Passivization in Afaan Oromoo

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1. Introduction

For many decades now passivization has been the center of attention in syntactic theories

There was much debate on passivization among linguists of formal bent which led for the development of different syntactic theories.

After Chomsky's (1970) publication "Remarks on Nominalization" there exist two hypotheses on morphology, namely, "the Weak Lexicalist Hypothesis" and "the Strong Lexicalist Hypothesis". The Weak Lisicalist Hypothesis considers derivation as a lexical process formed by lexical rules and inflection as a syntactic process formed by transformational rules. Thus, for the Weak Lixicalist hypothesis passivization is purely a syntactic process formed by transformational rules.

Contrary to this view, the Strong Lexicalist Hypothesis, which was introduced by Bresnan (1978) and which was further developed by Lapointe (1980) treats both derivation and inflection as a morphological process. Thus, for the strong lexicalist hypothesis passivization is purely a lexical process formed by lexical rules.

In this article an attempt will be made to analyze passivization in Afaan Oromo. The article has two parts. Part II presents the empirical data[1] and part III gives the theoretical consideration of passiviztion in Afaan Oromoo.

2. Empirical Data

Passive structures are formed in Afaan Oromoo by suffixing the passivizer morpheme –*am* to a transitive verb (see Baye 1986, Temesgen 1993). The following examples illustrate this.

	(1) Active	Gloss	Passive	Gloss
	ɗaw-	'hit'	ɗawam-	'be hit'
	ɲaat-	'eat'	ɲaatam-	'be eaten'
	mur-	'cut'	muram-	'be cut'
	ajjess-	'kill'	ajjessam-	'be killed'
	ijaar-	'build'	ijaaram-	'be built'

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[1] The transcription employed here for Afaan Oromoo:
 (a) represents IPA
 (b) vowel length and consonants geminations are represented by means of double letters.

It is apparent from the examples in (1) that Afaan Oromoo has purely a morphological passive construction in that passive is formed from a transitive base by suffixing the morpheme *–am*. To learn more about passive structures in Afaan Oromoo let us consider the examples in (2).

(2) a. mergitu-n   dabalaa   ɗaw-t-e
      mergitu-Nom dabalaa   hit-3FS-PRF
      'Mergitu hit Dabala.'

   b. dabalaa-n   mergitu-ɗan   ɗaw-am-e
      dabalaa-Nom   mergitu- by   hit-PAS-PRF
      'Dabalaa was hit by Mergitu.'

A close inspection of the sentences in (2) show that the two sentences are quite similar. They appear to mean the same thing. They have similar word order in the sense that in both cases the word order is subject first and verb last. The same basic words are used. However, there seem to be two significant differences between these two sentences. The first difference lies on the fact that the verb in (2b) contains an additional morpheme, the suffix *–am*, which does not occur in (2a). The second difference has to do with a shift in the assignment of grammatical relations, the same participant appears filling the same semantic roles in both sentences but there is a shift in the assignment of grammatical relations. That is, the patient *Dabalaa* is a direct object in (2a) but a subject in (2b). In a similar way the agent subject *Mergitu* in (2a) becomes an oblique argument in (2b). This can be clearly observed from (3).

(3) a. **ɗaw**-   **< agent,   patient >**   **Active**

                | |

            SUBJ   **OBJ**

   b. **ɗawam-** **< agent,   patient >**   **Passive**

                | |

         (**OBL**_{AGT})   **SUBJ**

From (3) one can realize that passivization is basically a realignment of grammatical relations. It involves the demotion of the active agent from subject into passive oblique and the promotion of the active patient from object into passive subject.

So far we have presented the empirical facts of passive formation in Afaan Oromoo. The next question is how does the grammar produce these changes? This question will take us to the second part of the paper.

3. Analysis of the data

In this part we shall present how different theories treat passivaization. The first theory that we shall consider is Chomskyan Linguistics and the second one is one of the constraint based grammars known as Lexical –Functional Grammar (LFG).

3.1. Chomskyan Linguistics

In Chomskyan Linguistics one can observe two phases in the consideration of passivization the pre-minimalist and the minimalist.

3.1.1   Pre-minimalist Approach

Form the pre-minimalist treatment of passivization we shall consider the Government and Binding Theory. In Government and Binding Theory the passive form is derived from the corresponding active form syntactically. For the sake of analysis examples (2a) and (2b) are repeated here as (4a) and (4b).

(4)   a.   [[mergitu-n]   [[dabalaa] [ɗaw-t-e]]]
             IP NP   VP NP   V
             mergitu-Nom   dabalaa   hit-3FS-PRF
             'Mergitu hit Dabala.'

        b.   [[dabalaa-n]   [[mergitu-ɗan]   [ɗaw-am-e]
             IP NP   VP PP   V
             dabalaa-Nom   mergitu- by   hit-PAS-PRF
             'Dabalaa was hit by Mergitu.'

In these examples, (4a) is the active form and (4b) is its corresponding passive form. The d-structure of (4b) is as shown in (5).

(5)   [[e]   [[dabalaa]   [ɗaw-am-e]]]
         IP   NP   VP NP   V

In (5) the subject position of the passive structure is empty as a passive verb does not have a subject in its d-structure. The surface or s-structure of (5) is as shown in (6).

(6)   [[dabalaa –n_i] [[t_i]   [ɗaw-am-e]]]
        IP   NP   VP NP   V
          ' Dabalaa was hit.'

In Government and Binding Theory passivization is a syntactic process formed by applying transformational rules. That is to say a passive form is derived from its corresponding active form syntactically through the application of transformational rules. In the above examples (4a) is the active form, (5) the deep structure and (6) is the corresponding s-structure or the derived form. If we consider example (5) we learn that the object NP, *Dabalaa* remains without being case assigned. The reason is that the passive verb ɗ*awam-* 'be hit' cannot assign accusative case to its object NP, *Dabalaa* as passive

morphology absorbs accusative case in the sense of Chomsky (1986:74). If the object NP, *Dabalaa* remains in situ (i.e., in its d-structure position) the sentence will become ill formed as the case requirement is not satisfied. In order to satisfy the case requirement the object NP, *Dabalaa* has to move to a case position and the only case position where it can receive nominative case is to the *e* position of the sentence as in (6). In (6) *Dabalaa* moved to the *e* position of the sentence and receives nominative case from INFL and hence it satisfies the case requirement. According to this theory the reason for the movement of the object NP, *Dabalaa* from its deep structure position in (5) to the subject position in (6) is, therefore, explained in terms of case.

As we can learn from this, the Government and Binding Theory derives passive forms from the corresponding active forms syntactically but when we consider the data in example (1) we learn that passivization in Afaan Oromoo is exclusively a morphological process and it is not a syntactic process. From this we, therefore, learn that the Theory of Government and Binding cannot explain passivization in Afaan Oromoo.

Now let us consider whether or not the Minimalist approach could explain passivization in Afaan Oromoo.

3.1.2   Minimalist Approach

In the minimalist theorizing passivization has not received much attention. In this approach passivization is a syntactic process that involves demotion of the subject and promotion of the object as a structural subject of the passive. For the sake of exposition let us consider the examples in (2) above repeated here as (7).

(7) a. mergitu-n   dabalaa   ɗaw-t-e
        mergitu-Nom dabalaa   hit-3FS-PRF
        'Mergitu hit Dabala.'

    b. dabalaa-n   mergitu-ɗan   ɗaw-am-e
        dabalaa-Nom   mergitu- by   hit-PAS-PRF
        'Dabalaa was hit by Mergitu'

(7a) is the active form and (7b) is the passive form. The derivation of (7b) from its corresponding active form (7a) in the minimalist approach could be structurally shown as in (8).

(8)

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                          TP
                 _____/  _____
                /                    \
          NP  [nom]                   T'
          Dabalaa              _____/  _____
                              /                \
                        T [past, nom]           vP
                                          _____/  \_____
                                         /              \
                                        v                VP
                                      ɗawam          ___/  \___
                                                    /          \
                                                   V            NP
                                               (ɗawam)      (Dabalaa)
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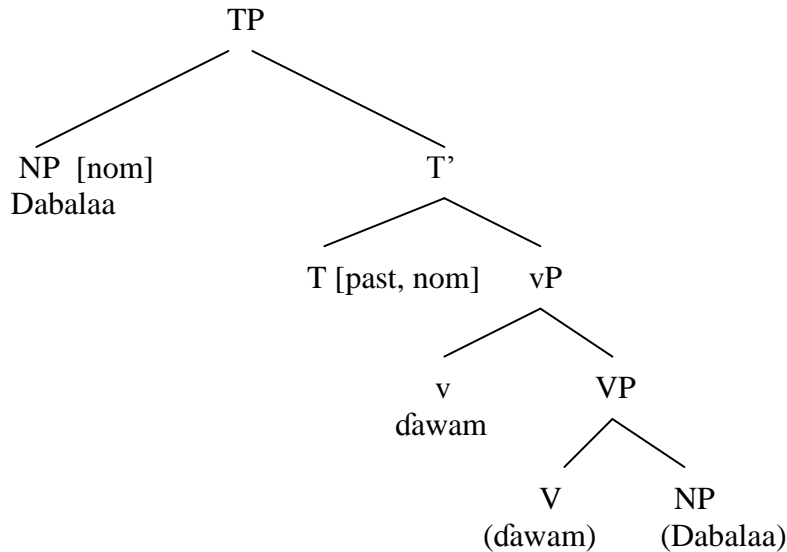
In (8) the NP, *Dabalaa* moved from its object position in VP to the specifier position of TP. The motivation for such movement is explained in terms of feature checking. That is the NP, *Dabalaa* checks its nominative [nom] feature on T and raises to the specifier of TP by so doing it satisfy T's EPP feature. As we can learn from the tree in (8) in the minimalist approach, too passivization is purely a syntactic process.

Thus far, we have seen how the GB and the minimalist approach treat passivization. In both approaches passive form is derived from its corresponding active form syntactically but when we consider the passive formation in Afaan Oromoo it is a morphological process that can be formed by attaching the passivizer morpheme *–am* to a transitive verb. This may lead us to argue that both the Government and Binding theory and the minimalist approach could not explain passivization in Afaan Oromoo.

3.2. Lexical-Functional Grammar

Finally we shall consider one the constraint-based syntax called the Lexical-Functional Grammar. The Theory of Lexical-Functional Grammar as described in Kaplan and Bresnan (1982), Sells (1985), Simpson (1991), Bresnan (2001), Falk (2001), Dalrymple (2001) and others, considers passivization as a lexical process. In what follows we shall see passivization in Afaan Oromoo in light of this theory. For ease of exposition the examples in (2) repeated here as (9) below.

(9) a. mergitu-n   dabalaa   ɗaw-t-e
        mergitu-Nom dabalaa   hit-3FS-PRF
        'Mergitu hit Dabalaa'

     b. dabalaa-n   mergitu-ɗan ɗaw-am-e
        dabalaa-Nom   mergitu-by   hit-PAS-PRF
        'Dabalaa was hit by Mergitu.'

(9a) is the active sentence and (9b) is its corresponding passive sentence. In Lexical-Functional Grammar the relationship between active and passive sentences in (9) is reduced to the relationship between active and passive verbs. Hence, the passive verb is derived morphologically from the active verb by applying the following lexical rule (adopted from Bresnan 2001).

(10) Passive rule

        Active   Passive

R < X   Y >   ↔   < X   Y >
     | | | |
     SUBJ OBJ   (OBLθ) SUBJ
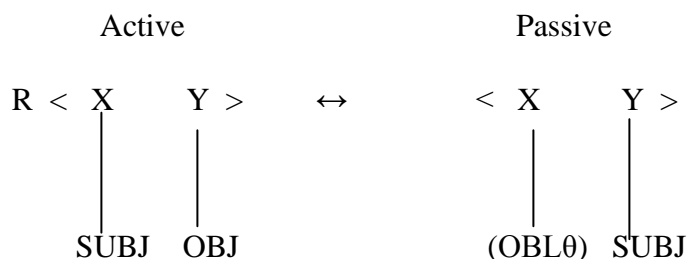
The passive rule states that the SUBJ of the active lexical entry is to be substituted by optional (OBLθ) in the passive lexical entry. In a similar way, the OBJ of the active lexical entry is to be changed into SUBJ in the passive lexical entry. Lexical rules, therefore, are interpreted as rules that derive one lexical entry from another lexical entry. According to this theory both active and passive verbs are listed in the lexicon separately and their relationship is indicated by the passive rule. When we apply the passive rule to the above passive construction in Afaan Oromoo we learn that the active verb ɗaw- 'hit' and its passive counterpart ɗawam- 'be hit' have two different lexical entries in the lexicon. This is shown in (11).

(11) a.   ɗaw-   V (↑PRED) = 'ɗaw- < (↑SUBJ) (↑OBJ) >'

     b. ɗawam-   V (↑PRED) = 'ɗawam- < (↑OBLθ) (↑SUBJ) >'

In the recent development of the theory of Lexical-Functional Grammar lexical rule such as passive rules in (10) above considered as explanatorily weak as such rules lack generalization in giving general picture about linking relation of active /passive alternation. Hence, a more general theory of relation change was designed by L. Levin (1986). This general and monotonic theory is called Lexical Mapping Theory (hereafter LMT). The LMT is concerned about the correspondence between thematic structure and syntactic functions of a predicate. The theory has been further developed by Bresnan and Kanerva (1989), Bresnan and Zaenen (1990), Bresnan and Moshi (1990) and Bresnan (2001). LMT has four main components, namely: semantic role hierarchy, classification of grammatical functions, mapping principles and well-formedness conditions.

Regarding semantic role hierarchy, LMT assumes the following universal hierarchy of thematic roles arranged in decreasing order (taken from Bresnan and Kanerva 1989:23)

(12)   ag> ben> recip /exp > inst> th/ pt > loc

The second component of LMT is the classification of grammatical functions into features. Accordingly, the grammatical functions are decomposed into binary distinctive features such as [±r] and [±o]. The distinctive feature [-r] represents the semantically unrestricted functions SUBJ and OBJ. This is because such grammatical functions can be linked to a variety of thematic roles and even they can be associated with non-thematic arguments such as expletives or pleonastic elements. The binary distinctive feature [+r] stands for semantically restricted functions OBJθ and OBLθ as the thematic roles they can be associated with are very much restricted.

Similarly, the distinctive feature non-objective (or [-o]) subsumes the grammatical function SUBJ and OBLθ as such grammatical functions could function as external arguments of a predicate but not as object of a predicate. Likewise the feature objective (or [+o]) subsumes the grammatical functions OBJ and OBJθ that can function as object of a predicate.

The third component of LMT is the Mapping Principles. It is concerned with syntactic mapping of thematic roles. It has three subcomponents according to Bresnan and Kanerva (1989). They are namely, Intrinsic Role Classification, Morpholexical Operation and Default Role Classification. The Intrinsic Role Classification is concerned with the association of arguments of a predicate with thematic roles at argument structure (or a-structure). According to the Intrinsic Role Classification subject and object grammatical functions are associated with theme/patient role, non-object grammatical functions with agent roles, and oblique or subject grammatical functions associated with the locative roles.

The Morphplexical Operation suppresses or adds thematic roles by so doing it affects the argument structure of a predicate. It is applied on grammatical functions which have negative feature specification such as [-r] or [-o]. The Morphpleixal Operation is typically applied to passive to suppress the thematically most prominent argument or agent of the predicate. Accordingly, the agent subject of the active predicate is suppressed to passive oblique through the application of Morphological Operation.

The Default Role Classification links argument structure with functional structure in the lexicon. It applies after the entire morpho-syntactic derivation of a predicate. According to this mapping principle the highest thematic role receives [- r] and all the other grammatical functions receive [+ r] feature.

Finally, the well-formedness condition constrains the lexical mapping relations. It subsumes Function-Argument Bi-uniqueness and the Subject Condition (Bresnan 2001), The former condition states that "Each a-structure role must be associated with to a unique function, and conversely" and the latter states "Every predicate must have a subject" (Bresnan 2001: 311).

Coming back to our main discussion now we shall consider how the LMT derives passive in Afaan Oromoo. For the sake of discussion example (9b) is repeated here as (13).

(13)   dabalaa-n   mergitu-ɗan   ɗaw-am-e
        dabalaa-Nom mergitu-by   hit-PAS-PRF
        'Dabalaa was hit by Mergitu.'

According to LMT both the active and passive predicates have the same number of arguments in the mapping from thematic structure (θ- structure) to argument structure (a-

structure) and the difference is on the mapping of arguments to functional structure (i.e., from a-structure to f-structure).

(14)   ɗawam-   <   AGENT,   PATIENT >
       Intrinsic: [- o]   [- r]

The predicate ɗawam- 'be hit' has two arguments at the Intrinsic Role Classification level just as its active predicate ɗaw- 'hit'. The agent argument encodes [-o] and the patient argument encodes [-r] by the Intrinsic Role Classification discussed above. But when the passivizer morpheme –*am* is attached to the predicate ɗaw- the agent argument is suppressed by the Morpholeical Operation principle already discussed as in (15).

(15)   ☐awam-   <   AGENT,   PATIENT >

        Intrinsic: [- o]   [- r]

        Passive: ɸ

In (15) the agent argument is suppressed and hence, it becomes invisible to Default Role Classification. Because of this the agent argument cannot map onto syntax (or f-structure). Moreover, the Default Role Classification cannot apply to the patient argument as it has [-r] feature intrinsically and this makes applying [+ r] default feature to the patient argument unnecessary. This is given in (16),

(16)   ɗawam-   <   AGENT,   PATIENT   >

        Intrinsic: [- o]   [- r]

        Passive: ɸ

        Default:
                     _____
                              SUBJ/OBJ

In (16) the patient argument has the intrinsic feature [- r] which means that it can fill either the SUBJ or the OBJ function as [- r] is unrestricted function. The point is which of the two functions the patient argument maps onto syntax. This question will take us to the consideration of the Well-formedness Condition discussed above. The Subject Condition, which is one of the well-formedness Conditions, states that every sentence must have subject, According to this condition the potential candidate in which the patient argument to map onto the syntax is the SUBJ function but not the OBJ function. This is given in (17),

(17)   ɗawam-   <   AGENT,   PATIENT   >

        Intrimsic: [- o]   [- r]

        Passive: ɸ

        Default:
                    _____
                                        SUBJ/OBJ

    Well-formedness Condition   SUBJ

In (17) the SUBJ grammatical function is associated with the patient argument but not with the Agent argument. So far we have seen how the LMT derives the passive from the active predicate lexically

4.   Conclusion

From what we have discussed so far on passivization in Afaan Oromoo, we can conclude the following. The empirical data we have considered in part II clearly shows that passivization in Afaan Oromoo is a morphological process in the sense that passive is formed by attaching the passivizer morpheme –am to a transitive verb.

In part III we have considered the theory of Government and Binding, the minimalist approach and the Lexical-Functional Grammar in order to explicate the passivization in Afaan Oromoo. We have learned that both the Government and Binding theory and the minimalist approach failed to explain passivization in Afaan Oromoo simply because such theories consider passivization as a syntactic process which actually doesnot apply to Afaan Oromoo. On the other hand, Lexical-Functional Grammar treats passivization as a morphological process and hence Lexical-Functional Grammar seems an appropriate theory to explain passivization in Afaan Oromoo.

References

Baye Yimam (1986) *The phrase structure of Ethiopian Oromo*. PhD. Thesis. School of Oriental and African Studies, University of London.

Bresnan, J. (1978) "A realistic transformational grammar". In: Morris Halle, Joan Bresnan, and George A. Miller (eds.) *Linguistic Theory and psychological Reality*. Cambridge, MA: MIT Press. pp. 1-59.

—   (2001) *Lexical- Functional Syntax*. Oxford: Backwell Publishers.

Bresnan, J and Jonni M. Kanerva (1989) "On Locative Inversion in Chichewa: A case study of Factorization in Grammar". *Linguistic Inquiry*. Vol. 20. pp. 1-50.

Bresnan, J and L. Moshi (1990) "Object asymmetries in comparative Bantu Syntax". *Linguistic Inquiry.* Vol. 21. pp. 147-186.

Bresnan, J and A. Zaenen (1990) "Deep unaccusativity in LFG". In: K. Dziwirek, P. Farrell, and E. Mejias- Bikandi (eds.) *Grammatical Relations: A Cross- Theoretical Perspective*. Stanford, CA: CSLI Publications. pp. 45-57.

Chomsky, N. (1970) "Remarks on nominalization". In: R. Jacobs and P. Rosenbaum (eds.) *Reading in English Transformational Grammar*. Ginn.

— (1986) *Knowledge of Language: Its Nature, Origin and Use*. New York: Praeger.

Dalrymple, M. (2001) *Syntax and Semantics in Lexical- Functional Grammar*. Vol. 34. San Diego: Academic Press.

Falk, Y. N. (2001) *Lexical- Functional Grammar: An Introduction to parallel Constraint-Based syntax*. Stanford, CA: CSLI Publications.

Kaplan, R and J. Bresnan (1982) "Lexical – Functional Grammar. A formal system for grammatical representation". In: J. Bresnan (ed.). *The Mental Representation of Grammatical Relations.* Cambridge, MA: MIT Press. pp. 173- 281.

Lapointe, S. (1985) *A theory of grammatical agreement*. PhD. Thesis in Linguistics. New York: Garland.

Levin, L. (1986) *Operations on Lexical Forms: Unaccusative Rules in Germanic Languages*. PhD. Thesis. Cambridge, MA: MIT Press.

Sells, P. (1985) *Lectures on Contemporary Syntactic Theories.* Stanford CA: CSLI Publications.

Simpson, J. (1991) *Warlpiri Morpho-Syntax.* Dordrechti: Kluwer Academic Publishers.

Temesgen Negasa (1993) *Oromo Word Formation*. MA thesis. Addis Ababa University.