) captures the goal of semantics; the semantic analysis of a given language "must explain how the sentences of this language are understood, interpreted, and related to states, processes and objects in the Universe" (p.60). The general task of semantics may be summarized by the question: 'what is the meaning of a sentence 'S' of a language 'L'? The answer to this question may not be tackled directly. More basic questions may also have to be asked to break down its complexity. The question in this case, is what is the meaning of the lexical elements that constitute the syntactic structure 'S' and the interrelatedness between or among them? -lexical semantics. By asking this question, we are therefore confronted with yet another difficult one, which is understanding meaning.

Meaning has been a very controversial term. The views expressed by Ndimele (1999), Collinge (1991), Cherry (1957) among others paint a picture of the controversies surrounding the concept of meaning owing to its several functions. Ndimele (1999) posits that meaning is a chameleon changing the colour of its effects, with the change of speaker, hearer, context or setting. Collinge (1991) notes that the problem is to ascertain what meaning means as meaning serves many functions. Cherry (1957) on his own, remarks that meaning is a harlot among words, it can seduce the writer or speaker from the path of intellectual chastity. Though fraught with controversies, its centrality in communication has consequently brought an array of approaches to its definition notable among which is lexical semantic approach.

The central idea in lexical semantics is the use of meaning as a parameter for the distinction between some lexical items and others which 'forces' such items to be highly selective in their occurrence with others. This selective nature of certain related items yields them into semantic fields. Semantic field is 'an area of meaning containing words with related sense' (Finch, 2000 p.6). Sense refers to common linguistic meaning of an

expression. The sense of word according to Palmer (2000, p.86) "is revealed through the relations of meaning which the word contracts with other lexemes in the language." These relations include synonymy, antonymy, hyponymy, etc. Hyponymy is the focus of this study and can be used to analyze verbs of cooking in Igbo language.

Igbo is a 'verb language' (Emenanjo, 2005, Nwachukwu 1984, Uwalaka, 1984, 1988). The study of any aspect of its verb is central in the study of the language in entirety. Aspects of Igbo verbs have been found to exhibit sense relationship andselectional restrictions of their nominal complement (Anoka, 1983, Agbo 2010, Nweze 2011, Igbeaku, 2012). This study therefore examines hyponymous relationship in verbs of cooking in Igbo language. The tone convention used is as proposed by Green & Igwe (1963) in whichlow(`) and down step (-) tones are marked and high tones are unmarked. For clarity, we subsequently examined some concepts related to this study which are sense relations and the verb in Igbo language. Also, a theoretical background is provided hinged on lexical semantic theory as well as review of some empirical studies. These are all part of the literature review. Thereafter, data presentation and analysis, summary of findings and conclusion.

LITERATURE REVIEW

THEORETICAL PERSPECTIVE

This study is built around lexical semantic relations. Lexical semantic relations theory presumes that the actual value of a word can only be ascertained by its relatedness with other items in a paradigm. The central claim of this theory is that the meaning of a lexical item in a language cannot be acquired in isolation rather, in looking at various relationships such word has with other words in that language. According to Asher (1994), lexical semantic relations theory explains approaches that reject the view that the vocabulary of a language is an unordered set of items that belong together on the basis of their meaning..." (p.45). In relation to this, Agbedo (2000) claims that the value of a word is acquired by virtue of its relatedness with other items in the unit. A lexical semantic relation is in contrast with earlier theoretical accounts of meaning of words such as container theory. The theory therefore accounts for meaning of lexical items in language in terms of relationships which group words into semantic set or are said to belong to a semantic field.O'Grady &Katamba (2011) formalize this perspective and note that: (p.236)

Not only do words have meaning properties (such as ambiguity, or having a meaning), they also bear various meaning relations to One another. Just as words can be related

morphologically, so they can be related semantically, and words related by virtue of meaning form subgroups within the lexicon of a language.

One of the concepts that determine the criteria for classifying lexical items under a lexical semantic field is selectional restriction. Some linguists refer to this restriction as collocation. Wehemeier (2000) cited in Nweze(2011) observes that collocation is the way in which particular lexical item tend to belong together or occur. Firth (1987) sees this process of belonging together as company keeping of words. He claimsthat a word is identified by the company it keeps which contributes part of its meaning. For instance, the word 'blunt' co-occurs with 'blade', 'roaring' co-occurs with lion (animal). The system of keeping company is conceived by linguists as co-occurrence restrictions. The constraints placed on lexical relations are discussed by many schools using different terms. Asher (1994) uses "essential meaning relations." Firth (1987) "collocation and company keeping."

In this study, and upon this theory, we analyze the semantic relations or meaning relation of hyponymy using verbs of cooking in Igbo language.

Conceptual Review

This section reviews related concepts to this study which include sense relations and the Igbo verb.

Sense Relations

The relationship that exists between one word and another within a language system refers to sense relation. Not only can words be traced as "containers" (container theory of meaning) or as fulfilling 'roles' (semantic roles); they can also have relationships. In considering the relationships, we are characterizing the meaning of a word not in terms of its component features, but in terms of its relationship to other words. The common thread that runs through the views of scholars about sense relations is that it examines various relationships words or lexemes share among them. Anagbogu, Mbah and Eme (2010, p.223) view that sense relation is "the meaning relation between words; it refers to how the meanings of individual words are either different or similar." Similarly, Ndimele (1999) postulates that in every language, words not only bear meaning relation to each other but have no meaning properties in isolation. Finch (2000) refers to sense relation as the semantic relationships which words contract with each other within the linguistic system on the basis of their senses. From the foregoing, one understands sense relation as a term that examines relationships between words in a language and characterizes words belonging to same area of meaning hence same semantic set.

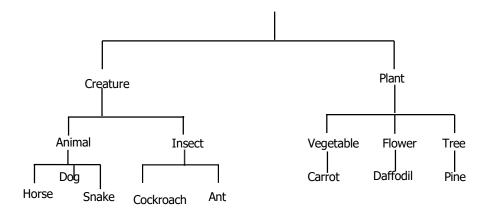


Figure 1: (cued from Palmer. 2000)

In sense relation, there are levels of meaning relation namely the word level and sentence level. The former refers to meaning relations of individual words or lexical items. However, our focus here is on the word level. Anagbogu, Mbah&Eme (2010) posit that the following word sense relations are in existence; synonymy, antonymy, hyponymy, polysemy, etc.

Having highlighted these sense relations, attention is now on the sense relation which is relevant to this study; which is hyponymy. Its ability to classify two or more words that are related under another umbrella term makes it very apt in analyzing the verbs of cooking in Igbo language.

Hyponymy

When the meaning of one form is included in the meaning of another, the relationship is described as hyponymy. Some typical example pairs are: daffodil-flower, dog - animal, poodle - dog, carrot - vegetable, etc. Cruse (1990) cited in Igbeaku (2012) agrees that the concept of hyponymy involves inclusion and exclusion. The concept of 'inclusion' involved in the example pair: daffodil -flower, is the idea that if any object is a daffodil, then it necessarily is a flower, so the meaning of flower is included in the meaning of daffodil or, a daffodil is a hyponym of flower. The sense of inclusion and exclusion relates to entailment. In other words, the sense relation is based on a one-way entailment which holds between parallel sentences containing hyponyms and superordinate term. Hyponyms are included within a super ordinate term while non - hyponyms are excluded. It presumes that when two or more words are hyponyms; it entails that they have a common super - ordinate term; otherwise, it entails that they do not belong to the same SUPER-ORDINATE term.

Palmer (2000) notes that when we consider hyponymous relations, we are essentially looking at the meaning of words in some type of hierarchical relationship. One can, in fact represent the relationship

between a set of words such as 'animal, ant, carrot, cockroach, creature, daffodil, dog, flower, horse, insect, living things, pine, plant, snake, tree, and vegetables' as hierarchical diagram in the following way.

From this diagram, we can say that 'Horse is a hyponym of Animal or the ant is a hyponym of insect.' We can also say that two or more terms which share the same SUPER – ORDINATE (higher –up) term are cohyponyms. So, 'Horse' and 'dog' are co-hyponyms of 'animal.' Co-hyponyms capture the idea of 'is a kind of as when you give the meaning of a word saying: "Dog is a kind of animal." It is often the case that the only thing some people know about the meaning of a word in their language is that it is a hyponym of another term.

Espousing the idea of inclusion, Cruse (1990) observes that a complement of a hyponym or co-hyponym is impliedly a complement of the Super – ordinate term. We exemplify Cruse's (1990) position as follows:

(a) "Onugbu` aàdighimma" entails 'Akwukwon ri` aàdighimma."

There is an idea of inclusion because Onugbu (bitter leaf) is a hyponym of 'akwukwon ri' (vegetable leaves) which is the SUPER-ORDINATE term. The idea of inclusion can be seen below.

(b) "Akwukwon ri aadighiuto" does not entail "Onugbu aadighiuto"

The logical truth underlying it is that the term "akwukwon" ri" can refer to other hyponyms like ugu (pumpkin), 'uha', etc other than 'onugbu.' In relation to this, Agbedo (2000) observes that the semantic relation of hyponym involves inclusion. Ndimele (1999) notes that inclusion implies membership.

We therefore posit that hyponymy is a type of sense relation whereby the meanings of one or more words are embedded in the meaning of a general term. The words whose meanings are embedded in a general term are called co-hyponyms while the general term which

embeddes others is called the super-ordinate term. This influenced our analysis of Igbo verbs of cooking in this study.

THE IGBO VERB

According to Emenanjo (2005) who corroborates Nwachukwu (1984), Uwalaka (1984, 1988), Igbo is a 'verb language.' The Igbo verb is central in the analysis of the language. Studies in Igbo verb for decades now revolve principally around two points of argument. The two issues are co-occurrence of Igbo verbs with nominal elements and transitivity. We therefore approach a review of the Igbo verb in these two lines of argument.

On the co-occurring nominal element of the Igbo verb, Emenanjo (1975, 1978, and 2005) and Uwalaka (1984, 1988) both view that Igbo verbs co-occur with nominal elements which extend the meaning of the verbs. However, their explanations of this position vary. For Emenanjo (1978), every Igbo verb must exist with a "nominal element which complements it." The nominal element is called complement. All Igbo verbs have the Bound Cognate Noun (BCN) which in a given construction, always occurs closely linked to the verb and immediately behind it.

According to Emenanjo (2005), the Igbo verb is, with regard to the co-occurring nominal element, sub-divided into five major classes. These are General Complement Verbs (GCV) which take a general noun complement, that is, nouns which may go on to be more narrowly specified. The general noun complement is the cover term for the specific nouns which sub-categorize the GCV. He also identified Inherent Complement Verbs (ICV) which are verbs the citation form of which includes a nominal element which may or may not be cognate with the verb. Inherent complement verbs are usually 'dual unit morpheme' and are characterized by being immediately followed by a free morpheme, always a noun (and in very few cases by a prepositional phrase) which must be included in their citation forms. Thus, the CV stem and its nominal complement form one semantic unit, and, in any dictionary entry, they must be cited together to fully specify their meaning. Other verbs identified Emenanjo (2005)include Bound bγ Complement Verbs (BCV), Prepositional Phrase Complement Verbs (PPCV) and Ergative Complement Verbs (ECV). The BCV are "verbs which are often used with bound verb complements without the nuances of emphasis which is inherent in bound verb complements" (p.482). The PPCV are verbs that are often followed by prepositional phrase, with which they constitute one indivisible semantic unit. The Ergative Complement Verbs are verbs which involves the alternation of the syntactic position of the subject and object of the verbs in question. This exchange of positions does not change the total meaning of the construction. While we would not go

deeper into these classifications, it is imperative to point out a counter-argument.

Uwalaka (1984, 1988) contends that Emenanjo's (1975, 1978) explanations of the nominal element co-occurring with Igbo verbs is not tenable. For Uwalaka (1984), the co-occurrence of verbs and their bound cognate nouns is "verb + noun complexes", which should be treated as semantic units in the lexicon. The cognate noun or object is one which has a high selectivity between it and the verb and not just as elements which are morphologically related to the verbal element.

The explanations of these scholars with regard to co-occurrence of elements with Igbo verbs play out in the lexical entries of dictionaries. For Uwalaka (1984, 1988), only V + N complexes should be entered in the dictionaries as it solves problems of homophonous verbs in Igbo. For Emenanjo (1975, 1978), every Igbo verb should be entered with its complements to distinguish them even better. We therefore agree with both scholars in terms of co-occurrence of nominal element with Igbo verbs as extensions of their meanings. While we would not be concerned with their different explanations as they are not related to this study. Consequently, we turn attention to another highly debated issue in the studies of the Igbo verb, which is transitivity.

The argument on whether Igbo has transitive verbs or not has been a heated one, so much so that scholars have taken different sides on the issue. Uwalaka (1984, 1988), Nwachukwu (1983, 1984) and Ubahakwe (1976) among others are on one side; proposing the transitivity of Igbo verbs while Emenanjo (1975, 1978, 2005) among others insist that transitivity is not necessary for the classification of Igbo verbs. The latter argues for complementation as the appropriate process that can be used to classify Igbo verbs. The central claim of Emenanjo (1975) is that both transitivity and intransitivity verbs in Igbo take objects. The nominal cognate element which complements the verb is an "object in function." In other words, he holds that both transitive and intransitive verbs exist at the deep structure of Igbo and their analysis is explicit there.

Uwalaka (1988) and others stated above, are on the other divide and propose transitivity of Igbo verb. Uwalaka (1988) proposes the 'pronominalisation test' to determine true objects and consequently transitive verbs in Igbo. The pronominalisation test is a lexical rule which replaces a lexical NP with a pronoun. This helps Uwalaka (1988) to submit that Igbo has transitive verbs. Similarly, Ubahakwe (1976) insists that there are transitive verbs in Igbo. He criticizes Emenanjo's (1975) assertion because for him, the idea of 'object' and 'transitivity' are in accordance with the surface structure and or semantics of the language. The classification of verbs into transitive and intransitive depends on the "usage" of the verbs. For him, the same verb may be transitive in one instance and intransitive in another instance. It is notable that Emenanjo (2005) observes that the pronominalization

test of Uwalaka (1988) is valid though fought with limitations. The debate has been on-going even among the most recent or evolving scholars with views and counter-views along the already established divides of the argument which are not the focus of this study. However, we admit that both directions of debate have their merits. We are inclined to agree with Emenanjo's (2005) views on complementation because it adds credence to this study.

EMPIRICAL STUDIES

Sense relational study particularly hyponymous relation of verb types in Igbo language has received some research attention. However, much of it is on dialects (varieties) of the Igbo language. We focused on some studies that are very relevant to this study. They include Igbeaku's (2012) study of verbs of harvesting in Igbo language, Nweze (2011) study of verbs of excretion using Imiryike variety of Igbo and Anyanwu&Iloene's (2004) verbs of planting and harvesting using Ngwa and Obimo dialect of Igbo. Others are Ndiribe's (2004) study of verbs of planting in Ihiala dialect of Igbo, and Anoka's (1983) selectional restriction using verbs meaning 'to buy' in Igbo.

Anoka (1983) investigates selectional restrictions using verbs meaning 'to buy' in Igbo. He drew data largely from the Mbaise variety of the Igbo language. Anoka (1983) observes that:

Strong selectional restrictions have been observed in Igbo VPs. The restrictions are essentially semantic in that what verb goes with which lexical item is determined by the inherent meaning of the verb. This strict selection imposed on the noun – verb collocation governs semantic clusters of object nouns (p.171).

He identified that there are about seventeen verbs meaning 'to buy' in Igbo but each has limited number of bought articles with which it can be associated. Each verb, therefore, will be cited with its feature specifications which determine its selectional possibilities. Anoka (1983) remarks that in order to examine the co-occurrence possibilities, the verbs are sub divided into three groups:

- (i) Common mode zu
- (ii) Mode of buying verbs pa, ma, tụ, gụ, ko, kpọ, (-
- po), wu, be, cha, pu, fo
- (iii) Special verbs wu, lu, kpo, gba.

He notes that the verb 'zu' can co-occur with nearly all objects of buying except 'ohu' (slave). He presents the following examples:

- 1 (a) zuła anu 'buy fieb'
 - (b) Zuṭa azu` 'buy fish'

(c) Zuta `ala` - 'buy land'

For the second group (mode of buying verbs), Anoka (1983) states that that 'pa' is glossed as 'to buy' and it is associated with large quantities and bulky items such as bags of rice, beans, creates of tobacco, bales of cloth, etc. Example:

- 2 (a) pałaakpagari 'buy a bag of gari'
 - (b) pataigbencha` 'buy a carton of soap'
 - (c) pałaudummanya 'buy a jar of wine'

'Ma' collocates with all referential terms of commodities sold by measures, 'tu' for items of a very small quantity; 'gu' collocates usually with countable and uncountable items while 'kpa' collocates with objects which can be scooped. He presents the following examples.

- 3 (a) matagari buy some gari (b) mataose` - buy some pepper
 - (c) tutanwagari buy a small quantity of gari
 - (d) tuṭanwaayiya buy a small quantity of crayfish
 - (e) guomkpuruji buy seed yams
 - (f) kotara m nchashinkita kobo` buy me a kobo worth of soap.

The above examples as provided by Anoka (1983) will subsists while we look at the group (III) three which he called special verbs "whose origin has become totally observed and cannot enter the same slots as either common mode or the mode verbs" (p.203). For this group, Anoka (1983) presents the following examples:

- 4 (a) gbataohu` buy a slave
 - (b) kpołara m akwa `- buy me some cloth
 - (c) lutemmanya buy drink
 - (d) owuju`namaabuo He/She bought two cows for sale

He explains that 'kpo' collocates with clothing materials / objects while 'gba' is the verb most suitable to collocate with the noun 'ohu' (slave).

The findings of Anoka (1983), add credence to the present study because this study alongside with identifying hyponymous relationship of verbs of cooking in Igbo language, also examines the selectional restrictions of the verbs in terms of nominal elements / objects that collocate with them. It would be necessary to focus now, on more recent investigations on hyponymy in Igbo verb types.

Igbeaku (2012) observes that harvesting of every specie of crop has a Super -ordinate term and cohyponyms. The different verbs of harvesting of the

various classes of crops in Igbo are classified under relevant super — ordinate terms which bind them together. In other words, each class of crops has a super — ordinate harvesting term in which the hyponyms are included. He identified four broad classes of crops; each with four species. The classes include cereal crops, root and tuber crops, vegetable crops and fruit crops. In harvesting cereal crops, maize has five hyponyms while in harvesting root and tubers; cocoyam has five hyponyms. Pumpkin as an example of a vegetable crop has two hyponyms whereas orange, specie of fruit crop has four hyponyms. He presents the following examples:

- 5 (a) ghọ oka` harvest maize as a superordinate term.
 - (b) be oka`
 - (c) gbu oka'
 - (d) ka oka`
 - (e) ji oka`
 - (f) lia oka`

According to Igbeaku (2012), 5 (b-c) require the use of tools to cut off the crops from their stems, tools like cutlass while 5 (a,d,e,f) are used when the harvest is done with bare hands. It is the means of harvesting maize that creates the co-hyponyms. For root and tubers, Igbeaku (2012) identified bu/vu as common super – ordinate terms. He presents the following illustration.

6 (a) bu/vu ede` - harvest cocoyam (b) gwu ede` (c) gbe ede` (d) vo ede` (e) gbu ede` (f) ho ede`

He posits that 6 (b-e) involve harvesting by uprooting the roots from the soil using hoe or any related tool while 6 (f) is harvested with bare hands by pulling the roots from the soil. He also observes that 6 (d-f) are predominantly used in the South – Eastern Group of dialects (SEGD) and Northern Group of dialects (NGD) of the Igbo Language. For vegetables and fruit crops, Igbeaku (2012) presents the illustrations below:

- 7 (a) be ugu harvest pumpkin leaf by cutting with a sharp object
 - (b) kpa ųgų harvest pumpkin leaf using fingers
- (c) me ugu harvest pumpkin leaf by pulling it from the stalk

The term 'me' according to him is mainly used in the Northern Group of dialects of the Igbo language.

- 8 (a) ghọ `oroma super ordinate term
 - (b) ju `oroma
 - (c) ko `oroma

- (d) ti `oroma
- (e) du `oroma

He explains that 8 (b& d) require the use of missile-like stick. This kind of harvest is skillful but not orderly thereby leading to harvesting both ripe and unripe. 8 (c) requires the application of 'go-to-hell' during harvesting (p.15); while 8 (e) involves the use of long object like stick to push down the fruit. The findings of Igbeaku (2012) are related to this study because they stress the importance of selecting verbs and their nominal complements in formation of a semantic unit using verbs of harvesting. However, this study extends this analysis to verbs of cooking in Igbo language.

On the dialect – based studies, Nweze (2011) investigates verbs of excretion and posits that verbs of excretion refer to verbs that denote the passage of feaces and urine out of the human body. He subcategorized them into two using Imiryike dialect of Igbo.

According to him, Imiryike is a town in the Northern part of Igbo land. Nweze (2011) cites Ikekeonwu (1996) as having observed that Imiryike belongs to the Nsukka dialect cluster and according to Nwozuzu (2008), it belongs to the Northern group of dialects of Igbo. The sub categorizations are: verbs of defecation and verbs of urination. In all, she finds nineteen verbs of excretion with 'nyo' and 'gbo' as the two super – ordinate terms. She exemplified as follows:

- 9 nyu super ordinate term
- (a) ma Pour watery stool
- (b) mashi passing very small quantity of stool(c) kpa passing stool in between interval
- (d) ku pour out stool
- (e) pu passing stool suddenly out of tension
- 10 gbo super ordinate term
- (a) kpabu` break urine which is in progress
- (b) wushi pass big quantity of urine
- (c) za` suddenly pass urine

Anyanwu and Iloene (2004) investigate verbs of planting and harvesting using Ngwa and Obimo dialects of Igbo. It is observed that 'ku' is the Ngwa dialect term in planting of leafy vegetable while 'ku' is used in Obimo dialect.

Both dialects use 'kpa' as the verb of harvesting leafy vegetable. In planting fruity vegetables, Ngwa and Obimo use 'do' and 'dva' respectively. Ngwa uses 'gho' while Obimo uses 'wo' in harvesting them. In planting of root crops, Ngwa applies these verbs; 'hi, gbu and gba' while Obimo uses 'yi' and 'gba/dva'. The verbs of harvesting root crops in Ngwa are 'gwu' and 'vu' while Obimo has 'gwu, gbu and gbaa' among others.

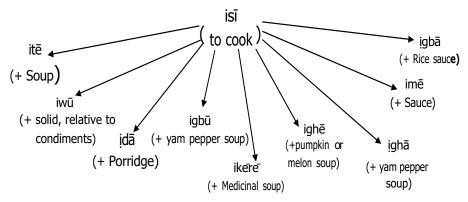


Figure 2: Hyponymous relationship of verbs of cooking in Igbo

Ndiribe (2004) discusses lexical semantics of planting terms in Ihiala dialect of Igbo language. In his analysis, each classification of crop is associated with a particular term. He presents the following examples

- 11 (a) iso to sow tuber crop (like yam, cassava)
 - (b) iku to plant seed items like maize
- (c) igbā to plant stems like sugar cane, bitter lead
 - (d) ighā to spread tiny grains like pepper, rice
- (e) izo to transplant crops from nursery gardener like palm tree.

He observes that each class of crop like cereal, fruit, root and tubers is identified with a particular planting term like 'iso, iku, igbā, etc.

However, from the general review, it is observed that the findings of these dialect-based studies and others buttress the views of Cruse (1990) that describes hyponymy in the sense of inclusion and exclusion. The inclusion suggests the existence of co-hyponyms which share in the meaning of a super-ordinate term. It is obvious also from the review that verbs in Igbo language and its varieties select their nominal complements which extends their meaning.

DATA PRESENTATION AND ANALYSIS

12 (a) **solid food forms**– $iw\bar{u}$ – such as cereals (rice, beans, maize), root / tubers (yam, cassava) etc

(i) iwūji 'to cook yam'
(ii) iwūede` 'to cook cocoyam'
(iii) iwūakpu 'to cook cassava'
(iv) iwūoka` 'to cook maize'
(v) iwū`osikapa 'to cook rice'
(vi) iwū`agwa` 'to cook beans'

(b) **Liquid food forms** – *itē*, *igbū*, *ighā*, *ikērē*, *ighē* –such as soup, pepper soup, medicinal, soup, etc.

- (i) itēofe` 'to cook soup'
- (ii) igbūjimmiriokū 'to cook yam pepper soup'

(iii) ighājimmiriokū 'to cook yam pepper soup' (iv) ikērēogwu 'to cook medicinal soup' (v) ighēugu 'to cook pumpkin soup' (vi) ighē (ofe) 'egusi 'to cook melon soup'

(c) **Porridge food forms** $-id\bar{a}$, $it\bar{e}$ —such as yam porridge, cocoyam porridge, plantain porridge, etc.

(i) idāji 'to cook yam porridge'(ii) idāede` 'to cook cocoyam porridge'(iii) idāunère` 'to cook plantain porridge'

(iv) itējpo 'to cook yam/cocoyam/plantain porridge

(d) **Sauce** -imē, ighē, igbā— sauce is usually a thick liquid often used in eating solid food item usually tubers (yam) and (rice, in which case it is called stew).

- (i) imē mmanuji 'to cook yam sauce'
- (ii) imēihendori 'to cook sauce for yam or cocoyam'
- (iii) ighēsitiu` (stew) to cook (rice) stew'
- (iv) igbāsitiu` (stew) or frai (fry) 'to cook (rice/beans) stew'

The picture that emerges from the data above is that the verb 'isi', 'to cook' is a generic super-ordinate term in Igbo language. And there are verbs of cooking variety of items which have the super-ordinate term 'isi' in Igbo. These verbs have their meanings included (the idea of inclusion) in the super-ordinate term or share in its meaning. From the data, it is evident that we identified nine hyponyms (fig. 2) or what are called co-hyponyms that is, verbs whose meanings are included or embedded in the super-ordinate 'isi' (to cook). And the idea of inclusion begets entailment.

In other words, the use of the hyponyms is an entailment of the super ordinate. We illustrate this as follows:

13 (i) itē ofe` entails isiofe' (ii) iwū ji entails isiji (iii) idā ji entails isiji (iv) ikērēogwu` entails isiogwu' (v) igbā sitiu` entails isisitiu` (vi) ighēugu entails isiųgų etc. Also, the hyponyms of the super-ordinate term 'isi' exhibit selectional restrictions in terms of the nominal element or cooked item that collocate with them. We have been able to classify some cooked items into four groups namely: solid food forms, liquid food forms, porridge food forms and sauce. This grouping is essentially to aid the analysis of data in this study. We now analyze the selectional restrictions of these verbs based on the groupings of the cooked items provided in 12 (a,b,c, and d).

For the solid food forms or cooked form involving solid food items such as cereals, tubers, roots, etc, the verb 'iwū' is used and this is relative to addition or otherwise of condiments in the cooking of these food items. For instance, Igbere, Abiriba, Ohafia, Alayi varieties and part of Umuahia, Ikwuano varieties which constitute part of Nwozuzu's (2008) Cross River Group of Dialects (CRGD) and East Central Group of Dialects (ECGD) respectively; use the verb 'iwū' when the solid food item (tuber) is not mixed with any condiments (just to be cooked 'white'). It is also observed that the verb 'iwū' collocates with solid food forms with some condiments in some varieties of the Igbo language such as the North – Eastern group of dialects (NEGD) (like Uturu,IhubeAbakaliki, Ozza, etc) where you have such expressions:

- 14 (i) iwūjiawayā 'to cook yam pepper soup'
 - (ii) iwūukam' 'to cook plantain porridge'
 - (iii) iwūidimmirioku 'to cook yam pepper soup'

In all, it is observed that the verb 'iwū' collocates primarily with solid cooked forms as exemplified in 12 a (i – vi). For the liquid food form under which we classified soup, pepper soup, medicinal soup using roots/leaves; we identified five verbs of cooking that collocate with such food or cooked forms. The verbs are 'itē', igbū', 'ighā', 'ikērē', 'ighē'.The verb 'itē' collocates basically with the cooked item 'soup' in virtually all varieties of the Igbo language, while 'igbū' and 'ighā' collocate with 'yam pepper soup.' The verb 'igbū' is common among Ikeduru, Mbaitoli varieties of the ECGD; 'ighā' is common among the Ikwuano, ohuhuUmuahia varieties of the same East Central Group of Dialects.

The verb 'ikērē' collocates basically with medicinal soup with roots / leaves and it is common among some varieties of the ECGD. However, 'ighē' collocates with pumpkin soup or melon (egusi) soup and it is common among some varieties in the ECGD and East Niger group of dialects (ENGD) such as Ihiala. These are all exemplified in 12 b (i-vi).

For the porridge food form under which we classified all forms of porridge delicacies among the Igbo; the verb 'idā' collocates with porridge delicacies such as yam, cocoyam, plantain, etc and this is common among the OhuhuUmuahia, Ikwuano and other varieties of Igbo within the East Central group of dialects. The verb 'itē' is also used for porridge food form particularly within the

Igbere, Ohafia, which are part of Cross River group of dialects (CRGD) as seen in example 12, c (i-vi).

For the sauce food group, the verb 'imē' collocates with sauce with which food items like tubers are eatten. Also, the verb in some varieties is used in reference to cooking stew. In addition, we have verbs like 'ighē' and 'igbā' which basically collocates with rice or beans sauce and these are common in a number of varieties or dialects across Igbo particularly Ngwa dialect which belongs to Nwozuzu's (2008) South Eastern group of dialects.

SUMMARY OF FINDINGS AND CONCLUSION

A sense relational study of verbs of cooking in Igbo language, particularly hyponymous relations is quite revealing of the patterns and behavior exhibited by these verbs. It was found in this study that verbs of cooking in Igbo exhibit hyponymous relationship and selectional restrictions in terms of their co-occurring elements; (ie) the cooked items. The verb 'isi' (to cook) is a generic super-ordinate term which embeddes the meaning of other verbs for the cooking of a variety of items in Igbo. This is possible from the dialects or varieties of the Igbo language. We identified nine hyponyms of the super – ordinate term 'isi' in Igbo. In other words, the meaning of the nine verbs are embedded in the super-ordinate 'isi' as illustrated in the 12 (a,b,c,d) and figure 2.

Another interesting finding of this study is the selectional restrictions of the cooked items that collocate with the verbs. We developed four groups of food forms by way of analyzing the selectionalrestrictios. They are in 12 (a, b, c, d). Each hyponym was found to collocate primarily with each group of food form. We conclude therefore, by corroborating Igbeaku (2012), Nweze (2011), Agbo (2010), Ndribe (2004) among others that Igbo verbs are rich in hyponymy. Also, we conclude that verbs of cooking in Igbo exhibit selectional restrictions in terms of their nominal elements or cooked items that collocate with them. This however, is a corroboration of Anoka (1983).

In other words, Igbo language speakers' semantic knowledge of the verbs of cooking involves the meaning of the verbs, in relation to their co-occurring nominal element.

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