Ikwere Empty Categories

By

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Abstract

Empty categories, though phonetically imperceptible, have proven to be syntactic attributes that are inherent in the grammars of natural languages. For instance, while performing the transformational operation of movement, empty categories preserve the positions from which constituents were moved by requiring traces to be left behind. Beyond their relevance in movement, empty categories also account for the presence of certain covert constituents in syntactic structures, as evident in the case of PRO. This paper undertook an examination of the notion of empty categories in Ikwere, discussing the empty category types in the language, and analyzing the nature of their occurrences. The study is anchored on the Government-Binding theoretical framework and adopts the Qualitative research design. The study found that two empty category types, NP-trace and PRO, exist in Ikwere. In discussing the instances of NP-trace in the language, the study observed that NP-trace, as a surface structure phenomenon, is predicated on the movement transformational operations of cleftivization, and left dislocation. Contrarywise, the paper expound how PRO is base-generated in Ikwere non-finite complement clauses and not a trace of its antecedent in the higher clause, even though both are co-indexed. Further, the work observed that, as the subject of the non-finite clause, PRO is an opaque domain and cannot be assigned the nominative case, given that it is not governed by a [+tense INFL]. Additionally, the paper highlighted the mutual exclusivity of PRO and NP, an occurrence which is understandable given that NPs, by necessity, occur in governed environments. Consequent upon its findings, this paper concludes that empty categories, though subtle, are as intrinsic in the Ikwere syntactic structure as overt NPs.

Keywords: Empty Categories, NP-trace, PRO, Cleftivization, Left Dislocation

1. Background

Ikwere belongs to the Igboid language cluster; a cluster which is subsumed under the Benue-Congo group of languages and a member of the Niger-Congo language family (Williamson and Blench, 2000). This classification makes Ikwere coordinate with other Igboid languages such as Igbo, Echie, Ogba, Ẹkpeye, etc.

Although for a period, Ikwere was categorized a dialect of Igbo, according to Enyia (2008), it was the investigations of Professor Kay Williamson and Professor Donwa-Ifode, now Yul-Ifode that led to the recognition of Ikwere as a distinct language by the Federal Ministry of Education in 1985.

Ikwere has a total of twenty-four dialects, which are mostly mutually intelligible. These dialects are Rumuekpne, Rundele, Ọdeegnu, Ẹmowha, Ọgbakiri, Akpo, Ọbio, Aluu, Igwuruta, Ọmagwa, Isiokpo, Ibaa/Obeele, Ipo, Ozuaha, Ọmuanwa, Ubima, Akpnabu, Egbedna, Ọmadeeme, Eleele, Omudiogna, Ubimini, Omerelu and Apnani (Alerechi, 2007).

For this study, data were drawn from the Ẹmowha dialect of Ikwere. The adoption of Ẹmowha is hinged on the fact it is the native dialect of the researcher.

2. Introduction

Syntax studies the internal structure of phrases, clauses and sentences. It refers to a traditional term used to describe the study of the rules governing the way words are combined to form structures that are larger than the word in a language. Matthews (2007) notes that syntax is distinguished from morphology which also studies internal structure. However, whereas morphological studies pertain to individual words, the focus of syntactic analysis is on phrases, clauses and sentences. Matthews further notes that in a structure such as *these books*, the relationship between the words is where *these*, a determiner modifies *books* and a number agreement is sustained between both words, is the syntactic relationship. Conversely, an analysis of the internal compositions of the individual words *these* and *books*, showing plural inflection in each word, would constitute a morphological study. Agreeing with Matthews, Crystal (2008) asserts that syntax is opposed to morphology, the study of word structure, and that if we choose to adopt an alternative definition of syntax that avoids the concept of 'word'

altogether, syntax can be seen as the study of the interrelationships between elements of sentence structure, and of the rules governing the arrangement of sentences in sequences. Expatiating further, Crystal writes, in initial formulations of Generative Linguistics, the syntactic component was one of three major organizational units within a grammar (the others being phonological and semantic) that contains rules for the generation of syntactic structures (e.g., phrase-structure rules, transformational rules); however, the exact nature of the syntactic rules within this component varies from one grammatical theory to another.

Pivotal to syntactic understanding and syntactic rule application is the notion that not all categories are overt. Certain categories, though devoid of phonetic forms, are present in the syntax of the language, and as such, are factored into syntactic considerations. These categories are aptly named empty categories.

3. The Notion of Empty Category

About empty categories, Fodor (1989) writes, they are constituents that have no phonological substance associated with them; they are inaudible in speech, and invisible in the writing systems of languages. Highlighting the complexity of empty categories, Fodor further notes, empty categories generate two kinds of challenge: firstly, they do not manifest themselves overtly, therefore, their existence must be inferred. Secondly, they are often co-indexed with antecedents that are not adjacent to them. Echoing aspects of Fodor's view, Radford (1997) describes empty categories as syntactic structures that contain empty or covert or null categories. Accordingly, such categories have no overt phonetic form and hence are inaudible or silent. To Matthews (2007), the empty category is an element in Chomsky's Principle and Parameters Theory which occupies a position but has no phonetic realization. In his characterization of the empty category principle, Crystal (2008) narrows the description of the notion to the government sub-theory and trace. He notes: the empty category principle is a principle of the government (sub-) theory of government-binding theory that requires a trace to be properly governed, i.e., to be governed either by a lexical category or by a category with the same index (its antecedent).

From a broad perspective, empty categories are grouped into two types: trace and PRO. This grouping is buttressed by the assertions of Chomsky. Chomsky

(1981:55-56) in Isaac (2020) distinguishes between trace and PRO as empty categories on the basis that trace is governed. In other words, the antecedent of trace is in a theta position and the antecedent-trace relation satisfies the subjacency condition. Continuing, he notes that PRO, on the other hand, is ungoverned; its antecedent, if there is one, has an independent theta-role, as does PRO. Adding, Isaac (2020) notes that while trace is a product of some permutation operation, PRO is base-generated.

Expanding on the subtypes of trace and PRO, Oyioka, Ojwang and Ongarora (2015) discuss that the typology of empty categories mirrors the typology of overt categories; therefore, four types of empty categories can be derived when trace and PRO are further expanded. These are namely: NP-trace, WH-trace, PRO and pro. In essence, in the categorization of empty categories as noted in Oyioka, Ojwang and Ongarora, PRO is subdivided into big PRO and pro and trace is as well broken down into NP-trace and WH-trace.

As noted, prior, although empty categories can be base-generated, as in the case of PRO, there is, however, a direct link between the transformational operation of movement and the creation of certain types of empty categories, particularly, NP-trace and WH-trace. To support this stance, Villiers (1995) notes that the well-grounded theoretical decision to permit movement rules in syntax had as a consequence the necessity of postulating empty categories in the original sites of the moved elements. To further buttress this position, it is instructive to note that when a noun phrase (NP) moves from one argument position (A-position) to another A-position (for example, from object to subject position) a gap is left in the position from which the category has been moved. By syntactic convention, the gap created by this NP-movement, must be filled. Therefore, an NP-trace which, in essence, is an empty category is employed as a covert filler of this extraction site (Aroonmanakun, 1997; Radford, 1997, Carnie, 1999; Haegeman, 1998).

It is expedient to note that when NPs move and generate traces, these movements can be categorized into A-movement and A̅-movement. According to Lasnik and Uriagereka (1988) in Ishima (2018), A-movement is a movement of a category from a position that is potentially a recipient of theta-role to another such position (for example, from object position to subject position, or from embedded subject

position to higher subject position). To Ndimele (2004) A-movement contrasts with Ā-movement where the movement is from a theta-role assigned position to a position in which neither case nor theta-role is assigned.

4. Theoretical Framework

The Government-Binding Theory (GB) assumes a derivational grammatical model, consisting of four levels of representation: lexical items are combined together at D-structure (underlying structure); D-structure is mapped into S-structure, which is the syntactic representation that most closely reflects the surface order of the sentence; S-structure is not directly interpreted itself, but is factored into Phonological Form (PF) and Logical Form (LF); PF is the interface with the Phonology where shapes, sounds, and groupings of items are directly represented, and LF is the interface with the Semantics of the language (Black, 1998).

As noted in Oyioka, Ojwang and Ongarora (2015), the GB Theory of syntax is modular in nature, and as posited by Chomsky, often, a number of its modules namely, X-bar theory, Government theory, Binding theory, Trace theory, and Theta theory interact with one another. This view mirrors that of Crystal (2008) which states, because of the way the sub-theories of GB interact, GB is commonly described as a 'modular' theory.

Given the intertwining nature of the modules of GB, this study employs four of the theory's modules concurrently in the analysis of its data. The X-bar theory is adopted in the tree diagram analysis of the various constructions in the study, showing hierarchical arrangement of constituents and the specifier-head-complement relationships of diverse constituents. Additionally, the tenets of Trace Theory, Binding Theory, and Case Theory are gleaned to analyze trace, highlight co-indexation, and case and opaque domains in the study.

5. Ikwere Empty Categories

This study identified subtypes of trace and PRO as existing in Ikwere, specifically, NP-trace and big PRO. In what follows, the paper delves into an examination of the notion of empty categories in Ikwere, discussing the intricacies of the empty category types there are in the language, and analyzing the nature of their

occurrences in the language. Instances of NP-trace will be discussed along the lines of the movement transformational operations that necessitate them.

5.1 NP-Trace in Ikwere

This work identifies two instances that necessitate Np-trace in Ikwere, and they are orchestrated by the A̅-movement operations of cleftivization and left dislocation.

As will be discussed in more detail, later on in the paper, left dislocation does not exactly generate an empty category. At the NP extraction site of a left dislocated construction, an overt constituent is left behind. It is, however, included in this work to enrich the discourse on NP-trace.

5.1.1 Cleftivization

A cleft sentence is one that has been split so that the focus is placed on one part of it. Cleft sentences are usually introduced by *it*, which is then followed by a verb phrase whose main verb is generally a form of the verb *to be*. The focused part of the sentence comes next and then the rest of the sentence is introduced by a complementizer (relative pronoun, relative determiner or relative adverb) (Nordquist, 2019). Through cleftivization, we can place the focus on the subject or object of a construction. Given that the element moved is an NP, an NP-trace (empty category) is generated at the extraction site from which the NP constituent moved in the surface structure. The trace is represented with the symbol [t], and to depict the co-indexation relationship between the trace and its antecedent, the subscript notation [$_i$] is attached both categories.

Let us illustrate how cleftivization generates NP-traces in Ikwere with examples.

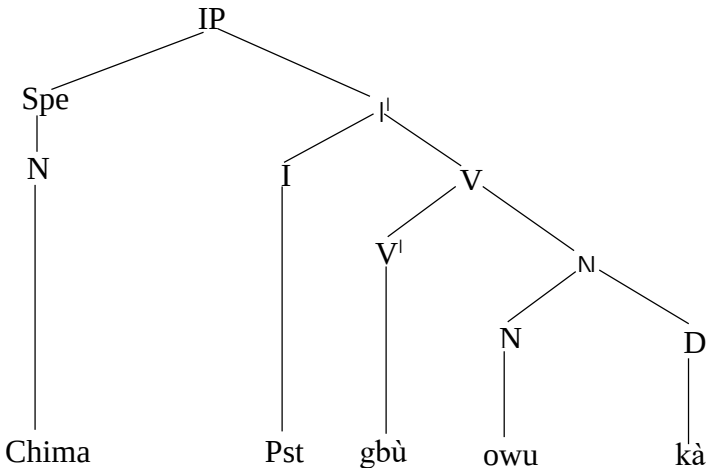
1a)	Chima	gbùrù	owu	kà
	PN	Kill+Pst	Goat	Det.
	'Chima killed this goat'			

b)	Ọ̀	bụ̀	Chima$_i$	[t$_i$]	gbùrù	owu	kà
	It	Be	PN		Kill+Pst	Goat	Det.
	'It was Chima that killed this goat'						

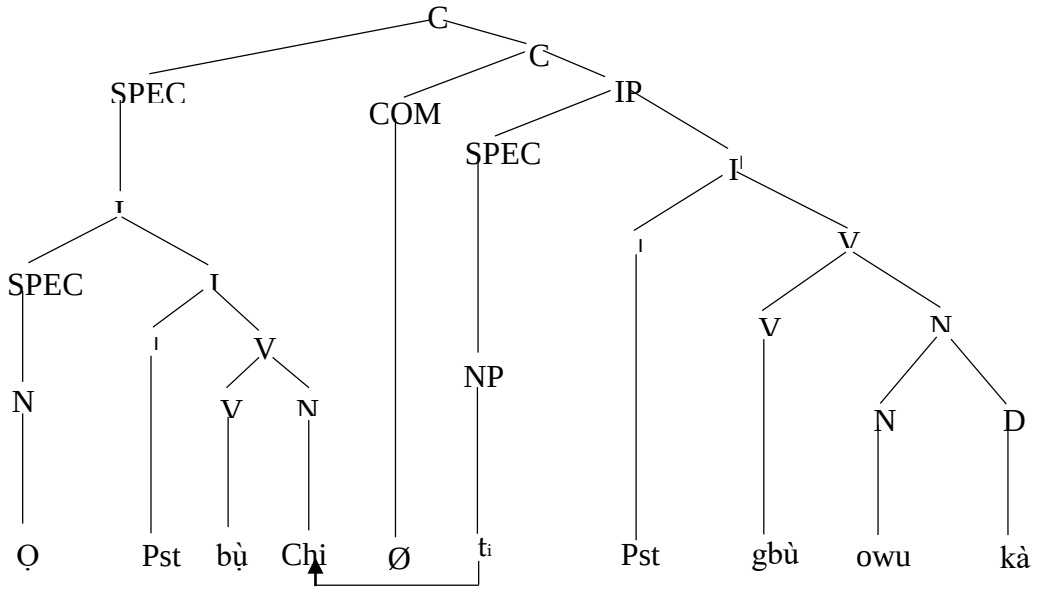
c) Ọ̀ bụ̀ owu$_i$ kà$_i$ Chima gbùrù [t$_i$]
It Be Goat Det. PN Kill+Pst
'It was this goat that Chima killed'

The sentence in example 1a) is the base-generated structure while those of 1b) and c) have undergone cleftivization. The focus in 1b) is on the subject while in 1c) the focus turns to the object. In both instances, when the NP is moved to achieve focus, an NP-trace is created at the position from which the NP was moved. To adequately highlight this existence of the NP-trace in examples 1b) and c), let us subject the sentences to a tree diagram analysis.

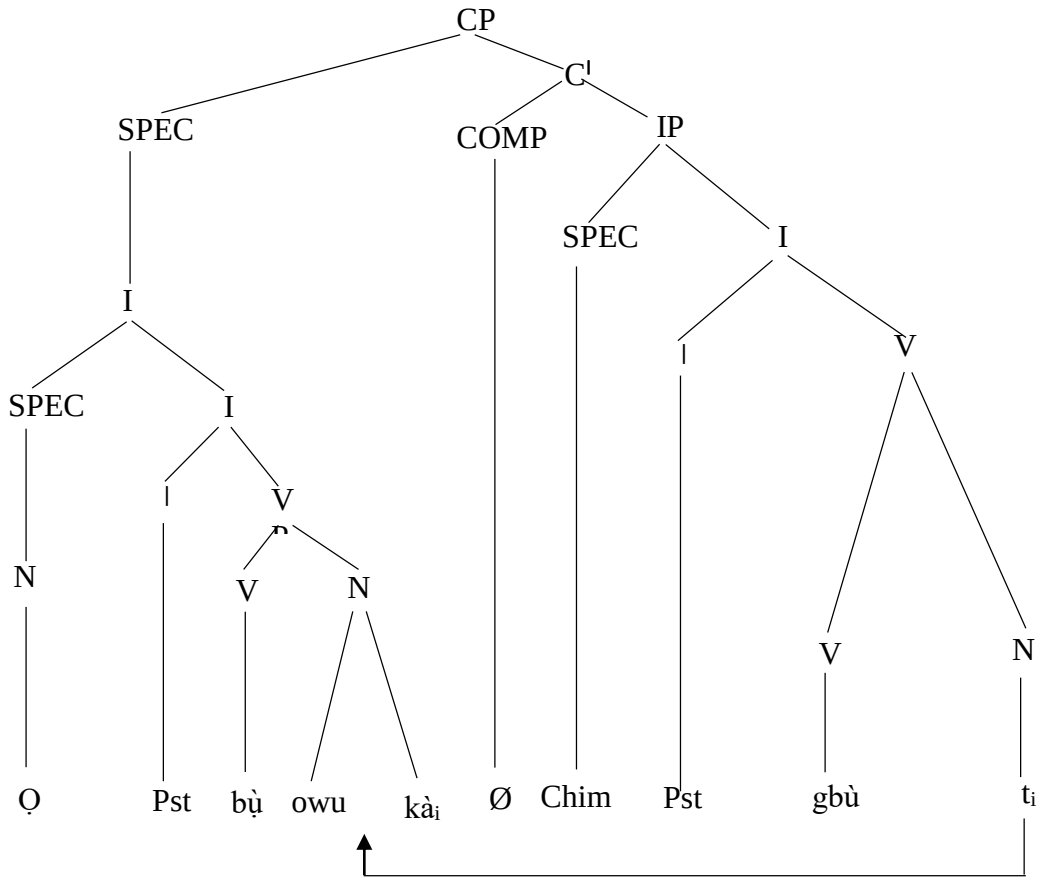
1a) Chima gbùrù owu kà
PN Kill+Pst Goat Det.
'Chima killed this goat'



b) Ọ̀ bụ̀ Chima$_i$ [t$_i$] gbùrù owu kà
It Be PN Kill+Pst Goat Det.
'It was Chima that killed this goat'



c) Ọ̀ bụ̀ owu$_i$ kà$_i$ Chima gbùrù [t$_i$]
It Be Goat Det. PN Kill+Pst
'It was this goat that Chima killed'



As seen in the tree diagram analyses of examples 1 b) and c), to achieve focus, the subject and object NPs in 1 a) were moved towards the left periphery of the constructions, outside the minimal clause, into an IP that is dominated by the SPEC node of the CP in the constructions. Although these NPs were into IP constituents, their landing sites are A̅-positions and both theta roles and case cannot be assigned to categories in them. Also, NP-traces were left in the original sites of the moved NPs in the constructions. Additionally, we observe that Ikwere does not require a

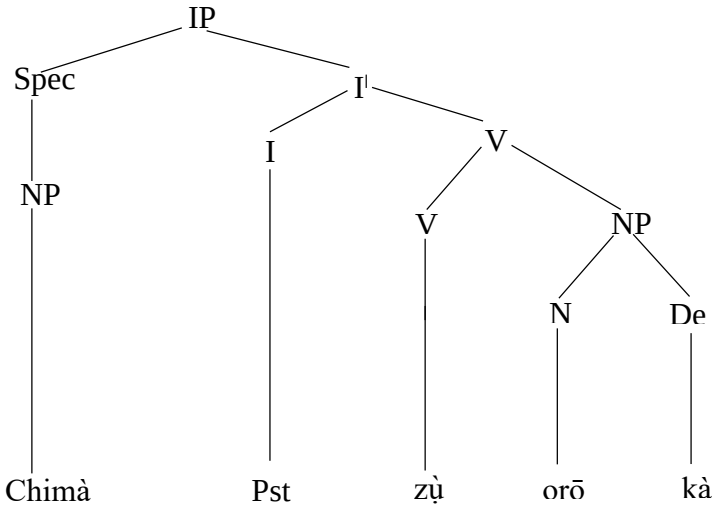
complementizer in the construction of a cleft sentence. In the tree diagrams of both 1 b) and c) above, the COMP node is null.

5.1.2 Left Dislocation

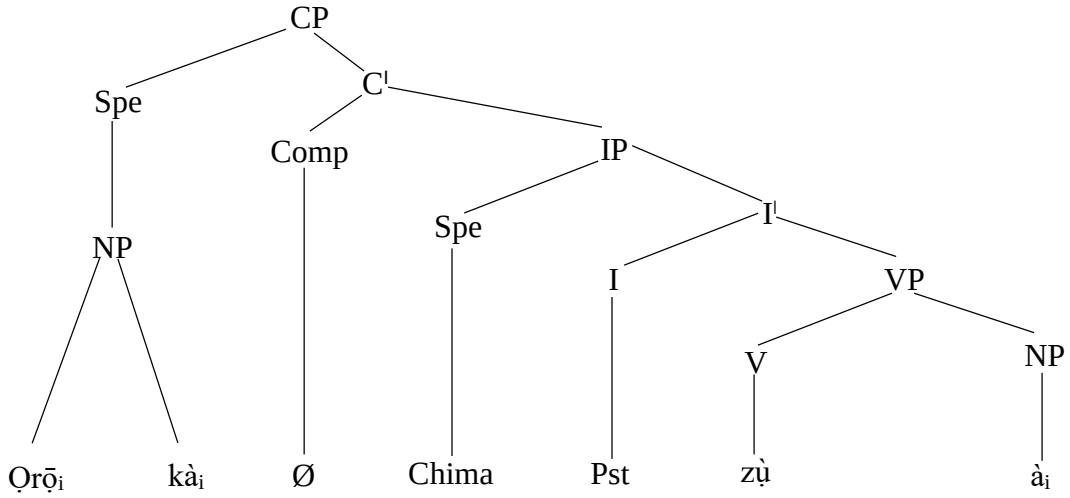
Another transformational operation that gives rise to NP-trace in Ikwere is left dislocation. Left dislocation is a syntactic process that involves the promotion of an argument. In left dislocation, a constituent is raised to a more prominent position outside the minimal clause to give emphasis to the constituent. Although left dislocation is similar to topicalization, they differ in one important characteristic. While topicalization completely transplants the argument leaving only a ghost copy of the constituent, left dislocation moves the argument but leaves behind a resumptive pronoun. The tree diagram analysis of the instances below depicts left dislocation in Ikwere.

2a)	Chima	zụ̀rụ̀	ọrọ̄	kà
	PN	Buy+Pst	House	Det.

'Chima bought this house'



b) Ọrọ̄$_i$ kà$_i$, Chima zụ̀rụ̀ à$_i$
House Det. PN Buy+Pst RProN
'This house, Chima bought it'



Although left dislocation does not exactly result in an actual empty category, the pronoun it leaves behind performs a resumptive role. In example (2b) above, even though an overt element is left at the original position of the object NP, this overt constituent only repeats or in some way recapitulates the meaning of the moved object NP.

This paper, in its discussion of trace, will not include the case of WH-trace because the syntax of Ikwere does not stipulate WH or question word fronting for grammaticality to be achieved. In Ikwere question formation, the question words remain in their base-generated position even in the surface structure. Here are instances of different Ikwere question words retaining their base-generated positions in the surface structure.

3a) Rẹwhnà ị̀ bụ̀ kinī?
Name Poss Be QW (What)
'What is your name?'

b) Ị́ bụ̀ nǹnḗ?
2PSg Be QW(Who)
'Who are you?'

c) Wè rìrì bele?
3PPl Eat+Pst QW (How Many)
'How many did they eat?'

d) Ì snèrnù owele?
2PSg Go+Pst QW (Where)
'Where did you go?'

e) Ẹ̄hnị̄ nè me i ọla
Body Be Do 2PSg QW (How)
'How is your body?'

As seen in examples 3(a) to (e), the Ikwere question words remain insitu in the surface structures.

5.2 Big PRO in Ikwere

According to Isaac (2020), PRO or Big PRO is understood to be the subject of the infinitive clause. Let us consider the following sentences:

4a) We would like [to stay]
b) We don't want [to upset them]

In the examples above, the bracketed infinitive complement clauses appear to be without subjects. However, an argument can be made that, though infinitive clauses appear to be without a subject, they are understood to contain an empty category or covert subject; that is, their subject has no overt phonetic form, and so, is silent. The empty category understood to be the covert subject of a non-finite complement clause has much the same grammatical and referential properties as personal pronouns; hence, it is conventionally designated the notation PRO (for pronoun) or more specifically, big PRO.

Let us now turn our attention to Ikwere and employ adequate examples that showcase the manifestation of big PRO in the syntax of the language. In the examples that follow, the non-finite complement clauses have been demarcated from the main clause by being enclosed in brackets.

5	Chima$_i$	chọ̀rụ̀	[PRO$_i$	osne	ọrọ̀]
	PN	Want+Pst	[PRO	Infinitive+Go	House]
	'Chima wanted to go home'				

From the example above, PRO is not visible in speech or writing but it exists in the deep syntax of the language. It can be observed that Chima, the subject of the main clause and PRO, the subject of the infinitive complement clause are co-indexed. Any attempt to insert an overt NP in the position of PRO in the above construction will result in ungrammaticality. Let us attempt an insertion of an overt NP in the position of PRO.

6a)	*Chima$_i$	chọ̀rụ̀	[ò$_i$	osne	ọrọ̀]
	PN	Want+Pst	NomProN	Infinitive+Go	Home
	Chima wanted he/she to go home				

b)	*Chima	chọ̀rụ̀	[Ovunda	osne	ọrọ̀]
	PN	Want+Pst	PN	Infinitive+Go	Home

In example 6a) above, we tried to replace PRO with a third person singular nominative pronoun that is co-indexed with the subject of the maximal clause but the resultant construction is ungrammatical. Again, in 6b) we tried to insert a subject R-expression (personal name) into the PRO position and we achieved another ungrammatical construction. Example 6b) fails on yet another front because the subject of the maximal clause and that of the infinitive clause are not co-indexed. This, therefore, is not in conformity with the original construction in example 5, where the subject of the main clause, 'Chima' and PRO are co-indexed.

6. Conclusion

This work undertook an overview of empty categories in Ikwere and examined the specific types that exist in the language. Two types of empty categories were

found to exist in Ikwere; namely, NP-trace and PRO (big PRO). Conspicuously, WH-trace is not included in the types of empty categories that occur in Ikwere. This is owed to the fact that Ikwere does not front her question words. Question words in Ikwere remain in their base-generated position which is the sentence final position.

In examining the instances of NP-trace in Ikwere, the analysis was hinged on the transformational operations that necessitate them. Cleftivization and to some extent, left dislocation were noted to be responsible for the creation of NP-trace empty categories in Ikwere. While cleft sentences generate actual phonically unrealizable empty categories, left dislocated constructions leave behind a resumptive pronoun at the extraction site of the moved constituent. The case of left dislocation may not qualify as an instance of empty category in the strict sense of the concept but it still depicts how a moved NP leaves behind a co-indexed element or trace at its original position after it is moved.

The second empty category identified in the work is big PRO, the de facto subject of the infinitive clause. Interestingly, unlike NP-trace which is created by the syntactic transformational operation of movement, PRO is base-generated in Ikwere, that is, it is generated in the deep structure of the syntax of Ikwere. This study noted that the subject of the maximal clause housing the infinitive clause that PRO serves as its subject and PRO are usually co-indexed. Also, from the findings of this work, it is grammatically impossible to substitute PRO with an overt NP constituent. Any attempt at such will result in ungrammaticality. In essence, PRO is the understood invisible subject of the infinitive clause in Ikwere and it cannot be replaced. Fascinatingly, although PRO is the subject of the infinitive clause, PRO is considered to be caseless and an opaque domain, giving that it occurs in the environment of [-tense INFL] and as such has no case governor. In a nutshell, this study highlights the fact that, their subtlety notwithstanding, empty categories are intrinsic categories in the syntax of Ikwere as overt categories, just as is the case in other natural languages.

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