

SELECTIONAL CONSTRAINTS OF YORUBA VERBS OF FARMING

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Abstract

This paper attempts to contribute to the existing arguments on verb-nominal collocations. Verb-nominal collocations refer to the patterns of collocations of verbs and their internal arguments. This notion has been studied, although not exhaustively in existing literatures. Emerging data from verbs of farming in Yoruba show that some verbs exhibit some idiosyncratic behaviour. A careful study of the verbs employed in farming in Yoruba shows that some verbs may share similar semantic notion, yet exhibit different patterns of collocations with object arguments. Thus, the general opinion that a verb determines the features of the noun it subcategorises for is only an integral part of the grammatical role of the verb in verb-nominal collocations. Advancing these arguments further, this paper seeks to unravel the semantic underpinnings and variations in the collocation patterns of the Yoruba verbs of farming. We explore the object arguments of these verbs and investigate their similarities/differences to give a clearer understanding of the grammatical roles the verb play in complement structures.

Keywords: Semantic underpinnings, Verbs of Farming, verb-nominal collocations

1. Introduction

Yoruba verbs have been studied, although not exhaustively (Bowen 1888, Bamgboṣe 1964; 1966, and Oyelaran 1976, Awobuluyi 1978, Adeyeye and Abiodun 2019, etc.). These studies reveal that the Yoruba verbs exhibits some idiosyncratic characteristics. Over time, linguists have argued that the Yoruba verbs are not inflectional in nature. All through the variations of person, number, mood, and tense, the Yoruba verbal root remains unchanged. (Bowen 1888, Bamgboṣe 1966, and Oyelaran 1976). Research has also shown that the Yoruba verbs can be split (split verbs). When used in an object, the verb can split into two halves. (Awobuluyi 1978:53).

However, emerging data from the Yoruba verbs of farming presents new peculiarities which justify this study. The Yoruba verbs of farming constitute a sub-class of the Yoruba verbs. Some of the Yoruba verbs of farming have generic terms and variants. These verbs follow an organized unusual pattern in their collocations with their object complements. The verbs impose peculiar syntactic and semantic restrictions on the NP(s) that they collocate with. To ascertain the patterns of constraints placed by the Yoruba verbs of farming

on NP complements, we intend to do an analysis of the subcategorical frames of their verbs in Section 3 of this paper. To account for the subcategorical frame of each verb, we shall set up a paradigm of feature matrices for the verbs and NPs they collocate with. Different feature-based theories of meaning consider meaning in terms of feature lists, those properties of meaning which, taken together, express the meaning of a word in some way. These accounts assume not only the existence of the definitions for concepts in terms of core features, but also in another set of relevant features. These features reflect information that is not necessarily part of the definition itself. (Rosch and Mervis, 1975; Smith, et al (1974); Collins and Quillian, 1969; Jackendoff, 1990; Minsky, 1975; Norman and Rumelhart, 1975; Shallice, 1993; Smith and Medin, 1981). As such, description in terms of features i.e. subcategorical features will enable us to provide an adequate account of the inherent grammatical restrictions which each verb imposes on its choice of complement(s)

2. Methodology

The paper adopts both direct and indirect systems of data collection in this research. The informants were sourced from native speakers of Yoruba

within the age range of 30 - 65 years. The older speakers of the language were deliberately engaged because the younger generation may not be able to give in-depth information about verbs of farming given that most of them don't part-take in farming. The farmers were interviewed individually and in groups at pre-arranged locations at times convenient for them. The data collection was done using 1,700 SIL comparative African wordlist (SILCAWL). Unlike other wordlists, the SIL comparative wordlist amongst other advantages gives a plethora of corpus for different spheres of life i.e. agriculture, commerce, travel and transportation, tailoring and weaving, man's physical being (body parts), medicine, etc. Terms for tools, crops and farming processes were collected with their examples in contexts. After

that, the informants were asked to supply any other term not captured on the wordlist. Lastly, two veteran farmers within the ages 60-65 were interviewed to corroborate and verify the data collected.

For the secondary source, published works on farming in Yoruba, e-books on farming practices in Yoruba and the Yoruba dictionary were consulted. The data were observed after collection and the verbs were categorized into eight groups based on shared semantic notions and analyzed following their argument selectional restrictions: verbs of planting, verbs of harvesting, verbs of reproduction, verbs of maturity, verbs of spoilage, verbs of peelage, verbs of clearing and verbs of breaking.

3. Subcategorical Frame of Yoruba Verbs of Planting

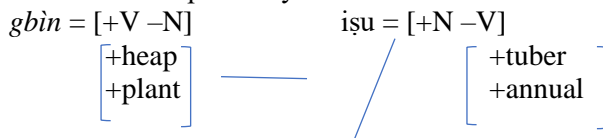
The verbs of planting are verbs that describe the events involved in the process of crop planting. These group of verbs have two kinds of terms, a generic term and its variants. The generic terms encapsulate general ideas or state of a phenomenon. On the other hand, the variant terms describe an integral idea or state of a phenomenon. The generic term for planting in Yoruba is "gbìn" "to plant" as shown in the example below in 1(a)

1a. gbìn = [+V -N]

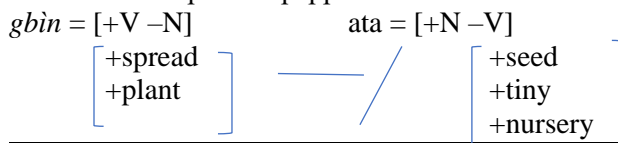
- +deep
- +heap
- +spread
- +plant
- +replant

The subcategorical features of the word *gbìn* above show that it encodes features which describe the different processes of planting. This explains why it collocates freely with different types of crops. Examples in context are considered below.

b. Dàda gbìn iṣu
 Dada plant yam
 "Dada planted yam"



c. Dada gbìn ata
 Dada plant pepper
 "Dada planted pepper"

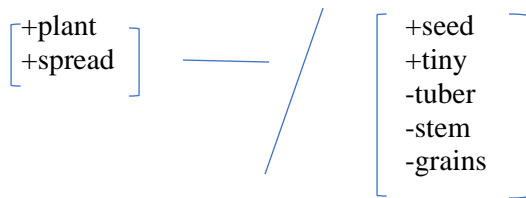


- d. Dada *gbìn* kòkó
 Dada plant cocoa
 “Dada planted cocoa”
gbìn = [+V -N] kòkó = [+N -V]



Following the data above, the feature [+heap] in (1b) captures crops that are planted in a heap. It subcategorises for an object complement with [+tuber] feature and also a covert argument i.e. an instrument used to dig up the heap not represented in open syntax but exists in LF interpretive level of the native speaker (i.e. in the mind). The feature [+spread] in (1c) captures crops that are planted by spreading them on the soil. It subcategorises for an object complement with the [+seed, +tiny] features. The feature [+deep] in (1d) captures crops planted in the soil. It subcategorises for object complement with the [+seed] feature and a covert argument used for the process of digging, the feature [+replant] in (1a) captures crops that are usually transplanted e.g. pepper and tomatoes. These inherent features of the generic verb explain why it collocates freely with the object complements. However, the verb *gbìn* has two variants; *fón* and *lọ* which contradict the collocation pattern exhibited by the generic verb. To buttress this claim, let us consider the subcategorial frame of each variant below,

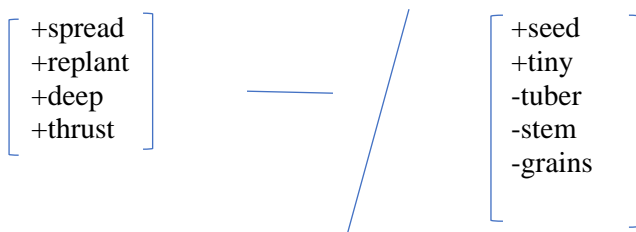
- 2a. *fón* = [+V -N] NP = [+N -V]



The feature [+spread] restricts the kinds of crops it collocates with to crops planted by spreading their seeds on the soil e.g. tomatoes, pepper. See example below

- b. Òjọ lọ *fón* ata
 Ojo go spread pepper
 “Ojo went to plant pepper in the nursery”
 c. *Dàdà *fón* *isù*
 Dada spread yam
 “Dada planted yam”

- 3a. *Lọ* = [+V -N] NP = [+N -V]



The feature [+replant] of the verb *lọ* restricts the kinds of crops it selects to crops that go through two processes of planting i.e. spreading and replanting e.g. pepper, tomatoes, cocoa, etc. see example below

- b. Òjó lọ ló ata
 Ojo go replant pepper
 “Ojo went to transplant pepper”
- c. *Dàda ló iṣu
 Dada replant yam
 “Dada planted yam”

Given the analysis of the verbs of planting above, only the generic verb “gbìn” collocates freely with all crops while its variants are restrictive in collocations. Collocating then freely will result in ungrammatical constructions as shown in examples 2c and 3c above. The sentences in 2c and 3c above are ungrammatical because the object NP “yam” is not licensed by the subcategorical features of the verbs “fón, ló”. Aside from the fact that the subcategorical features of these verbs as shown above are at variance with the subcategorical feature of the object NP, the verb in (2c) selects only overt arguments as opposed to the [+tuber] feature requirement explained earlier. Although, the verb in (3c) selects both overt and covert arguments. In the LF of the native speaker, it is assumed that the instrument here (covert argument) is used for digging the soil into a deep not a heap.

3.1 Subcategorical Frame of Yoruba Verbs of harvesting.

The verbs of harvesting are verbs that describe the different processes involved in harvesting a crop. These group of verbs also have a generic form and variants forms. The generic term for harvesting in Yoruba is ‘kórè’. Let us consider its subcategorical frame in 4a below.

$$4 \quad kórè = [+V -N] \left[\begin{array}{l} +dig \\ +pluck \\ +cut \\ +pick \\ +tear \end{array} \right]$$

The subcategorical features of the word *kórè* above show that it encodes features which describe the different processes of harvesting. This explains why it collocates freely with different types of crops. Examples in context are considered below.

- 5a. Dàda kórè òpòlópò iṣu
 Dada harvest many yam
 “Dada harvested many tubers of yam”

$$Kórè = [+V -N] \quad iṣu = [+N -V] \\ \left[\begin{array}{l} +dig \end{array} \right] \quad / \quad \left[\begin{array}{l} +tubers \end{array} \right]$$

- b. Dàda kórè òpòlópò ọsàn
 Dada harvest many orange
 “Dada harvested many oranges”

$$Kórè = [+V -N] \quad ọsàn = [+N -V] \\ \left[\begin{array}{l} +pluck \end{array} \right] \quad / \quad \left[\begin{array}{l} +fruits \end{array} \right]$$

c. Bòsè ñ kórè ata
 Bose PROG.harvest pepper
 “Bose is harvesting pepper”

$Kórè = [+V -N]$ — / $ata = [+N -V]$
 $\left[\begin{array}{l} +pluck \end{array} \right]$ — / $\left[\begin{array}{l} +vegetable \\ +seed \end{array} \right]$

d. Bòsè ñ kórè èfó-gbúre
 Bose PROG.harvest water-leaf
 “Bose is harvesting vegetables”

$Kórè = [+V -N]$ $kórè\ èfó-gbúre = [+N -V]$
 $\left[\begin{array}{l} +cut \end{array} \right]$ — / $\left[\begin{array}{l} +vegetable \end{array} \right]$

e. Olú ñ kórè àwọn ògèdè tí ó ti gbó
 Olu PROG.harvest PL. plantain REL 3SG. ASP. mature
 “Olu is harvesting plantains”

$Kórè = [+V -N]$ $ògèdè = [+N -V]$
 $\left[\begin{array}{l} +cut \end{array} \right]$ — / $\left[\begin{array}{l} +fruits \\ +stem \end{array} \right]$

f. Olú n kórè eyìn
 Olu PROG.harvest palmfruit
 “Olu is harvesting palmfruit”

$Kórè = [+V -N]$ $eyìn = [+N -V]$
 $\left[\begin{array}{l} +cut \end{array} \right]$ — / $\left[\begin{array}{l} +fruits \\ +thorns \end{array} \right]$

g. Olú ñ kórè àwọn ọsàn tí ó wò
 Olu PROG.harvest PL. orange REL. 3SG. fall
 “Olu is harvesting oranges that fell from the tree”

$kórè = [+V -N]$ $ọsàn = [+N -V]$
 $\left[\begin{array}{l} +pick \end{array} \right]$ — / $\left[\begin{array}{l} +fruits \end{array} \right]$

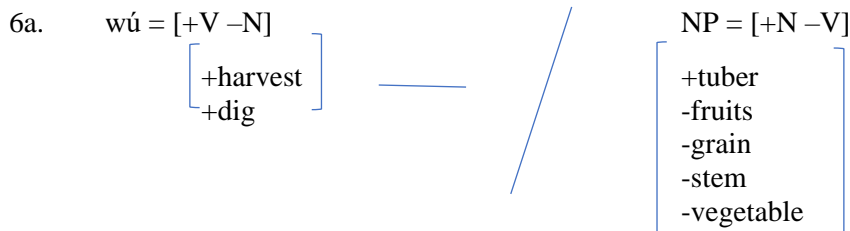
h. Olú ñ Kórè agbadó.
 Olu PROG.tear corn.
 “Olu is harvesting corn.”

$kórè = [+V -N]$ $agbadó = [+N -V]$
 $\left[\begin{array}{l} +tear \end{array} \right]$ — / $\left[\begin{array}{l} +fruits \\ +seeds \\ +stem \end{array} \right]$

The contexts of usage of the verb *kórè* show that the verb collates freely with all crop types because it encodes features which describe the different processes of harvesting. In (5a) The feature [+dig] specifies that the harvesting of the relevant crop involves the process of digging. Hence, it subcategorises for an overt Object NP with the [+tuber] feature and a covert argument with the [+instrument] feature. In (5b and c) the feature [+pluck] describes the action of plucking. It also encodes the meaning that the crop to be harvested are not

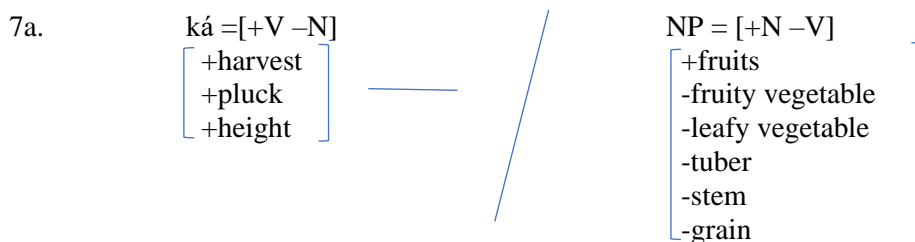
yet severed from their relevant trees or plants. It subcategorizes for Object NP with the [+fruit or +vegetable, +seed] feature. In (5d, e and f) the feature [+cut] describes the action of severing the crop from the relevant tree or plant by cutting with instrument. It subcategorises for an object NP with the [+fruit or +vegetable] feature and a covert argument with the [+instrument] feature. (5g) The feature [+pick] captures the fact that the crops are already severed from their plants and the crops are rather small. It subcategorises for object NP with the [+fruit, -instrument] features. In (5h) The feature [+tear] describes the action of tearing the crop from its stem. It subcategorises for object complement with the [+stem, -instrument] features.

The verb *kórè* has eight variants; *wú*, *ká*, *já*, *şá*, *kọ*, *ya* and *şa*. to establish their collocation patterns, let us consider the subcategorial frame of each variant below.



The feature [+dig] of the verb *wú* restricts the kinds of crops it collocates with to crops harvested by digging them out of soil with an instrument e.g. yam, cassava, potatoes, cocoa yam, etc. see example below

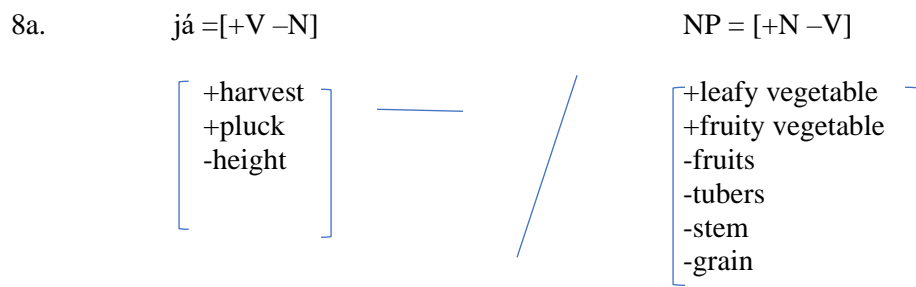
- b. Dàda *wú* òpòlópò ìsu
 Dada uproot many yam
 “Dada harvested many tubers of yam”
- c. Ade ma n *wú* ege ta
 Ade usually uproot cassava sell
 “Ade harvests cassava and sells it”
- d. O lo *wú* odunkun loko
 He went potatoe farm
 “He went to harvest potatoe in the farm”
- e. Ojo *wú* koko oba
 Ojo uproot cocoayam king
 “Ojo harvested the king’s cocoayam”
- f. *Ojo *wú* osan oba
 Ojo uproot osan king
 “Ojo harvested the king’s orange”



The feature [+pluck], [+height] of the verb *ká* restricts the kinds of crops it collocates with to crops that are plucked from height usually above arm’s reach with an instrument or climbing in order to reach them e.g.

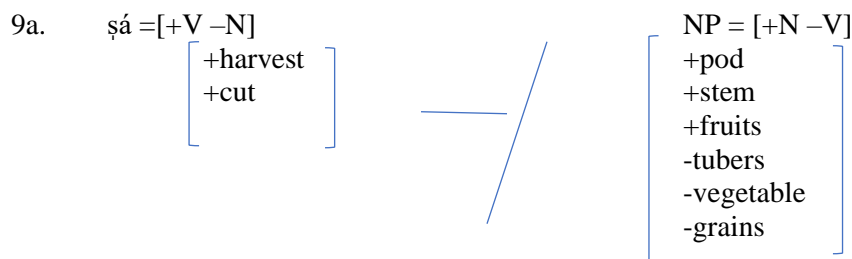
mangos, oranges, etc

- b. Dàda *ká* òpòlópò ọsàn
 Dada pluck many orange
 “Dada harvest many oranges”
- c. Bòsẹ̀ *ń* *ká* móngoro
 Bose PROG.pluck mango
 “Bose is harvesting mango”
- d. Ojo *ká* ọsàn lo gba mi
 Ojo pluck orange in compound my
 “Ojo harvested orange in my compound”
- e. *Ojo *ká* ege lo gba mi
 Ojo pluck cassava in compound my
 Ojo harvested cassava in my compound



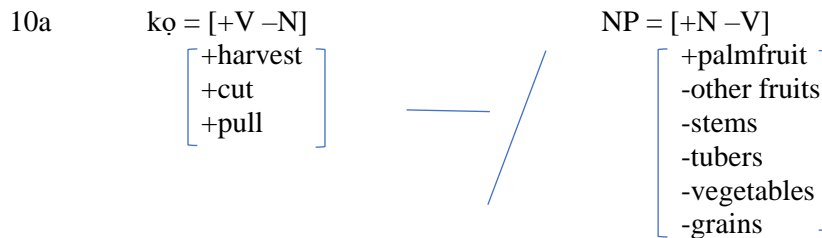
The features [+pluck], [-height] of the verb *já* restrict the kinds of crops it collocates with to crops that are plucked from height usually at arm’s reach and does not require an instrument or the process of climbing in order to reach them e.g. vegetables

- b. Bòsẹ̀ *ń* *já* ẹ̀fọ̀-gbúre
 Bose PROG.pluck water-leaf
 “Bose is harvesting vegetable.”
- c. Dolapo ma n *já* efo ta
 Dolapo usually pluck
 “Dolapo harvest vegetable to sell it”
- d. *Bobo *já* isu
 Bobo pluck yam
 “Bobo harvested yam”



The subcategorical feature [+cut] of the verb *ṣá* restrict the kinds of crops it collocates with to crops harvested by cutting the produce with an instrument e.g. cocoa, pawpaw, plantain, banana, sugarcane, etc. see example below

- b. Olu *ń* *ṣá* àwọn ògèdè tí ó ti gbó
 Olu PROG.cut PL. plantain REL. 3SG. ASP. mature
 “Olu is harvesting plantains.”
- c. Ade n *ṣá* ireke lo ko
 Ade PROG cut sugarcane in farm
 “Ade is harvesting sugarcane in the farm”
- d. Ta lo *ṣá* ògèdè mi
 who cut banana my
 “who harvested my banana”
- e. *Ta lo *ṣá* osan mi
 who cut orange my
 “who harvested my orange”



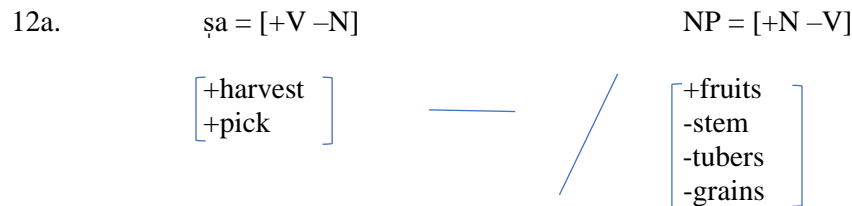
The verb *kφ* also means to harvest by cutting with an instrument coupled with the feature [+pull] these features restrict the kinds of crops it collocates with to crops harvested by cutting followed by intermittently pulling the fruit from its stem until it is finally severed. An example of such a crop is the palm fruit. Hence, collocating this verb freely will result in ungrammatical construction. See examples in context below

- b. Olú *ń* *kφ* eyìn
 Olu PROG. cut palmfruit
 “Olu is harvesting palmfruit.”
- c. *Olú *ń* *kφ* ege
 Olu PROG. cut cassava
 “Olu is harvesting cassava.”
- d. *Olú *ń* *kφ* efo
 Olu PROG. cut vegetable
 “Olu is harvesting vegetable.”
- e. *Olú *ń* *kφ* isu
 Olu PROG. cut isu
 “Olu is harvesting isu.”



The feature [+tear] of the verb *ya* restricts the kinds of crops it collocates with to crops harvested by tearing its produce off its plant e.g. corn. See example (11b) below for illustration

- b. Olú ñ *ya* agbadó.
Olu PROG. tear corn.
“Olu is harvesting corn.”
- c. *Olú ñ *ya* koko.
Olu PROG. tear cocoayam.
“Olu is harvesting cocoayam.”
- d. *Olú ñ *ya* isu.
Olu PROG. tear yam.
“Olu is harvesting yam.”



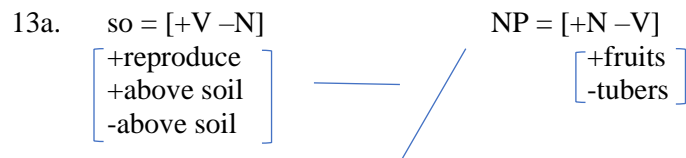
The feature [+pick] of the verb *şa* restricts the kinds of crops it collocates with to crops that falls off their plants on their own accord e.g. orange, fruit, pea, etc.

- b. Olú ñ *şa* àwọ̀n ọ̀sà̀n tí ó wọ̀
Olu PROG. pick PL. orange ASP. 3SG fall
“Olu is picking oranges that fell from the tree”
- c. *Olú ñ *şa* àwọ̀n ọ̀sà̀n tí ó wọ̀
Olu PROG. pick PL. orange ASP. 3SG fall
“Olu is picking oranges that fell from the tree”

In the analysis of the verbs of harvesting above, it can be observed that only the generic verb “*kòrè*” collocates freely with all crops but underlyingly may or may not select a covert argument in open syntax as illustrated in examples 5a-h. However, its variants are restrictive in collocations owing to the fact that they communicate specific harvesting process as illustrated in examples (6b-f), (7b-e), (8b-d), (9b-e), 10b-e), (11b-d) and (12b-c) above.

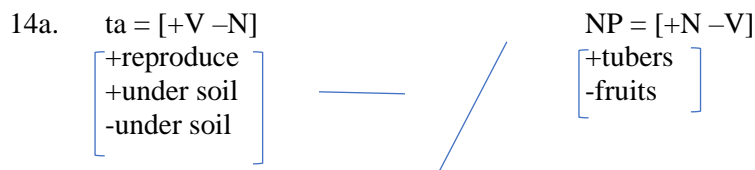
3.3 Subcategorial Frame of Yoruba Verbs of Reproduction

Our data shows that there is no generic term for the verbs of reproducing in Yoruba. Two terms are usually employed for these verb group; *so* “reproduce” and *ta* “reproduce”. Both verbs mean the same thing but cannot collocate with the same crop. The verb *so* collocates with produce that grows above the soil while the verb *ta* collocates with produce that grow below the soil. See their subcategorial frames below for more illustration.



Examples of crops in this category are orange, tomatoes, pepper, cocoa, cocoanut, pawpaw, etc. see it examples in usage below.

- b. Tòmátí` bàbá ti so òpòlópó Tòmátí
 Tomatoes baba ASP. reproduced many tomatoes
 “Baba’s tomatoes plant has reproduced many tomoatoes”
- c. *Tòmátí` oko bàbá ti ta òpòlópó tòmátí`
 Tomatoes farm baba ASP. reproduced tomatoes
 “Baba’s tomatoes plantation has reproduced tomatoes”.
- d. Ìbépe oko bàbá ti so èso
 Pawpaw farm baba AST. reproduce fruit
 “Baba’s pawpaw plantation has reproduced fruits”.
- e. *Ìbépe oko bàbá ti ta èso
 Tomato farm baba AST. reproduce fruit
 “Baba’s pawpaw plantation has reproduced fruits”



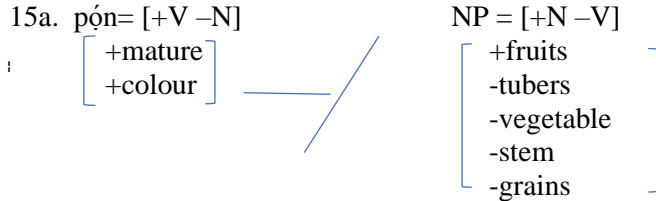
The feature [+below soil] of the verb *ta* restricts the kinds of produce it collocates with to produce that grows under the soil e.g. tubers. See its examples in usage below.

- b. iṣu oko mi ta dáadáa ni ódún yìí
 Yam farm 1SG.POSS. shoot very-well at year this
 “The yam in my farm reproduced very well this year”
- c. *ègégé oko mi kò so dáadáa ni ódún yìí
 Cassava farm 1SG.POSS. NEG Shoot very-well at year this
 “The cassava in my farm did not reproduce well this year”.

The analysis in example (13b) show that the verb *so* collocates with fruits and fruity vegetables while example (14b) shows that the verb *ta* collocates with tubers. Aside from surface illumination presented in the analysis above, these verbs of reproduction cannot also be used interchangeably because they provoke different intuitive thoughts at the LF interpretive level of the native speaker. It is assumed that the verb *so* is associated with crops which may or may not subcategorise for an underlying argument i.e. an instrument for harvest. It does not require an instrument where the reproduced crop is within arm’s reach as seen in example (13b) and where it is out of arm’s reach as seen in example (13d) it would require climbing or an instrument e.g. a long wooden stick. On the other hand, it is assumed that the verb *ta* is associated with crops which subcategorises for an object complement coupled with a covert argument for harvest (instrument) which in this case is usually a machette or a hoe. All of these explain why examples (13c, d and 14c) result in ungrammatical and unacceptable constructions in the language.

3.4 Subcategorial Frame of Yoruba Verbs of Maturity

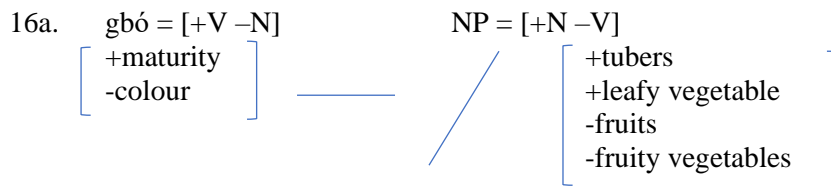
Maturity here is in reference to when the crop has reached its harvest stage. In this regard, two forms of verbs are usually employed; *pón* ‘ripe’ and *gbó* ‘mature’. The first verb *pón* collocates with a crop that changes its colour to indicate maturity, often times from dark green to light green, yellow or red. Below is its subcategorial frame for a clearer illumination of its features.



The feature [+colour] of the verb *pón* restricts the kinds of crops it collocates with to crops that change colour to indicate maturity e.g. orange, pawpaw, tomatoes, pepper, etc. See its usage in examples below.

- b. *osàn tí ó wà lógbà wa tí pón*
 orange REL. 3SG. in compound our ASP. ripe
 “The oranges on the tree in our compound have ripen”
- c. *máa din ògèdè yèn, kò ti pón*
 don’t fry plantain that, NEG ASP ripe
 “don’t fry that plantain, it is unripe”.
- d. *ra ope-oyibo mejì tí ó pón*
 Buy pineapple two REL 3SG ripe
 “Buy two ripe pawpaws”
- e. *Bunmi fi tomati tí oo pón se obe*
 Bunmi use tomatoes REL NEG ripe cook soup
 “Bunmi used unripe tomatoes to cook soup”
- f. *Ata-rodo yèn tí n pón*
 pepper that ASP PROG ripe
 “That pepper is getting ripe”

The second verb *gbó* collocates with crops that do not change colour to indicate maturity. Its subcategorical frame is shown below for a clearer illustration of its features.



The subcategorical feature [-colour] of the verb *gbó* restricts the kinds of crops it collocates with to crops that do not change colour to indicate maturity e.g. tubers and leafy vegetable. See its usage in examples below.

- b. *işu baba tí gbó*
 Yam Baba ASP. mature
 “Baba’s yam has matured”
- c. *Efo tí mo gbin tí gbó*
 Efo that I plant ASP mature
 “The vegetable that I planted has matured”

The analysis of the verbs of maturity above shows that the verb *pón* collocates with fruits and fruity vegetables because they change colour to indicate maturity while the verb *gbó* collocates with tubers, stems, leafy vegetable and grains because they do not change colour to indicate maturity. Hence, the native speakers

intuitively associate these verbs to their respective kinds object compliments

3.5 Subcategorial frame of Yoruba Verbs of Spoilage

Here, the word spoilage is used to refer to when crops weaken and eventually perish. The verbs of spoilage in Yoruba contain a generic term, *bàjé* and four variant forms; *rẹ̀*, *lù*, *rà*, *kó*, and *pón*. let us consider their subcategorial frames below.

- 17a. $bàjé = [+V -N]$
 $\left[\begin{array}{l} \pm weak \\ \pm hard \\ +decay \end{array} \right]$

Subcategorial frame of the verb *bàjé* shows that it collocates freely with all crop types because it encodes all the different features noticeable when a crop spoils. The subcategorial feature [+Weak] captures crops that become weak when they get spoilt. The feature [+Decay] captures crops that decays when they get spoilt. The feature [+Hard] captures crops that becomes hard when they get spoilt. Examples (17b-f) below show the kinds of crops the verb *bàjé* selects.

- b. *àwọn ọ̀sàn ọ́rì igi yẹn tí bàjé*
 PL orange head tree that. ASP. spoil
 “The oranges on that tree have spoilt”
- c. *ọ̀sàn yíì tí bàjé lápá kan*
 Orange this has spoil side one
 “This orange has spoilt from one side”
- d. *ìṣu tí o wà nínú ebè yẹn tí bàjé*
 Yam REL. 3SG. exist inside heap that. ASP. spoil
 “The yam in that heap has spoilt”
- e. *ilá tí mo rà tí bàjé*
 Okro REL. 1SG buy ASP. spoil
 “The Okro that I bought has spoilt”
- f. *ẹ̀fọ ọ́rì igi yẹn tí bàjé*
 Vegetable head tree that ASP. spoil
 “The vegetable on that stem has spoilt”

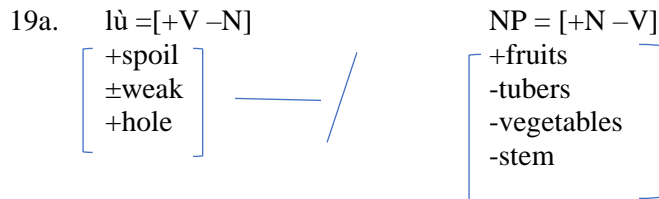
Examples (17b-f) reveal that the verb *bàjé* collocates freely with all crops because it encodes all the features of spoilage. However, let us consider the collocation patterns of its variants

- 18a. $rẹ̀ = [+V -N]$ NP = [+N -V]
 $\left[\begin{array}{l} +spoil \\ +weak \end{array} \right]$ $\left[\begin{array}{l} +fruits \\ -tuber \\ -stem \\ +vegetable \end{array} \right]$

The feature [+weak] of the verb *rẹ̀* above restricts the kinds of crops it collocates with to crops that become weak when they spoil e.g. orange, pawpaw, mango, vegetables, etc. See example below.

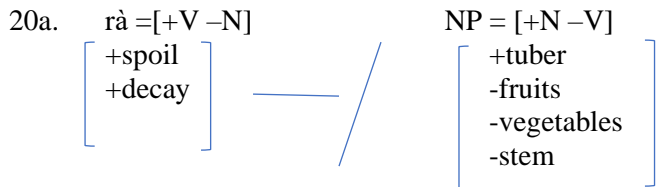
- b. *àwọn ọ̀sàn ọ́rì igi yẹn tí rẹ̀*
 (pl.) orange on tree that has weak
 “The oranges on that tree have spoilt”

- c. Olu ya mangoro to rẹ̀ si egbe kan
 Olu separate mango weak at one side
 “Olu separated the spoilt mangoes”
- d. ma ra efọ̀ to rẹ̀ wa le
 NEG buy vegetable REL weak come home
 “Don’t buy spoilt vegetable and come home”
- e. ibẹ̀pẹ̀ ti mo tọ̀ ju ti rẹ̀
 Pawpaw REL I keep ASP weak
 “The pawpaw that I kept has spoilt”



The features $[\pm\text{weak}]$ and $[\text{+hole}]$ of the verb *lù* restricts the kinds of crops it collocates with to crops that become weak at one side with a hole when it spoils e.g. orange, mango, etc. See example below for its usage in context.

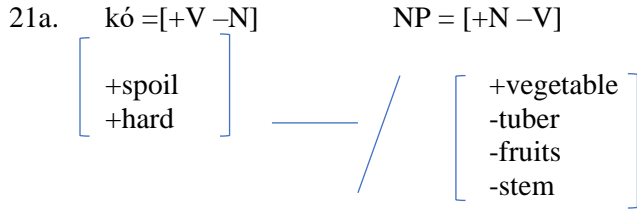
- b. ọ̀sàn yí ti lù
 orange this ASP. puncture
 “This orange has spoilt at its side”
- c. ope-oyinbo ti mo to ju ti lù
 pineapple REL I keep ASP puncture
 “The pineapple that I kept has spoilt”



The feature $[\text{+decay}]$ of the verb *rà* restricts the kinds of crops it collocates with to crops that decay when they get spoilt. e.g. tubers. See example in context below.

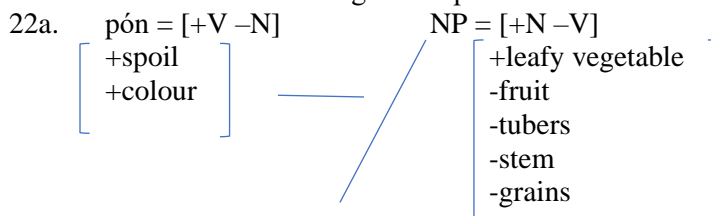
- b. iṣu tí ó wà nínú ebè yẹn ti rà
 yam REL. 3SG exist inside heap that. ASP. decay
 “The yam in that heap has spoilt”
- d. Olu ta ege e to tin rà lopo
 Olu sell cassava his REL ASP decay cheap
 “Olu sold his cassava that is getting spoilt cheap”

The verb *kó* in example (21a) means ‘to become strong’. It collocates with crop that becomes hard when it spoils. See its subcategorical frame below.



The feature [+hard] of the verb *kó* restricts the kind of crop it collocates with to crop that hardens when it spoils e.g. okro. See example in context below

b. ilá ti mó rà ti kó
 okro REL. I buy ASP. hard
 “The Okro that I bought has spoilt”



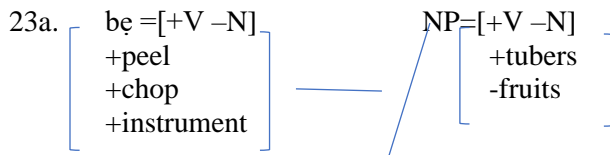
The feature [+colour] of the verb *pón* restricts the kinds of crops it collocates with to crops that change colour when they spoil e.g. leafy vegetable. See example in context below.

b. ẹfọ orí igi yẹn ti pón
 Vegetable head tree that. ASP. hard
 “The vegetable on that stem has spoilt”.

The subcategorical frames of the verbs of spoilage above reveal that the generic verb *bàjé* collocates with all crops because it encodes all the features of spoilage. However, the subcategorical frames illustrated in examples 18a, 19a, 20a, 21a and 22a reveal that its variants are restrictive in collocating with crops because they encode specific features of spoilage.

3.6 Subcategorical frame of Yoruba Verbs of Peelage

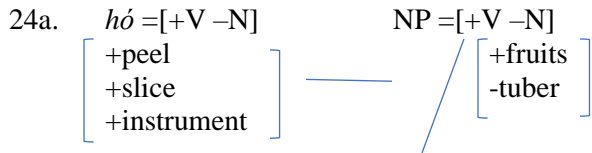
There is no generic term for the verbs of peeling because no single verbal encodes all the features of peeling. In this regard three different verbs are usually employed. They are *bẹ*, *hó*, and *bó*. These verbs cannot be used interchangeably. The Yoruba language distinguishes how the process of peeling is done by employing different verbal terms. The verb *bẹ* collocates with crops that are peeled by chopping off their back. Therefore, the verb subcategorises for a covert argument with the [+instrument] feature. The verb *hó* collocates with crops that are peeled by slicing off their back. Similarly, this verb subcategorises for a covert argument with the [+instrument] feature. While the verb *bó*, collocates with crops that are peeled without a covert instrument. See their subcategorical frames below for more illustration.



The feature [+chop] of the verb *bẹ* restricts the kinds of crops it collocates with to crops peeled by chopping off their back by repeated blow of a sharp instrument e.g. yam, cassava, etc. See its usage in the example

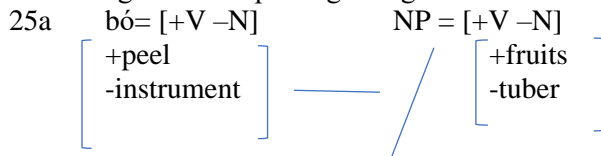
below.

- b. iyá-àgba n̄ bẹ̄ isu
 grandma PROG.peel yam
 “Grandma is peeling yam”
- c. *iyá-àgba n̄ hō isu
 grandma PROG.peel yam
 “Grandma is peeling yam”



The feature [+slice] of the verb *hó* restricts the kinds of crops it collocates with to crops peeled by slicing off their back with a sharp instrument e.g. orange. See its usage in the example below.

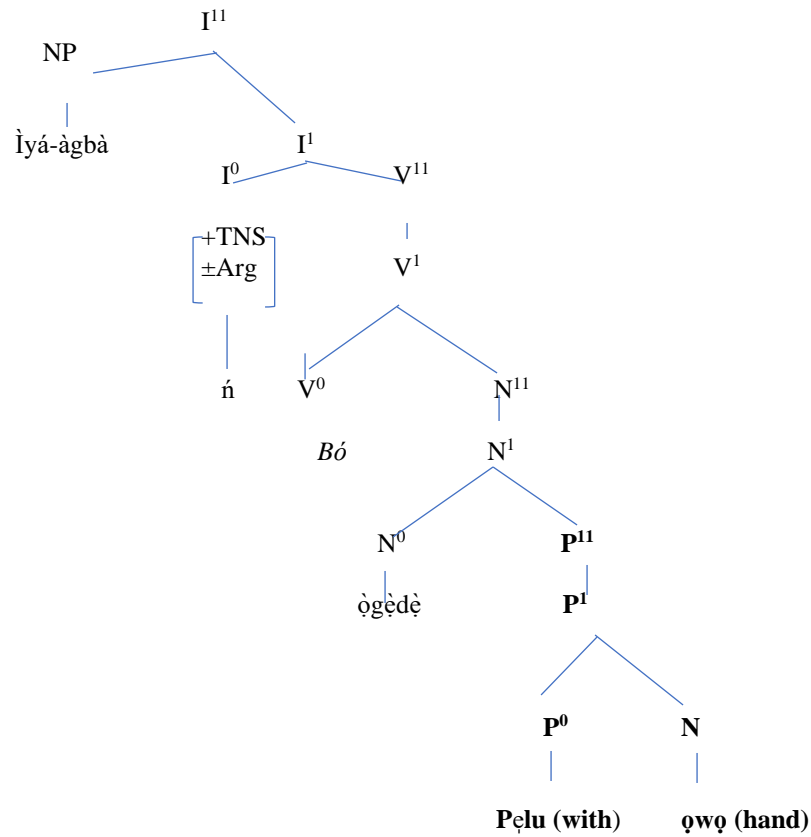
- b. Ìyá-àgbà n̄ hó ọ̀sàn
 Grandma PROG.peel orange
 “grandma is peeling orange”.
- c. *Ìyá-àgbà n̄ bē ọ̀sàn
 Grandma PROG.peel orange
 “grandma is peeling orange”.



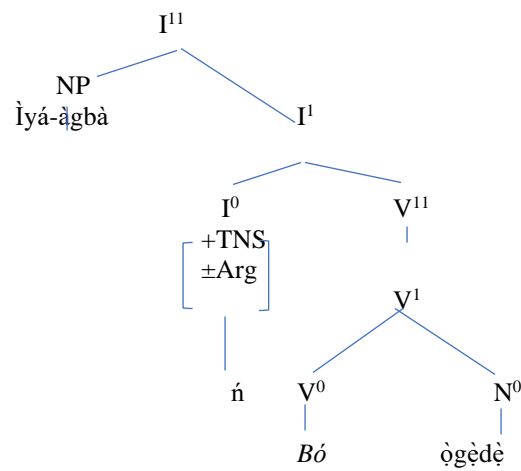
The feature [-instrument] of the verb *bó* restricts the kinds of crops it collocates with to crops that can be peeled without an instrument. However, the act is carried out with the hand alone. Hence, the verb *bó* subcategorises for NP complement with the [+fruit] feature and a covert or underlying argument “hand” absent from open syntax but assumed and understood by the native speakers. examples of such crops are e.g. tangerine, banana, plantain, etc. we will now buttress our argument with the aid of a D-structure and S-structure using the example below.

- c. Ìyá-àgbà n bó ògèdè.
 grandma PROG.peel ogede.
 “grandma is peeling banana.

D-structure



S-structure

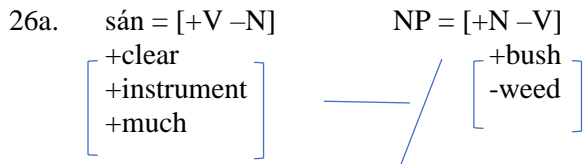


The difference between the D-structure and the S-structure is the prepositional phrase structure capturing the underlying argument not represented on the S-structure. This is so because the economy of derivation condition compels the grammar of all languages to perform the most economical one. Thus, since native speakers' knowledge of these verbs implies an awareness of the existence of these underlying NP objects, it therefore becomes economical not to represent it in open syntax.

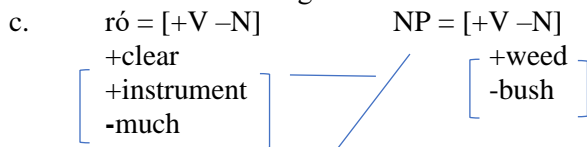
The analysis of the verbs of peeling above shows that the verbs *bẹ*, *hó* and *bó* share the feature [+peel] but the verb *bó* does not require an instrument as such collocates with objects arguments that do not require instrument but still underlying picks up a covert argument for peeling as shown in example 25c above. the verbs *bẹ* and *bó* share the features [+peel, +instrument] but the differences in their event acts' features; [±chop, ±slice] account for the variations exhibited in collocating them with object NPs. This explains why examples 23c and 24c are ungrammatical and unacceptable in the language. The object NP "yam" agrees with feature [+chop] while the object NP "orange agrees with the feature [+slice].

3.7 Subcategorical frame of Yoruba Verbs of Clearing

By verbs of clearing, we mean verbs employed in Yoruba when removing weeds on the farm land. There is no generic verb in this regard. However, two verbs are employed. They are *sán* and *ró*. They both mean "to clear" but encode different semantic underpinnings. Yoruba distinguishes between the sizes of weeds to be cleared by employing these terms. Let us consider their subcategorical frames with examples to buttress our argument.



b. Àlání ñ *sán* oko.
 Alani PROG.clear bush.
 "Alani is clearing bush".

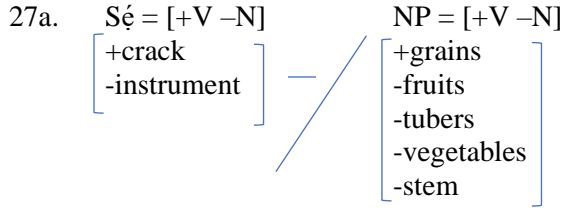


d. Àlání ñ *ró* oko.
 Alani PROG.clear weed.
 "Alani is clearing weed".

In the analysis of the verbs of clearing above, the subcategorical frames of the verb *sán* and *ró* reveal that they share the features [+clear and +instrument]. However, the subcategorical feature [+much] of the verbs *sán* in (26a) above restricts its collocation to unwanted plant cut with a particular kind of instrument 'machette', not represented in open syntax but intuitively understood by naïve speaker as shown in example (26b) while the feature [-much] of the verb *ró* restricts its collocation to weeds cut with a particular kind of instrument 'hoe' again not represented in open syntax but intuitively understood by naïve speaker as shown in example 26d.

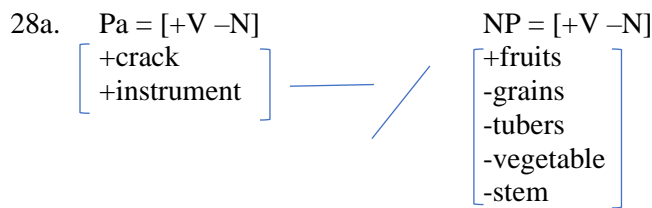
3.8 Subcategorical Frame of Yoruba Verbs of Cracking

By verbs of cracking we mean verbs that denote breaking off the back of a crop in order to get it content. Yoruba distinguishes how this cracking is done by employing two terms; *sé* and *pa*. Let us consider their subcategorical frame with examples below for clearer illustration.



b. Wunmi fẹ sẹ egusi
 Wunmi want crack melon
 “Wunmi wants to crack melon”.

c. *Wunmi fẹ sẹ ekuro
 Wunmi want crack melon
 “Wunmi wants to crack melon”.



b. Wunmi fẹ pa ekuro
 Wunmi want crack palm kernel
 “Wunmi wants to crack palm kernel”.

c. *Wunmi fẹ pa egusi
 Wunmi want crack palm kernel
 “Wunmi wants to crack palm kernel”.

In the analysis of the verbs of cracking above, the subcategorical frames of the verb *sẹ* and *pa* reveal that they share the features [+crack]. However, the feature [-instrument] of the verb *sẹ* restricts the kinds of crops it collocates with to crops that require no instrument to crack their backs because their backs are usually soft. Hence, it will be ungrammatical to collocate crop which violate this feature with it, as shown in example (27c) above. However, the feature [+instrument] of the verb *pa* restricts the kinds of crops it collocates with to crops that require an instrument to break their backs because their backs are usually very hard. Collocating it with crops which contradicts this feature will result in ungrammatical and unacceptable construction in the language as shown in example (28c) above.

4.0 Conclusion

The discussion so far has exposed the idiosyncratic selectional properties of the verbs under investigation. These verbs have two distinct patterns of collocations with their NP objects. First, the verb determines the presence of the NP objects. The direct objects are overt but the covert objects are not represented in open syntax since the native speaker knowledge of these verbs implies an awareness of the existence of these underlying NP objects. The generic terms collocate freely with all crops. Secondly, the verb delimits the presence of an Np object. The variant terms are

restrictive in their collocation with crops. The analysis above shows that the variations in collocation patterns are largely feature driven. Another point to emphasis here is that the generic verbs determines the presence of an NP object while the variant verbs not only determines but also delimits the presence of an NP object. Following from these, it suffices to say that Chomsky’s selectional restriction rule can be expanded into two areas: macro-selectional restrictions and micro-selectional restrictions. The macro-selectional restriction rules determine the presence of the object complement while the

micro-selectional restrictions rules not only determines but also further delimits the object complement form. Over and above all, the issues handled in this paper points to the richness of the

Yoruba verbal system that is yet to be fully explored.

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