

## Research Article

# The Theory of Universals and the Problem of Double Object Constructions

Kparou, Hanoukoume Cyril<sup>1</sup>, Ph.D. and Kalejaye, Abiola<sup>2</sup>, Ph.D.

Babcock University, Nigeria  
Corresponding Author Email: [kparouh@babcock.edu.ng](mailto:kparouh@babcock.edu.ng)

**Received:** September 17, 2021

**Accepted:** September 29, 2021

**Published:** October 6, 2021

**Abstract:** The SVOO prototype structures (Subject-Verb-Object-Object) present different features across languages. The first researchers to address the subject proposed five postulates to determine the double object constructions. These principles have been considered as part of syntactic universals, and later, as principles of Universal Grammar. The principles are scrutinized in this paper, drawing data from two languages, French (Roman language) and Lama (Gur language). The data clearly show that two of these principles can be reconsidered because of their questionable status. Just like French which has a DOC (Double Object Construction) marked by the presence of a dative morpheme, Lama illustrates a type of DOC with a morphological marker, intermediate between the two objects. However, Lama has a specificity, because the order of the two objects is interchangeable without changing the meaning. In light of this analysis, it appears that the principles of rigid order and the presence of an intermediate formal marker (or linked to an object as in French), do not have the legitimacy of universals.

**Keywords:** Double Object Construction, Prepositional Object Construction, Minimalist Program, Syntactic Order, Universals.

## 1. Introduction

The determination of a Double Object Construction has traditionally been based on five restrictive postulates, which can be summarized as follows: (a) both objects are required, (b) both objects have uniform and universal semantic roles, (c) the syntactic category of both objects is DP (Determiner Phrase), (d) the order of the objects is fixed, (e) there is no formal marker for either object. According to Michaelis and Hapselmath (2003), these principles are universals because they believe they apply to all languages. If any of the principles fails, the DOC becomes a POC (Prepositional Object Construction). These postulates are formulated after studies in European languages, especially English (cf. Jaeggli, 1982, Michaelis and Hapselmath, 2003). In comparison with English, all other languages that do not manifest such postulates are said to be without Double Object Construction, and French was said to be a non-DOC language considering the following data.

- 1) a. Henry sent Obama a stamp; b. \*Henry a envoyé Obama un timbre
- 2) a. Henry sent a stamp to Obama; b. Henry a envoyé un timbre à Obama

These data mean that French does not have a direct equivalent of sentence (1a). Since one cannot construct an SVOO structure in French without the preposition “à” (to) (which justifies the ungrammaticality of the sentence (1b)), it was classified as a non-DOC language. Many linguists wrote to rebuke that assumption, and tried to show that French is a DOC language, starting with Kayne (1975) who questions the prepositional status of “à” (to) in French, then Fournier (2010:120) who states: “*Jean a donné le livre à Marie est une CDO*” (Jean gave the book to Marie is a DOC).

In Lama, the challenge seems to converge with French, nevertheless about the morpheme “ka”. This morpheme is an adposition, interposed between the complements of a verb. The study of the relationship between that morpheme and the two objects will shed light on its nature and function.

The second challenge concerns the syntactic order of the two objects. Is it rigid in Lama? Although it is impossible in other languages (English and French for example) to reverse the order of objects without the sentence becoming a Prepositional Object Construction (POC), Lama defies the postulate of rigid order by showing that it is not universal.

This article explains the foundations of the Double Object Constructions (DOC). First, three postulates of a universal nature will be analyzed. These are the postulates of mandatory arguments, the uniformity of thematic (or semantic) roles and the syntactic category of Determiner Phrase (DP). Secondly, the article aims at discussing two postulates, the non-existence of formal marker of both objects in the DOC and their syntactic (rigid?) order.

## **2. Three Universals of the Double Object Constructions**

Of the five restrictive postulates of the Double Object Constructions in the languages of the world, the data of Lama defies two. The other three are presented in this section. They are mainly, the mandatory arguments in the DOC, the mandatory Determiner Phrase (DP) as an object and finally, the UTAH (Uniformity of Theta roles Assignment Hypothesis), the hypothesis of the uniformity of thematic roles.

### **2.1. Two mandatory objects of the DOC**

The notion of a mandatory argument refers to the verbal valence. For Fournier (2010), to speak of a mandatory argument implies that the meaning of the predicate is necessarily dependent on it. That is, the meaning of the argument in question is part of the lexical entry of the verb. In example (3) below, it is the objects *yo* "child" and *túná* "fish" that complete the meaning of *háa* (Inf: *háú* "to give"). If one of the arguments is missing, it leads to ambiguous sentences such as (4 and 5).

- 3) a. *Alika háa yó ká túná*  
    /*Alika/give INAC/child/COMP/PL fish/*  
    "*Alika gives fishes to the child*"  
    b. [VP[V[DP[DP]]]]
- 4) a. *Alika háa yó*  
    /*Alika/give INAC/child/*  
    "*Alika gives to the child*" or "*Alika gives the child*"  
    b. [VP[V[DP]]] → Ambiguous
- 5) a. *Alika háa túná*  
    /*Alika/give INAC/PL fish/*  
    "*Alika gives fishes*" or "*Alika gives (something to) the fishes*"  
    b. [VP[V[DP]]] → Ambiguous

The absence of a second object in (4 and 5) makes the sentence ambiguous, because it leads to two interpretations. If the object *yo* (child) is coded as a Theme (in 4), the question about the Dative object (beneficiary) follows as (6). However, in case the argument with *yo* is encoded as a beneficiary, the question will focus on the Theme as (7).

- 6) *ı háa ka anó?*  
    /*3s/give INACP/G3s/Ind INTER/*  
    "*He gives it to whom?*"

- 7) ɿ háa ka wə ?  
/3s/give INACP/G3s/Ind INTER/  
"What does he give him?"

The absence of a second object in (4) makes the information incomplete. The recipient information is missing and will pose the question as the example (7).

- 8) ɿ háa ya anó ?  
/3s/give INACP/G2p/IndN INTER/  
"He gives them to whom?"

The verbs that motivate the DOC are ditransitive. According to the hypothesis of the selection of ELs (Lexical elements), the verb performs a binary selection in the principle of recursion (Chomsky, 1995, 2001; Wu, 2011). To account for sentences such as (4 and 5) that are not ungrammatical but ambiguous, Cummins and Roberge (2005) speak of an implicit object to describe the object not realized contextually. For these authors, an implicit or null object is an empty object at the FPh (Phonological Form) interface. Fournier (2010) adds that such an object is however involved in the event described by the VP (Verbal Phrase) despite its absence, which differentiates it from an external argument.

The Double Object Construction is therefore a syntactic structure motivated by a ditransitive verbal. The ditransitivity is therefore rendered by the criterion of two obligatory objects.

After the notion of a mandatory argument, another urgent question as to the nature of these arguments is, what does the "mandatory DP" criterion refer to?

## 2.2. The postulate of mandatory Determiner Phrases

The DP (Determiner Phrase) is the functional projection of the determinant. This is an approach that replaces the NP (Noun Phrase) as an argument of V (the verb). Tang (2000:4) makes a remark about the DP: "I will make the assumption that what we called Noun Phrases earlier in the handout are actually Determiner Phrases i.e. they are headed by D. Henceforth I will treat nominal expressions like *the king of France, red balloons, you, and Sweden* as DPs." According to this author, the former Nominal Phrase has become a Determiner Phrase. The DP is a functional projection (whose head D [determiner] a functional category) at the expense of the NP which has a lexical head N (Noun).

The DP theory is important, and it matters that an argument of V in the context of the DOC is necessarily a DP. This means that there is a possibility for a V to have an argument other than a DP. The following example (9), throw light on the requirements of this restriction. The verbal *sír* "say" in this example of course has two object arguments: ɿ *yal* "his wife" and *se ɿ hátá' máán* "that she pounds rice". However, it is only the first one that is a DP. The second argument is itself a sentence, expressing a case of subordination.

- 9) Aliká sír ɿ yal se ɿ hátá' máán  
/Aliká/say HYP/Poss 3s/woman/que/3s/pile HYP/rice/  
"Aliká told his wife to pound rice"

- 10) Aliká sír ɿ yal ká té m  
/Aliká/say HYP/3s/woman/COMP/speech/  
"Aliká told his wife a problem".

The sentence (9), despite the presence of two object arguments, cannot be parsed as a DOC because, the second object is not a DP.

### **2.3. UTAH or the uniformity of the thematic grid**

The semantic role is the meaning of an argument of the verb in its participation to the expression of the event denoted by the verb (Kparou 2011, Creissels 2006). In the expression of a DOC, each argument has a unique semantic role, which gives it referential autonomy. In the wake of the theory of uniformity of semantic roles, more commonly known as UTAH (Uniformity of Theta-role Assignment Hypothesis), Baker (1988) issued a principle that remains effective. According to him, each argument of the verb is associated with one and only one  $\theta$ -role and each  $\theta$ -role is related to one and only one argument in the same verbal construction. Thus, in a DOC, the external argument is an Agent, while the direct and indirect internal arguments are a Theme, a Recipient or a Beneficiary.

In the examples below, (11) is a DOC, because each argument has a  $\theta$ -role and each  $\theta$ -role is denoted by an argument. Thus, the subject is an Agent, the first DP object is Recipient, and the second DP object is Theme.

- 11) afal lēē yal ká mólá  
/man/serve INACP/woman/KA/sorghum/  
"The man serves sorghum to the woman"

Example (11) differs from (12), although the composition is formally the same in appearance. The subject is of course an Agent, but the second internal DP has no  $\theta$ -role of its own, as it qualifies the first internal DP which bears a Patient  $\theta$ -role. The analysis of (12) applies to (13). In both cases, the required interpretation shows the second DP is a complement of the first DP that assumes only the position of an object, therefore complement of V.

- 12) yírá AGENT yāā Alika PATIENT KA mǔ í  
/pl person/call INACP/Alika/KA/thief/  
"People call Alika a thief"

- 13) Asinṭa AGENT yá ɿ yal PATIENT KA atúúr  
/Asinda/call HYP/Poss 3s/wife/KA/sorcerer/  
"Asinda called his wife a witch"

Utah's approach is fundamental to distinguishing cases like (12) and (13). According to Fournier (2010), the criterion of  $\theta$ -roles in the analysis of the DOC is universal.

Ultimately, three criteria are fundamental in determining a DOC in Lama. The principles of ditransitivity, mandatory DP as an object, and uniformity of semantic roles can be elevated to the rank of universals.

The following sections analyze and discuss the other two postulates.

### **3. The question of the formal marker between the verbal predicate and the object complement**

As mentioned in the introduction, the restrictions of DOC received their first claims after the analysis of the English data. In a sentence like (14), there is no marker between the verb "sent" and its arguments "his son" and "a telegram". It is the prototype of a DOC.

At the same time, (14) opposes (15). The latter introduces the second object by means of a preposition. For the fact that the preposition "to" is necessary for the introduction of the second object, (15) loses the property of DOC at the expense of that of a POC (Prepositional Object Construction). As a rule, DOCs in English have their POC counterparts.

- 14) Bill sent his son a telegram  
15) Bill sent a telegram to his son

This makes it understandable that, talking about a formal marker between the V and the object DP, the principle aims at excluding constructions with a P (adposition) like (15). One question that arises is whether any marker between V and DP is necessarily a P. Since each language has a parametric system, only a consistent analysis can answer this question.

Lama is a case with an intermediate marker between the two arguments OO (Object - Object), i.e., there is a formal marker between the verb and the second object. In the following data, the KA morpheme is intermediate between the two OO. Before deciding on the nature of these constructions, i.e., whether they are DOCs or POC, it is necessary to determine the nature of KA. In other words, is KA an adposition? The sentences below can be analyzed to give consistent results.

- 16) Aliká cúl yó ká' húrú  
/Aliká/put back HYP/child/KA/bag/  
"Aliká handed a bag to the child"
- 17) Aliká há yó ká' lén  
/Aliká/give HYP/child/KA/wisdom/  
"Aliká gives advice to the child"
- 18) yélóm fá ñumpú' rerá ka wórásó  
/blind/beg HYP/passing PL/KA/money/  
"The blind man begs for money from passers-by"
- 19) wúró sírú apatərciná ka tēm  
/king/say INACP/notable PL/KA/speech/  
"The king tells the notables a problem"
- 20) Aliká cúl yó ká' húrú ka ntav tē ka tó' n re  
/Aliká/give HYP/child/KA/bag/KA/morning/under/KA/yard/in/  
"Aliká handed the child a bag in the morning in the inner courtyard"
- 21) Aliká há yó ká' lén ka sártə  
/Aliká/give HYP/child/KA/wisdom/KA/good/  
"Aliká advises the child well"
- 22) Aliká há yó ká' lén ka léle  
/Aliká/give HYP/child/KA/wisdom/KA/fast/  
"Aliká quickly advises the child"
- 23) Aliká cúl yó ká' húrú  
/Aliká/put back HYP/child/KA/bag/  
"Aliká handed a bag to the child"
- 24) \*Aliká cúl ká' húrú  
/Aliká/put back HYP/KA/bag/
- 25) \*Aliká cúl ká' yó  
/Aliká/put back HYP/KA/child/
- 26) Aliká cúl húrú  
/Aliká/put back HYP/KA/bag/  
"Aliká handed over a bag"

27) Alika cɯl yó  
/Alika/put back HYP/child/  
"Alika handed over to the child"

28) Alika cɯl húrú ká yó  
/Alika/put back HYP/bag/KA/child/  
"Alika handed a bag to the child"

The morpheme KA differs from P (pre/postposition) for several reasons, illustrated in the examples above.

- (i) KA appears in the same context as a P (tɛ "under") in (20).
- (ii) Obviously, adpositions in Lama are post DP (cf. (20) ntaɯ tɛ "morning", tón rɛ "in the courtyard", where "tɛ" and "rɛ" are postpositions), which is not the case of KA.
- (iii) The fact that KA also introduces the adverbs in (20) (sartá "good") and (21) (lɛlɛ "fast") shows that it is not a P, the latter always having a DP complement.
- (iv) KA never appears in a single-object construction, which explains the ungrammaticality of sentences (24) and (25). Unlike (24) and (25) which are ungrammatical because of the presence of KA, (25) and (26) are acceptable.
- (v) The inversion of the objects made possible without displacement of KA in (28) shows that it does not mark a DP (to transform it into PP) but it serves as an intermediary between several arguments of a V (including complements and adjuncts). From this analysis, it appears that KA does not have the attributes of a P. Ultimately, KA (a) is not a formal marker between the verb and its complement (cf. the characteristics iii, iv and v) and therefore, (b) its presence does not transform a DP into a PP, much less a DOC into a POC. Ditransitive constructions involving the KA are therefore DOCs by nature.

#### **4. Is the order of the two objects rigid?**

The postulate of the order of objects was introduced in favor of English. In the example (29) below, the two DP objects that are "his son" and "a telegram" cannot change order. By numbering them, DP1 (his son) always precedes DP2 (a telegram), if we want to keep the DOC structure. The change of this order involves a preposition (to), which leads to sentence (31) which is a POC. Therefore, (30) is ungrammatical because of the order DP2 - DP1. It cannot be interpreted, unless a metaphorical meaning is attributed to "a telegram".

- 29) Bill sent his son a telegram
- 30) \*Bill sent a telegram his son
- 31) Bill sent a telegram to his son

As a result of this analysis, it appears that the order of objects in the DOC is rigid in English. However, is the case of English (and perhaps other languages) enough to make it a universal criterion? The case of Lama is a challenge to the postulate of the rigid order of internal DPs to the VP in the DOC. The following examples, which were the subject of another analysis above, illustrate a case of a reverse order of DP objects without changing the meaning.

Considering (32) and (33), the internal DP1 is "yó" (child), the internal DP2 is "húrú" (bag). We have in the first case the order V-DP1-DP2. In the second case, the order is rather V-DP2-DP1.

32) Alika cɯl yó ká húrú  
/Alika/put back HYP/child/KA/bag/  
"Alika handed a bag to the child"

33) Alika cɯl húrú ká yó  
/Alika/put back HYP/bag/KA/child/

"Alika handed a bag to the child"

The reversal of the order of internal DPs is carried out without recourse to other intermediate morphemes, i.e., the DOC keeps the constituents recognized in Section 2 as essential. Lama does not involve, for example, a P (which would be a postposition). Therefore, reversing the order of objects in Lama does not turn a DOC into a POC. The order of objects in the DOC in this language is not rigid.

## **5. Internal features of DPs and the problem of ambiguous DOCs.**

An ambiguous DOC requires a double interpretation. In Lama, two fundamental factors motivate syntactic ambiguity in a DOC. There are, on one hand, the selection constraints of a full DP and on the other hand, the uniformity of morphological coding in a pronominal DP.

### **5.1. Selection constraints of DP objects in the DOC**

Semantic roles are motivated by selection constraints. Thus, for a DP to assume a  $\theta$ -role of Recipient, it must have internal characteristics that allow it to receive the Theme. Similarly, a DP must have the characteristics that motivate its reception by the Recipient.

34) yal túsé móté ka yó  
/woman/put in the mouth HYP/paste/KA/child/  
"The woman puts the dough in the child's mouth"

35) yal túsé yó ka móté  
/woman/put in the mouth HYP/child/KA/paste/  
"the woman put the dough in the child's mouth"

The sentence (34) is a DOC in Lama. Reversing the order of objects from (34) gives another DOC in (35) with the same semantic coding. The semantic role of Recipient is attached to yó "child" whatever its position (immediate or mediate of the verb). Similarly, the role of Theme is related to móté "dough" regardless of its position. This interpretation is explained by the features of selection internal to these DPs. The DP yó "child" is endowed with the feature [+Animate] which predisposes it to be a Recipient at the expense of the DP móté "dough" which requires the [-Animate] feature. More explicitly, it is the animate yó "child" who can eat the inanimate móté "dough" and not the other way around. Internal DPs may have similar selection features. Since the order of OO (Object-Object) does not influence the interpretation of a DOC, the similarity of the features of selection leads to an ambiguity. The case of (36) illustrates an ambiguous DOC. In this example, the DPs yal "woman" and yó "child" all have the feature [+Animate]. Both are likely to be encoded as Recipient. Sentence (36a) can therefore be interpreted as (36b) or (c). The choice between the two remains dependent on the context.

36) a. Alika cúl yal ka yo  
/Alika/put back HYP/wife/KA/child/  
b. Alika cúl yal [RECIPIENT] ka yo [THEME]  
"Alika entrusted the child to the lady"  
c. Alika cúl yal [THEME] ka yo [RECIPIENT]  
"Alika entrusted the lady to the child"

Another case of ambiguity in the DOC mentioned in the introduction to this section remains the pronominalization of both Objects.

### **5.2. The issue of pronominal DPs in the DOC**

The pronominalization of DP objects can be a factor of ambiguity in the DOC. A remarkable point is that the morpheme KA is no longer useful once one of the DP objects is a pronominal. Thus, the

presence of KA in (37a) is to be opposed to its absence in b. The form /ka/ observed in b, c and d is a nominal class marker.

37) a. Alika cül yó ká yí ló'  
/Alika/put back HYP/child/KA/whistle/  
"Alika gives a whistle to the child"

b. Alika cül ká yí ló'  
/Alika/ give HYP/G3s/whistle/  
"Alika hands him [child] the whistle"

c. Alika cül ká yó  
/Alika/give HYP/G3s/child/  
"Alika gives it [whistle] to the child"

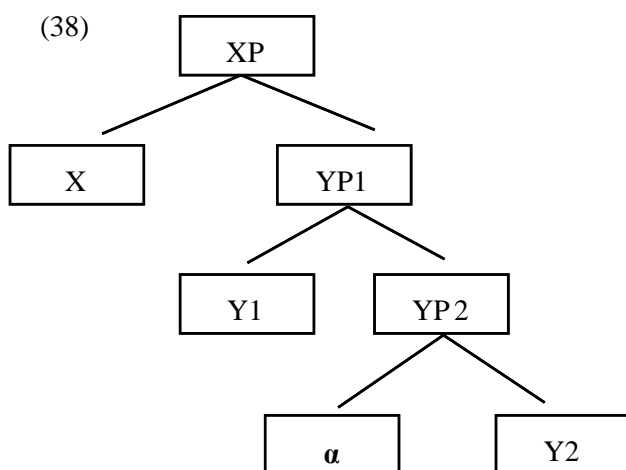
d. Alika cül ká ká  
"Alika hands it to him"

d'. Alika cül ká [child] ká [whistle]

d'' Alika cül ká [whistle] ká [child]

When an object is pronominalized, the reference is unequivocal as (37) b and c. In case both DP are pronouns like (37) d, it is almost impossible to determine their order. Even the context cannot be used to solve the problem. Only the speaker can know which precise DP each pronominal refers to.

## 6. Presenting a DOC in a tree



If we consider a DOC as a sentence formed basically of two elements belonging to two syntactic categories, such as X is a Verb and Y its complement, the formal structure of a DOC in Lama is as follows:

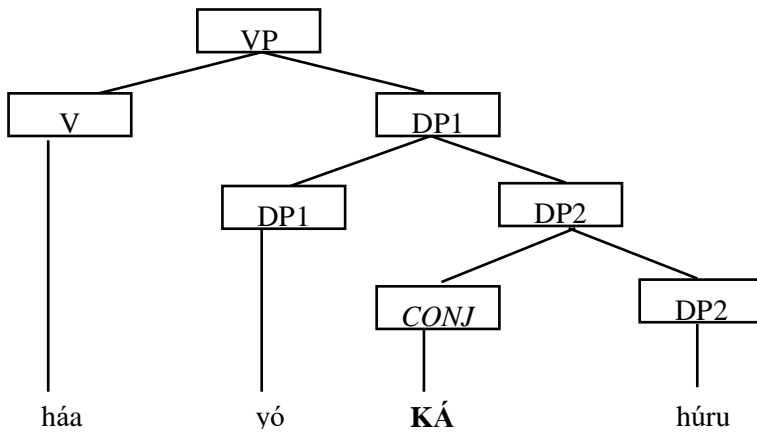
There is an element  $\alpha$  such as  $\alpha$  c-commands Y2 ( $\alpha$  is sister node of Y2 under YP2).

This structure in (38) is illustrated by the example (39).

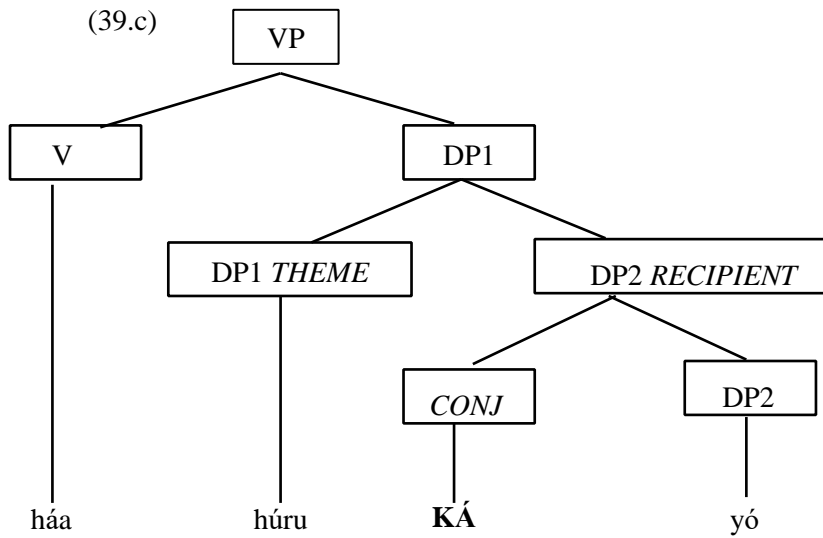
39) a. Alika [VP [VP háa [DP1 yó [DP2 ká húru']]]]  
Alika/donate INAC/child/KA/bag/  
"Alika gives a bag to the child"

Presentation (39b) illustrates a simplified structure of the DOC, example (39c) presents a DOC with a thematic grid, and (d) is the inversion of the objects of V.

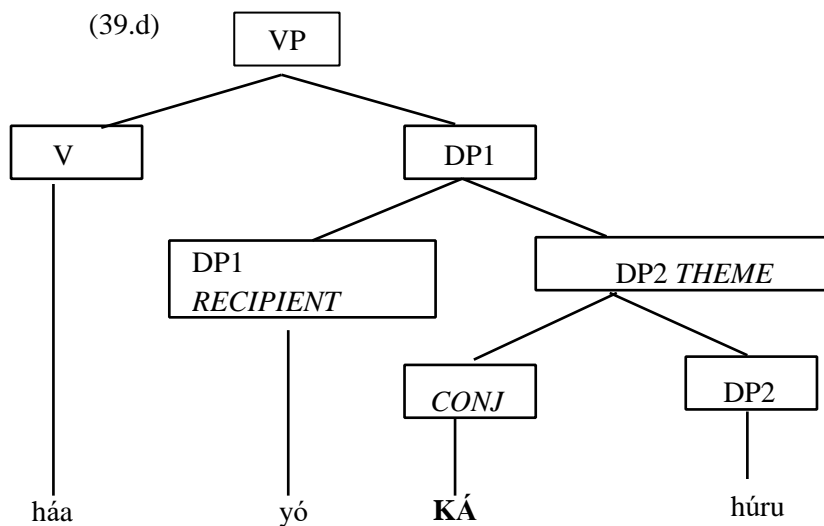
39 (b)



(39.c)



(39.d)



## **Conclusion**

Three principles that govern the Double Object Construction (DOC) could be considered Language Universals of the DOC. These are the principles of the mandatory arguments in the DOC, the mandatory Determiner Phrase (DP) as an object, and finally, the UTAH (Uniformity of Theta roles Assignment Hypothesis). The analysis calls into question two principles, namely, the absence of a formal element between the verb and the object argument, and the rigid order of the two objects of the verb. According to this analysis, the DOC in Lama admits the presence of KA, a morpheme of a conjunctive nature, intermediate between the two objects. The same data showed that the order of the Determiner Phrase Objects is not rigid. Finally, three fundamental criteria could be retained for the determination of a Double Object Construction (DOC): (i) Two mandatory objects, (ii) both objects must be DPs such as [VP[DP[DP]]] and (iii) both objects must have universal semantic roles.

## **Conflicts of interest**

There is no conflict of interest of any kind.

## **References**

1. Adger, D. and Peter S. 2010. Features in Minimalist Syntax. Queen Mary, University of London and CASTL, University of Troms.
2. Chomsky, N. 2000. Minimalist inquiries: the framework. Step by step: essays on minimalist syntax in honor of Howard Lasnik (pp. 89-155). Cambridge, Massachusetts: MIT Press.
3. Creissels, D. 2006. Syntaxe générale, une introduction typologique, v1. Paris: Lavoisier.
4. Cummins, S. and Yves R. 2005. A Modular Account of Null Objects in French. *Syntax*, 8, 44-64.
5. Dowty, D. 2000. The Dual Analysis of Adjuncts and Complements in Categorical Grammar. *ZAS Papers in Linguistics*, 17, 2000, Ohio State University.
6. Jaeggli, O. 1982. Topics in Romance Syntax. Dordrecht, Holland: Foris.
7. Kayne, R.S. 1975. French Syntax: The Transformational Cycle. Cambridge, MA: MIT Press.
8. Kayne, R.S. 1999. Prepositional Complementizers as Attractors. *Probus*, 11, 39-73.
9. Larson, R.K. 1990. Double Objects Revisited: Reply to Jackendoff. *Linguistic Inquiry*, 21, 589-632.
10. Michaelis, S. and Martin H. 2003. Ditransitive Constructions: Creole Languages in a Cross-Linguistic Perspective. *Creolica* 0500,1-16.
11. Nakamura, T. 2012. Une construction à double complément du verbe faire: attribut de l'objet indirect? Congrès Mondial de Linguistique Française–CMLF 2012, Université Paris-Est, LIGM (UMR 8049 CNRS). <http://www.shs-conferences.org>
12. Ourso, M.A. 2013. Casse-tête chinois pour l'hypothèse de l'intégrité lexicale. *Particip'Action, Revue Interafricaine de littérature, linguistique et philosophie*, Université de Lomé, vol5, N02, Janvier 2013, Pp 207–226.
13. Sikora, D. 2009. Les verbes de manière de mouvement en polonais et en français. *Eléments pour une étude comparée des propriétés structurelles de prédicats*. Thèse de Doctorat, Université de Nancy 2.
14. Strik, N. 2008. Syntaxe et acquisition des phrases interrogatives en français et en néerlandais : une étude contrastive. Thèse de Doctorat, Université Paris 8–Saint Denis. Tellier, Christian. 2002. *Eléments de syntaxe du français. Méthodes d'analyse en grammaire generative*. Montréal : PUM.

15. Tang, S.W. 2000. Some Minimal Notes On Minimalism. Linguistic Society of Hong Kong Newsletter, 36,7-10. (2000). The Hong Kong Polytechnic University.
16. Wu, T. 2011. La relativisation prénominale. Thèse de Doctorat, Université Paris III.

**Citation:** Kparou, Hanoukoume Cyril and Kalejaye, Abiola. 2021. The Theory of Universals and the Problem of Double Object Constructions. *International Journal of Recent Innovations in Academic Research*, 5(10): 8-18.

**Copyright:** ©2021 Kparou, Hanoukoume Cyril and Kalejaye, Abiola. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.