Thematic Roles in Somali:
A Principles and Parameters Approach

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Abstract

This study describes the thematic roles of Somali; a language that manifests unorthodox grammatical structures due to the use of the focus particle. A mapping of some language features related to the semantic-syntactic interface is carried out. The effect of the meaning of the lexical items is tested to whether it affects the syntactic structures of the sentences. It was found that the word order of Somali is determined by pragmatic and sociolinguistics factors. The focus particle of Somali plays a key-role in the Surface structure of the sentences. However; the thematic roles of the language appear not to be influenced by the grammatical manifestation of the language at the surface structure. Rather, they are determined at the deep structure level. Somali, being a pro-drop language, shows that predicates require obligatory external arguments while internal arguments are determined by the verb class and kind. Some structures show that certain verbs require PPs as obligatory arguments.

Keywords: Somali, Theta Theory, Thematic Roles

1. Introduction

Somali is an east Cushitic language spoken in Somalia, a country in Africa, and some other neighboring countries. It is an SOV language (cf. Saeed, 1993 and Gebert, 1986) with a number of speakers exceeding ten million (*Ethnologue*, n.d.). Somali is a language known for its complex grammar due to the application of the focus particle, i.e. focus indicator (cf. Andrzejewski, 1975). In Somali, the use of the focus particle is marked and it changes the canonical SOV word order to other orders; a process triggered by phrase topicalization.

This study aims at analyzing Somali using Theta Theory (cf. Chomsky, 1981; 1986; and Chomsky & Lasnik, 1993) to better understand the thematic roles of noun phrases and possible predicates in this language. The study seeks to find out whether the focus particle plays any role in determining the thematic roles of the language and to determine whether the meaning influences the form of the sentence. To do this, the framework of Principle and Parameters (P&P) has been adopted. The data were collected from native speakers of Somali living in the United States and from previous literature such as Saeed (1993, 1999). The application of Theta Theory was carried out as discussed in Haegeman (1994), Burquest (2003) and Haiden (2005).

The main aim of this analytical study is to see how certain aspects of meaning can influence the structural form of the sentence in Somali. It is well-established in the literature that certain constituents influence the presence of other constituents. For example, a verb entails the presence of at least one argument as a requirement of the universal Extended Projection Principle (EPP). This argument is the NP subject argument; and although Somali is a pro-drop language, the NP subject can always be recovered from the morphological inflections.

The paper is organized as follows: the first section of the paper summarizes the theoretical approach used in the study while the second section presents data samples of Somali and the discussion of the results. The third section summarizes the conclusions of the study and the fourth section concludes the paper. It is worth mentioning that this paper, in general, focuses on the data analysis of Somali; therefore, not much discussion of the theoretical framework is presented here.

2. Theta Theory

Theta Theory is a theory that is concerned with sentential arguments and predicates (cf. Chomsky, 1981; 1986; and Chomsky & Lasnik, 1993). It accounts for the relationship between predicates and the number of arguments each predicate requires. It also points out which constituents are optional and which constituents are obligatory. The

application of theta takes place in the deep structure of the sentence. Theta Theory has the following two main universal principles:

1. Each NP argument must be assigned one and only one theta role.
2. Each theta role can be assigned once and only once.

The two principles above create for each lexical predicate a theta grid, which identifies the number of arguments it requires and the thematic relationships holding between these arguments.

Within each sentence a predicate must have at least one argument since each sentence must have a subject in order to conform to EPP which requires a subject to be present in all sentence types in English (cf. Chomsky, 1981). The absence of the subject results in an ungrammatical sentence as (1b) below illustrates.

(1a) James likes his friends very much.

(1b) *Likes his friends very much.

EPP guarantees that each sentence has a subject and this subject must be present even if it has no semantic value, such as the expletives in (2).

(2a) It is raining.

(2b) There come the soldiers.

In addition, predicates differ in the number of the arguments they require based on their semantic meaning. The types of common arguments are summarized below as found in Gruber (1976) and Haegeman (1994):

1. Agent, with agentive verbs, is the role that is assigned to causative subjects which intentionally affect the object. These are usually, but not necessarily, animate subjects, as in *The cat traced the mouse*. *The cat* is the actor; hence it bears the Agent role.
2. Theme is an entity placed in a position or moved to a position by an external force (i.e. non-causative). For example, in *the car is moving*, the subject *the car* is assigned the Theme role. In *Mohammad gave the books to Salma*, on the other hand, the object *the book* is assigned the role of Theme. The role Theme can also be assigned by non-motional verbs. This is the case when the thing – the center of the speech – is not in motion. Rather, it is located in a certain position. Sentences of this type usually contain a prepositional phrase that describes the position of the thing as in *the book is lying on the table*. Here the book is Theme.
3. Goal is the role assigned to an entity towards which an activity is directed. For example, in *the car moved towards the wall*, the NP *the wall* is Goal.
4. Locative occurs with locative predicates, typically prepositions. For example, in *John kept the book in the bag*, the NP *the bag* is Locative.
5. Patient is the role assigned to things or persons that undergo the action carried out by the agent or suffered some kind of a physical activity. For example, in *Ali killed the snake*, the object *the snake* is Patient.
6. Experiencer is the role that describes an animate being undergoing an emotional or sensual feeling expressed by the verb. For example, in *John dreamed about Marry*, the subject *John* is Experiencer.
   Source is the role that describes the location from which an entity has moved. For example, in *John took the book from Mary*, the PP *from Mary* is Source.

The EPP ensures that there is one external obligatory argument for the predicate but the predicate, itself, determines the number and class of its internal arguments. To clarify, an intransitive verb does not require internal arguments (e.g. live, go, sink, etc.), a transitive verb would call for one internal argument (e.g. eat, play, break, etc.) and a ditransitive verb requires two internal arguments either two NPs (e.g. give, ask, pass, etc.) or an NP and a PP (e.g. put, lay, etc.).

3. Theta Theory Analysis

3.1 Somali Active Structures

Predicates in Somali are primarily verbs. However, copula verbs cannot be predicates due to that fact that they are constituents that do not require arguments because they do not carry a fixed semantic meaning. Consequently, nouns, adjectives, and preposition are considered predicates in this type of sentences and in verbless sentences.

Saeed 1982 shows that although the use of the focus particle has a common way, there are some regional differences. This observation can of course be extended to the use of vocabulary. Moreover, the focus particle serves a certain purpose in any sentence. It shows what elements are being topicalized but not necessarily fronted. Sentences in Somali are always structured in a way that at least one of the constituents is given more emphasis or importance than the others; this constituent could be the verb or commonly an NP. In other words, we assume that focus particles are part of the basic structure of the sentence and they carry no thematic, but structural and pragmatic significance.

The speaker is the one, who determines what is important, or what constituent has importance over the other, of course in his point of view; the speaker decides which constituent has more significance than the other and accordingly he/she focuses it. Somali speakers know that in every sentence one and only one constituent must be focused and this constituent is either nominal or verbal. Previous studies (cf. Antinucci, 1980) found that the application of the particle that focuses the verbs is problematic, as far as grammar writing is concerned, compared to those that show focus on nouns and adjectives. The following are examples of basic sentence structures found in Somali.

(3)   daadkii   baa xalay   geed qadday

       flood_the FOC last night   tree   took

       "The flood took the tree last night."

(4)   Cali waa   arday

       Ali   FOC student

       "Ali is a student."

(5)   Axmad baa dheer

       Ahmad FOC tall

       "Ahmad is tall."

(6)   eeyga   wuxu ku jiraa baabuurka

       The.dog FOC in.inside car

       "The dog is in the car."

(7)   Axmad hooyadii   buu lacag   u diray

       Ahmad mother-his FOC money to sent

       "Ahmad sent money to his mother."

(8)   Axmad wuu imanayaa

       Ahmad FOC coming

       "Ahmad is coming."

(9)   Ilaah baa   na kaa siiyey

       God FOC us you gave

       "God gave you to us"

The following structures are alternative to the structure (3) above. The different word orders, here, are due to the focused constituent. We claim that these alternative word orders do not influence the thematic roles because they are surface structures of the SOV order. Because the major phrases in concern for Theta application remain unchanged in all the structures, we hold the argument that Theta applies at the deep structure to be valid in Somali.

(10)   a   daakii   xalay   geed buu qadday

            flood_the last night tree   FOC took

            the flood took the tree last night

      b   daadkii   xalay   buu geed qadday

            flood_the last night FOC tree   took

            The flood took the tree last night

      c   waxaa geedkii xalay   qaaday daad

            FOC   tree_the last night took   flood

            "The flood took the tree last night."

      d   waxaa geedkii daad qaaday xalay

            FOC   tree-the flood took   last night

            "The flood took the tree last night."

The sentence in (3) and all its alternatives in (10) show the following Theta grid, the underlined Phrase marks the external argument of the predicate,

       qaaday: $_{(v)}$ <u>NP</u>   NP

            Agent Patient

We notice that *qaaday* 'took' which is a transitive verb requires two arguments regardless of the surface sequence of the constituents in the sentence. The verbs in the examples in (4-9) are analyzed as follows:

 arday: _(n) NP

  Theme

 ku jira: _(prep) NP   NP

  Theme Location

 dheer: _(adj) NP

  Theme

 diray: _(v) NP   NP   u +NP

  Agent Theme Beneficiary

 imanayaa: _(v) NP

  Agent

 siiyey: _(v) NP   NP   NP

  Agent   Theme Beneficiary

The data in (3-10) above show that all arguments are obligatory; the deletion of any argument results in ungrammatical structures. It should be noted, however, that the grammaticality is measured for these sentences at the sentential level as some of them may be grammatical at the context level after the deletion of some constituents.

The predicates *arday* 'student', *dheer* 'tall' and *ku jira* 'inside' require external arguments with the thematic role of Theme. We believe that the absence of action or motion suggests that Somali uses non-verbal items such as nouns, adjectives and prepositions. When a preposition is the predicate, it requires the internal argument of Location or Source.

The predicate *diray* 'sent', which is a ditransitive verb, requires two internal arguments. One of them is a prepositional phrase and the argument Beneficiary seems inevitable. Similar to *diray* is *siiyey* 'gave'. However, the latter requires two NPs as its internal arguments. On the other hand, the predicate *imanayaa* 'coming' requires one external argument. This does not necessarily eliminate the possibility of it to require an optional internal argument. In such a case; it would bear the thematic role of Location or Source.

The line of analysis above implies that verbs requiring arguments in Somali can be intransitive, transitive or ditransitive. However, Saeed (1999:75) states that ditransitive verbs in Somali are rare. Some constituents can be optional in the sentences; these include most complements of prepositions (cf. Saeed 1993).

On the basis of these examples, we can conclude that the ditransitive verbs in Somali may require at least one object and a second object or an obligatory prepositional phrase. Accordingly we classify Somali predicates, depending on argument optionality, into one-place argument, two-place argument and three-place argument. This is shown in the examples below.

(11)   Waxaa doorashada ka qaybgashay Marry

    FOC   elections   in participated Marry

    "Marry participated in the elections."

 qaybgashay: _(v)   NP   ka+NP

  Agent Theme

(12)   makhsin-kii ayaa-uu ka   baxay
    room-the   FOC-he from went
    "He went out of the room."

 baxay: _(v) NP   (ka+NP)

  Agent Location

 (13)   ku rid shandadda
    into put suitcase-the
    "Put it into the suitcase"

rid: (v) <u>NP</u>   NP   (ku+NP)

       Agent Theme Location

(14)   sidee   buu   uga   baxay?

        way-which FOC-he in-from went out

        "How did he get out of it?"

baxay: (v) <u>NP</u>   (uga+NP)

       Agent Location

(15)   waa-uu   i-u   dhiibay

        he   me-to handed

        "He handed it to me"

dhiibay: (v) <u>NP</u>   NP   u+NP

        Agent Theme Beneficiary

(16)   way kaa   qaadday

       she   you-from took

       "She took it from you"

qaadday: (v) <u>NP</u>   NP   (ka+NP)

        Agent Theme Source

(17)   way ka   qaadeen

       they from took

       "They took it from [him]"

qaadeen: (v) <u>NP</u>   NP   (ka+NP)

        Agent Theme Source

(18)   way   noo   qaadeen

       they   us-for took

       "They took it for us"

qaadeen: (v) <u>NP</u>   NP   (u+NP)

        Agent Theme Beneficiary

(19)   waa-ay na-u-ka   qaadeen

       they   us-for-from took

       "They took it from [him] for us"

qaadeen: (v) <u>NP</u> NP   (u+NP)   (ka+NP)

     Agent Theme Beneficiary Source

The examples (11-19) above show that the optional arguments generally carry the roles of location or Source. On the other hand, obligatory prepositional phrases carry the roles of Theme and beneficiary.

Chomsky (1981) showed that the representations of the syntactic levels are projected from the lexicon. Tenny (1994) explained that the mapping between the thematic structure and the thematic structure is governed by aspectual properties. This means that a verb which requires an animate external argument would be ungrammatical without it. The verb determines the kind of the external and internal argument required, consider (20):

(20)   wax baan cunay

       thing FOC.I eat

       "I ate something./I ate." Tosco (2003)

The verb in the structure (20) requires two arguments. The external argument the Agent must be an entity capable of performing the act of eating. On the other hand, the internal argument the 'Theme/Patient' must be an entity that accepts the action (i.e. eatable). This, of course, excludes the metaphorical uses of the verb in question.

3.2 Somali Passive Structures

Somali passive sentences are marked with the particle *la*. The subject of the passive sentence does not necessarily receive focus. The passive particle in the data below seems to always precede the verb.

(21)   Waxaa dukkaanii goor hore la   xidhay maanta.
         FOC   store   time early passive close   today
         The store was closed early today.

(22a)   Waxaa shalay   la   sameeyey albaabkii
         FOC   yesterday passive repaired   the-door
         "The door was repaired yesterday."

(22b)   albaabkii shalay   waa la   sameeyey
         door-the yesterday FOC passive repairing
         "The door was repaired yesterday."

The examples in (21) and (22) show that passive structures lack the thematic role Agent because there is no external argument for the predicate. They would be analyzed as follows:

         la xidhay: (v)   NP

                             Theme

         la sameeyey: (v)   NP

                             Theme

The examples in (23) below show something different,

(23a)   Axmad saaxiib wuu   la   kulmay
         Ahmad friend FOC   passive met
         "A friend was met by Ahmad."

(23b)   Saaxiib baa Axmad la   kulmay
         Friend FOC Ahmad passive met
         "A friend was met by Ahmad."

(23c)   saaxiib Axmad wuu   la   kulmay.
         Friend Ahmad FOC passive met
         "A friend was met by Ahmad."

(23d)   Waxaa Axmad la   kulmay saaxiib
         FOC   Ahmad passive met   friend
         "A friend was met by Ahmad."

The structures in (23) show that the Agent is mentioned and the Agent in (23 b & d) does, in fact, receive focus. This could be the result of pragmatic necessity. Since the Agent is focused, we assume that it is not an optional element in the structure and must receive a thematic role. We suggest that they are analyzed as follows:

         la xidhay: (v) NP   NP

                       Agent Theme

As a parameter, we can say that certain passive verbs in Somali show external argument and that the role Agent is an obligatory argument. Following Chomsky (1981), Sells (1985) and Ndimele (1992), we assume that the thematic roles are assigned at the D-structure; however, the theta criterion applies at all levels to guarantee that all heads are assigned thematic roles.

4. Conclusion

The class of verbs in Somali determines the number of arguments required even if the verb appears stranded without context. Certain verbs require NP complements as their internal arguments while others may call for NP complements and PP adjuncts as well. The classification of verbs into classes can be, in fact, established based on the number and kind of arguments they require. For example, verbs of motion can assign Agent and Theme roles to their external arguments. This, of course, proves that the semantic level of representation plays a key-role in determining the shape of the syntactic level of representation.

We can classify verbs in Somali as follows:

a. Transitive bearing the thematic roles of Agent, Experiencer, Theme or Patient.
b. Intransitive bearing the thematic roles of Agent or Experiencer.
c. Ditransitive bearing the thematic roles of Agent, Theme, Goal or Beneficiary.
d. Reflexive bearing the thematic roles of Agent, Experiencer, Theme or Patient.
e. Causative bearing the thematic roles of Agent, Theme or Patient.
f. Verbs of existence, and these bear no the thematic roles. However, other predicates such as nouns and adjectives bear the thematic role of Theme; and prepositions bearing the role of Locative.

All arguments are obligatory if they are in subject position in conformity with the EPP, or in complement position of the verb or preposition; however, it seems that some adjuncts can be obligatory as their absence would greatly deviate the meaning and could cause ambiguity in Somali.

Furthermore, the actual phonological manifestation of the internal arguments may be unnecessary with verbs of this kind because it is logically understood that there exists an internal argument. When we say 'I ate', it definitely means that something had been eaten. The meaning of such verbs expresses the need for at least two participants.

However, Somali is canonically an SOV language. And it seems that other word orders are not fully determined by the semantic level of representation. They can be determined by Focus and other pragmatic factors. The difference in word orders does not change the theta grid for any sentence.

It is evident, from the data, that Somali shares much with other languages when it concerns thematic roles. The universality of the principles of Theta theory leaves a small space for language parameters. The focus particle may cause some alternations of the internal arguments thematic roles, for example, the alternation between Theme, Goal and Patient roles. However, the external arguments remain unaffected by Focus.

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