A Minimalist Approach to Passive structures and Functional categories in Standard Arabic[1]

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ملخص

تهدف النظرية الأدنوية التي تبناها تشومسكي (1992، 1995, 2000) إلى فهم نحوي أفضل لتراكيب اللغة العربية على غرار مختلف اللغات الطبيعية من حيث الإقتصاد في الإشتقاق والتمثيل. وهكذا، يهدف هذا المقال إلى تقديم فكرة واضحة عن المقاربة الأدنوية حيث أثبتت بعضاالمكونات الوظيفية كونها وصفية للخصائص النحوية الأساسية للغة العربية الفصحى (SA) مقارنة باللغات ذات الصلة من حيث البنية التركيبية الأساسية. الفكرة الرئيسية التي أدافع عنها في هذه الورقة هي أنه، فيما يتعلق ببعض القيود الأدنويةلإسم المفعول في اللغة العربية الفصحى، فان إسقاط جملة AGROP ليس مفعلا تركيبيا, بينما يكون إسقاط AGRS عاملا حاسما في اشتقاق النظام الأمثل لتراتبية الكلمات في اللغة العربية. وفي نفس السياق, فإن التضمير لا يعد مكونا وظيفيا في أسماء المفعول في اللغة العربية رغم الإستدلال بضرورة تفعيله في حالة نقل المقولات الإسمية الى يسار الجملة اعتبارالعلاقة المطابقة (Agreement) في اللغة العربية.

Abstract

The minimalist approach as advocated by Chomsky (1992, 1995) aims to serve a better syntactic understanding of various natural languages in terms of economy of derivation and representation. Thus, this paper aims to provide an explicit insight into the minimalist program to show its account of the syntactic behavior of some functional categories in Standard Arabic (SA). The major claim that I defend in this paper is that, with respect to some minimal limitations of passive constructions in SA, the projection of AGRoP (Object Agreement Phrase)is not syntactically motivated. As to AGRs (Subject Agreement),it is shown to be a determining factor in deriving the optimal VSO word order exhibited by SA. The Pers (Person) feature will be shown to be licensed by TNS (tense) and Aspect to satisfy the economy principle in terms of its incorporation to the verb. Therefore, the Pers feature will be eligible for case checking with respect to its intrinsic binary feature as a [+AGR, + TNS] in SA passive constructions.

Key words: Minimalist approach, Passive structures, Agreement Phrase, Functional categories

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1. Introduction

SA passive structures have proved to be morphologically rich and therefore structural relations are derived from the notion 'minimal domain', i.e. a minimal set of positions associated with a head, divided in an internal domain (the complement) and a checking domain (the specifier(s)). However, Since Chomsky's (1986) generalization of the X-bar format to functional categories, head movement has been restricted to head positions, and phrasal movement to non-head positions in accordance with the structure preserving hypothesis of Emonds (1976). In this paper, these generalizations will be attested according to the morphological and syntactic properties of passive constructions in Standard Arabic. Functional categories like AGR and TNS will be shown to behave syntactically according to the minimalist program with some specific conditions in terms of features checking and incorporation to the verb. The main features of AGRs like Pers and number will be attested in this paper with respect to the morphological and syntactic properties of SA. First, AGRs will be shown not to assign case in SA passive structures, though in an SVO order a subject NP may check its case feature in Spec AGRs at LF. Second, number agreement will be shown to be spelled out as a pronominal in SA passives with respect to the complementary distribution between agreement and the post verbal lexical subject. Finally, the morphological instantiation of PASS (Passive morpheme) as a temporal-aspectual morpheme will be claimed to behave as a V-related feature, needed for the PF realization of passive constructions.

2. Theoretical background

In the Minimalist Program of Chomsky (1992), structures are built up incrementally in the derivation. AGR and TNS, for instance, are assumed to incorporate features of the verb (i.e.V-features) in a similar fashion of phases (Noun or determiner phrases) where the Noun is claimed to be base-generated in a lower position in the derivation where it acquires its nominal features, then, raises to D. (see Fassi Fehri 1993, 1999; Borer 1996; Ouhalla 1994; Benmamoun 2000, 2003; among others). A consideration of the functional categories as manifested in SA structures is a reaction to Chomsky's adoption of Pollock's (1989) Split-INFL hypothesis introducing the two agreement projections AGRoP and AGRo. Chomsky states that AGRP plays no role at LF, in which case the possibility of AGR trace deletion once AGR has been moved. Also, Chomsky states that agreement and case are 'checked at LF since they have

LF consequences having to do with visibility (the Case Filter) and the Chain Condition'.

The function of the V-features is claimed in this paper to check the morphological properties of the verb selected from the lexicon (Chomsky 1995: 196). As to the morphological features of TNS and AGR, they have two functions for they do not only check properties of the verb that raises to them but also check the properties of the NP (DP) that raises to their Spec. As for case, different analyses have been provided in the literature including Lasnik (1995) who assumes that if case is structural then it will be checked in the LF component in Spec AGRoP in the same way as accusative case is checked. However, if case is inherent as argued for by Belletti (1988), it will be checked in situ under the head-complement relation with the verb. In this paper, we will also attest these contentions in view of a major claim that INFL(ection) heads maximal projection in syntax, and that the selectional restrictions of the verb are taken into consideration in the analysis of AGRo or AGRs in SA passives.

3. AGR and TNS interaction in SA

The main function of inflectional elements like AGR and TNS in SA is that the former remains optional while the latter is substantially carried in IP (Inflectional Phrase). Both categories however ensure that the DP and V are properly paired while case assignment is assumed to be licensed in a Spec-head relation. For illustration, let us consider the following examples:

1- **a-**darab-a   l-walad-a   ʔabuu-hu.

    hit (past)-3ms   the boy-acc   father (nom)-his

    "He hit his son, the father."

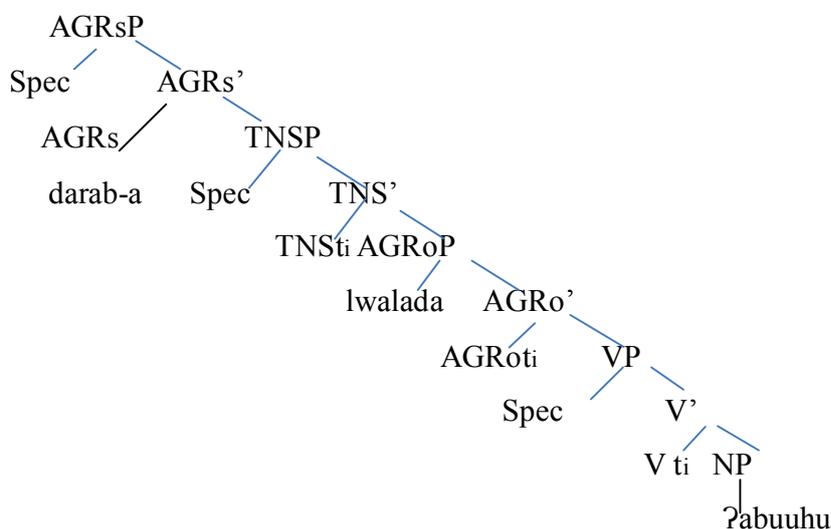   **b-**d u r i b -a   l-walad-u/ʔabuu-hu.

    hit (PASS)-3ms   the- boy-nom father (nom)-his

    "The boy/his father was hit."

    c-machghoula   l-fikri

     busy(pass)-3ms   the-mind-Gen

     "(He is) busy minded."

Under minimalism, the pronominal clitics as in (1a) and (1b) are lexical elements identified as affixes along with verbal inflections and case features, which are commonly overt at LF. Given this assumption, the operation move is assumed to operate in view of such property especially

the movement of the subject and object. As is clear in (1a) represented as in (2), the derived word order is VOS subsuming that two AGR phrases are involved in the derivation.

2-

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                    AGRsP
                  /      \
              Spec        AGRs'
                         /      \
                    AGRs          TNSP
                   darab-a       /     \
                              Spec       TNS'
                                        /     \
                                  TNSti AGRoP
                                       /      \
                                  lwalada      AGRo'
                                              /      \
                                        AGRoti        VP
                                                     /    \
                                               Spec        V'
                                                          /   \
                                                     V ti      NP
                                                               |
                                                            ʔabuuhu
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Notice first that the subject in (2) is base generated in Spec VP where it is assigned nominative case in terms of spec-head relation. Yet, given the underlying claim advocated in Chomsky (1986) and reconsidered in Chomsky (1992) that structural case assignment needs to be expressed under spec-head relation in a unified X-bar theoretic terms, let us just assume that the subject needs not only TNS but also AGRs to be assigned case. For the sake of analysis, the NP subject" *ʔabuu*" (father) will be assumed to check case in Spec TNSP and/or AGRsP. As for the case of the object, its features will be checked in Spec AGRoP.

In fact, the movement of the object over the Spec of VP is quite problematic in that it violates one major principle of economy, namely "*shortest move*". As an attempt to solve such a problem, let us compare (1a) and (1b) as in the following: given that the common property of (1a) and (1b) is the operation "*Move object*", in the former the movement is driven by *Greed* in that its features will be checked against those of the verb that ends up in AGRs, therefore such move cannot be delayed until LF as needed by *Procrastinate*. As for (1b), the object moves to Spec VP where it is assigned nominative case as a reflection of a spec-head relation. The movement in (1b) is also motivated by the TNS feature in conformity with the claim that the feature of case for subject is attributed to TNS while the feature of AGR for subject is attributed under Spec- head relation (Chomsky 1995, Lasnik 1993 and Marantz 1995). Similarly, the subject in Spec VP in (1b) is assigned case by virtue of both relations of TNS and Spec-head

agreement. In (1c), however, the passive form is derived via movement of the head (the adjectival passive form *"maſɣoul"* " busy" in a similar fashion of N-to-D in Arabic construct states or phases (for more details, see Fassi Fehri 1993, 1999; Ouhalla 1994; Benmamoun 2000, 2003; Matushansky 2006; Shormani 2014).

In (1b), contrary to (1a), the assumption of an AGRoP preceding the VP is unwelcome for different reasons. Basically, Spec AGRo is a position for the checking of object features namely accusative case. Moreover, the logical subject moves to Spec VP to be assigned the relevant features of the subject namely nominative case by TNS for purposes of convergence. Thus, if this way of reasoning is correct, it follows that AGRoP is not needed at all in SA passives. As a corollary, this proposal will sustain the claim that TNS will check the features of the verb and nominative case of the subject in Spec VP (See also Borer 1986 and Chomsky 1993).

Given these assumptions, the question that may be raised is as follows: what is the use of AGRs in SA passive constructions? In order to answer this question, it is probably important to address some issues concerning the projection of AGRsP and its morphological specificity in comparison to PASS(ive) and TNS.

4. AGR in SA passives

It is generally accepted in the literature that the status of agreement as a functional head is not uncontroversial even within the syntactic view of inflectional morphology. Probably, the multiple morphological expressions of agreement within a single verbal complex are problematic for the hypothesis that AGR is a unique functional head. However, on the basis of data form SA passives, the phi-features displayed by AGR (person, number and gender) do have syntactic manifestations that might account for the projection of a single AGRsP in conformity with the projection of TNSP. Though, AGRs will be shown not to assign case in SA passive structures irrespective of the fact that in an SVO order a subject NP may check its case feature in Spec AGRs at LF.

4.1 AGR as a projection

The AGR morpheme is essentially marked by its feature composition as shown in the analysis of (2b) above. Thus, the underlying assumption is that AGRs is realized as an affix

specified for some phi-features like person, number and gender. These features seem to offer a solid basis and a determining factor in deriving the right word order in SA passive constructions. For illustration, let us consider the following:

3- **a-**qutil-at   l-banaat-u.

   killed(PASS)-3fs   the-girls-nom

   "The girls were killed."

   b-*al-bannat-u   qutil-at.

     The-girls-nom   killed (PASS)-3fs

    "*The girls was killed."

   c-al- banaat-u   qutil-na.

    the-girls-nom   killed (PASS)-they-3fpl

    "The girls were killed."

Given the ungrammaticality of (3b), contrary to (3a) and (3c), the SVO order requires full agreement while a VSO order does not. In (3a), contrary to (3c), the AGR element is specified only for Pers and gender but not number. Syntactically, however, both constructions are acceptable, the fact which implies that the agreement relation, in VS or SV, is checked in (3a) and (3c) respectively.

Assuming, accordingly, the projection of AGRsP, AGRs is supposed, under the minimalist approach, to be strong in SA though it may either be rich or poor. When AGRs is rich, it has both nominal and verbal features associated with it, but while poor it is identified either as V or N-related (Benmamoun, 1998). So, as a way to derive (3a), let us assume that *Greed* forces the movement of the verb to PASS, then to TNS and subsequently to poor AGRs. As for the object, it moves from its extraction site to Spec VP to function as the nominative case marked subject, then moves across spec PASSP to spec TNSP where it gets its case checked. Yet, given that when AGRs is poor as in (3a) it is either N or V related, the movement of "*al-banaatu*" (the girls) to spec AGRs may be barred on a substantial ground as will be demonstrated below.

Contrariwise, we may suggest that in (3c) the verb head moves to PASS then to TNS where it has its tense inflection checked against the V features of TNS. If this reasoning is correct, the complex [V- PASS-TNS] moves to AGR where the element V of the complex satisfies *Greed* by checking its agreement morphology against the V-feature of AGRs;

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meanwhile, TNS checks the case feature of the subject before its movement to the checking domain of AGRs. So important in this regard is that a certain correlation in the derivation of (3c) (i.e., SV) is involved between rich AGRs and the subject movement to its checking domain. In particular, such move is required by *Greed* in order for the N-feature of rich AGRs to be discharged; though, as pointed out above, the movement is barred in (3a) (i.e. VS) in that no overt subject is available.

Comparing however (3b) and (3c), in the former the movement of the NP subject to Spec AGRs is barred by *Procrastinate* in that partial agreement as in (3b) is checked at LF due to procrastinate; contrary to full agreement which is checked overtly in (3c). Still, full agreement might be cast within the incorporation analysis in that it implies the generation of a pronominal within the position of the subject and incorporating it into the verb. In this regard, Benmamoun (1998) argues that the attractive part of the incorporation analysis is that it derives the complementary distribution between full agreement and a post-verbal lexical NP. To see how the incorporation analysis works in SA passives constructions, let us assume that pronominals function as AGR elements in SV orders but only as null elements in VS orders. Though, it will be shown that poor AGRs is manifested both in VS and SV orders.

4.2 AGR as a pronominal

Giventhedistinctivefeaturesoffullandpartialagreementdiscussedabove, the AGRsP is shown to be the checking domain of case of the subject and the V-features of AGRs. However, such move is shown to depend on the type of agreement involved and therefore the word order derived (i.e., V (erb) S (ubject) or SV). Thus, we will examine in this section whether an AGR element might function as a pronominal in SA passives. Consider the following:

4-a l-banaat-u   durib-na   (bi-ʃiddat-in).

    the girls-nom   hit (PASS)-3fpl (severely)

   "The girls were (severely) hit."

5- jaaʔ-a   l-ʔaçḏaaʔ-u   llaðii-na   ntuxib-uu

   came-3ms the-members-nom who-fpl   elected (PASS)-3mp

   "The members who were elected came."

6-a- tu-mtaħan-u l-fatayaat-u ɣad-an.

imperf- examined (PASS) the-girls-nom tomorrow-acc

"The girls will be examined tomorrow"

b- al-fatayaat-u tu-mtaħan-u ɣad-an.

the-girls-nom imperf-examined (PASS) tomorrow-acc

"The girls will be examined tomorrow."

To account for (4), it is assumed in Baker (1988) that for an element to be incorporated it has to be governed by the host. Accordingly, we assume that the pronominal element *-na-* incorporated onto the verb which selects it. Given this assumption, the pronominal element is in a complementary distribution with the NP subject in spec AGRs, the features of which are checked overtly at LF. As for (5), given that the pronominal attached to the embedded passive verb *"ntuxib"(*be elected) is in the subject position and that the VP is selected by a complementizer (Comp*) "llaðii-na",* two finite verbs are displayed carrying finite TNS and AGR. Confining however our attention on the one hand to the agreement features on Comp and the embedded verb; and on the other hand, the main verb and the subject in Spec TNSP, we notice that the first relation exhibits full agreement while the second relation exhibits partial agreement.

In other words, when the subject is a pronominal, Comp and the lexical verb must carry full agreement. However, if the subject is lexical and post verbal it displays partial agreement and checks its nominative case in Spec TNSP. To this end, the question that may be raised is as follows: what prevents the subject from checking its nominative case in spec AGRsP?

Before answering this question, let us first account for the convergence of both passive structures (VS) and (SV) in (6a) and (6b), respectively. The first observation to be made is that the verb in both structures exhibits partial agreement; still both imperfective passive structures converge. The second observation is that number agreement is not spelled out on the verb in (6b) though it is spelled out as an affix on the preverbal NP. This state of affairs is deemed according to Benmamoun (1998) to the merger of the verb and the subject. However, this might be a wrong assumption in that, following Chomsky (1995); number is an interpretable and intrinsic feature of nouns but not verbs. We may then predict that number is not a categorical feature of verbs; instead, gender is V-related since it is morphologically realized on the passive verb in both cases of agreement as the following derivations suggest:

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7.a- durib-at.   **d**- durib-a.

    hit(PASS)-3fs   hit(PASS)-ms

    "She was hit"   "He was hit"

    b- durib-na.   **e**- durib-uu.

    hit(PASS)-3fpl   hit(PASS)-3mpl

    "They were hit"   "They were hit"

    c- sa-tu-drab-na.   **f**- sa-yu-drab-uuna.

    will-hit(PASS) imperf-3fp   will-hit-(PASS) imperf-3mp

    "You will be hit"   "They will be hit"

Notice that agreement in terms of gender is retained in all derivations. Then, if we assume along with Aoun et al. (1994) that agreement must be retained for intrinsic features but not grammatical features, we may predict that gender agreement is an intrinsic feature of verbs which must be retained. To examine whether what has been advanced so far follows on solid grounds, let us consider the following:

8-   **a**-Kunna n-nisaaʔ-u   *y/t-umtaħan-na.

    be 3f.pl the women-nom Pers-examined 3f.pl

    "The women were being examined"

    b-Kaan-at n-nisaaʔ-u   *y/t-umtaħanu.

    be-3fs   the women-nom *3ms/3fs-examined

    "The women were being examined"

Notice that in (8a), full agreement follows on the basis of realization of all phi-features on Comp, however in (8b) partial agreement is realized only in terms of gender. The claim to be made is that gender is overtly realized on the passive verb and is therefore retained in the derivation. Supposing that this claim is true, it is still unclear why the auxiliary *kunna* in (8a) does agree, contrary to (8b), only with the suffixed agreement element but not the prefixed one. As an explanation of this state of affairs, in (8a) the gender may be assumed to be an intrinsic feature of the passive verb and not the DP, thus it should be overtly realized on verbs irrespective of number agreement, a non categorial V-feature as in(8b). As an alternative proposal, number agreement may be spelled out as a pronominal on the grounds that it is N-related but not V-related. For illustration consider the following:

9- **a-** ʔamar-tu   ʔan   yu-drab-a   l-ʔawlaad-u.

ordered-I (Comp) subjunctive   hit (PASS) imperf the-boys-nom

   "I ordered (someone) to hit the boys."

b-ʔamar-tu ʔan   yu-drab-uu   (*l-ʔawlaad-u).

ordered-I (Comp) subju   hit(PASS)imperf-they (*the-boys nom)

   "I asked that they should be hit."

10-   **a-**ʔamar-tu   ʔan   tu-draba   l-banaat-u.

ordered I   (Comp)   hit(PASS) imperf the-girls-nom

"I ordered that the girls should be hit"

   b- ʔamar-tu   ʔan   tu-drab-na.

   ordered-I (Comp)   hit(PASS) imperf-they

"I ordered that they should be hit."

Following Aoun et al. (1994), what is important about VSO order is that when the verb moves higher, the number agreement may not be retained. Under minimalist assumptions, this claim is sustained in Benmamoun (1998) in terms of the merger of the verb and subject. Accordingly, the merger of the verb and the subject in (9b) and (10b) will be basically assumed to be responsible for the complementary distribution between number agreement and the post verbal lexical subject.

However, as is clear from (9b) and (10b), the agreement marker is characterized as discontinuous in the imperfective in that it consists of two affixes as in (8a) above, while number is fixed in the suffixal position (see Fassi Fehri 1996 and Noyer 1992 among others). Given this, the agreement morphemes *-uu-* and *–na-*suffixed to passive verbs in (9b) and (10b) respectively index number agreement, let us assume that it is an incorporated pronoun under an AGR projection as in the following paradigms.

11-Perfective

kutib-a   "It(3ms) was written"

kutib-   "They(dual-m)were written"

kutiba-   "They(dual-f) were written"

kutib-   "They(m.pl) were written"

kutib-   "They(f.pl) were written"

12-Imperfective

     a-*yuktab-u.*   "It (ms) is being written"

     b- *yuktab-aa.*   "They (dual.m) are being written"

     c-*tuktab-aa*.   "They (dual.f) are being written"

     d- *yuktab-uu-na.*   "They (m.pl) are being written"

     e-*tuktab-na.*   "They (f.pl) are being written"

With respect to the paradigms under (11) and (12), the pronominal AGR element is incorporated to the verb and preserves the number agreement specification as the difference between (11 a-b-d) and (12a-b-d) shows. Additionally, given that a null pronominal cannot *spell out* agreement features due to the lack of a phonological matrix, I assume that number agreement is spelled out as a pronominal in SA passives as in (9b) and (10b). Accordingly, the complementary distribution between number agreement and the post verbal lexical subject is reduced to incorporation or merger of the pronominal on the passive verb.

Now, suppose that we accept the above line of argumentation that at some point in the overt derivation, the subject and the verb in (9) and (10) reflect a Spec head relationship. Following Aoun et al. (1994), a verb with a post verbal conjoined pronominal subject can either agree with the full conjunction, exactly like a verb with a post verbal conjoined non-pronominal subject. For argumentation, let us consider the following examples from SA and their corresponding Moroccan Arabic (MA) examples respectively.

13-a- qutil-at/*Φ   [IP l-banaat-u] wa [e l-walad-u].

     killed(PASS)-3fs the-girls-nom and   the-boy-nom

   "The girls and the boy were killed"

  b- t-qtl   [IP l-wald] w [e l bent t] .

     PASS-killed the-boy   and the-girl
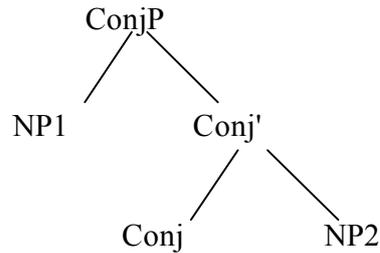
   "The boy and the girl were killed"

Notice that in (13a-b), the spec head relation is expressed only with the first conjunct but not with the second one. Therefore, number agreement will be spelled out as a pronominal with regard to the relevant phi-features in satisfaction of *Greed*. Assuming this to be correct, the DP subject in spec IP position (or Spec Conj(unction)P(hrase)) might be spelled out as a pronominal that preserves its relational features. To see whether this is a correct stipulation, let us consider the following:

14- **a-** qutil-na/*at hunna wa l-walad-u.

killed(PASS)-they(f.pl)/*3fs them-3fpl and the- boy-nom

"They and the boy were killed."

b- ʔ al-banaat-u qutil-na wa l-walad-u.

the girls-nom killed-they and the boy-nom

"The girls and the boy were killed."

15- **a-**qutil-na hunna laa ʔixwat-u-hunna.

Killed-3fp they (fpl) not brothers-nom-3fpl

"They were killed but not their brothers."

b-qutil-uu hum laa ʔaxawaat-u-hum.

Killed-they(mpl) they not sisters-nom-3mpl

"They were killed but not their sisters."

Following the assumption already made by Benmamoun (1998) that the overt pronoun is not the real subject, and that the real subject is a null pronominal focused by the overt pronouns, we might expect the merger of the pronominal subject and the verb to apply at a certain point in the derivation with respect to the type of agreement involved and the features checked. In the ConjP under (14a-b), merger applies similarly but yields different derivations; thus, merger would be assumed to apply at different levels. In particular, given the claim made above that number agreement is spelled out as a pronominal; the latter which is the yield of spellout is supposed to merge at least before LF. In other words, such merger applies in satisfaction of *greed* in that it applies in (14a); while in (14b), merger applies after movement of the subject to Spec AGRsP where number and gender features are checked. In this regard, Marantz (1995) claims that AGR features of AGRs will include the phi-features (person, number and gender) of the subject DP that is raised to spec of AGRs, while the AGR features of AGRo will include the phi-features of the object DP that is raised to spec of AGRo.

The problematic issue that is usually noticed in conjunct phrases is however raised in SA passives. Given (14a-b), the verb agrees only with the adjacent argument (a lexical NP or a pronominal) but not the second DP of the conjunct. Following Aoun et al. (1994), the most conjoined subjects in Arabic may have a standard X-bar representation in which the first conjunct occupies the complement position of Conj' as in (16).

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16-

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                    ConjP
                   /    \
                  /      \
               NP1       Conj'
                        /    \
                       /      \
                    Conj      NP2
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The lack of agreement of the verb with the second conjunct is not well founded in SA passives in that both DPs function as structural subjects that are assigned nominative case. The yield of this state of affairs is twofold: first the raising of the verb to spec AGRsP as in (14b) would imply that it can be assessed to interpret the gapped verb. Second, though the merger of the verb and the pronominal subject does not violate structure preservation (Emonds, 1976), the verb does not agree with the intrinsic features of the conjunction. Thus, we cannot assume that in (14a) contrary to (14b) the post verbal conjoined pronominal subject can act as the antecedent nor does it function as the structural subject. Instead, this pronominal is a copy of the agreement feature exhibited by the lexical NP in (14b) or the focused overt pronominal in (14a).

In sum, the assumption that number agreement is spelled out as a pronominal in SA passives is based in principle on the complementary distribution between agreement and the post verbal lexical subject. Accordingly, the incorporation of the pronominal and its merger with the verb applies with respect to the retention of the intrinsic features in satisfaction of *Greed*. However, with respect to conjunct structures, the spelled out pronominal is but a copy of the agreement features exhibited by lexical DPs and focused pronominals.

5. Pers agreement and TNS

Given the types of agreement exhibited in SA passives, an examination of the feature content and distribution of agreement morphemes as well as pronominals establish the following hierarchy on specification (Fassi Fehri, 1996: 6):

17-Pers> Number> Gender

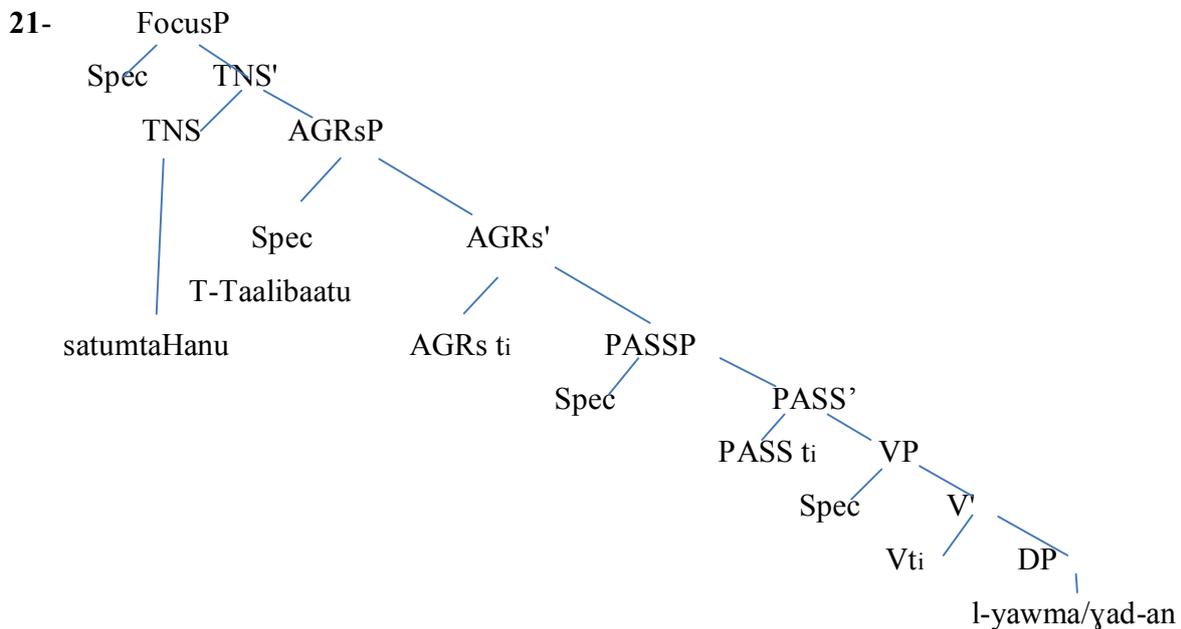This specification of Pers is obligatory with inflected verbs as the following contrasts show:

18-   **a-** ʔanti   durib-ti.

     you (fs)   hit (PASS)- 2fs

   "You were hit."

   b- ʔantumaa   duribtu-maa.

   you-dual   hit (PASS)- dual

   "You were hit."

   c- *hunna   durib-uu.

    they (fpl)   hit (PASS)- they(mpl)

   "*They-fplwere (mpl) hit."

19-   **a-** ʔantum-aa   tu-drabaa.

     you(dual)   you-dual-hit-dual

    "You are being hit."

   b- *ʔantum   tu-drab-na.

   you (mpl) you-dual-hit-(fpl)

   "*You-mpl are being (fpl) hit."

Perfective and imperfective passive verbs in (18) and (19) seem to differ only in placing the Pers affix in the closest environment to the verb, as prefix or suffix. Yet, the Pers agreement specification has not been shown in the literature to define the distinction between full and partial agreement, or SVO and VSO orders. Thus, the claim that I will try to defend is that Pers is intrinsically specified for inflectional features. In other words, the Pers feature is licensed by TNS and Aspect, therefore its incorporation to the verb follows on syntactic grounds. Accordingly, the person feature will be eligible for case checking with respect to its intrinsic binary feature as a [+AGR, + TNS]. For illustration, consider the following:

20- **a-**yu-mtaħanu   T-Talabat-u   (*l-baariħata/l-yawma).

     (3.m)-examine (PASS) the students-nom (*yesterday/today)

     "The students are being examined (*yesterday /today)."

   b-tu-mtaħanu   T-Taalibaat-u   l-yawma.

    (3f)-examine (PASS) the-students-nom today

      "The students are being examined today."

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c- sa-tu-mtaħanu   T-Taalibaat-u   l-yawma/ɣadan.

future-3f- examine (PASS) the students-nom today / tomorrow

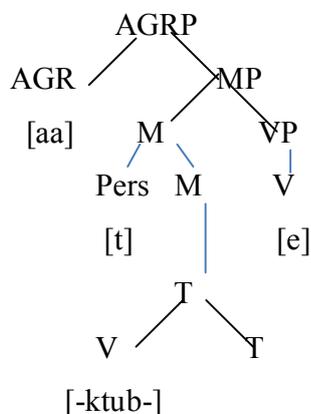"The students will be examined today / tomorrow."

Assuming that the Pers feature is characterized as [+TNS, +AGR] element, it will be then spelled out as a pronominal when it indicates agreement and as an affix when displayed as a TNS feature. Therefore, the Pers feature will be on the one hand, in a position where it inherits a person feature of the subject presumably to check the case feature of the subject (Fassi Fehri 1996).On the other hand, As an Agr element, the Pers feature will be spelled out as a pronominal with a nominal feature. So, the Pers feature *–yu –*in (20a) or *–tu-* in (20b) index an imperfective temporal interpretation which is expected to function as PASS. However, in (20c) the incorporation of the Pers feature is independent from that of the temporal feature *-sa-*. We assume accordingly that in cases like (20c), checking of the case feature is delayed with respect to procrastinate until LF. In other words, case checking applies after adjunction of the Pers agreement to TNS, the fact which subsumes that AGR is neither an extended projection of TNS nor does it check, contrary to Chomsky's (1995) assumption, nominative case of the subject. The outcome of this line of analysis is then to project a TNSP as a FocusP (FP).

21-   FocusP

Spec   TNS'

TNS   AGRsP

Spec   AGRs'

T-Taalibaatu

satumtaHanu   AGRs t$_i$ PASSP

Spec   PASS'

PASS t$_i$ VP

Spec   V'

Vt$_i$ DP

l-yawma/ɣad-an

Contrary, however, to what has been assumed above, Fassi Fehri (1996) claims that in the imperfective, Person incorporates into M(ood) which is a functional projection higher than TNS,

and lower than AGR. This stipulation is represented as in the following tree diagram as suggested in Fassi Fehri (1996:17) and exemplified in (23) below:

22-

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                      AGRP
              AGR            MP
              [aa]      M         VP
                    Pers   M        V
                    [t]             [e]
                             T
                         V       T
                      [-ktub-]
```

With respect to SA imperfective verbs, (21) will reflect a certain adjunction of V to TNS, then the complex (V-TNS) into Mood. Additionally, Pers incorporates to the left of the complex M yielding [Pers-V-TNS-Mood] order headed by Mood (see Fassi Fehri 1996). Given this, let us assume, that Pers is a pronominal element which gets incorporated to the verb as an intrinsic agreement feature of the verb, while TNS and Mood reflect the aspectual temporal status of PASS. For illustration, let us consider the following.

23- a-r-risaalat-aani   kutib-at-aa .

 the-letter-(dual)   written (Pass)-3fs-(dual.f)

 "The two letters were written."

 b- r-risaalat–aani   tu-ktab-aani.

 letter- (dual) TNS/Pers- write-(PASS) (dual).

 "The two letters are being written."

Displaying an SVO order, (23a) and (23b) manifest a type of full agreement where number agreement is spelled out as a pronominal. Furthermore, in (23a) the perfective passive verb is inherently marked for TNS and Aspect (or Mood as in (22)). As for Pers agreement, it is marked by the number affix assumed to be spelled out as a pronominal. If these assumptions are correct, (23a) will be interpreted on two different levels: first, since the passive verb has a temporal aspectual interpretation, then its movement is not necessary and not needed by *Greed*. Therefore, TNS will be on the one hand dissociated from Pers agreement; on the other hand, its checking will be delayed until LF in satisfaction of *Procrastinate*. Second, the Pers agreement affix which is dissociated from TNS but associated with number may be claimed to raise

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along with number agreement to AGRs. However this is a wrong move in that Pers agreement is the first element which the verb gets incorporated to, the fact which entails that Pers agreement is closer to the verb than number agreement. If this view is straightforward, along with the view that the vowel *-a-* suffixed to the perfective passive verb [*-kutib-*] indexes the simple past form in the corresponding active form [*katab-a] "he wrote",* then Pers agreement is still incorporated to TNS.

Contrary, however, to perfective passive structures, imperfective passive structures as in (23b) display a certain prefixed Pers agreement feature which stands for gender as well. This is adduced, according to Fassi Fehri (1996), to the fact that the imperfective inflects for Mood. Essentially, the position of Pers agreement is interpreted to be a position where the head of the Mood Phrase is realized. Consequently, Mood and Person fuse in imperfective forms just like TNS and Pers do in perfectives. In accordance with (22), Pers agreement might be claimed to be a V-related feature which cannot be spelled out like number agreement. This follows essentially in the case of perfective passive structures where TNS is an abstract feature characterizing, besides Aspect/Mood, PASS.

Following this line of reasoning, Pers agreement, which is fused to Mood in imperfectives and to TNS in perfectives, should be claimed to be derived under Mood or TNSP rather than AGRP. Though this is a strong claim, Pers agreement, unlike number agreement, is projected under MoodP. Consequently, along with Shlonsky (1989), Pers agreement will be projected independently from number and therefore each one will be checked in a different position.

Essentially, in the case of imperfective passives as in (23b), Pers has a temporal V-related feature which is checked under PF, while number is checked only at LF. For the sake of argumentation, in (20a-b-c) as well as (23a-b), Pers agreement is displayed in full agreement and partial agreement as well. Moreover, there is no syntactic motivation for associating -*tu…aani-* in (23b) where the Pers agreement *-tu-* may be associated with different number features as in (23a) and (24c) below.

tu-ktab-	(3f.s)
tu-ktab-	(2f.dual)
tu-ktab-	(f.pl)
* *Ø-ktab-*	

       * *Ø-ktab-*   (dual)

       * *Ø/nu-*   (f.pl)

Given the contrasts in (24) and (25), the specification of Pers is assumed to be an inherent property of the subject as well as the imperfective passive verb. Comparing (24a) and (25b), Pers agreement proves to be required for the PF realization of the verb, while number agreement does not. In this regard, the questions that may be asked are as follows: first, can we assume that the package of incorporation includes only the Pers feature, but not number? Second, can we assume that Pers agreement is merged at PF, and number agreement only at LF? Finally, can we assume that PASS is, in terms of its inflectional and V-related feature, licensed along with Pers agreement, generally assumed to be a V and T- related feature, at PF?

       Given these assumptions, the underlying implication that has been understood in the minimalist theory is that Pers merger to the verb will be assumed basically to apply, as an overt operation, before spell out in that its consequences show up in PF as well as LF. Contrariwise, number agreement is a post-spellout operation, i.e. a covert operation, in that its consequences show up only at LF (Chomsky 1995, Lasnik 1996).

       To this effect, in (23) the Pers feature will be considered to belong to the agreement chain [+Pers,+number]. However, given the convergence of (24a) and divergence of (25a), the Pers feature should be specified. Basically, specification is defined as a principle applying to lexical insertion where one specific lexical item of those competing for insertion is selected. The other related requirement to be satisfied by Merger of Pers agreement, as suggested by Fassi Fehri (1996), is the Non-redundancy principle formulated as in the following:

       26-Non Redundancy

In agreement chains, a feature cannot be specified more than once.(P: 25)

Given both requirements of specificity and non-redundancy, (24c), in comparison to (25c), is well formed in that it satisfies specificity by selecting the Pers feature among other competing features like *-yu-* (mpl) and *–nu-*(1pl) as the non-well-formedness of (25c) shows. As for non-redundancy, the Pers feature is displayed only once in (24c) but twice in (25c). If this line of reasoning is correct, the derivations in (24) converge as long as the Pers feature is needed for PF purposes. As for number feature, which belongs to the agreement chain [+person, +number], is not needed by *Greed* in that in (24a) and (24b-c), the n u m b e r feature is either an

abstract feature of the verb or is spelled out as a pronominal. Therefore, number feature is either an abstract feature or a pronominal incorporated at LF for full interpretation purposes. If this is true, the Pers feature may incorporate or merge with the V-related features encoded in the passive verb forms at least of imperfective constructions.

Accordingly, given the V-features of Pers agreement along with the associated temporal features, PASS in imperfective construction will be claimed to be licensed at PF in view of the following principles:

- Pers Agreement fusion with TNS in imperfective passive constructions

- Pers Agreement is a V-related feature.

- The projection of Pers Agreement, along with TNS, under Mood Phrase.

- The morphological instantiation of PASS as Aspectual-temporal morpheme, and therefore as a V-related feature, needed for the PF realization of passive constructions.

CONCLUSION

This paper examines the structural properties of SA passive forms in conformity with the structural relations that PASS displays vis-à-vis the other associated functional categories like AGR and TNS. In this paper, the projection of a single AGRsP in conformity with the projection of TNSP has been accounted for with respect to the claim that Agrs is not eligible to assign case in SA passive structures irrespective of the fact that in an SVO order a subject NP may check its case feature in Spec AGRs at LF. Number agreement has been shown to be spelled out as a pronominal feature which is checked at LF in SA passive constructions, while Pers agreement has proved to contribute in the licensing of PASS and TNS due to its morphological specificity. In particular, the Pers feature displays a temporal V-related feature needed by *Greed* for the PF realization of PASS. Finally, the projection of Pers and TNS under Mood Phrase has been demonstrated with regard to some imperfective passive verb forms which display different features. Specifically, as an AGR element, the Pers nominal features in SA are weak while the nominal features of TNS are strong. Thus, for case checking purposes, the subject is shown to move to [SpecAGRs] in case of full agreement (SV) but only to [Spec TNSP] in case of partial agreement (VS).

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