Agreement in Arabic

The last chapter examined in detail the syntactic behaviour of the Finnish possessive suffixes both in the possessive construction and a number of non-finite verbal clause-types. Taken at face value, the data suggested that the nominal properties of these suffixes (specifically whether they should be analysed as agreement morphemes or pronominal affixes and their binding-theoretic status) varied according to the construction in which they appeared, leading some scholars to propose, undesirable as it may at first seem, that the language has two sets of morphosyntactically distinct morphemes which happen to be phonetically identical. On the basis of correlations between restrictions on word order and the properties of the suffixes in each of the constructions under discussion, this step was shown to be unnecessary. An alternative was developed, according to which the φ-features of the affix were always lexically valued, but their status with respect to LF-interpretability determined at the point at which they are introduced into the derivation: taking affixes merged in a θ-position to have interpretable φ-features and those merged in a non-θ-position to have uninterpretable φ-features in need of deletion was shown to account for the full range of data in a more principled and elegant way than any of the three alternative analyses considered. By drawing on ideas familiar from standard analyses of the passive, the ability of a verb to assign an external θ-role was argued to be inhibited by the morphology associated with some non-finite verb forms, but not others.

This chapter and the next will explore the more general validity of these claims by considering languages with similar agreement patterns and examining the extent to which the model proposed can account for these. The first such language is Modern Standard Arabic, in which, as Fassi Fehri observes, “bound nominative forms are homonymously ambiguous between a pronoun and an inflection interpretation” (Fassi Fehri, 1993:121). This situation is reminiscent of the lexical split proposed by Toivonen to account for the different behaviour of the Finnish possessive suffixes (cf. section 2.3.3 of the last chapter) and it is the aim of this chapter to show that it is amenable to an analysis along similar lines. Section 1 introduces the two basic word orders of Modern Standard Arabic finite clauses and presents the restrictions on agreement associated with each. Section 2 considers the syntax of SVO sentences, showing it to be directly comparable to that of the Finnish temporal adjunct and agent constructions, and in so doing refines the model of θ-role assignment hitherto adopted. After object and
complementiser agreement have been shown (in section 3) to have essentially the same properties as the Finnish participial construction, section 4 tackles the problem of partial agreement in VSO clauses, a phenomenon for which there is no direct parallel in Finnish. In spite of this, it is shown that such clauses can be accommodated in the model by adopting Mohammad’s (1989, 1990) Expletive Hypothesis for VSO orders. Section 5 considers verb-initial sentences with pronominal subjects, which do display full agreement and argues that these are not true arguments, but rather occupy an Ā-position, from where they bind the pronominal affix. Section 6 considers why these additional options are not be available in Finnish and section 7 concludes the discussion.

1 PATTERNS OF AGREEMENT IN MODERN STANDARD ARABIC

Modern Standard Arabic allows two basic word orders in finite declarative clauses with different degrees of subject agreement being possible in each. In SVO clauses, the verb obligatorily agrees with an NP-subject in all φ-features (1), while in VSO clauses only gender agreement is possible (2). Partial (i.e. gender only) agreement is not possible in SVO clauses (3), nor is full agreement possible in VSO clauses (4)\(^1\).

(1) \text{n-nisāʔ-u} \text{daxal-na} \text{makātib-a-hunna}  
the-women-NOM enter.PAST-3PL.F office.PL-ACC-their.F  
‘The women have entered their offices’ (Fassi Fehri, 1993:32)

(2) \text{daxal-at} \text{n-nissāʔ-u} \text{makātib-a-hunna}  
enter.PAST-3SG.F the-women-NOM office.PL-ACC-their.F  
‘The women have entered their offices’ (Fassi Fehri, 1993:32)

(3) \text{*n-nisāʔ-u} \text{daxal-at} \text{makātib-a-hunna}  
the-women-NOM enter.PAST-3SG.F office.PL-ACC-their.F  
Intended: ‘The women have entered their offices’ (Fassi Fehri, 1993:32)

(4) \text{*daxal-na} \text{n-nissāʔ-u} \text{makātib-a-hunna}  
enter.PAST-3PL.F the-women-NOM office.PL-ACC-their.F  
Intended: ‘The women have entered their offices’ (Fassi Fehri, 1993:32)

\(^1\) In the interests of consistency, some of the Arabic examples are reproduced here in a form slightly different from that in which they appear in the sources cited.
Arabic allows pronominal arguments of all kinds to remain unexpressed in the presence of a corresponding agreement morpheme on the verb. Subject and object agreement differ in this respect to the extent that, while an overt subject may co-occur with subject agreement, where the verb carries object affixes, the argument they cross-reference is obligatorily null\(^2\).

(5) (ʔanā) intaqad-tu-hu (*ʔiyyāhu)
   (I.NOM) criticise-PAST.1SG.NOM-3SG.M.ACC\(^3\) (*he.ACC)
   ‘I criticised him’

(6) (ʔanta) ?aːt.ay-ta-nī-hi (*ʔiyyāya) (*ʔiyyāhā)
   (you.SG.M.NOM) give-PAST.2SG.M.NOM-1SG.ACC-3SG.F.ACC (*I.ACC) (*she.ACC)
   ‘You gave her to me’

(7) (hunna) dʒiʔ-na
   (they.F.NOM) come-PAST.3PL.F.NOM
   ‘They came’

A pronominal object must be expressed as an affix on the verb rather than as a free form wherever this does not violate another principle of the grammar. One such principle is the person constraint, which requires object affixes to appear in ascending order of value of person feature. However, the order of the affixes is also constrained by semantics, with the first of two object affixes attached to a ditransitive verb obligatorily being interpreted as the indirect object and the second as the direct object. The conflict between the requirements on a verb with, for example, a second person direct object and third person indirect object is resolved by expressing one of the arguments as a free form.

(8) *ʔaːt.ā-hu-ka l-ʔustād-u
   give-PAST.3SG.M.NOM-3SG.M.ACC-2SG.M.ACC the-teacher-NOM
   Intended: ‘The teacher gave you to him’

(Fassi Fehri, 1993:104)

---

\(^2\) This is a slight oversimplification (see sections 4.3.2 and 5 below).

\(^3\) Anticipating the proposal in section 5.1 that agreement affixes have Case, subject and object agreement will be glossed throughout this chapter as NOM and ACC respectively.
(9) ʔaʕt.ā-hu l-ʔustād-u ʔiyyāka
    give-PAST.3SG.M.NOM-3SG.M.ACC the-teacher-NOM you.SG.M.ACC
    ‘The teacher gave you to him’
    (Fassi Fehri, 1993:105)

The object affixes also appear on certain complementisers such as ʔinna, cross-referencing the φ-features of the subject (10) and in this respect behave in the same way as a matrix predicate exceptionally Case-marking the subject of the embedded clause (11). In both these cases too, the affixes are in strictly complementary distribution with overt arguments.

(10) qāla ʔinna-hu dīʕ-a
    say.PAST.1SG.NOM that-3SG.M.ACC come-PAST.3SG.M
    ‘I said that he came’

(11) hasib-tu-hu dīʕ-a
    think-PAST.1SG.NOM-3SG.M.ACC come-PAST.3SG.M
    ‘I thought he came’
    (Fassi Fehri, 1993:98)

(12) qāla ʔinna(-hu) l-ʔustād-a dīʕ-a
    say.PAST.1SG.NOM that-3SG.M.ACC the-teacher-ACC come-PAST.3SG.M
    ‘I said that the teacher came’

(13) ḥasib-tu(*-hu) l-ʔustād-a dīʕ-a
    think-PAST.1SG.NOM(*-3SG.M.ACC) the-teacher-ACC come-PAST.3SG.M
    ‘I thought he came’

2 AN ANALYSIS OF SVO ORDER
2.1 The Structure of SVO Clauses
The restrictions on the co-occurrence of agreement and overt subjects in Arabic finite clauses with SVO word order are exactly the same as those observed for first and second person subjects in the Finnish temporal adjunct and agent construction in section 2.1 of the preceding chapter. Verbs exhibiting full agreement may be preceded by pronominal subjects without these necessarily needing to receive focal or contrastive stress of any kind.
It is only in the third person that the constructions in the two languages have different properties in this respect. Firstly, as a comparison of (1) and (7) reveals, full NPs in Arabic, unlike their counterparts in Finnish non-finite clauses, trigger the same agreement as third person pronouns. Secondly, whereas in Finnish null third person subjects are anaphoric to the extent that they are only grammatical when co-referential with an antecedent in a higher clause, in Arabic they may occur in exactly the same range of contexts as null first and second person subjects.

Drawing from these observations the conclusion that Arabic differs from Finnish in that full NPs are specified for φ-features and third person agreement licenses a null pronominal in the same way as first and second person affixes do, it is a simple matter to apply the model developed for the Finnish temporal adjunct and agent construction directly to Arabic SVO clauses. This amounts to saying that the topmost node of the verbal complex (presumably v in a finite clause) does not assign a θ-role to its left with the consequence that, by the proposal in 3.4.2 of the last chapter, the φ-features of any agreement affix Px merged with vP will not be

---

4 Note that while the Finnish data suggest that having φ-features (or, more specifically, a person feature) is sufficient for a category to be able to receive a θ-role, it does not support the view that this is necessary, if the suggestion (made in section 2.1 of the last chapter) that full NPs are not valued for person is correct.

5 As yet no precise account of how optional arguments are licensed has been given. This is the subject of chapter six.

6 In order to make the parallels clear, I shall continue to use the symbol Px to denote an agreement head.
interpretable and must therefore be deleted. At this stage in the derivation then, the structure of the clause is as follows\(^7\).

\[(17)\]

\[
\begin{array}{c}
\text{PxP} \\
\text{uφval} \\
\text{vP} \\
\text{v}
\end{array}
\]

The derivation of the Finnish constructions then proceeded by introducing the head α, which word-order evidence from clauses of the same type with no possessor agreement had already shown to trigger movement of the verbal complex out of VP. The subject was then merged in the specifier of α, checking the uninterpretable φ-features of Px and receiving genitive Case. Assuming the analogue of this α to be the nominative Case-assigner T, the structure of finite Arabic SVO clauses is expected to be the following (cf. (118) of the chapter three).

\[(18)\]

\[
\begin{array}{c}
\text{TP} \\
\text{SUBJECT} \\
\text{[CASE: ] T-v-Px} \\
\text{uφval} \\
\text{assign}_{\text{NOM}} \\
\text{tPx} \\
\text{t_v} \\
\text{vP} \\
\text{PxP}
\end{array}
\]

### 2.2 The Locus of Θ-Role Assignment in SVO Clauses

One claim of this analysis is therefore that preverbal subjects in finite SVO clauses originate in SpecTP and as such seems to be at odds with the general, if not unanimous, consensus that SpecvP is the position in which thematic subjects are introduced into the structure. While it is true that Doron and Heycock (1999) have argued convincingly that a class of elements with subject properties are first merged in SpecTP\(^8\), these differ from the kinds of subject under discussion here in being associated with a θ-role assigned further down the structure and hence rely crucially on SpecTP not being a θ-position. This will clearly not be the case for the structure shown in (18), if the position of first merge is always the position in which an element receives its θ-role. Furthermore, anticipating the discussion of VSO orders in section

\(^7\) This is essentially the same as that given for the temporal adjunct and agent constructions in (129) of the last chapter.

\(^8\) These data will be considered in detail in section 4.3.2.
4 below, there seems to be ample evidence that v can indeed assign the subject θ-role in Arabic finite clauses.

In Finnish, the pattern of agreement exhibited in a given context was dependent on the construction in which it occurred and as such, whether or not the verb was able to assign a subject θ-role could safely be assumed to be determined by a morphosyntactic property of the affixes (va/nut-, de-, ma- etc.) making up the form in question. This line of reasoning is not available for the Arabic data, as it is only the patterns of agreement, rather than the forms of the verb themselves that differ according to word order. What the data seem to suggest is that v may, but need not, assign a θ-role to the category immediately c-commanding it, that θ-role remaining available for assignment to a category in SpecTP once ν-to-T movement has occurred. This is, of course the same conclusion as was reached on the basis of purely theoretical considerations in section 2.2.4 of chapter two and the Arabic data may therefore be taken to constitute independent empirical support for this position. Moreover, it also resolves an anomaly in the analysis proposed in the last chapter, where it was proposed that the Case-assigner α was also a θ-role assigner in the temporal adjunct and agent constructions but not in the participial construction. To all intents and purposes, this amounted to proposing the existence of two distinct heads, albeit with overlapping properties, but under the new proposal, even where the θ-role is assigned from α, it need not be assigned by α. This head can thus be taken to have the same properties in both constructions (with any further restrictions on where θ-roles can be assigned in different types of clause still being taken to originate in the morphology). An SVO clause is therefore simply the structure that emerges when the verb waits until is has moved as far as is possible before assigning its subject θ-role. This model will be assumed from this point onwards and the phrase ‘assigned from a head’ rather than ‘assigned by a head’ used to identify the position in which an assigning head discharges its θ-role.

However, while resolving this one issue, adopting this analysis raises the question of whether the θ-role can also be assigned from Px, through which the θ-assigner clearly moves where it is present. In the analysis proposed for the Finnish temporal adjunct and agent construction and now adopted for finite SVO clauses in Arabic, it was assumed that Px first moves to α/T and has its φ-features checked there by an element merged in SpecαP/SpecTP rather than allowing the subject to be first merged in SpecPxP, but no support was offered for this conclusion. Indeed, since Px in these constructions has uninterpretable φ-features, there is
ample motivation for merging the subject in SpecPxP and no *a priori* reason why this should not be allowed. If it were, however, then sentences such as (19) in Finnish and (4) in Arabic, repeated here as (20), should be grammatical, the verb raising in both cases past the subject in SpecPxP to check tense and the object *kattoa* ‘roof’ being targeted by the EPP-feature on α in the Finnish example, but it would be reasonable to contend that in the absence of corroborative evidence for such an analysis from other constructions, the stipulative nature of such a restriction reduces the explanatory power of the account as a whole.

(19) *Katto-a korja-te-ssa-ni minu-n Nelli lō-i somee-nsa
Intended: ‘While I was fixing the roof, Nelli hit her finger’

(20) *daxal-na n-nissā3-u makātib-a-hunna
enter.PAST-3PL.F the-women-NOM office.PL-ACC-their.F
Intended: ‘The women have entered their offices’   (Fassi Fehri, 1993:32)

As it happens, Arabic offers independent empirical support for the conclusion that the subjects (of SVO sentences) do not originate in SpecPxP⁹, even if it does not necessarily offer any further insight into the theoretical motivation behind the restriction. While the subjects in all the examples considered so far have been nominative, this appears to be the option chosen only when no other Case-assigner able to target the preverbal position is present in the structure. If the clause is embedded under certain matrix verbs or introduced by certain complementisers including *‘inna* (an option not restricted to embedded clauses), then the subject must appear in the accusative.

(21) hasib-tu baqarat-an/*-un takallam-at
think-PAST.1SG.NOM cow-ACC/*-NOM speak-PAST.3SG.F
‘I thought that a cow has spoken’   (Fassi Fehri, 1993:48)

(22) *‘inna baqarat-an/*-un takallam-at
that cow-ACC/*-NOM speak-PAST.3SG.F
‘A cow has spoken’   (Fassi Fehri, 1993:48)

---

⁹ This position will be modified somewhat in section 5
If, as it seems reasonable to assume, a Case-assigner assigns its Case to the nearest Caseless NP in its c-command domain, then this result is unexpected if the subject originates in a position below T, such as SpecP XP (or SpecvP for that matter). In that case, the subject would be expected always to receive nominative Case and consequently be unable to receive the accusative Case assigned by any complementiser or matrix verb present after moving to the preverbal position (23). (This concurs with the fact that postverbal subjects in VSO clauses are invariably nominative (24), even when the clause is introduced by an accusative-assigning head, although as will be seen in section 4.3, the situation is a little more complicated.)

(23) CP/VP
    / \                        / \                        / \                  
   C/V assign_{ACC}           TP assign_{NOM}               T assign_{SUBJECT}    P XP
                        \                                  /                        / 
                         SUBJECT [CASE:NOM]                  ISUBJECT

(24) qāla ʔinna-hā dḥāʔ-at  l-banāt-u/*-a
       say.PAST.1SG.NOM that-3SG.F.ACC arrive-PAST.3SG.F.NOM the-girls-NOM/*-ACC

‘I said that the girls arrived’

(Mohammad, 1999:143)

If, on the other hand, the subject is first merged above T, then it is not in its c-command domain and can escape being assigned nominative Case in the presence of another Case-assigner. If no such head is available then nominative is assigned as a last resort, either by T or by means of a default rule.

At this point the question arises as to why it is that the subjects of Finnish constructions claimed here to have essentially the same structure as in (18) can have no other structural Case than genitive. This is easily accounted for if we recall that the temporal adjunct, as its name suggests, is only ever found in adjunct positions and are as such not within the c-command domain of a structural Case assigner, with the result that the clusal head α always assigns genitive as a last resort. This explanation might, at a first glance, appear to be falsified by the participial and agent constructions, which do appear to occupy a position accessible to a Case-assigner.
Where an agent construction modifies a direct object, as is the case in the partial structure (25), its subject is within the c-command domain of the verb and should therefore be able to receive accusative or partitive Case. (26) shows that this prediction is incorrect: only the genitive is grammatical.

(25)

\[
\begin{array}{c}
\text{VP} \\
\text{V} \\
\text{mö-assign}^{\text{ACC/PAR}} \\
\text{häne-} \\
\text{[CASE:]} \\
\text{αP} \\
\text{auton} \\
\text{osta-ma-nsa} \\
\end{array}
\]

(26) Minä mö-i-n häne-n/*-t/*-a osta-ma-nsa auto-n

I[NOM] sell-PAST-1SG I-GEN/*-ACC/*-PAR buy-INF3-3.PX car-ACC

‘I sold the car that he bought’

Similarly, in the partial structure (27), the subject of the embedded participial clause is immediately c-commanded by the matrix verb muista- and should therefore also be able to receive the accusative or partitive Case canonically assigned to object positions. (28) shows that it cannot.

(27)

\[
\begin{array}{c}
\text{VP} \\
\text{V} \\
\text{muista-assign}^{\text{ACC/PAR}} \\
\text{minu-} \\
\text{[CASE:]} \\
\text{α} \\
\text{soitta-nee-} \\
\end{array}
\]

(28) Eero muista-a minu-n/*-t/*-a soitta-nee-n haitaria-a

Eero[NOM] remember-3SG I-GEN/*-ACC/*-PAR play-NUT-DFT accordion-PAR

‘Eero remembers me playing the accordion’

The explanation of the ungrammaticality of (25) is straightforward. Assuming that the verb can assign structural Case to a maximum of one category, this will always be to the head of the object DP auton. If this Case were assigned to the subject of the agent construction, there
would be no other way for the object to get Case and the structure would crash. The subject of the agent construction, on the other hand, is accessible to the Case-assigner \( \alpha \), with the consequence that only where this option is chosen do grammatical sentences result.

Turning now to the participial construction, recall from section 3.4.1 of the last chapter that the participial construction was argued to differ from the temporal adjunct and agent constructions in that an overt subject was merged in Spec\(VP\) (where \(V\) is the highest head of the verbal complex). When merged as the object of a verb assigning accusative or partitive Case, it will have the structure given in (29), which is analogous to (23). Unlike that of the temporal adjunct and agent constructions, the subject in this structure is always in the c-command domain of \( \alpha \) from which it will receive genitive Case and consequently be unable to receive Case from \( V \).

\[
(29) \quad \begin{array}{c}
V \\
\downarrow \text{assign}_{\text{PAR/ACC}} \\
\text{SUBJECT} \\
[\text{CASE:GEN}] \\
\downarrow \text{assign}_{\text{GEN}} \\
\alpha \\
\downarrow \text{assign}_{\text{SUBJECT}} \\
\text{VP} \\
\end{array}
\]

It could of course be argued that while \( V \) is clearly able to assign its \( \theta \)-role to the category in Spec\(VP\), there should be nothing to prevent it waiting until it has moved to \( \alpha \) to do so, thereby making the subject available for exceptional Case-marking by the matrix verb. In the discussion of this model of \( \theta \)-role assignment in section 2.2.4 of chapter two, it was argued that the choice of whether to merge the subject or the Case-assigner first was arbitrary, since both satisfied a requirement of the topmost head of the verbal complex (the subject enabling a \( \theta \)-role to be discharged, the Case-assigner \( T \) fulfilling the verb’s need for tense), with the consequence that both orders could be derived without movement. In the case of the participial construction, however, the verbal complex is not dependent on \( \alpha \) in the same way, as the grammaticality of participial clauses where this head is absent altogether shows. The only way the derivation can proceed following the merger of the topmost head of the verbal complex \( V \) is therefore for the subject to be introduced.
By hypothesis, then, if the Finnish temporal adjunct could be embedded under verbs or complementisers assigning a structural Case, then their subjects would have that Case in those contexts rather than the canonical genitive. However, the structures of such non-finite clauses (with overt subjects) as do occur in these contexts are such that either there is another category which must receive the structural Case in question from the verb in order for the structure to be grammatical, or that the preverbal subject is already marked as genitive by the time it arrives in SpecαP. Thus different factors conspire to prevent subjects of Finnish non-finite clauses from displaying the same range of Cases as those of Arabic SVO clauses.

3 OBJECT AND COMPLEMENTISER AGREEMENT

The restrictions on the co-occurrence of agreement and overt arguments in the case of object and complementiser agreement, on the other hand, are the same as those applying to the Finnish participial construction and an account akin to the one offered in section 3.4 of the last chapter can be successfully applied here. There it was argued that the highest head of the verbal complex was a \( \theta \)-role assigner with the consequence that the \( \phi \)-features of an overt subject or agreement head \( P_x \) merged with its projection would be interpretable. By the same token, if the subject \( \theta \)-role in an SVO clause is assigned by T, any \( P_x \) head merged immediately above it will have interpretable \( \phi \)-features and function as a pronoun.

\[
(30) \quad CP \\
\quad C \\
\quad \quad P_xP \\
\quad \quad \quad P_x \quad [\text{\textit{ipval}}] \\
\quad \quad \quad TP \\
\quad \quad \quad \quad T \quad \text{assign}_{\alpha}
\]

Where SpecTP is filled, the element in that position will receive the \( \theta \)-role from T, such that any \( P_x \) subsequently merged would have uninterpretable \( \phi \)-features, given the conclusions reached in section 2.4.2 of chapter three. Being valued, these features would be unable to probe the subject in SpecTP, the only element able to check them, and remain undeleted, resulting in ungrammaticality (31). Only where no such head is merged can the derivation converge.
Similar reasoning applies to where these affixes function as thematic objects, the only difference being that it is V rather than T that assigns the θ-role and v rather than C that assigns Case to an overt object.

4 THE PROBLEM OF PARTIAL AGREEMENT IN VSO ORDERS

While the patterns of subject agreement in SVO clauses and of object and complementiser agreement in general can be accommodated in the model developed for Finnish non-finite clauses, the pattern of subject agreement in Arabic VSO clauses is different from that found in either kind of clause discussed in chapter three. As long as gender is ignored, the co-occurrence of agreement and overt subjects in Arabic VSO clauses is subject to similar restrictions as the Finnish participial construction. Extending this analysis developed in section 2.4 of the previous chapter for such clauses to the Arabic data predicts correctly that an agreement affix merged directly with the verbal complex can receive a θ-role from v and function as an argument and also accounts for the lack of number agreement with the postverbal subject in examples (1) and (2) above. However, these same examples show that it runs into difficulty as soon as gender is taken into account, for it is clear that the form of the verbal affix varies according to whether the subject is masculine or feminine. In this respect, such ‘default agreement’ in Arabic VSO clauses is crucially different from the default agreement found in the Finnish participial construction. For while the ending –n, found in the latter in the presence of an overt subject, is distinct from any of the possessive suffixes and can therefore reasonably be assumed to have no φ-features, the situation in Arabic is not as clear cut, since verbs in VSO constructions carry the same agreement as that triggered by third person singular preverbal subjects. It could, of course, be claimed that the difference between the two languages in this respect is purely morphological in nature: in Arabic (but not Finnish), the verbal affixes encoding lack of φ-features just happen to have the same phonetic form as those specified as [3SG]. However, since it was shown in the previous chapter that even the Finnish possessive suffixes, the confusing syntactic behaviour of which
had led commentators to posit a functional ambiguity of precisely this type, were amenable to an elegant uniform analysis, the hypothesis should at least be explored that Arabic third person singular agreement morphemes have the same lexical specification in both the contexts in which they occur.

One consequence of adopting this hypothesis is that Arabic VSO constructions instantiate a clause type argued to be impossible in the last chapter, namely one in which a $P_x$ head is allowed to co-occur with a subject that is indisputably merged low (in Spec$vP$ in this case). Based on the assumption that only unvalued features are able to probe, it was shown there that merging a $P_x$ head above an overt subject would always lead to ungrammaticality, because the valued $\phi$-features of the $P_x$ head could not probe the subject and would thus not be deleted, while any category merged above $P_x$ to this end would be unable to receive a $\theta$-role. If this analysis is to hold for Arabic therefore, it must be shown either that the $\phi$-features of $P_x$ do not need checking in VSO clauses, or that the postverbal subject is in a position to check them after all, or that another element is available to check them (and that this element does not need a $\theta$-role).

### 4.1 Third Person Singular Features Do Not Need Checking in VSO Clauses

Exploring the first of these possible explanations, the simplest reason for a feature not to need deleting is that it is simply not present in the first place. Since the clauses under consideration only ever have third person singular features, this amounts to saying that third person is not a possible $\phi$-feature value in Arabic, but is in fact the reflex of the absence of a person feature, and singular number similarly is the absence of a number feature. However, while proposals along these lines have been made for a number of other languages, there is good reason to suppose that they are not compatible with the hypothesis being explored here. Firstly, if a given $P_x$ head is to have the same features lexically, regardless of whether these are interpretable or not, then this analysis makes incorrect predictions about the interpretation of sentences with null third person subjects. For while the case can be made that the $\phi$-values of the $P_x$ head for person and number in VSO structures are underspecified, this reasoning cannot be extended to gender, which does co-vary with that of a postverbal subject. The $\phi$-specification for the $P_x$ head must therefore include at least a valued gender feature, even in VSO structures. Now, if $v$ can assign a $\theta$-role to an overt subject, it should also be able to assign it to a $P_x$ head in the absence of such a subject, just as the topmost head of the verbal
complex was argued to assign a θ-role to either an overt subject or a possessive suffix in the Finnish participial construction (cf. section 2.4.3 of chapter three).

(32)

By virtue of carrying this θ-role, $Px$ functions as a bound pronoun and its φ-features are interpretable. In the case of a third person singular affix therefore (if these are unspecified for person and number as proposed above), the φ-features of $Px$ will consist of a single gender feature, $[iγ:M]$ or $[iγ:F]$. As such, their interpretation should be broader than that of the lexical pronouns *huwa* ‘he’ and *hiya* ‘she’ (which presumably have the feature matrices $[iφ:3SG.M]$ and $[iφ:3SG.F]$ respectively), also including first and second person and dual and plural subjects\(^{10}\). However, the subjects of (33) and (34) must be interpreted in the same way as third person singular pronouns: the more general reading is not possible, suggesting that the φ-features of the affixes in question are fully specified.

(33) ɗāʔ-a

come-PAST.3SG.M.NOM
‘He came’
*‘Someone/something masculine came’

(34) ɗāʔ-at

come-PAST.3SG.F.NOM
‘She came’
*‘Someone/something feminine came’

---

\(^{10}\) The notion that third person is in fact the absence of person could perhaps be upheld by arguing that, in the absence of a clear indication of a discourse participant, a default ‘non-participant’ value is assigned to the subject. It is, however, less than obvious that third person is a discourse default. The subject of the English sentence *Went to the shops yesterday*, for example, is naturally construed as first person, not third, in the absence of an overt subject.
It could be argued that the absence of a person and/or number feature prevents the affix from functioning as an argument and that the φ-features of a third person singular \( P_x \) are therefore always uninterpretable, regardless of whether they are introduced into the structure immediately above a θ-assigner or not. If this is the case, then the status of \( P_x \) is the same as in SVO clauses, in which (according to the argument in section 2 above) the subject θ-role is assigned by T rather than \( v \) and the φ-features of \( P_x \) are always uninterpretable. If third person singular morphemes are only specified for gender, then they should differ from the other affixes in being compatible with preverbal subjects of all person-number combinations, not only third person singular ones. Whereas the derivation of (35) would be predicted to crash because the uninterpretable φ-features [1SG] of the morpheme –tu would remain undeleted, the absence of such features in (36) should remove the need for a subject with φ-values matching the suffix –a. This analysis thus predicts, incorrectly, that full agreement with a preverbal subject, although possible, should not be obligatory.

(35) *?anta intaqad-tu zayd-an
    you.SG.M criticise-PAST.1SG.NOM Zayd-ACC
    Intended: ‘You criticised Zayd’

(36) *?anta intaqad-a zayd-an
    you.SG.M criticise-PAST.3SG.M.NOM Zayd-ACC
    Intended: ‘You criticised Zayd’

Furthermore, irrespective of whether the \( P_x \) head carries person and number features in need of deletion, the fact remains that it has a gender feature, which in VSO clauses will be uninterpretable under the assumptions adopted here. Since there is no reason to think that Arabic has a lexical nominal category specified only for gender, it would seem reasonable to suppose that, given the strong evidence against an underspecification analysis of third person agreement, the same element as checks the gender feature could also check person and number.

4.2 Postverbal Subject Checks Features

If the conclusion is correct that third person affixes are fully specified, then the second possible explanation for the unexpected grammaticality of VSO clauses containing a \( P_x \) head mentioned above (that the subject is, after all, able to check an uninterpretable gender feature)
is also unlikely to be workable. That is not to say, of course, that there is no position available from which it could plausibly check the gender feature: as was observed in the discussion of θ-role assignment in sentences with SVO word order above (section 2.2), SpecPxP is just such a position, but as the discussion in that section also showed, there is no means of preventing it from also checking the person and number features and receiving nominative Case in that position, predicting incorrectly that full agreement in VSO clauses should also be derivable (by subsequent movement of the verbal complex to T).

4.3 Another Element Checks Features

The only remaining possibility then, is that an element other than the subject checks the verbal φ-features in VSO clauses. This element must be phonetically null, have third person singular features and, since it is not in a position to receive a θ-role (the postverbal subject having received that assigned by v) must still be a legitimate LF-object without one. This conclusion is not without its problems, however, for the element in question is, to all intents and purposes a null expletive, the existence of which is dubious on conceptual grounds, since it contributes neither to the PF- nor the LF-interface. The hypothesis is all the more suspect for the fact that neither of the overt third person pronouns with the same φ-feature values as this expletive would have to have can occupy the preverbal position in a VSO clause.

(37) (*huwa) dāj-i tābīb-u l-malik-i
    (*he.NOM) come-PAST.3SG.M physician-NOM the-king-GEN

    ‘The king’s physician came’

    (Mohammad, 1999:117)

(38) (*hiya) dāj-at tābīb-at-u l-malikat-i
    (*she.NOM) come-PAST.3SG.F physician-F-NOM the-queen-GEN

    ‘The queen’s physician came’

    (Mohammad, 1999:117)

11 The status of the φ-features of expletives presents an interesting conundrum for the proposal advanced in the last chapter that the interpretability of such features depends on their receiving a θ-role. Since an expletive does not, by definition, carry a θ-role, its φ-features should be uninterpretable and need deleting. This is clearly not compatible with any model which allows expletives to trigger agreement. For the purposes of the present work, therefore, it must simply be accepted that expletives are anomalous to the extent that their φ-features do not need deleting, despite not being associated with a θ-role.
4.3.1 The Expletive Hypothesis

Nevertheless, the proposal that it is an expletive element that controls agreement in verb-initial structures has had currency among Arabic linguists since it was first advanced by Mohammad (1989, 1990). In a critique of this position, which he calls the Expletive Hypothesis, Fassi Fehri (1993) concedes that, despite sentences such as (37) and (38) not being grammatical, there are constructions in which third person pronouns function as expletives, but that in these cases, the third person plural pronouns hum (39) and hunna (40) are also possible. If silent expletives are licit in clauses of the type exemplified by (37) and (38), then there can be no principled reason for disallowing those with plural number, again predicting, counter to fact, that plural verbs should be possible in VSO clauses.

(39) hum l-dʒunūd-u
they.M.NOM the-soldiers-NOM
‘It is the soldiers. That’s soldiers’ (Fassi Fehri, 1993:40)

(40) hunna n-nisāʔ-u
they.F.NOM the-women-NOM
‘It is the women. That’s women’ (Fassi Fehri, 1993:40)

Mohammad (1999:Ch.4) responds to a number of objections to the Expletive Hypothesis, accounting for the apparent counterexamples just mentioned by means of the Binding Theory and the Case Filter. Observing that the plural forms are only grammatical in non-verbal sentences, Mohammad suggests that hum in (39) and hunna in (40) are licensed in the same way as pronouns in equative sentences with thematic subjects such as (41) and (42). In these sentences (for reasons which Mohammad does not identify) co-indexation of the pronoun and R-expression is possible, despite constituting a Principle C violation.

(41) huwa i ṭabīb-u l-malik-i
he.NOMi [physician-NOM the-king-GENi]
‘He is the king’s physician’ (Mohammad, 1999:116)

(42) hiya i [ṭabīb-at-u l-malikat-i]
she.NOMi [physician-F-NOM the-queen-GENi]
‘She is the queen’s physician’ (Mohammad, 1999:117)
Mohammad’s rather vague claim that “whatever is responsible for licensing [(41) and (42)] licenses [(39) and (40)]” (Mohammad, 1999:117) seems to imply that the pronouns in (39) and (40) are also licensed by virtue of being co-indexed with their associate and are hence in fact thematic subjects, to a degree at least. Nominal categories in verbal clauses, by contrast, are subject to Principle C, with the effect that co-indexation of the preverbal pronoun and postverbal subject in (37) and (38) would result in ungrammaticality. If third person plural pronouns are only licensed in contexts where they can be co-indexed with a plural R-expression, then this explains why they may not duplicate postverbal subjects in these kinds of clauses, but the ungrammaticality of overt singular pronouns functioning as expletives in the same contexts is still unexpected, particularly if a null subject with identical features is supposed to be licit.

Mohammad proposes that the difference in the grammaticality of overt expletives in equative and verbal sentences is due to the fact that in equative sentences two nominative Cases are available (for reasons that Mohammad does not discuss), one of which is assigned to the R-expression, the other to the expletive. In the verbal sentences (37) and (38), by contrast, only one nominative Case is available, which, having already been assigned to the postverbal subject, cannot also license an overt expletive. If this is the correct conclusion, then it is to be expected that an overt expletive will be licensed if another Case-assigner is available in the structure. Recall from section 2.2 above that certain complementisers and verbs assign accusative Case to the thematic subject in the SpecTP position of an SVO clause they take as their complement and from section 1 that where an accusative argument is pronominal, it appears as an affix attached to its Case-assigner (in this case the complementiser or matrix verb). If the possibility of an overt expletive in that same position is dependent on whether or not it can receive Case, then overt object suffixes, functioning as expletives, should be possible in embedded clauses introduced by such heads. The following example shows that this prediction is indeed borne out.

(43) qāla ʔinna*(-hā) džāʾ-āt l-banāt-u
    say.PAST.1SG.NOM that-3SG.F.ACC arrived-PAST.3SG.F.NOM the-girls-NOM

‘I said that the girls arrived’

(Mohammad, 1999:143)

Adopting the Expletive Hypothesis therefore provides an element other than the postverbal subject, able to check the uninterpretable φ-features of Px in Arabic VSO clauses. What it
does not predict, however, is that the expletive necessarily has the same feature value for
gender as the postverbal subject. Since the verb is not dependent on the subject to delete its
uninterpretable φ-features, it should be possible for a feminine verb (with a feminine
expletive) to cooccur with a masculine subject and vice versa. As it happens, the second of
these possibilities has been noted by Arab grammarians where the verb is separated from the
thematic subject by another category (44-45) and Mohammad even gives two examples where
nothing intervenes (46-47).

(44) wa-kāna l-il-yahūd-i fi bilād-i l-³arab-i
and-was.3SG.M for-the-Jews-GEN in countries-GEN the-Arabs-GEN
dʒāliyāt-un kaθīrat-un
settlements(F)-NOM many-NOM
‘The Jews in the Arab countries had many emigrant settlements’

(45) qad kāna yaskunu l-³irāq-a ³umam-un muxtalifat-un
qad was.3SG.M settle.3SG.M the-Iraq-ACC peoples(F)-NOM different-NOM
‘Different peoples had settled in Iraq’

(46) lawlā-hu la-dā³-a ³asmā?-u kaθīr-in mina
if.not.for-3SG.M.ACC la-lost.3SG.M.NOM names(F)-NOM many-GEN of
l-kutub-i n-naфизat-i
the-books-GEN the-precious-GEN
‘If it had not been for him, the titles of many precious books would have been lost’
(Mohammad, 1999:119)

(47) naṣar-a hā³ulā³i l-ðawārī naw³-an mina ³θ-ðaqāfat-i ...
spread-3SG.M.NOM these the-slave.girls type-ACC of the-culture-GEN
‘These slave girls spread a type of culture …’
(Mohammad, 1999:120)

The precise mechanisms behind gender agreement with a postverbal subject are clearly more
complicated than the Expletive Hypothesis can account for on its own and the account offered
here makes no claim to be exhaustive in this regard.
4.3.2 Multiple Subject Constructions

There is however one kind of construction which appears to falsify the Expletive Hypothesis, namely what Doron and Heycock (1999) call the multiple subject construction\(^{12}\), in which the preverbal position is occupied by a non-subject argument.

\[(48)\] hind-un yuqābilu-ha T-Tullāb-u

Hind-NOM meet.3SG.M-3SG.F.ACC the-students(M)-NOM

‘The students are meeting Hind’  \((\text{Doron and Heycock, 1999:71})\)

Doron and Heycock put forward a range of evidence that the preverbal nominal hind-un (to which they refer as the ‘broad subject’, thus distinguishing it from the ‘narrow subject’ \(T\)-\(Tullābu\)) is first merged in SpecTP. Of particular interest for the discussion in hand is the fact that broad subjects exhibit the same variation in Case-marking as do preverbal subjects, argued in sections 1 and 2 also to originate in that position. In a sentence such as (48), in which there is no head external to the clause that could assign Case to the broad subject, it is nominative. When the clause is embedded under a matrix verb or one of the complementisers that assign accusative, on the other hand, it must exhibit that Case.

\[(49)\] dhana-na-tu hind-an yuqābilu-ha T-Tullāb-u

thought-1SG Hind-ACC meet.3SG.M-3SG.F.ACC the-students(M)-NOM

‘I believed Hind to have been met by the students’  \((\text{Doron and Heycock, 1999:73})\)

However, unlike preverbal narrow subjects, which obligatorily trigger full subject agreement on the verb, a broad subject, whether nominative or accusative, triggers no agreement at all. As (50) and (51) show, it cannot even control the gender feature, which must rather track that of the postverbal narrow subject\(^{13}\), apparently calling into question the validity of the conclusion that it is the preverbal expletive that controls agreement in straight VSO clauses.

\(^{12}\) As Doron and Heycock note, this construction is usually considered by Arabic linguists to be a case of left dislocation. See their paper and references cited there for arguments for and against this position.

\(^{13}\) Note that all the φ-features of the broad subject are cross-referenced by the object agreement affix –\(ha\) in this example, contrary to what was said in section 1 about object agreement and overt arguments being in strictly complimentary distribution. The reasons for this apparent exception will be discussed in the next section. What is important for the discussion in hand is that the broad subject, despite occupying the same position as that from which a narrow subject deletes the unvalued φ-features of the \(Px\) head immediately below T, cannot control the subject agreement.
Doron and Heycock do, however, provide one piece of evidence that suggests that the Expletive Hypothesis may still be tenable, in spite of these apparent problems. They take the fact that broad subjects are not restricted to VSO-type clauses as an indication that Arabic allows multiple specifiers, noting that where both broad and narrow subjects precede the verb, the narrow subject must follow the broad subject.

The precise implementation of this restriction (which can be replicated in the framework of the theory being developed here, even if the two are not directly compatible) is of secondary importance to the fact that these examples demonstrate irrefutably that two preverbal positions are available. If this is the case, then there is no reason why the second, that occupied by the narrow subject controlling the agreement in (52), should not be occupied by an expletive in (48). Unlike the VSO sentences considered so far, however, there is no way of forcing the expletive in such a context to be phonetically realised, since the patterns of Case-marking in embedded multiple subject constructions show that only the broad subject in the higher specifier of T appears in the accusative (54). The narrow subject obligatorily has nominative Case as it would in a matrix VSO clause, predicting correctly that it should be impossible to spell out an expletive merged in the same position (55) either as an agreement affix or as a free pronoun.
The fact that broad and narrow subjects may co-occur preverbally is therefore at least consonant with the possibility that it is a null expletive located in the lowest specifier position of T that checks the uninterpretable $\varphi$-features of $P_X$ in sentences such as (48) and (49), even if there is no way of proving conclusively that it is present.

5 AGREEMENT WITH PRONOUNS

The sentences used so far as examples of partial agreement have all had full NP subjects and have thus really shown only that number agreement with a postnominal subject fails. Consideration of overt pronominal subjects reveals a different pattern. In such cases, full agreement is not only possible, it is obligatory.

(56) ɗisi?-tu ʔanā  
come-PAST.1SG.NOM  I.NOM  
‘I came’  
(Mohammad, 1999:121)

(57) *ɗi?-a ʔanā  
come-PAST.3SG.NOM  I.NOM  
Intended: ‘I came’  
(Mohammad, 1999:121)

Furthermore, doubling the affix in this way is not restricted to subject agreement. Object affixes, whether they cross-reference a direct object (58), prepositional object (59) or a possessor (60) can also be doubled by a pronoun in all the contexts in which they occur.

(58) ʔ-antaqid-u-ka ʔanta  
1SG.NOM-criticise-IND-2SG.M.ACC  you.SG.M.NOM  
‘I criticise you’  
(Fassi Fehri, 1993:114)
(59) marar-tu bi-hi huwa lā bi-ʔaxī-hi
passed.by-1SG.NOM with-3SG.M.GEN he.NOM not with-brother-3SG.M.GEN
‘I passed by him, not by his brother’
(Fassi Fehri, 1993:114)

(60) ?-asʔal-u ʔan xabar-i-ka ?anta lā ʔan xabar-ʔ
1SG.NOM-inquire-IND about news-GEN-2SG.M.ACC you.M.NOM not about news-1SG.GEN
‘I am inquiring about your news, not about mine’
(Fassi Fehri, 1993:114)

In this respect the data diverge from the pattern attested in the Finnish participial construction, in which overt pronominal subjects do not trigger any agreement in φ-features on the participle, and as such cast doubt on whether the schema developed for that type of clause in the previous chapter (61) is the correct analysis for subject agreement in Arabic VSO clauses and object agreement generally.

(61) CASE ASSIGNER
    PXP
    P
    [iφval] Θ-ASSIGNER

There are, however, important differences between pronouns in these positions and other kinds of argument in Arabic (including preverbal pronominal subjects with the same phonetic form). Fassi Fehri (1993:Ch.3§1.6), noting that they obligatorily carry focal or contrastive stress of some kind (as (56) to (60) indicate) follows traditional Arabic grammar in treating such pronouns as a class separate from those that function as non-focussed arguments. While this move enables him to maintain the generalisation that postverbal subjects may trigger only gender agreement, it comes at the expense of introducing a further functional ambiguity into the grammar, since the phonetic exponents of the new class of strong pronouns that it creates are identical to those of the class of weak pronouns, which may occur, unstressed, in preverbal positions. The following sections will show that, like the functional ambiguity purported to obtain in the case of Finnish possessor agreement, here too the differences between the strong and weak pronouns need not be lexically stipulated, but can rather be predicted from interactions between the grammatical features of lexical items allowed or required by the structural configurations into which they are introduced.
5.1 The Base Position of Emphatic Subjects

As it stands, there is no position in the structure in (61) which could be occupied by a pronominal argument duplicating the φ-features of the head \( P_x \). On the one hand, a subject merged in Spec\( P_x P \) would, under the theory of agreement developed in the last two chapters, delete the φ-features of \( P_x \), which would consequently have to be uninterpretable. This situation could only obtain if \( v \) did not assign a θ-role to its left in such constructions. A pronominal subject could then be merged in Spec\( P_x P \), checking the φ-features of \( P_x \) as required, before the verbal complex moved to T to give the VSO word order. This would give the correct results for pronominal subjects, but as it stands, does not explain why full NP subjects cannot also be merged in this position thereby triggering full agreement in VSO clauses. In the absence of an independently motivated condition limiting the class of elements that can occupy Spec\( P_x P \) to pronouns, then, this hypothesis will thus fall at the same hurdle as the idea explored in section 2.2, that all preverbal subjects originate in this position.

If, on the other hand, such a subject were merged in the same place as a postnominal NP subject (as specifier of the θ-assigner), then it would receive the θ-role shown as being assigned to \( P_x \) in (61), the φ-features of which would then be uninterpretable and need to be deleted. This poses essentially the same problem as that which the Expletive Hypothesis was invoked to solve in the previous section: the valued φ-features of \( P_x \) are not able to probe an argument lower down the structure, but this appears to be the only category present able to check them. However, while proposing the presence of null third person singular expletives with gender features to match those of \( P_x \) was relatively unproblematic in the case of subject agreement and could be motivated by reference to their overt counterparts in comparable constructions, the fact that there is no restriction on the φ-feature values of the \( P_x \) head in this range of constructions makes a similar argument for these structures unworkable. A proposal along these lines would require there to be first and second person expletives, a linguistic category not attested overtly in any dialect of Arabic (or indeed of any known language). Even if a convincing case could be made for the existence such a category, it would remain to be explained why it should never be able to have different φ-features from the postverbal subject, as was shown to be possible in at least some cases with gender agreement (even if the rules underlying this laxness were not fully understood). Furthermore, it would require there to be a set of object expletives, which the same tests as revealed the presence of subject expletives in SpecTP can show not to be present in the specifier position of the accusative Case-assigner \( v \). Since a \( vP \) is always within the c-command domain of a T head, an expletive
in Spec\textsuperscript{v}\textsuperscript{14} should always be lexicalised (presumably as a subject agreement affix, given that expletives embedded under an accusative Case-assigner were realised as object agreement affixes). This expletive will only be able to fulfil its purpose of deleting the uninterpretable features of the object agreement if it has the same φ-values, predicting incorrectly that an overt pronominal object should in fact trigger two lots of agreement with the object, one expletive subject affix and one object affix.

(62) *zayd-un antaqid-u-ta-ka
    Zayd-NOM criticise-IND-3SG.M NOM-2SG.M NOM(EXPL)-2SG.M ACC you.SG.M NOM
    Intended: ‘Zayd criticises you’

There is also evidence from Case-marking that these pronouns do not originate in the same position as full NP arguments. For while a full NP argument must receive accusative Case from a verb (63) or accusative-assigning complementiser (64) to its immediate left, a doubling pronoun can only ever appear in the nominative (65-66). An obvious explanation for this is that full NP arguments originate in a position where they can receive Case, whereas doubling pronouns do not, the absence of an appropriate Case-assigner suggesting that their nominative form is the result of a default rule.

(63) ?-antaqid-u Hind-an/*-un
    1SG.NOM-criticise-IND Hind-ACC/*-NOM
    ‘I criticise Hind’

(64) qāla ?inna l-?ustād-ā/*-u dhār?-a
    say.PAST.1SG.NOM that the-teacher-ACC/*-NOM come-PAST.3SG.M
    ‘I said that the teacher came’

(65) ?-antaqid-u-ka ?anta/*?iyyāka
    1SG.NOM-criticise-IND-2SG.M ACC you.SG.M NOM/*you.SG.M ACC
    ‘I criticise you’

(66) qāla ?inna-hā hiya/*?iyyāhā dhār?-at
    say.PAST.1SG.NOM that-3SG.F ACC she.NOM/*she.ACC come-PAST.3SG.F
    ‘I said that she came’

\textsuperscript{14} This would only be possible in SVO clauses, in which the θ-role associated with \textit{v} has been argued to be assigned from T rather than from \textit{v}.
By the same token, there is good reason to suppose that the verbal affixes are Case-marked, since their realisation as subject or object affixes varies according to their structural position in the same way as the Case of NP-arguments does. For just as the object NP in (63) and embedded subject NP in (64) must be accusative, so also must a pronominal argument in the same contexts be realised as an object affix.

(67)  ρ-antaqid-u-ka/*-ta  
 1SG.NOM-criticise-IND-2SG.M.ACC/*-2SG.M.SUBJ  
‘I criticise you’

(68)  qāla  ρ’inna-hā/*-at  dį₃’-at  
  said.1SG.NOM that-3SG.F.ACC/*-3SG.F.SUBJ come-PAST.3SG.F  
‘I said that she came’

Comparing the structure of the relevant parts of these sentences with (63) and (64), it is clear that the relationship that the $P_x$ heads realised as object agreement bear to the Case-assigners $v$ and $C$ (69) is similar both to that of the full NP arguments (70) and to the relationship a $P_x$ head realised as subject agreement bears to the Case-assigner $T$ (71). This being the case, it is a small step to posit that $P_x$ heads have an unvalued Case-feature and are realised as subject agreement when nominative and object agreement when accusative.
Combining these two insights, a strong case can now be made that emphatic pronominal arguments do indeed originate in Spec\(PxP\), in spite of the arguments presented against that position at the start of this section. The fact that the head of the complement of \(T\) itself needs Case prevents the element in the specifier position of that head from being Case-marked\(^{15}\), while the spec-head relation between the pronoun and the affix guarantees that their \(\phi\)-feature values will be the same. The question now arises whether this congruence of \(\phi\)-features arises in the same way as it does in SVO clauses (where a preverbal subject deletes uninterpretable \(\phi\)-features in \(T\)) or via a different mechanism not hitherto discussed and the answer to this question has implications for the issue, examined in 2.2 above, of where \(\theta\)-roles may and may not be assigned. For if agreement with an emphatic pronoun is the result of it deleting the uninterpretable \(\phi\)-features of a \(Px\) head, it cannot be the case that the \(\theta\)-role is assigned low in these structures, as this would lead, in the absence of an element occupying the specifier position of the \(\theta\)-assigner, to the \(\phi\)-features of \(Px\) being interpretable. The only alternative explanation that is both compatible with this mechanism of agreement and also yields the correct word order does therefore indeed seem to be that the \(\theta\)-role is, just in this restricted set of cases, assigned from \(Px\) to its specifier.

There are, however, good reasons to believe that this is not the correct analysis. Firstly, while the \(\theta\)-assigning heads in subject and object agreement configurations (\(v\) and \(V\)) do invariably move through any \(Px\) head immediately dominating them, this is not the case with complementiser agreement, where the \(\theta\)-assigning head manifestly does not move any higher than \(T\) and hence should not be able to assign its \(\theta\)-role to any position above SpecTP. Secondly, even in the case of subject and object agreement, arguments from the interaction of Case and \(\Theta\)-theory suggest that there too it is from the lower head that the \(\theta\)-role is assigned.

\(^{15}\) Presumably in much the same way as possessors cross-linguistically are typically not assigned the Case of the noun they modify.
For if the visibility of a θ-role is dependent on the element carrying that θ-role receiving Case, then it is clear that the emphatic pronoun, argued in the last section to be Caseless, cannot be the bearer of a θ-role as would be the case if assignment proceeded from $Px$. If θ-role assignment proceeds from $v$ or $V$, on the other hand, then it will be assigned to $Px$, and will be visible by virtue of the fact that this head has Case.

This type of structure, in which a Case- and θ-marked affix is doubled by a Caseless, non-θ-marked pronoun constitutes a third kind of agreement relation of a kind not attested in Finnish and two questions now arise, the first pertaining to the precise nature of the relationship between the emphatic pronoun and the pronominal affix and the second being why pronouns but not full NP arguments may bear that relationship. By way of answer to the first question, it is clear that this analysis has much in common with the Pronominal Agreement Hypothesis as first articulated in generative terms by Jelinek (1984) and elaborated upon in the literature reviewed in section 3.1 of chapter two, most notably Baker (2003), in which he demonstrates that pronominal agreement is a property of constructions rather than of languages, and that where it is present, an overt NP may not occupy the argument position related to that affix\(^{16}\), but can at most bind the pronominal affix as an adjunct (c.f. Baker, 2003:2). Spec$PxP$, being a non-Case- and non-θ-position, has much in common with such an adjoined position, the most striking difference being that it is located in the middle of the structure, rather than in the peripheral, dislocated position that such elements occupy in the examples discussed by Baker. Viewed in this way, it appears that the premise of the second question, that only pronouns may bear this relationship to an affix, is in fact wrong, since in the multiple subject construction, discussed in section 4.3.2, broad subjects do seem to bear just this kind of relation to a Case- and θ-marked (object) affix and furthermore do occupy a clause-peripheral position more usually associated with dislocated elements. Since object agreement affixes only ever appear in positions where they receive a θ-role, the relationship of the broad subject $hind$ to the pronominal affix $-ha$ in a multiple subject sentence such as (49), repeated here as (72), must also be one of binding from a non-θ-position.

\(^{16}\) Note that this is also the prediction made by the model being developed here, since it is not possible for both an agreement affix and an NP argument to receive a θ-role in a given position. Even in the case of emphatic pronouns co-occurring with a pronominal affix, independent consideration of the data led to the conclusion that the doubling element is not located in the specifier of the θ-assigning head.
(72)  Hind-un,  yuqābilu-ha,  T-Tullāb-u
      Hind-NOM,  meet.3SG.M-3SG.F.ACC; the-students(M)-NOM
   ‘I believed Hind to have been met by the students’

Why then can such NPs not appear in the same SpecPxP position as emphatic pronominal arguments? One possible answer to this question can be given in terms of Case, for while SpecPxP has been argued to be a non-Case position, the (higher) SpecTP position occupied by broad subjects is a Case position. If the option of remaining Caseless (or of having nominative by default) were restricted to pronouns, this would explain in a principled way the distribution of both categories able to double pronominal affixes.

6  OUTSTANDING ISSUES
The preceding discussion of Modern Standard Arabic has shown that, in addition to the two patterns of agreement attested in Finnish non-finite constructions, it allows two others not attested in that language. This final section will consider why these configurations are not also possible in Finnish.

6.1  Why there can be no Expletives in the Finnish Participial Construction
If the structure EXPLVSO, argued to underlie Arabic VSO clauses, were also allowed in Finnish participial clauses, then the following should be possible.

(73)  *Minä halua-n (sen) osta-va-nsa sinu-n/Jussi-n/ etc. auto-n
      I.NOM  want-1SG (EXPL.GEN) buy-VA-3.PX you.SG-GEN/Jussi-GEN car-ACC
   ‘I want you/Jussi to buy a car’

Since Finnish makes free use of expletives (Holmberg and Nikanne, 2002), it is unlikely to be the case that the element sen (or its counterpart in any other morphological case) is not available. However, recall from section 1 of chapter three that sen differs from the other pronouns in not being able to check the φ-features of a possessor agreement morpheme and in this respect behaves like full NP arguments. Even so, there is no reason why a variant of the same sentence with default agreement should not be possible. (74) shows that it is not.

(74)  *Minä halua-n (sen) osta-va-n sinu-n/Jussi-n etc. auto-n
      I.NOM  want-1SG (EXPL.GEN) buy-VA-DFT  you.SG-GEN/Jussi-GEN car-ACC
   ‘I want you/Jussi to buy a car’

155
One possible explanation for this comes from the status of the default ending –n, which, being homophonous with the accusative singular ending for NP arguments, is often assumed to result from Case-marking by the matrix verb (e.g. Koskinen, 1998:§3.2.1.1). If this were the case, then there would be no means of the expletive receiving Case, with the consequence that it could not be phonetically realised, for the same reasons as it must remain unexpressed in Arabic clauses not introduced by a Case-assigner. The difference between Arabic and Finnish in this respect is that while the ultimately null expletive is motivated in Arabic to the extent that it serves to eliminate the uninterpretable φ-features of the Px head, there being no such features to check in Finnish, it is entirely superfluous and hence, by minimalist assumptions, impossible.

6.2 Why Finnish does not allow Emphatic Doubling of Argumental Affixes

The fact that the category in SpecPxP cannot receive Case in the Finnish participial construction should not, however, be a barrier to a Caseless emphatic pronoun appearing in that position, as was argued to be the case for Arabic in section 5. That is to say, there is no reason why the following should not be possible.

(75) *Minä halua-n sinu-n17 osta-va-si auto-n
    I.NOM want-1SG you-GEN buy-VA-2SG.PX car-ACC
    ‘I want you to buy a car (not Jussi)’

Note that, since in this case the participle does not carry the default ending –n, it could be argued (if the proposal mentioned above is correct) that it is not Case-marked by the matrix verb18. This being the case, there is nothing to prevent haluan assigning Case to the pronoun (which would then have the form sinut). As such it would then stand in the same relation to the agreement affix as an exceptionally Case-marked subject in an Arabic SVO clause and would therefore cause the φ-features of that affix to delete, under the assumption that the computational system is blind to the LF-status of the elements upon which it operates (cf.

17 The genitive has been chosen here, since this is the case argued to be the default case for specifiers in Finnish by Vainikka (1989). The choice of case is academic, however, since pronouns carrying other case endings are equally ungrammatical.
18 In fact, a more probable explanation is that the Case-marker –n is deleted when the possessive suffix is attached, since this also happens with object nominals, which clearly are in a position to receive Case. The alternative line of argumentation is pursued here simply in the interests of completeness.
sections 1.2 and 3.2.2 of chapter two). Since these φ-features carry the subject θ-role (by virtue of which they are interpretable), deleting them will result in the loss of that semantic information, ultimately resulting in an LF-crash.

7 CONCLUSION
The aim of this chapter was to determine whether the mechanisms claimed to underlie the system of agreement in Finnish non-finite clauses would prove to have more general validity by applying the model to a historically and areally unrelated language. In some cases, namely complementiser and object agreement and in SVO clauses, the models could be applied with a minimum of adjustment. Other clause types, namely those with VSO word-orders (particularly where the subject is pronominal) did not fit in so well, but by exploring these cases in detail, it was shown that they could be accommodated and that there were good reasons why the same structures are not available in Finnish.