

IGBO AND YORÙBÁ VERBS OF COOKING

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Abstract

The field of cooking provides a versatile area of human activities and use of language that indicate both (food and language) as representing crucial sites for socialization, identity construction, and the everyday fabrication and perception of the world. This paper explored the nature of culinary terms through the lexical field analysis of the generic verbs of cooking of Igbo language (*sí*) and Yorùbá (*sẹ*) to determine how its sub-fields are categorized in the two languages. Invoked in this study is a notion of semantic field as the theoretical framework. In the design, the degree of heat application or none and the instruments of cooking combined to form the delimiting frame for the cooking types. Using a total of 100 questionnaires distributed equally among the two language groups, the study collected data from adult speakers of the languages. The data generated, were subjected to deep examination to reveal the structure of the vocabularies of Igbo and Yorùbá cooking terms with respect to how they make distinction in their lexical fields. The findings revealed some similarities and differences between the two languages on how they employ lexical items to express different cooking items. While the two languages have broad range of lexical items distinguishing cooking types, that is, they display extensive culinary fields and lots of merger in the semantic spaces of cooking types, they however differ on some such as the semantic space of cooking: while Igbo has twenty eight cooking types Yorùbá reveals twenty six. However, there exist cooking types the two languages share conceptual spaces together in.

1. Introduction¹

Ìgbo² and Yorùbá are among the languages spoken in Nigeria and are among the three sociolinguistically classed as major languages. The inter-relatedness of the two languages has for long been at the centre of linguistic discourse. The two languages had for long been linked to and often analyzed as coming from the same sub-phylum.

In earlier classification for example, Greenberg (1963), re-echoed by Uwaezuoke and Ogunkoya (2017), designated the two languages to Kwa group of languages. In more recent times, the classing of the two languages into one group has continued as while Bennett and Stork (1977) reassigned the erstwhile Eastern Kwa languages of Greenberg such as Yorùbá, Igbo, Edo

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²Tone Pattern:

Nwachukwu's tone marking system (PAN) is used in this paper. Three tone patterns are used but concretely two tone symbols manifest:

- (i) high tone is indicated by a slanting stroke leaning to the right as on the vowel inside the stroke /ó/;
- (ii) low tone is indicated by slanting stroke to the left as on the vowel inside the stroke /ò/.
- (iii) For down-step the same high tone indicator is used. Thus only the first tone of a sequence of syllables on the same pitch is marked until a change in pitch. In the case of a change in pitch from high that is not low, another high tone indicator is used to signal down-step.

For the Yorùbá tone-marking system:

- (i) high tone is indicated by a slanting stroke leaning to the right as on the vowel inside the stroke /ó/;
- (ii) low tone is indicated by slanting stroke to the left as on the vowel inside the stroke /ò/.
- (iii) The mid tone is left unmarked.

and Nupe to Benue-Congo, Blench (1989) designated them as West Benue-Congo after pulling them off from their Eastern branches of Greenberg's Kwa group. Blench and Williamson (2000), according to Ohiri-Anichie (2006), went further to group them with Edoid and Akokoid as a sub-branch of West Benue-Congo. Ikekeonwu (2007) reported and followed Bendor Samuel (1989) in assigning them to the New Benue Congo Sub family of Niger-Congo.

All these groupings of the two languages are instantiated by close cognate linguistic forms found among them which derived from lexicostatistic analyses (see Mbah 2008, for example). Quoting Greenberg and others, Ohiri-Aniche (2006) had observed that the occurrence of resemblances in vocabulary items involving both sounds and meaning correspondences in languages spread over a vast area is a pointer to a genetic relationship among such languages. More areas of studies to discover more genetic relationships between the two languages keep on churning out. Ohiri-Aniche (2006) took on the dimension of the closeness or otherwise of the Akokoid to both languages (the Igboid and the Yoruboid, including the Edoid). Ikekeonwu (2006), on the other hand, examined the phonetic implications of segment contiguity in some Nigerian languages including Yorùbá and Ìgbo considered coming from the same family, to determine how the phonemes realign their segments. Uwaezuoke and Ogunkoye's (2017) study was on the comparison of tense formation in the two languages.

The present study explores the patterning of culinary terms in Igbo and Yorùbá languages. While *sí* and *sè* respectively represent the general verbs of cooking in the two languages that can co-occur in all senses of cooking or food preparation, "there is a sub-set of lexical items that mutually delimit each other within (the) semantic space" (Anyanwu and Iloene, 2004). As stated by Anoka in (1983) in his analysis of the Igbo verb of buying, 'To kill' is the term (in English) with the general meaning of the class (kill) and the other verbs are more specific with regards to means, motive, etc. and of course, are more limited in collocation range'. Thus, with the neutral verbs of cooking in the two languages the investigation will explore the range of hyponyms available in their semantic spaces and compare how each patterns its hyponyms and puts them to function with the aim of discovering the similarities and differences in them. The choice of the two languages in the examination of the sense relation contracted by their generic verbs of cooking is informed by the need for a continued exploration of areas of similarities and differences in their structures, having been classified as belonging to the same phylum, the West/New Benue-Congo languages. It will also clarify the much reported interesting insights in cross-linguistic studies (Lord, 1975) found among the two languages apart from revealing if there occurs any proto-Benue-Congo forms of the verbs compared.

2. Semantics in *Culinary*

In this section a review of key terms of the study is carried out. Here the concepts of lexical field or the Field theory, *culinary* and verbs of *culinary* will form the major attention.

Lehrer (1969) has affirmed that the study of meaning (semantics) becomes more orderly when placed in a lexical field, especially a field which deals with a specific universe of discourse. Neat sub-patterns emerge most clearly in the study of semantic field which help in understanding better the dynamics of metaphorical extension of words that perhaps bring systematic observation to additional studies in fields such as figures of speech (see for example, Oha 2006/8). Thus several studies have been carried out on investigating the lexical fields of a particular lexeme. The idea is that in lexical field the meaning represented in the lexicon are interrelated; they cluster together to form 'field' of meaning which in turn cluster into even larger fields until the entire language is encompassed (Malmkjer, 1991). Lehrer (1969) has seen the inter-play in lexical field as vocabulary being organized into lexical or conceptual fields, and the items within each field being tightly structured with respect to each other. Malmkjer (1991) adds that lexical field can be used to illustrate how languages differ even in apparently quite basic lexical divisions and fields such as temperature terms, kinship terms, colour terms, parts of

the body, and division of animal and vegetable worlds, as they would divide the semantic space differently and would reflect this in the vocabulary item governing those fields.

Lehrer (1969) is a seminal application of field theory to cooking terms that made an interesting generalization concerning the formal properties of words that share common fields. Using verb as basic lexeme in the processing of food, Lehrer (1969) developed thirty five hyponyms of the central lexeme – cook - drawing from information about the specificity of the cooking types to distinguish one from the other, and from the general verb. The set of verbs provided as hyponyms are as follows: Cook, boil, simmer, stew, poach, braise, parboil, steam, reduce, fry, sauté, pan-fry, French-fry, deep-fry, broil, grill, barbecue, charcoal (or charcoal-brail), plank, bake, roast, shirr, scallop, brown, rissole, sear, parch, toast, burn (unhappily), flamber.

All the cooking terms yielded hyponyms of *cook* in its general sense. It was also discovered that a lot of other hyponyms emerged from some hyponyms of the general verb. For example, she presents the hyponyms of *boil*₁ to appear as follows in Table 1:

Table 1: Hyponyms of boil₁

Boil₁ (unmarked)				
Simmer		Boil₂ (marked)		
Poach	Stew	Parboil	Steam	Reduce
	Braise			

In Table 1 above, a lexeme is a hyponym of a term above it; lexemes on the same line are co-hyponyms of one another if separated by a vertical bar.

Lehrer (1969) saw some shortcomings in the theory. To her, words are not always sharply separated from one another in the fields. She (1969) discovered a lot of overlaps with this approach. For example, she said, ‘The range of lexemes like *roast* and *grill* partially extending over two other terms also reveals the limitation of hierarchical analysis’. Lehrer (1969) therefore considered componential analysis as a better approach in handling the semantic relationship more conveniently. Lehrer’s (1969) study was based on the analysis of one language – applying the field theory in discovering the range of organization of cooking terms in English invoking the situation of universe of discourse of the culture of the language. Thus, it is a synchronic study. In the present study however the universe of discourse of two languages is invoked – to compare the semantic spaces provided by Igbo and Yorùbá in discussing cooking terms.

In spite of Lehrer’s (1969) disappointment over the hitches she encounter with lexical field and her subsequent switch to componential analysis, several researchers were still stuck to lexical field in their analysis of various semantic concepts. Lutzeier (1982) also applied the notion of lexical field to the field of nouns under the aspect of financial income. Using the verbal context, α = VICTORIA WAS PLEASED ABOUT HER Y, he developed L of ‘basic words’: {TIP^w, SUBVENTION^w, SUBSIDY^w, CONSIDERATION^w, INCREMENT^w, SAVINGS^w, INHERITANCE^w, COLLECTION^w, INDEMNITY^w, EARNEST^w, BONUS^w, PITTANCE^w, ROYALTY^w, REVENUE^w, EXHIBITION^w, BURSARY^w, RECOMPENSE^w, INTEREST^w, PROFIT^w, PRIZE^w, GRATUITY^w, GIFT^w, WINNING^w, REPARATIONS^w, COMPENSATION^w, EARNING^w, EMOLUMENT^w, FEE^w, GRANT^w, HONORARIUM^w, INCOME^w, INDEMNIFICATION^w, PAY^w, PAYMENT^w, PENSION^w, REMUNERATION^w, REWARD^w, SALARY^w, SCHOLARSHIP^w, STIPEND^w, WAGES^w}.

The following dimensions are the semantic structures for the following sub-sets of financial income:

- Those for regular financial income
- Irregular incoming payment
- Neutral
- Related to an annual base
- Not related to an annual base
- Neutral
- Retired person
- Freelance worker
- Neutral
- By doing one's job
- Not by doing one's job
- Neutral
- In order to make up for losses
- Not in order to make up for losses
- University in Scotland
- In connection with an increase

His findings, he said, bore out his proposal for a semantic relation as part of the structure of lexical fields.

Anyanwu and Iloene (2003) are another exploration of the notion of lexical field in the domain of verbs of planting and harvesting in Igbo. They set to examine and compare the verbs of planting and harvesting in Ñgwà and Óbímò dialects of Igbo with a view to noting their differences as well as their similarities. The observations captured, they hoped, would contribute towards the language's dialectology, and also give an insight into the proto-Igbo forms of the verbs compared. The verbs of planting and harvesting in the two dialects were lexically grouped into sets with each set mutually delimiting one another. The choice of the lexical items within a delimiting set is pragmatically determined by the kind of process involved in the planting or harvesting of a particular crop. Despite some morphemic variations, it was discovered that data from the two dialects revealed evidence of selectional restrictions. It was also discovered that the verb of planting in both dialects revealed that some verbs of planting co-occur in two dimensions or semantic spaces, that is, leafy plants and fruit vegetables. There was also a revelation of morphemic variation in the two dialects' terms. Anyanwu and Iloene's (2003) observation in the study of the lack of general verbs of planting and harvesting can only apply to the two dialects as the word *ìkò ọ́rụ (ùbì)* and *íwè ñrì (ubì)* are standard for the two concepts in Igbo.

Onietan (2010) is another lexical field analysis, this time, on the verb of buying in Owe dialect of Yorùbá. Combining both paradigmatic with syntagmatic concepts, the study set out to investigate the substitutes of *rà* 'to buy' and their collocates. The following items were used as basis for the study: whole grains, powdery food, seed of lemons, vegetables, nuts, fruits, crops like yams and maize, fried food, some cooked food, meat, fats, palm wine, sugar, omo (detergent) cloth, household furniture, and minerals. Eleven substitutes were discovered with semantic roles explored. From such explorations several predictions were made about the items that collocate with each *ra* hyponym.

Interest has also been directed to the exploration of the concept of *culinary* in semantics. The word *culinary* has simply been defined by the Oxford Advanced Learner's Dictionary as '*adj* of cooking or kitchen....' A related term *cuisine*, needs also to be explored in relation to the preceding one. It can be seen that culinary relates to cuisine in that while *culinary* is concerned with cooking, *cuisine* concerned more with types of prepared food. The type may be defined by

culture, geography, preparation method or ingredients used in preparing it. *Culinary* thus seems to be a more inclusive lexeme of the two. In discussing *culinary*, therefore the sense of *cuisine* is included, or what makes the cuisine of a given language is implied.

2.1. Theoretical Framework

The theoretical framework adopted for this study is the lexical semantic relation theory of lexical Field. Lexical Field theory (also called Semantic field), according to Cruse (1990), is a structured group of words with related meanings that perhaps has some sort of distinctive life of its own. According to Malmkjer (1991), Semantic Field theory holds that the meaning found in the lexicon forms an interrelated system clustering together to form field of meaning which in turn cluster into even larger fields until the entire language is encompassed. The theory, with its origin credited to Trier (1930) has been influenced by the Saussurean structuralism which holds that a language system consists, at any level, of sets of paradigmatic choices, arranged along the syntagmatic axis according to definite principles of combination (Cruse, 1990). Trier (1930) has proposed that the entire vocabulary can be divided and subdivided into interlinked fields. He viewed the entire vocabulary of a language as a unified system in which lexical item gets its meaning and boundary by its relations with other items in the system. In such a setting, the vocabulary forms a kind of network where each individual lexical item has significance only by the existence of the neighboring counterparts. According to Cruse (1990) individual words were grouped into larger units called the “superordinate”, which themselves formed mosaic-like elements of the vocabulary “semantic field”

Relevant to this work is Lehrer’s (1969) application of the field theory to the lexical field of cooking terms in English. In the said study, she uses verb as basic and syntactically and semantically related nouns and adjectives to paradigmatically and syntagmatically analyze the field of cooking. The study also invokes Lehrer’s (1969) notion of ‘universe of discourse’ or what we call ‘conceptual field’ or ‘semantic space’ to delimit a set of cooking type as specified by the broad properties the groups share in terms of their preparations. Also incorporated in the present study in order to strengthen it and perhaps to overcome the lapses encountered by Lehrer (1969) is the notion of collocation of the cooking terms with their cooking items.

Comparative linguistic study has been noted to contribute significantly to the understanding of the relationship between languages of the world (Ndimele, 2003), apart from giving insight to the nature of language in general, and helping to build up the general theory of language. Igbo and Yorùbá have been much analyzed as examples of languages with rich data of interest for comparative analysis on the behaviors of their verbs (Lord, 1975). In this study, further investigation is carried out in the area of the semantic space a verb contracts with its hyponyms. The verbs of cooking were examined in the two languages to ascertain how their hyponyms are mutually delimited. In delimiting the cooking types the study assumes the process involved to be the degree of heat applied, since it forms the common denominator in cooking as had been established by Lehrer (1969). In carrying out the research three principal questions were addressed:

1. How do Igbo and Yorùbá languages specify the semantic space of cooking?
2. To what extent does the specification of the semantic space of cooking in Igbo and Yorùbá compare?
3. To what extent does the delimitation of each set of lexical items differ in the two languages?

3. Procedure

The study adopted a survey approach. Though the two languages are acclaimed to have dialects, it is the variety regarded as the standard version used in literary and official writings of both languages that data were elicited on in the study. One hundred participants who were adults

and at least fairly literate users of the languages (that is, have obtained education that include the language at least to the First School Leaving Certificate level; to be able to fill the questionnaire to avoid alterations of intended tokens) formed the subjects of the study. Five field assistants for each language were engaged. They were trained to administer the questionnaire drawn to elicit information on cooking types in the languages (see Appendix 1), guide the participants and finally collect the results back to the research team. The aim as already stated was to discern from the participants the number of cooking types they can generate. The data obtained were processed by categorizing them into the cooking types of the languages from where further analyses were carried out. Of course the intuitive knowledge of each of the researchers in each of the respective languages was fully exploited in validating the data.

4. Igbo and Yorùbá Cooking Types

Data obtained from the two Languages are presented in Table 2 below:

Table 2: Ìgbo and Yorùbá cooking verbs and their semantic spaces

Components▶		Soak cold	Mixture lacking Heat	Season	Grind	Instrument	Abort	Subtle heat	Heat in liquid	Mixture on heat	Thicken on heat	Apply dryly	Iterate	Soften	Redden	Dry on sun	Heat in oil	With container	Smoke	Mild hearth	Melt	Heat dryly	Direct on hearth	On flame
Cooking Types▼																								
Igbo	Yoruba																							
sì	Sẹ̀	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*
dè	rẹ	*											*											
yọ	-	*	*			*						*												
rù	ri	*																		*				
gwé	lò		*		*							*				*								
kwọ	lò	*	*		*	*								*										
sù	gùn					*										*								
sù	gùn					*								*										
bio	-		*	*														*						
gwọ	rò pọ		*	*						*								*						
gbà	sà											*				*								
mị	sà											*							*	*			*	

ńà	yọ							*								*		*			*			
dàtù	+gbé ...						*		*									*		*				
gbàzè	yọ'							*										*		*	*			
dà	+gbe							*	*	*							*	*		*				
gbò	tẹ								*	*	*							*						
gbò	rò					*			*	*	*							*						
sí²	sè			*						*	*							*						
sìchu	bọ				*					*								*						
tẹ	Sè			*					*	*								*						
sikwa	sè jinná									*			*				*	*						
sidè	sè rò									*				*				*						
sìcha	-									*					*			*						
sìta	+asè..									*		*						*						
yé¹	dín																*	*						
yé²	yan¹																	*				*		
rù	yan²																			*				
hù	tà																					*	*	
kpọ	Sun																					*	*	*
-	pọn								*	*	*							*						

Key:

+gbe.. = *gbé ka iná*+ase.. à *sè gbẹ omi*

4.1. Discussion

Table 2 shows the cooking types in Ìgbo and Yorùbá respectively. The asterisks in the boxes indicate the activities belonging to each cooking types. Cooking types are organized into sub-groups of common core traits or common essential properties that bind them called ‘components’ (i.e. the activities) or what we call ‘conceptual field’ or ‘semantic space, delimiting a set of cooking types as specified by the broad properties the group share in terms of their preparations. Such properties in this study are defined by the intensity or otherwise of heat. There is a cultural dimension to culinary. While in the British culture, for example, wine or alcohol may form part of the cooking types (see Lehrer, 1969) such does not obtain in the area of study as typified, for example, in Ìgbo where ‘wining’ is separated from ‘dining’ as in the expression “**òriri nà ọ̀nụ̀nụ̀**” (Dining and wining): an Igbo expression for festivity. This expression shows that food differs from wine, and therefore, in a feast where the two normally come together, it is descriptively shown in the above Ìgbo expression.

Despite linguistic and cultural differences, the data from the two languages display extensive culinary fields and lots of merger in the semantic spaces of cooking types. While the Igbo column shows twenty eight cooking types defined by twenty three semantic spaces, the Yorùbá table depicts twenty six cooking types also defined by twenty three components. The cooking types are contained in the rows while in the columns contain the indexes forming the semantic space each cooking type.

Whereas the verb **si'** (cook in Ìgbo) and **sè** (cook in Yorùbá) can co-occur with all food types in the two languages, all other verbs for cooking select the food types they co-occur with within the delimited semantic space defined by the components based principally on the nature of the heat applied or not applied. Some foods are prepared without undergoing immediate heating in Ìgbo and Yorùbá. On the other hand, some food items that undergo heating do not become readily edible. The index column is graded according to the vigour of heat application that food can pass through, from [-heat] or low to the highest heat, since the notion of cook is typically associated with heat. In this regard a continuum of **pre-heat** to **intense heat** can be drawn characterizing the index as follows:

Soaked cold
Mixture lacking heat
Seasoning
Abort
Grind
Impact
Subtle heat on conduction
Melt
Liquid on heat
Mixture on heat
Thickening on heat
Drying on heat by conduction
Iterate
Soften
Redden
Drying on the sun
Fat on heat
Heat by conduction
Smoking
Mild heat on hearth
Direct on hearth
Dry conduction

By flame

As in Lehrer (1969), the field of cooking terms in both Ìgbo and Yorùbá is easily analyzed by taking the verb as basic in describing the hyponymy and other semantic relationships inherent in food preparation. The set of verbs is as follows for Igbo:

si'¹ (cook)(soak)
yò (sieve)
de(soften)
gwò (turn in seasoning)
bio (turn in mixture)
gwé (grind dryly)
kwò (grind wet)
su' (pestle dry)
su' (pound)
gbò (congeal)
gba' (spread in the sun)
mi' (dry in heat, either sun or fire)
na' (heat by radiation)
dátu (warm a little)
gbázè (thaw/melt)
da' (warm)
si'² (boil)
síchu (parboil)
te' (cook through seasoning and heating)
si'kwa (re-cook to accomplishment)
si'dè (cook to soften)
si'cha (cook to redden)
si'ta (cook to dry up hosting liquid)
ye' (fry in oil)
ye'² (fry dry through conduction)
ru' (roast in mild heat)
hu' (roast in direct hearth)
kpò' (burn in flame)

For Yòrubá, the following cooking terms obtain:

re (soak to remove acid)
ri (soak to soften)
rò pò (turn in sauce)
lò (grind dryly, grind wet)
gún (grind or pestle dry or pound)
tè ((congeal in hot water)
rò (congeal while being turned in hot water)
sá (dry on the sun or dry over hearth)
yò (warm near mild heat from the hearth melt under heat)
gbé ka iná (warm a little, warm without a limit)
bò (parboil)
sè jinná (re-cook to accomplishment)
sè rò (cook to soften)
à sè gbẹ mi (cook to dry hosting liquid)
dín (fry in oil)
yan (fry to dry in container turn object in hot ash to roast)

ta (place object on hearth to roast)

sun (burn e.g skin, yam corn or object to roast)

pón (wrap liquid to solid state)

Again, as in Lehrer (1969), a few of the verbs interacting with basic verbs of cooking through compounding derivation in Igbo as below do not semantically belong to the field of cooking preparation as in:

(1) **kwa'** 'iterate'

cha 'reddden'

chu' 'abort'

'zè 'thaw/melt'

However the compounds formed yield such cooking types as follows:

(2) **si'chu** 'parboil'

si'kwa 're-cook to accomplishment'

si'cha 'cook to reddden'

gba'zè 'heat to thaw/melt'

A similar feature in Yoruba is the use of verb phrase that practically do not derive from cooking field to name cooking types, as in:

(3) **gbé ka'ná** 'warm a little, warm without a limit'

sé jinná 're-cook to accomplishment'

sè rọ 'cook to soften'

à sè gbẹ'mi 'cook to dry hosting liquid'

Si' and **sè** (cook) refers to the general lexeme for food preparation in the two languages. So every other cooking type has two senses; one for cooking and the other for its specific method. For example:

Ìgbo:

(4) **Àdá** **nà-esí nsrí,** **ọ** **nà-eté** **ofe**
A. PROG cook.food PRO3dP PROG.season soup
'Ada is cooking, she is cooking soup'

Yorùbá:

(5) **Níkèé sè** **oúnjẹ Ó** **ń** **te** **èbà**
N. cook food, PRO3rd PROG congeal gari

‘Níkèè is cooking (food) She is congealing garri’

Surely, the general lexeme, **sí/sè** in the two languages did not give an adequate description of the action embedded in the second sentences above. It takes the second clause for the interlocutor to have gotten adequate explanation.

Basically an index can define a cooking type. In other cooking types however, two or more indexes may define a given cooking type. The ‘soaked cold’ row for example, defines the following Igbo and Yorubá paired cooking types respectively:

(6) **dè/rẹ** ‘soften’
rù/ri ‘soften’

Heat is not applied to these cooking types for them to be ready for eating. Though, the Igbo **dè** (soak) for instance has its content, a cassava tuber, for example, boiled and sliced to flakes first before the soaking preparation, which brings it to the edible stage. Such initial boiling process on its own cannot bring it to readiness. In **rẹ** for Yorubá, cooking is accomplished through the soaking of the raw items, for example grain, to soften. Both **dè/rẹ** and **rù/ri** involve soaking in water for a period of time for the items to be ready for eating in the two languages. However, while for **dè/rẹ**, soaking removes the acidic content, for **rù/ri**, cassava for example, is soaked to soften for processing into **akpu** (fofofo). There is another dimension of **ru** which we may tag as **rù²** covering another means of food preparation in Igbo which is not captured by the term described above. The set of components that specifies the preparation is: ‘mild heat on hearth’ and “not soak cold” in water. Here the item is placed inside hot ash in the hearth for the same purpose of softening as in **rù¹**. Items that undergo this cooking process include the native pear and palm nut. The semantic relation is however not strong enough as to term the two senses hyponymous, but rather tilts towards polysemy.

Igbo also exploit the cooking type **yọ** which is accomplished through the following semantic markers:” soak cold, mixture lacking heat, instrument and apply dryly, sieve. Food items involved in this preparation include processing of softened cassava tuber into raw fofofo, cassava flour, bean cake flour and others, as in (7):

(7) **yọọ ákpụ** ‘sieve cassava flour (for fofofo)’

or

yọọ gari ‘sieve cassava grates into garri’

It is to be noted that this food preparation type does not present food on the table. It brings food to a semi-processed stage.

Another class of cooking type sharing the same selectional restriction in the two languages is **gwọ’/rò pọ** both specified for ‘mixture lacking heat” and “seasoning. For **gwọ’** in Igbo, an additional component may be needed according to the taste of the preparer – “thickening on heat”, which is optional and does not apply in many cases. For instance, a measure of cassava crisps can be prepared by turning it inside a prepared sauce placed on the hearth. Also a cassava flake sauce can be placed on mild hearth to thicken as the cook prefers. It is this characteristic that distinguishes **gwọ’/rò pọ** for cassava crisps from **bíó** in Igbo. For **bíó** the already boiled items (sliced yam or cocoyam, vegetable and sauce) are mixed by turning them together in palm oil just as in cassava crisps, except that unlike **bíó**, vegetable sauce is not required in **gwọ’/rò pọ**.

Igbo **gwe’** and **kwọ’** are both glossed as **lò** in Yorubá. In Igbo while **gwe’** is categorized for “mixture lacking heat” “grind”, “pestle”, “apply dryly” and “dry on sun”, **kwọ’** is defined by “soaked cold”, “mixture lacking heat”, “grind”, “pestle” and “soften”. While **gwe’** is

characterized by being dried on the sun and comes off dryly, **kwọ'** is characterized by wetness and therefore requires wet collocates.

Sú and **sú** are two cooking types with common traits in the nature of the finished product in Igbo. Their sub categorizations are as follows: For **sú** are “pestle”, “apply dryly”, and “dry on sun” and for **sú** are “soak cold”, “pestle”, and “soften”. **sú** involves crushing drily either in a mortar or grinding on the stone while **sú** involves crushing to pulp or lump (wetly) on the mortar with ‘pestle’. The same item (pepper, tomatoes, and other items for preparing sauce) can be prepared either way while only **sú** can be involved in pounding tuber to lump (as pounded yam or **akpu**). For Yorùbá, both distinctions come off in one term as **gún**.

Gbá and **mí** in Igbo gloss as **sá** in Yorùbá. In Igbo the two terms are hyponyms as their sub categorizations are different. They are processes of food preparation mostly for preservation. The component of **gba'** is ‘dry on the sun’. Food items collocating with it include cassava chips, yam chips, cocoyam chips, pepper, tomatoes, meat and other items meant for preservation through drying. **mí** on the other hand, is subcategorized by “dry on heat by radiation” and “heat on hearth”. In this case the source of preservation can be the heat from the hearth or sun too. However, it has a narrower range of collocates than **gbá**. Mostly preserved items through this process are meat and fish. Food preparations in the two terms gloss as **sá** in Yorùbá. **ńá/yó** are cooking terms in both Igbo and Yorùbá specified for radiation. The components include “subtle heat”, “heat in oil”, “heat by conduction”, “mild heat in hearth” and “melt”. Melting is the product of the actions. Even as radiation is the main process, the item is nonetheless encased in a container since the essence of the preparation is for the congealed oil to melt to liquid. This process collocates with congealed oil only.

Dátụ/gbé ka íná in Igbo and Yorùbá respectively have the sense of ‘to simmer’ and they collocates with both liquid and solids. The components involved are ‘liquid on heat’, ‘mixture on heat’, ‘heat in oil’, ‘heat by conduction’. These processes are used for bringing water to the required warmth. This means to cook below the boiling point without the rolling bubbles which characterizes boiling (**da'**). However, while in Igbo the process is expressed in a compound word, in Yorùbá it is expressed in a phrase.

Gbázè in Igbo which also glosses as **yó** in Yoruba is a compound verb whose second component does not semantically belong to the culinary field. **zè** means to thaw, collapse, crumble or melt. **gbá** is both causative and intransitive verb meaning to shoot or explode respectively. **zè** is also an intransitive verb meaning to crumble. The resulting form from the components **gbázè** is a compound that is ergative; both causative and intransitive. The causative compound verb is shown in (8):

- (8) **N'gozi** **gbazèrè** **mánú n'ọkụ**
 N. thaw/melt oil PREP.fire
 'Ngozi melted oil on the hearth'

The intransitive compound verb is exemplified as in (9):

- (9) **Ímanú** **gbazèrè** **n'ọkụ**
 oil thaw/melt PREP. fire
 'oil melted on the hearth'

That this compound formation occurs in Igbo cooking lexemes from components that are unrelated to cooking field restates the transformational account of compound verb in Oha (2010) where it is shown that compound is not formed in the lexicon.

da' in Igbo which glosses as **gbé ka íná** in Yoruba involves bringing liquid or food item to warmth or keeping them warm. Components that define them include ‘subtle heat’, ‘liquid on heat’, ‘mixture on heat’, ‘oil in heat’, ‘heat by conduction’, mild heat on hearth’. The process

of heating either through conduction in a container or through hearth by direct radiation is gradual. However **da'** is unmarked with respect to the vigour of the heat and overlaps with simmer and boil. This can also be actualized through keeping the item nearer to the heat by direct radiation from the hearth, as in warming an overnight-boiled or roasted yam. Items prepared in this way include warm water, bringing already cooked food to warmth, etc. The collocates include both liquid and solid.

gbò and **tẹ** are respectively Ìgbo and Yorùbá cooking terms for food preparation that involves 'mixture on heat' and 'thickening on heat' to congeal. Included in the food types are garri and akamu (pap, custard, etc.).

The Yorùbá **rò** and **tẹ** distinguish two types of food preparation described in one term, **gbò** in Ìgbo. The Yorùbá meaning for **rò** involves turning the substance which is cooking on fire with an instrument (ladle) from liquid state till it turns to congealed state. Perhaps it is the process of cooking that distinguishes the two terms. While in **gbò/tẹ** processes the substance is emptied into hot water and becomes congealed in as such food garri, **rò** requires turning with an instrument as the substance is emptied into the hot water for it to congeal as in such food as **agidi** (corn meal). Ìgbo **gbò** and Yorùbá **tẹ** describe the preparation of such food as pap/custard.

A less general sense of **si'** (cook) denotes the application of heat which 'produces an irreversible change in the object (food) cooked' (Lehrer, 1969), as in **si' ji'** 'cook yam'; **si' mmiri oku'** 'boil hot water'. These are objects (foods in the raw state, or water) being applied heat to cook or to get to its boiling point. Yorùbá also gloss this action in the general cooking lexeme – **sè**. Thus the Ìgbo and Yorùbá references to 'boil' water, 'boil' yam are **si'** and **sè**. This sense will not be included in the index involving 'soak cold' for example, attesting to the fact that it forms a hyponym of **si'**¹ (cook). However, it has a lot of overlaps with **dá/gbé ka ná** 'warm to boil'.

tẹ involves 'seasoning', 'liquid on heat', 'mixture on heat' and 'heat by conduction' to prepare the food. "Liquid on heat" and mixture on heat" seem superfluous, but have to be stated because liquid is basic before the stage where mixture is involved. Foods that result from this process are soup and stew. For Yorùbá, the process is glossed in the general lexeme **sè**. Yorùbá has no particular lexeme for referring to the process of soup making but gloss it under the general term for cooking and specified by the collocate as in (10):

(10) *sè ọbẹ* 'cook soup'

The following group of four **si'** compounded cooking terms in Ìgbo has been discussed earlier as involving the application of heat which produces an irreversible change in the object (food) cooked. However the differing nature of each is brought about by the meaning injected by the second components of the compounds. **si'chu** in Ìgbo parallels **bò** in Yorùbá involving 'mixture on heat', 'heat through conduction' and 'abort'. They mean to parboil food where the food is not thoroughly cooked. They collocate only with solids. The prepared item, by this process is kept in a parboiled state. Many food items, such as vegetables, rice are brought to such stage in the process of cooking. **sikwa** in Ìgbo glosses as **sè jinná** in Yorùbá and has the following components: 'mixture on heat', 'heat in oil', 'heat by conduction' 'iterate' and imply 're-cook'. This only involves solids and presupposes previous cooking. The new cooking is not only to bring it to warmth but to bring to conclusion the process of previous cooking. The species of cocoyam called **ternia soghurm** prepared in sauce is brought to readiness through this process in the Ìgbo culture areas where they are popular with, such as in Mgbídi in Awgu Local Government Area of Enugu State. **sidè** is another Ìgbo compounded cooking term which also has a phrasal Yorùbá equivalent, **sè rò** that means extending the duration of the food cooked longer than normal to allow it softens. This cooking type overlaps with **sikwa** in the preparation of the species of cocoyam mentioned above as popular food in the Mgbídi Ìgbo sub-culture where such processes get the collocates softened by re-cooking. Its components are 'mixture on heat', 'heat by conduction', and 'soften'. Yorùbá seems to have this term as a grammatical expression but not as a pragmatically relevant cooking process in the language. **sícha** is another compounded form

of **si** (cook) in Igbo that involves extending to other more complex cooking dimensions. This can mean cooking to redness or having the item completely cooked. This cooking type is excluded in Yorùbá cooking terms. The first sense can imply the second sense in that, for example, the same **ternia soghurm** is, in the process of cooking to completeness, brought to redness. For other solids, **sícha** may imply bringing to completely cooked stage or being thoroughly cooked. This is in contrast to some food items not brought to completely cooked stage such as some vegetable preparations. ‘Mixture on heat’, ‘reddden’, ‘heat through conduction’ are the main components of this cooking type.

síta in Igbo which glosses as **sè gbẹ mi** in Yorùbá is a cooking term which has the goal of either reducing liquid on the solid or drying it. For example boiling rice must be gotten to the stage of having the water or liquid dried up. The components are ‘mixture on heat’, ‘dry on heat’, ‘heat through conduction’.

Summarizing, the five compounded senses of cook¹ form its hyponyms as shown in the Table 3 below:

Table 3: si’ Compounds in Hyponymous relations with si¹ in Igbo and their Glosses in Yorùbá

Si ¹ Compound in Igbo	Glosses in Yorùbá
sichu	bò
sikwa	sè jinna
ssicha	sè rọ
sicha	
sita	sè gbẹ mi

In Table 3, as also provided in Lehrer’s (1969) English data, the hyponyms arrange themselves with respect to the vigour of the boiling action. The different components that characterize them arrange them into hyponyms of one another even though they can apply to the same range of collocations. For Yorùbá counterparts, they are pragmatically non relevant to cooking terms and occur in phrases as have been noted above.

Yé¹ and **dín** are both Igbo and Yorùbá cooking terms that respectively describe frying inside oil. The components are “heat in oil” and “heat in container”. Items that get fried in this way are akara, meat, yams, potatoes, plantain, etc. **Ye²** is polysemous with **Ye¹** and glosses as **yan** in Yorùbá. It describes solid objects that are fried through roasting in a dried container placed on hearth. The components are “apply dryly”, “heat in container”, “instrument” and “heat dryly”. Fried ground nuts are prepared through this way.

Rú is a cooking term in Igbo that describes food preparation where nuts like palm nuts or pears are placed into hot ashy hearth to get done. Its components are “mild hearth” and “apply dryly” and “instrument”. While the method of preparation differs from that of **rù** described earlier in the use of instrument in the former, the two produce the same effect on the collocates.

Rú in Igbo glosses as **yan¹** in Yorùbá and involves roasting an item on direct hearth to get it done. The components include ‘apply dryly’, ‘instrument’, and ‘direct on hearth’. Yams and

other tubers are roasted through this process. Yorubá uses the same lexeme for frying dry for this cooking type.

Kpó in Ìgbo glosses for **ta** in Yorùbá and indicate cooking type where the object being cooked is subjected to flaming. Involved are such activities as skinning goats or other killed animals, etc. Its components include “apply flame dryly”, “direct on hearth” and “on flame”. Fresh maize in its pod is also flamed as a way of roasting it as a special recipe. **pón** is a cooking type exclusive to Yorùbá within the two languages. Food in liquid form is heated to solid state. The components of this cooking type include “heat in liquid”, “mixture on heat”, “thicken on heat”, and “cook in container”.

5. Conclusion

The data from Ìgbo and Yorùbá verbs of cooking and their culinary fields reveal that both languages have the verbs **sí** and **sè** respectively co-occurring with all food types, with a robust array of other mutually delimiting sets of lexical items within them. They show a robust correspondence in the semantic spaces that delimit cooking types. While Igbo has twenty eight semantic spaces mutually delimiting one another, Yorùbá has twenty six. Instances where the two languages correspond in their semantic spaces include:

de/re
rù/rì
gwó/rò pò
gbò/tè
sí/sè
ná/yò
á/dátu/gbé ka'ná
sichu/bò
síkwa/sè jinná
sìdè/sè rọ'
sí'ta/sè gbẹ mi
ye'¹/dín
hù/tá
kpó/sun

The choice of lexical item within a delimiting set is culturally determined by the type of process involved in the cooking of the food item. Thus the following cooking types are differently specified in the two languages: while Ìgbo has unique terms for **té** (cook soup) Yorùbá glosses it with the general cooking term **sè** ‘cook’. Ìgbo distinguishes between **gwé** ‘grind dryly’ and **kwó** ‘crush to pulp’ while Yorùbá uses a single term **lò** for the two. Igbo also distinguishes between **sú** ‘hit to powder with pestle’ and **sù** ‘pound to lump’, Yorùbá on the other hand has the two concepts as **gun**. Igbo also makes demarcation between **gbá** ‘spread to dry on the sun’ and **mì** ‘dry over the hearth’ while they come off in Yorùbá as one term: **sá**. In Igbo **na** ‘place near the hearth’ has its equivalent as **yò** in Yorùbá. However, **na** and **gbázè** ‘melt’ are different processes in Igbo but are glossed as **yò** in Yoruba. Interestingly too, **dátu** ‘warm a little’ and **dá** in Igbo are realized in a phrase – **gbé ka iná** in Yorùbá. **Ye**² ‘fry dryly’ and **hù** ‘roast in hearth’ are glossed as **yan** in Yorùbá. Yorùbá distinguishes between **tè** ‘congeal in hot water’ and **rò** ‘congeal in hot water while turning the liquid item to congeal’ while Igbo has one term **gbò** for both.

The following cooking terms are peculiar to Igbo:

- (11) **yò** ‘sieve either wet or dryly’
bio ‘turn in mashed oiled vegetable’
sicha ‘cook to redden or completely cooked’

On the other hand **pón** (heating liquid food to solid state) is unique to Yorùbá. Some Igbo terms are polysemous; having different meanings in the cooking semantic space, for example, **rù** as in:

- (12) **rù ákpụ** ‘soaking in cold water; soak cassava’ for **fufu**’ as contrasted with
rù ubé ‘roast in hot ash; roast pears’

The same applies to the pair **ye**¹/**ye**²

Ye¹ is frying inside the oil while **ye**² involves frying dryly enmeshed in dry sand in a container.

At the grammatical level, compound formation through verbs referring to cooking process with **sí** as noticed in Igbo is not a productive process, even though it is transparent to meaning through the first verb. One cannot for example, form new verbs from **sí** as in **sígba**, **síte**, etc,
to denote a new cooking term.

Another discovery of the study is that cooking verbs involves stages that can be delineated into pre-boil, boil and post-boil. Certain food preparation may be accomplished at the first or second stage of the process while others may go through the three stages. The preceding stage or one stage may provide basis for the next stage. Depending on the type of preparation, yam for example, may be ready by a boiling process. It may also require a post boiling process like **bíó**–“stir (especially yam mixed with vegetable)”.

The study envisages the lexical items from one semantic field (the donor field) transferring to another semantic field (the recipient field) with the structure of the first field (the donor field) providing the structure or reorganizing some previous structure of the second field (the recipient field). For example, Oha (2006/8) in his study discovered that such cooking terms can be a donor field to such semantic discourse themes as health, manipulation of justice, mysticism, accident or physical discomfort, emotion and anger.

Lexical field analysis of Igbo and Yorùbá verbs of cooking reveals that within the semantic space of a given domain in the lexicon exists a large productive array of set of lexical items that mutually delimit one another which in such less frequently used languages can be lost if not documented.

Worth of further investigation in the study is unveiling and documenting the various culinary types of these cultures to provide for food scientists, dieticians and other researchers into food to evaluate their nutritional contents and values, and where they appear deficient, explore methods of improving them. Thus exposing cooking types of these cultures will also expose them to modification to more modern methods to enhance improvement in the value chain. This, we believe, will chart ways for a new direction in Africa foods appreciation globally.

References

- Anoka, G. M. K. (1983) Selectional Restriction 1; Verbs Meaning ‘to buy’ in Nwachukwu, P. A. N. (ed.) *Readings on the Igbo Verbs (Studies in Igbo Linguistics Vol. 1)* Nsukka: University of Nigeria Nsukka.
- Anyanwu, O. and Iloene, M. I. (2004) “Verbs of Planting & Harvesting in Igbo: The Ngwa & Obimo dialects Example” In Ndimele, O-M (ed.) *Language and Culture in Nigeria: A festschrift for Okon Essien*. Aba: National Institute for Nigerian Languages. Pp 815 – 821.
- Bendor-Samuel, J. (Ed. 1989) *The Niger-Congo languages: A classification of Africa’s largest language family*. Lanben Md: University press of America.
- Bennet, P. R. and Serk, J. P. (1977) South Central Niger-Congo: A reclassification. *Studies in African Linguistics*8: 241 – 73.
- Blench, R. M. (The Benue-Congo languages: A definition and proposed internal classification. *Africanstriche Arertscpiera* 17: 115 - 43
- Greenberg, J. (1963) *The languages of Africa*. The Hague: Mouton and Co.
- Hornby, A. S., et al (Eds) (new edition, 2012) *Oxford Advanced Learner’s Dictionary*. Oxford: Ox ford University Press.
- Ikekeonwu, C.I (1986) A Lexico-phonotactic Study of Northern Igbo Dialects. Ph.D. Thesis, University of Nigeria, Nsukka
- Ikekeonwu, C.I. (2007) Inter co-ordination in some Nigerian languages. In Ndimele, O-M, Ikekeonwu, C. I. and Mbah, B. M. (Eds.) *Languages and economic Reforms in Nigeria*. PortHarcourt: M & J Grand Orbit Communication Ltd & Emhai.231 - 236
- Lehrer, A. (1969) “Semantic Cuisine” *Journal of Linguistics* 5 Pp. 39 – 55.

- Lord (1975) "Igbo Verb Compounds and the Lexicon". *Studies in African Linguistics* 6:1. pp 23-48
- Lutzeier, P. R. (1982) The Notion of Lexical Field and Its Application to English Nouns of Financial Income. *Lingua* 56 p. 1 – 42.
- Lyons, J. (1968) *Introduction to Theoretical Linguistics*. London: Cambridge University Press.
- Ndimele, O-M (2003) "On the Wh-Parameter and Grammar Induction: Insights from African Languages" In Ndimele O-M (ed) *Four Decades in the Study of Language & Linguistics in Nigeria. A Festschrift for Kay Williamson*. Aba: National Institute for Nigerian Languages.
- Malmkjer, K. (1991) *The Linguistic Encyclopedia*. London: Routledge
- Mbah, B.M. (2008) Methods of Testing Language Relationship: Examples from Historical Linguistics. *Journal of Igbo Studies* 3.
- Oha, A. B. (2006/8) Igbo Culinary Field and the Structure of Metaphor. *Nsukka Journal of African Languages and Linguistics*. 3 and 4.
- Oha, A. B. (2010) Verb Compounding in Igbo: A Morphosyntactic Analysis. (Unpublished Thesis) Submitted to the Department of Linguistics, Igbo and Nigerian Languages, University of Nigeria, Nsukka, Nigeria.
- Ohiri-Aniche C. (2007) The place of Akokoid in Benu-Congo. In Ndimele, O-M, Ikekeonwu, C. I. and Mbah, B. M. (Eds.) *Languages and economic Reforms in Nigeria*. PortHarcourt: M & J Grand Orbit Communication Ltd & Emhai. 34 - 47
- Onietan, E. A. (2010) The Substitutes of Ra "to Buy" & their Collocates in Owe in Ozo-mekuri, N. (ed.) *Language Policy, Planning and Management: A Festschrift for Professor Ben Elugbe*. Pp 797 – 8
- Uwaezuoke, A. H. and Ogukoya, A. H. () A Contrastive Morphological analysis of tense formation in Igbo and Yoruba: Implication on learners and teachers. <http://dx.doi.org/10.4314/ujah.v18i3.10>
- Williamson, K. and Blench. R. M. (2000) Niger-Congo overview. In Heine, Bernd and Derek Nurse (Eds.) *African Languages: An introduction*. Cambridge: Cambridge University Press.

Appendix 1

QUESTIONNAIRE FOR IGBO AND YORUBA CULINARY FIELD (QIYCF)

Dear respondents,

We implore you to respond to the following questions directed towards obtaining data for a TETFUND sponsored research titled, 'IGBO AND YORUBA VERBS OF COOKING 'SÍ' AND 'SE' RESPECTIVELY AND THEIR CULINARY (LEXICAL) FIELDS'.

We assure you that any response given will be strictly for the above stated purpose.

Thanks for expected co operations.

QUESTIONNAIRE FOR IGBO AND YORUBA CULINARY FIELD (QIYCF)

SECTION A: PERSONAL INFORMATION

Tag. No.:

Age range of respondent: (tick as appropriate) 25 and below (), 26 - 35 (), 36 – 45 (), 46 – 55 (), 56 – 65 (), 65 and above ().

Sex:.....

Name of language:.....

Name of dialect:.....

Number of years lived among dialect language speakers

SECTION B QUESTION ITEMS

Indicate names given to the cooking types involved in the food items below and also indicate whether they fall into the general name 'cook' in the language/dialects:

FOOD	COOKING TYPE	GENERAL NAME
1. Yam		
2. Cocoyam		
3. Akpu		
4. Soup		
5. Porridge		

6. Stew
7. Cassava flake
8. Cassava slices
9. Abacha/ugba sauce
- 10 Moimoi
- 11 Akara
- 12 Potato/yam slice
- 13 Roast corn
- 14 Cook corn
- 15 Pound yam
- 16 Garri lump
- 17 Akamu/pap/custard
- 18 Dried meat
- 19 Dried tapioca
- 20 Sinning goat/dog/ cow
- 21 Vegetable-sauced yam/cocoyam
- 22 Agidi
- 23 Ground wet pepper/tomatoes
- 24 Ground dried pepper/tomatoes
- 25 Roast pears
- 26 Congealed/blocked oil/fat
- 27 Warm already cooked food
- 28 Soaked cassava tuber for akpu
- 29 Cassava flour to garri
- 30 Boil water
- 31 Warm water
- 32 .parboi