## Lexical Passivization in Arabic and English

by

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### ADS1BACT

The main purpose of this peper is to find evidence as to whether passivization should be treated as a lexical rule or as a syntactic rule. The data used in this paper is from Standard Arabic (SA), By comparing the Lexical Functional Grammar (LFG) and the Relational Grammar (RG) treatments of passivization. I will ergue in this paper that SA provides evidence supporting the lexical treatment of passivization.

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This evidence has to do with a process of word formation in SA that operates on the passivized form of the verb and changes it into an adjective. I will call this process "adjectival conversion" (AC). Given that the processes of word formation, according to the lixicalist hypothesis (Chomsky 1970), are considered lexical rules, one might infer that the process of AC is a lexical rule. And, given that lexical rules apply in the lexicon, the passivized verb form (i.e. the input

of the AC rule) must be available in the lexicon, so that the AC rule can apply. This means that the passivized verb form should be represented in the lexicon to feed the AC rule. It cannot be a consequence of syntactic passivization.

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More significantly, I will show that the AC rule in SA applies to intransitive constructions which do not passivize. Since intransitive verbs in SA do not passivize, the availability of the passivized forms of these verbs in the lexicon must be independent of passivization Hence, the passive rule in SA, like the AC rule and other lexical processes, must operate on the passivized verb forms in the lexicon, and therefore it should be treated as a lexical rule. Thus, SA provides further evidence that passivezation should be treated lexically rether than syntactically.

# Lexical Passivization in Arabic and English

Within the RG framowork, passivization in SA is a syntactic process which can be briefly described as an advancement of "2" to "1".

Within the framework of LFG, passivization is treated as a lexical fule which can be simply stated as follows:

This lexical rule of passive operates on lexical forms in the lexicon. In LFG terms, two lexical entries are associated with the predicate in (2), namely an active entry and a passive one. Both entries are related by the passive rule presented above. Consider those entries:

- 1- a. Kataba: V, "Kataba (subj., obj.)" agent pat.
  - b. Kutiba: V, (part), "Kataba (by obi) ,(subj.)

    agent pat.

    (Ø)

The lexical treatment of passive might seem more advantageous, since relevant morphological changes are automatically addressed by the lexical rule. However,

it seems to me that this advantage is only apparent, since within the RG framework, such morphological Changes - though viewed as consequences of the syntactic passivization - can be handled by morphological rules. Because this superficial morphological evidence is insufficient to determine between the lexical and the syntactic treatment of passivization, I will turn to more subtle phenomena to resolve this problem.

The first phenomenon has to do with passive variation, where some SA predicates will allow for this variation, while others do not. Specifically, predicates in (2-4) below can passivize either by the process of vocalic ablaut (i.e. "u...i"), or by the prefixation of "in- ". However, constructions in(5-7) below allow only for the first type of passivization; otherwise, as 5.c, 6.c, and 7.c show, the constructions will be ungrammatical.

Consider the following data:

- 2.a. Kasar**a** Ahmad-u zzuja:j a break, Pstm. A.-Nom. the glass Acc, "Ahmad broke the glass."
- c. in-Kasara zzuja:j-u (biw. Ahmad-i) paśsive-break, the glass-Nom. by A. Gen.

Pst.

"The glass was broken by Ahmad."

3.d. Fataha Ahmad-u lba:b-a open - Pst. A. - Nom. the door-Acc. "Ahmad opened the door.

b. futiha lba:b-u (biw.Ahmad-i)
open-Pst. the door-Nom. by A. - Gen.
passive
"The door was opened by Ahmad."

c. in-fataha lba:b-U (biw.Ahmad-i)
passive,open the door -Nom. by A. Gen.
pst.
"The door was opened by Ahmad."

- 4.a. Sakaba Ahmad-u llaban a pour out, Pst. A.-Nom. the milk-Acc. "Ahmad poured out the milk."
  - b. Sukiba llaban-u (biw, Aħmad-i)

    pour out the milk-Nom. by A. Gen.

    Pst. passive

    "The milk was poured out by Ahmad."
  - c. in-sakaba llaban-u (biw-Aħmad-i)
     passive-pour out the milk Nom. by A. Gen.
     Pst.
     "The milk was poured out by Ahmad."

Now, compare the data in (2-4) above with (5-7) below:

5-a. dakara Ahmad-u lgissat-a mention, pst A. – Nom. the story-ACC "Ahmad mentioned the story."

b. dukirat ulgissat-u (biw.Ahamad-i)
mention, pst the story-Nom. by A. Gen.
passive, fem.
"The story was mentioned by Ahmad."

c. \*indakarat ulgissat-u (biw. Ahmad-i)
passive-mention the story - Nom. by A. Gen.
past. fem.
"The story was mentioned by Ahmad."

6.a. Saddaqa Ahmad-u nnaba?-a believe, pst. A. Nom. the news-Acc. "Ahmad believed the news."

b. §uddiga nnaba?-u (biw-Aħmad-i)
believe the news-Nom. by A. Gen.
Pst. passive
"The news was believed by Ahmad."

- 7.a. Faddala Ahmad-u ssa:y-a
  Prefer/like pst. A. Nom. the tea Acc.
  "Ahmad preferred/liked the tea."
  - b. Fuddila šša:y u (biw.Ahmad-i)

    prefer/like the Nom. by A. Gen.

    pst, passive tea

    "The tea was preferred/liked by Ahmad."
  - c. \*in-faddala šša:y-u (biw. Aħmad-i)
    passive prefer/ the Nom. by A -Gen.
    like, pst. tea
    "The tea was preferred/liked by Ahmad."

The obvious guestion that arises, them, is: how to account for the distribution of passive allomorphy free variation found in the preceeding examples.A related task is to see if this phenomenon of passive variation helps in determining whether SA passive is best viewed as a syntactic or lexical process. In order to do so, I will classify transitive verbs in SA into two classes, depending on the semantic features of these verbs.  $\,\mathrm{I}\,$ will call verbs such as those in (2-4) "Kasara verbs", where the object of such verbs necessarily undergoes a "change of-state". (Fillmore, 1970). On the other hand, I will call verbs such as those in (5-7) "dakara verbs", where objects of such verbs do not necessarily undergo a "Change- of - state". Thus, verbs will marked as belonging to either "Kasara class" or"dakara class", where "Kasara verbs" allow for the variation "u--i

--- "in- ", while "dakara verbs" allow only for the "u--i" passive pattern.

This means that in order to rule out the ungrammatical "in-" constructions like those in (5-7), one has to resort to lexical semantics. At first glance, this necessity of referring to lexical semantics in order to handle the phenomenon of passive variation in SA seems to motivate the treatment of passive as a lexical rule. The reason for this is that passivization in theories like LFG takes place in the lexical component of the grammar. Besides, the semantic properties of predicates (e.g. argument selection and semantic roles associated with arguments) are referred to in the lexicon. In theories like RG, on the other hand, the passive rule applies in the syntactic component without reference to the semantic propertes of predicates.

However, this need for considering lexical semantics in order to account for passive variation in SA does not seem to be compelling evidence for treating passive lexically, rather than syntactically. The reason for this is that syntactic theories like RG could refer to the semantic properties of predicates in the lexicon, and still treat passive as a syntactic rule. Besides, the variations in (2c-4c) could be analyzed as inchoative, rather than passive variations. From this perspective, I will turn to another phenomenon that might present strong evidence supporting the treatment of passive as a lexical rule.

This phenomenon involves an instance of word formation processes that operate on the passivized verb
form as its input. The reason such instance would
present strong evidence supporting the treatment of
passive lexically is that word-formation processes,
according to the lexicalist hypothesis, Chomsky
(1970), are generally agreed to be accomplished by
lexical rules. For instance, Chomsky (1970) rejected
the position that nominals like Bill's decision to go
are derived transformationally (i.e. syntactically)
from S's like Bill decided to go; and he proposed,
instead, that such nominals are generated by base rules
(i.e. lexically).

The precess of word formation that will be investigated here operates on the passivized verb form as its input, and changes it into an adjective. Thus, I will call this process "adjectival conversion" (AC). The data below illustrate this process. Verbs involved in this data are non - triliteral (i.e. each contains four, five, or six consonants). It should be noted here that the passive alternations mentioned before (i.e. "in- ~ u---i") are exclusively associated with perfective verbs. Passive alterations associated with imperfective verbs are "an- ~ u---a". Only the "u-----a" pattern is involved in the following data. Consider the following construction:

8.a. Y - ustaxdam - u 1-kita:b - u imp. - use, Passive - Indic. the - book - Nom.

- 3, m.s.
  "The book is/has been used."
- b. ?al-kita:b-u l-m-ustaxdam-u
  the book Nom. the AP use, Passive Nom.
  "The used book."
- 9.a. Y- ustaħda⊖- u nni₫a:m u

  Imp innovative Passive Indic. the System 
  "The system is innovated".
  - b. ?a nni₫a:m u 1 m ustaħdaੳ-u
    the system Nom.the AP innovate, Passive Nom.
    "The innovated system".
  - c. \frac{\frac{1}{an} ?i nni\frac{1}{a}:m \frac{1}{m} usta\frac{1}{m} i}{about the system Gen. the AP innovate Passive Gen.

    "About the innovated system"
- 10.a. <u>y -ustaħabb u</u> ha:da 1 mašru:b u
  Imp. prefer, this the drink Nom.
  Passive Indic.
  3, m.s.
  "This drink is/has been preferred."

- b. ha:da 1 maśru:b u <u>1 m -ustahabb u</u>

  this the drink Nom. the-AP- prefer, PassiveNom.

  "This preferred drink."
- c. ¶an ha:da 1 masru:b i 1 m ustahabb i
  about this the drink Gen. the -AP-prefer,PassiveGen.
  "About this preferred drink"

The data in (8-10) illustrate the AC of the Passivized verb stem. The underlined elements in (8a-10a) are the passivized verbs, while the underlined elements in (8b-10b) are the derived adjectives. Each of the passivized verbs in (8a-10a) consists of three elements: the imperfective prefix y\_ , the passivized verb stem, and the marker of the indicative mood\_u. On the other hand, each of the derived adjectives in (8b-10b) consists of four elements: the definite article (8b-10b) consists of three elements:

The question, then, is: what is the empirical evidence that the underlined derived elements in (%b-10b)are adjectives in SA? The answer is quite simple. Adjectives in SA must: (a) agree in case, number, gender, and definiteness with the nouns they modify, and (b) follow

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the nouns they modify, as for as the linear order is concerned, Now, considering the underlined derived clements in (8b-10b), one notes that cach of these elements modifies the noun that used to be the subject of the passivized verb before the application of the adjectival conversion rule. It is evident that the derived element agrees with the noun it modifies in case, number, gender, and definiteness. In (8c-10c), the modified noun is in the genitive case, by virtue of being the object of a preposition; accordingly, the derived adjective is in the genitive case: On the other hand, the derived element always follows the modified noun in linear order. Thus, the derived elements in (8b-10b) must be adjectival forms, not verbal forms.

In sum, the data in (8-10), and the discussion that followed show that the passivized verb stem- based on the lexicalist hypothesis above — is operated on by a iexical process of word — formation. This iexical process takes the passivized verb stem as its input, and converts it into an adjective, as shown above. This means that the passivized verb stem must be represented in the lexical component of the grammar. It cannot be considered as a consequence of syntactic passivization, since syntactic processes cannot feed lexical deriva — tional processes. Stated differently, the AC rule in SA stipulates that the passivized verb stem must be represented in the lexicon. Thus, the passivized verb stem cannot be considered as a consequence of syntactic passivization. Based on this evidence, one can conclude

that passivization in SA should be treated lexically, rather than syntactically.

A further piece of evidence supporting this conclusion has to do with cases where the AC rule operates on intransitive verbs which – as the constructions in (11b-13b) show – don't passivize. Consider the following data and the discussion that follows.

"The building{is/has been}collapsed"

- - " The collapsed building"
- 12.a. y ahta:1 u Ahmad u

  Imp. exert Indic. A. Nom.

  cunningness

  3, m.s.
  - "Ahmad exerts cunningness."

- b. \*y uhta:1 u Ahmad u
  Imp exert Indic. A. Nom.
  3, m.s. cunningness, Passive
  "Ahmad{is/has been exerted} cunningness."

"The cunning Ahmad"

- 13.a. y axta:1 u Ahmad u
  Imp. swagger Indic. A. Nom.
  3, m.s.
  "Ahmad swaggers."

  - c. Ahmad u 1 m uxta:1 u
    A. Nom the AP Swagger, Nom. Passive
    "The boastful/conceited Ahmad"

Considering (11-13), one notes that though such constructions do not passivize (by virtue of the ungrammatically of (11b-13b). However, verb stems included in such constructions allow for the derivation of passivized forms. Thus, the AC rule operates on the passivized form of intransitive verbs to convert it into

an adjective, just as it operates on the passivized form of intransitive verbs in (8-10). It is significant to note here that the passivezed form of the intransitive verbs in (11-13) is not a morphological consequence of syntactic passivization as claimed in RG, since intransitive constructions such as those in (11-13) do not passivize in the first place. Rather, the passivized forms of intransitive verbs must be represented in the lexicon, so that the lexical AC rule operates on them.

To conclude, the lexical AC rule in SA operates on passivized forms of both transitive and intransitive verbs (8-10 and 11-13, respectively). Since the AC rule is a lexical derivational process, the passivized forms of both transitive and intransitive verbs must be represented in the lexicon, so that the AC rule can apply. It follows, then, that the passive rule in SA - like the AC rule and other lexical processes - must operate on the passivized verb stem in the lexicon, and consequently it should be treated as a lexical rule. Thus, SA provides strong evidence that passivization should be treated lexically, rather taan syntactically.

### **FOOTNOTES**

- \* I would like to thank farrell Ackerman for his helpful comments on this paper.
- 1. With respect ot formalism here, I mostly relied

on J.Bresnar 1982).

- This is Just a tentative account of the semantics of the verbs involved here, since the investigation of this issue is beyond the scope of this paper.
- 3. According to this analysis, "Kasara" verbs behave like such English verbs as break, freeze, melt....

In other words, such verbs allow for causative and inchoative usages in both SA and English. The only difference is that inchoativization in SA is morphologically marked, while in English it is not.

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