

CASE, AGREEMENT AND WH-MOVEMENT IN VERBLESS CONSTRUCTIONS IN STANDARD ARABIC: A MINIMALIST PERSPECTIVE*

Abdul-Hafeed Ali Fakh (PhD)

Department of English, University of Ibb, Yemen
a_hafeed@yahoo.com

Abstract: The objective of this paper is to provide an adequate account of the following two questions: (a) How are Case and agreement features checked in verbless constructions in Standard Arabic?, and (b) What motivates *Wh*-movement in such verbless sentences? This paper explores the syntactic behavior of verbless sentences and spells out two Minimalist proposals to account for these two questions. Although a verbless sentence in Standard Arabic does not contain any overtly lexical copular verb in the present tense, there is still a licensing of Case and agreement features. Following analyses in Chomsky (1995), Bemamoun (2000) and (Fakh 2003, 2005), we have attempted to account for this phenomenon by claiming that, given feature checking considerations and the EPP, such verbless sentences behave as such because their tense is specified only for the categorial feature [+D] which must be checked by the subject in the syntax. This nominal [+D] feature is responsible for licensing Case and agreement features in the present tense. When the tense of the verbless sentence is in the past or future, the verbal copula must lexically show up. In such cases the tense is specified for two categorial features [+V] and [+D] which must be checked by a legitimate head in the course of derivation. This paper also accounts for what really forces *Wh*-movement in verbless sentences in Standard Arabic. Following Chomsky's (1995) Minimalist analysis of *Wh*-movement in English, and Fakh's (2003, 2005) account of *wh*-raising in Standard Arabic, we propose that in a simple interrogative clause of Standard Arabic C (i.e., COMP) has an abstract strong [+Q] feature and that the question word operator, which moves to the COMP, has also a strong [+wh]feature that moves overtly for feature checking. We argue that the question word in Standard Arabic is motivated to move overtly to [Spec, CP] to check its own morphological features against that hosted in the interrogative C under the Spec-head agreement relation.

Key words: verbless, licensing, Case, categorial, *Wh*-movement, feature, agreement

1. Introduction

The syntax of verbless constructions in Standard Arabic generated considerable discussion among the traditional Arab grammarians who

* I would like to thank Prof. A. K. Sinha for his suggestions and comments on the earlier draft of this paper.

differentiated between nominal and verbal sentences taxonomically. Modern Arab and Western linguists have also shown their interest in the syntactic analysis of such constructions and have offered various alternatives to account for their syntactic behavior.

The present study examines closely the previous analyses of the verbless sentences, shows that they have failed to explain how Case and agreement features are licensed and why *wh*-raising takes place in such constructions. The objective of this study is to provide a unified account that can best explain how Case and agreement properties are licensed and what forces *wh*-movement within the Minimalist framework advocated in Chomsky (1995), Benmamoun (2000) and Fasih (2003, 2005).

This paper is organized as follows. In sections 1 and 2, we review the previous analyses of Arab and Western linguists and show that they could not offer any justification for the assignment of Case and agreement features or for the *wh*-movement. In section 3, we present two Minimalist proposals based on the Minimalist approach of Chomsky (1995) and Benmamoun (2000). The first proposal accounts for why a verbless sentence in Standard Arabic does not contain an overt copular verb and yet both the subject and its predicate receive Case and manifest rich agreement inflection. We assume that the tense in such verbless constructions is specified only for the nominal feature [+D] which is licensed by the subject. Given feature licensing and the EPP requirements, we argue that it is the categorial [+D] feature which checks Case and agreement properties. Subsection 3.1 compares tense features in English and Standard Arabic in the present tense and points out the differences between them in this regard. In subsection 3.2, we introduce Chomsky's (1995) account of *wh*-movement in English as the basis for our Minimalist analysis of *wh*-extraction from both the subject and predicate positions of verbless sentences in Standard Arabic. We present a Minimalist proposal to account for what motivates question word movement in verbless constructions and point out how such *wh*-raising takes place. Section 4 summarizes the findings of this study.

2. Previous Accounts

Arab and Western linguists have attempted to explore the syntactic behavior of verbless constructions in Standard Arabic and explain the contrast which holds between the verbal and nominal sentences. Alternative analyses have been proposed to account for the absence of the verbal copula in such constructions. Bahloul (1993: 209 ff.) points out that a contrast exists between verbal and nominal sentences; in the former, the verb inflects for "aspect – tense and agreement", while the latter "appears without any lexically realized verbal element". Bahloul argues that the previous account

could not provide an adequate analysis as it claimed that nominal sentences are derived from their underlyingly verbal counterparts. It implies that "the verb undergoes a deletion process under present/timeless reference", (p. 210). It means that the previous analysis relies basically on the assumption that it is the invisible nature of the copula which can account for the contrast between verbal and nominal sentences. This is seen in the syntactic analyses of Bakir (1980), Abdul-Ghany (1981), Fassi-Fehri (1982), Farghal (1986), Al-Waer (1987), among others.

Bahloul (1993: 227) further argues that their analyses cannot account for many facts about verbless sentences. He suggests an alternative treatment; he claims that the contrast between verbal and nominal predicates "is shown to derive from the properties of the sentential phrasal head (I°)..." and goes on to show that "while the presence of both TNS and WH features in I° force this latter to select for a VP complement, their absence imposes selectional restrictions on I°, which will be allowed to select for non-VP complement." Bahloul assumes that INFL is allowed to select either a VP complement (headed by a lexical verb) or a non-VP complement (headed by a lexical head other than the verb).

On the other hand, Plunkett (1993: 248-256) examines the absence of the copula in verbless constructions in Standard Arabic, specifically, when the tense is present and suggests that "the O-marked present tense does not need to be supported by a verbal element in Arabic." Plunkett (1993: 256) stresses that "it is this fact which makes possible the existence of sentences without copulas in Arabic."

Benmamoun (1999: 183) attempts to distinguish between the perfective and the imperfective in Standard Arabic on the basis of the presence and absence of the copula; he observes that the former "carries past tense features" and argues that the theoretical evidence "comes from the distribution of the verbal copula". Benmamoun concludes that the copula occurs obligatorily in the past tense, but not in the present tense context.

The previous analyses of verbless sentences in Standard Arabic suggest that the focus was on a single issue - namely, the copular verb is absent in the present tense, but is obligatorily present in the past tense. Let us illustrate this in (1).

- 1a mohammad - un mujtahid - un
 Mohammad-m.sg.nom. hard-working-m.sg.nom.
 'Mohammad (is) hard-working.'
- b. kāna mohammad - un mujtahid - an
 be.pst.3m.sg. Mohammad.m.sg.nom. hard-working-m.sg.acc.
 'Mohammad was hard-working.'

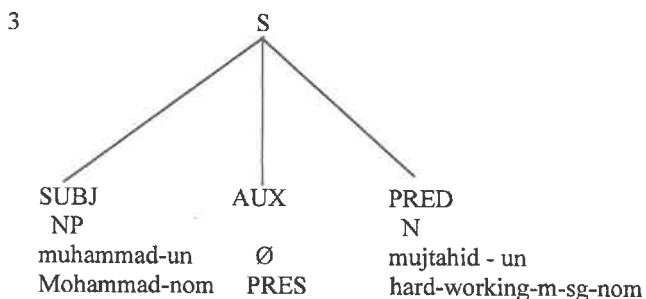
The contrast between (1a) and (1b) has not only generated considerable discussion among Arab and Western linguists but also been a long-running issue in generative syntax. In what follows we briefly present the three major arguments on this issue. The first argument is shown in Mouchaweh (1986: 134-203) who views verbless sentences as basically small clauses with no functional projection. This approach is adopted by Rapaport (1987) for Hebrew. Mouchaweh (1986) claims that there is no functional projection above the lexical projection in verbless sentences. He suggests that both the subject and the non-verbal predicate in (1a) are contained within the small clause, which can be an AP or a PP or an NP, as in (1a). His analysis seems to rely on the conclusion drawn from the analysis of English in (2), in which the constituents in the brackets are considered to be embedded small clauses.

- 2a. He found [*John happy*].
 b. He considers [*John a good man*].

We argue that verbless sentences in Standard Arabic are not small clauses without functional projections, particularly a tense projection. Rather, they are clauses that exhibit the same morpho-syntactic properties that are displayed in tensed clauses.

The second argument suggests that there is a verbal copula in verbless sentences, which is not overt. In Bakir's (1980: 176ff.) analysis this copula is deleted by a deletion rule, while it is considered to be phonologically null in Fassi-Fehri's (1993).

The third argument is offered by Benmamoun (2000: 43ff.) who discusses the feature structure of functional categories in Modern Arabic dialects. Benmamoun adopts and expands Jelinek's (1981) analysis of Egyptian Arabic which assumes an auxiliary (AUX) node that is specified for the present tense feature only. According to Jelinek's analysis (as quoted by Benmamoun, 2000), (1a) can be represented as in (3).



Benmamoun's (2000: 44) analysis attempts to overcome the problems that the preceding two arguments faced in such a way that "the present tense feature is syntactically projected and therefore can interact with temporal adverbs, assign nominative Case to the subject, and define locality domains for NPIs" (=Negative Polarity Items). Benmamoun stresses that in Arabic dialects verbless sentences are TPs that dominate a nonverbal predicate. He (2000: 49) also argues that the tense in verbless sentences is specified as [+D], but not [+V]. His argument rests upon the assumption that as the tense feature in verbless sentences is only [+D], it follows that there is no need for a verbal copula. Given feature checking, Benmamoun points out that "the only element that must be present is one that can check the [+D] feature, a role that is usually fulfilled by the subject" (p.49). Benmamoun's central claim emerges from the Minimalist assumption that movement to tense is not motivated by the requirement to provide a host for tense, and that "since tense does not need a host, the distribution of the copula must be found elsewhere" (p.49).

Although the preceding arguments seem to provide some insight, they do not show how Case and agreement features are licensed in verbless clauses and why such clauses exhibit rich agreement inflection. Moreover, such arguments do not show what motivates the syntactic movement of question word to [Spec, CP], how such *wh*-raising takes place in nominal sentences and what it leaves behind after movement occurs. The following section explores these issues and proposes Minimalist alternatives to the accounts given above.

3. Minimalist Alternative Analysis

3.1 Case and agreement features in verbless constructions

What is really fascinating about the verbless constructions in Standard Arabic is that the subject and its predicate receive Case and manifest rich agreement inflection, though the verbless sentence does not have an overtly lexical verbal copula. It can be illustrated in (4).

- 4a. al - bint - u na:jihat - un
 the-girl-f.sg.nom. successful.f.sg.nom.
 'The girl (is) successful.'
- b. *ta - ku:nu al - bint - u na:jihat - an
 3f.sg.be.pres. the-girl-f.sg.nom successful.f.sg.acc
- c. al - walad - u na:jih - un
 the-boy.m.sg.nom * successful.m.sg.nom
 'The boy (is) successful.'
- d. *ya - ku:nu al - walad - u na:jih - an
 3m.sg.be.pres. the-boy-m.sg.nom successful.m.sg.acc

A closer look at (4a) and (4c) reveals that, in each sentence, the subject and its predicate are Case-marked as nominative and display the same agreement features (i.e., person, gender and number features), even though there is no overt lexical copula in them. However, (4b) and (4d) are not acceptable due to the insertion of the overt lexical copula. The interesting question is: How are Case and agreement features licensed in such verbless sentences in (4a, c), and how to account for these phenomena?

The argument that we put forward here, partially follows the arguments posited by Bakir (1980), Mouchaweh (1986), Fassi-Fehri (1993), Bahloul (1993), Plunkett (1993) and Benmamoun (1999; 2000) and is partially based on the recent developments in the Minimalist analysis (Chomsky 1995; 1999; 2000). We hold the view that all tenses are not specified as [+V] and [+D] in Standard Arabic. We argue that in (4a) and (4c) (which have the present tense context) tense is specified only for one categorial feature, namely the nominal [+D], for the reason that the T head (of verbless sentences) does not have a feature [+V] which needs to be checked in the course of derivation by another legitimate verbal head, namely the verb.

Besides, verbless constructions in Standard Arabic do not need to be supported by a lexical verb. It follows from the fact that in the present tense the verb does not need to move to tense since the latter lacks a [+V] feature. It means that the lexical verb need not be realized for the reason that the T head does not have a [+V] feature. In this latter case it has to be checked only by another legitimate checker, namely the verb. And if a lexical verb is inserted in such constructions ungrammatical sentences are produced, as shown in (4b) and (4d). It supports our argument that the present tense of such verbless sentences is specified only by one categorial feature, namely [+D].

As Chomsky (1995) points out, tense in English is specified for two categorial features, [+V] and [+D]. The feature [+V] demonstrates the interaction between tense and the verb, while the feature [+D] determines its interaction with the subject. (5) illustrates this point; the auxiliary verb moves to tense in order to check its [+V] feature, while the subject DP raises from the Spec of VP to Spec of TP to license its [+D] feature.

5 John has slept early.

Following Chomsky's (1995) analysis, we argue along the lines of Benmamoun (2000) that movement to tense in Standard Arabic is not driven by the requirement to provide a host for tense, and that a lexical verb is not required in verbless sentences that indicate the present tense. This view holds good if we abandon the hypothesis that all tenses are specified as [+V]

and [+D] in Standard Arabic. In order to account for why a verbal head does not have to be present in the context of Standard Arabic verbless sentences, we have to assume that the T head does not have a feature [+V] which needs to be licensed/checked by a legitimate head in the course of derivation. Hence, the only candidate that must be available is one that can license the feature [+D]. It is, therefore, the subject that checks the morpho-syntactic property of the nominal [+D] feature. In other words, given feature licensing and the EPP, we point out that such verbless sentences behave as such because their tense is specified by only one categorial feature [+D] which has to be licensed by the subject. It follows then that it is the [+D] feature which is responsible for licensing Case and agreement features. It thus follows that if Case and agreement features are not checked, the derivation of such sentences will crash at PF, given the Minimalist assumption that all features must be interpretable in the course of derivation so that the derivation shows convergence. English is in contrast to Standard Arabic in that the English T head (of the present tense) has a [+V] feature. It is the presence of a verbal head that checks the [+V] feature obligatorily, as shown in (5). It means that the characteristic of the present tense in Standard Arabic differs from that of English in that in the former only the [+D] feature is used, while in the latter (i.e., English) two categorial features [+V] and [+D] are used. Though both in English and Standard Arabic, the present tense is unmarked (in contrast to the past and future tenses), in English all present tense forms other than simple present are marked for 'aspect' whereas in Standard Arabic aspectual markers belong either to the past or future (but not to the present). This may be the reason for the difference between English and Standard Arabic in the realization of the present.

However, when such sentences are in the past or future tense the verbal copula must be lexically realized. In other words, in Standard Arabic the difference between the present tense, on the one hand, and the past and future tenses, on the other, is manifested by the fact that the verb does not move in the present tense while it must do so in the past and future tenses. This contrast can be attributed to the fact that the past and future tenses have a [+V] feature, which must be checked by a verb, while the present tense (in the context of verbless sentences) is not specified for a [+V] feature. Let us demonstrate the occurrence of the verbal copula in the past and future tenses in (6) and (7) respectively.

6a. ka:nat al - bint -u najihat - an
 be-pst-3f.sg the-girl-f.sg.nom. successful.f.sg.acc.
 'The girl was successful.'

b. *al - bint - u najihat - un
 the-girl-f.sg.nom successful.f.sg.nom

- c. ka:na al - walad - u najjih - an
 be-pst-3m.s the-boy.m.sg.nom successful.m.sg.acc
 'The boy was successful.'
- d. *al - walad - u najjih - un
 the-boy-m.sg.nom successful.m.sg.nom
- 7a. sa - taku:nu al - bint - u najjihat - an
 will-3f.sg-be the-girl-f.sg.nom. successful.f.sg.acc.
 'The girl will be successful.'
- b. *al - bint - u najihat - un
 the-girl-f.sg.nom successful.f.sg.nom
- c. sa - yaku:nu al - walad - u najjih - an
 will-3m.sg-be the-boy-m.sg.nom successful.m.sg.acc
 'The boy will be successful.'
- d. *al - walad - u najjih - un
 the-boy-m.sg.nom successful.m.sg.nom

The grammaticality of (6a,c) and (7a,c) and the ungrammaticality of (6b,d) and (7b,d) reveal that the presence of the verbal copula is obligatory in the past and future tenses. Furthermore, tense and agreement in sentences denoting past and future must be supported by the presence of their overtly lexical verb which raises to their head position for feature checking at a later stage of derivation. This is obligatory in Standard Arabic to ensure the grammaticality of its derived structures. The absence of such a lexical verb in (6b,d) and (7b,d) denoting past and future tenses leads to their ungrammaticality. There is no verbal head in these sentences which must move to T(ense) to check its categorial feature [+V].

3. 2 Wh-movement in verbless constructions

3.2.1 An overview: Chomsky's (1995) Minimalist Account

The Theory of Feature Checking in Minimalism gives a crucial role to inflectional morphology. Given feature licensing, Chomsky (1995) points out that strong features must be checked in overt syntax while weak ones have to be licensed in covert syntax (i.e., at LF). Chomsky (1995) extends his analysis of feature licensing to involve the treatment of the abstract question affix Q (= [+wh]), which is assumed to be present in the underlying structure of an interrogative clause. Chomsky (1995:199) points out that there is no parametric variation between languages with regard to *wh-in-situ* phenomenon. He attributes the differences between languages to the "internal morphology of the *wh*-phrases." He stresses that there are certain

morphological features which have to be checked in the checking domain of a head. Hence, the movement of a *wh*-operator to the checking domain of [Spec, CP] is motivated by this requirement. Given this, Chomsky (1995:289) proposes that the complementizer C in an interrogative clause of English contains an abstract question affix Q, which has a strong Q-feature. He suggests that COMP in English has a strong Q-feature, as has the operator that raises to it. He (1995:199) shows that “the operators raise for feature-checking to the checking domain of C: [Spec, CP] or adjunction to Spec (absorption), thereby satisfying their scopal properties.” Following Watanabe’s (1991) analysis, Chomsky (1995:199) stresses that the Q-feature is morphologically strong in all human languages, “the *wh*-operator feature is universally strong.”

3.2.2 *Wh*-movement from the subject position

In section 2.1, we have tried to provide a Minimalist account of how in a verbless sentence in Standard Arabic the subject and its predicate receive Case and rich agreement features. We have also pointed out how Case and agreement features are checked in the Minimalist syntax. In this section, we present a Minimalist account of what forces the movement of the question word to [Spec, CP] in verbless constructions in Standard Arabic, why such *wh*-raising is motivated morphologically and what it leaves behind after the movement operation.

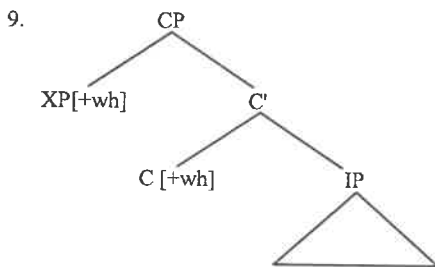
Now we examine how *wh*-raising takes place from the subject position of verbless sentences and show how the Arabic data is handled by the Minimalist analysis, with a view to pointing out whether the question word movement in Standard Arabic is overt or covert. Let us look at (8) to illustrate the point.

- 8a. Q[zayd - un fi al - hujrat - i]
_{IP} Zaid-nom. in the-room-gen.
 ‘Zaid (is) in the room.’
- b. [CP ↑ [C' [+Q] [_{IP} zayd-un ?ayna]]
 ↑ Zaid-nom. where
- c. Spell-Out: [_{CP} ?ayna [C' [+Q] [_{IP} zayd-un t_{?ayna}]]
 where Zaid-nom.
 ‘Where is Zaid?’

The representation in (8) demonstrates that the question word, *?ayna* ‘where’ which undergoes movement from the subject position, raises to the clause-initial position of CP (a position which Chomsky (1995:289) calls [Spec, Q]) as illustrated in (8b) and then it undergoes feature licensing. Following

Chomsky's (1995) Minimalist analysis of *wh*-movement in English, we assume that the complementizer C of simple interrogative clauses is morphologically strong in Standard Arabic and that it underlyingly contains an abstract Q-feature. The C position of CP is filled with an underlying affix Q=[+wh]), which is a Minimalist device to distinguish the interrogative sentence from its declarative counterpart. The C of CP has a strong morphological Q-feature which is checked against the raised *wh*-operator features under a Spec-head agreement relation. Hence, at Spell-Out the question word *?ayna* 'where' moves to [Spec, CP]; such a movement leaves behind a *wh*-trace, which is co-indexed with the raised *wh*-operator, thus forming an A'-chain relation. The raising of *?ayna* 'where' to [Spec, Q] is an instance of *wh*-substitution; the overt raising of *?ayna* to the licensing domain of [Spec, Q] eliminates the morphologically strong [+Q] feature, hosted in the head position of COMP via a Spec-head agreement relation, as shown in (8c).

Given Spec-head agreement, what checks the moved question word *?ayna* 'where' is a mechanism of an agreement relationship with the head C of CP, which is notated as C [+Q] (the head of an interrogative clause). In other words, the Spec-head agreement relationship with the head C checks and then licenses the raised *wh*-operator features in [Spec, CP], as illustrated in (9) below. Like English, the question word in Standard Arabic is also marked as [+wh]. We propose that a well-formed question word in Standard Arabic can have the Spell-Out representation as in (9).



The question arises: Is the question word movement in Standard Arabic overt or covert? In order to account for this, let us first examine (8c), reproduced as (10).

10. Spell-Out: $*\left[\begin{matrix} \text{CP} \\ \left[\begin{matrix} \text{C} \\ [+Q] \end{matrix} \right] \left[\begin{matrix} \text{IP} \\ \text{zayd-un} \\ \text{Zaid-nom.} \end{matrix} \right] \text{?ayna} \end{matrix} \right]$

The reason why (10) is ungrammatical is because the question word *?ayna* 'where' cannot remain *in-situ* after Spell-Out. The difference between (8c)

In (11) the question word that originates in the predicate position has to undergo overt syntactic movement to an empty landing site, i.e., to [Spec, CP]. The overt *wh*-movement of *kayfa* 'how' in (11) is obligatory since it has to get its own *wh*-features checked against the strong morphological [+Q] feature hosted in the C position. What motivates the overt raising of *kayfa* 'how' in (11) is the need to check its strong features in the checking domain of [Spec, CP] configuration, thus ensuring that the economy principle is satisfied. In other words, the strength of the internal morphology of the *wh*-phrase in Standard Arabic justifies the overt *wh*-extraction.

Besides, the overt *wh*-movement in (11) leaves behind a *wh*-trace that has to be co-indexed with its question word operator which lands in [Spec, CP]. The question word *kayfa* 'how' acts as an antecedent to bind its trace. It can be pointed out that the *wh*-raising of *kayfa* to the clause-initial position binds the sentence under its scope, since the scope of a question operator is the domain it c-commands. A closer look at (11b) shows that *kayfa* is, in fact, the predicate at LF, which is then forced to undergo overt raising to the licensing domain of [Spec, CP] to satisfy the principle of "economy of derivation". Hence, it is clear that the overt *wh*-movement in Standard Arabic is driven by what Chomsky (1995: 289) calls feature licensing requirements.

4. Conclusion

This study has attempted to answer two questions: (1) how Case and agreement features are checked in verbless sentences in Standard Arabic, and (2) what forces *wh*-raising in such verbless constructions. We have presented a Minimalist proposal which assumes that T(ense) in verbless sentences of Standard Arabic is specified only for the categorial feature [+D] which must be checked by the subject. We have also shown that [+D] is responsible for licensing Case and agreement features in the syntax. We have also noted that when the tense is in the past or future, the verbal copula obligatorily shows up lexically. While accounting for it, we have pointed out that the verb does not need to move to the head position of T(ense) in the present tense, whereas it has to do so obligatorily in both the past and future tenses. It is because they have a [+V] feature that must be licensed by a verb, a morpho-syntactic property that is lacking in the present tense. In other words, we have shown that T(ense) is specified as [+V] and [+D] in the past and future tenses, while it is specified only as [+D] in the present tense of verbless sentences.

While accounting for what motivates *wh*-movement in verbless constructions in Standard Arabic, we have proposed that COMP in simple interrogative clauses contains an abstract question affix Q, which has a

morphologically strong [+Q] feature, as does the question word operator (notated as [+wh] operator feature) that moves to it. The *wh*-word in Standard Arabic is motivated syntactically to move overtly to [Spec, CP] for feature checking/licensing requirements. This overt movement operation is a morphological property driven by the necessity to check the strong *wh*-features of the moved question word against that of the strong feature [+Q]-hosted in C position – via a Spec-head agreement relationship. We have also shown that such a question word movement serves to license the [+wh] feature and create a Spec-head relation between a [+wh] feature hosted in the C and the question word in its specifier position. The result of such a *wh*-movement is that the question constituent acquires sentential scope, whose scope is the domain which it c-commands, i.e., the entire clause. In short, the proposals discussed here account for two complex problems of verbless sentences in Standard Arabic in a principled manner under the broad framework of the Minimalist Program.

References

- Abdul-Ghany, M. 1981. *Government-Binding in Classical Arabic*. Ph.D. dissertation, the University of Texas at Austin.
- Abraham, W., Epstein, S.D., Thrainsson, H. and Zwart C. J. (eds.) 1996. *Minimal Ideas: Syntactic Studies in the Minimalist Framework*. Amsterdam: John Benjamins.
- Al-Waer, M. 1987. *Toward a Modern and Realistic Sentential Theory of Basic Structures in Standard Arabic*. Damascus, Syria: Tlass Publishing House.
- Aoun, J. 1993. "Wh-elements in situ: Syntax or LF?", *Linguistic Inquiry*, 24, 199-238.
- Aoun, J. 1993. "On Some Differences between Chinese and Japanese *Wh*-elements", *Linguistic Inquiry*, 24, 365-372.
- Aoun, J. Benmamoun, E. and Sportiche, D. 1994. "Agreement and Conjunction in Some Varieties of Arabic", *Linguistic Inquiry*, 25, 195-220.
- Bahloul, M. 1993. "The Copula in Modern Standard Arabic", in Eid, M. and Holes, C. (eds.), *Perspectives on Arabic Linguistics*, V, 209-230. Amsterdam: John Benjamins.
- Bakir, M. J. 1980. *Aspects of Clause Structure in Arabic: A Study of Word Order Variation in Literary Arabic*. Ph.D. dissertation, Indiana University, Bloomington.
- Barss, A. 2000. "Minimalism and Asymmetric *Wh*-interpretation", in Martin, R., Michaels, D., and Uriagereka, J. (eds.) *Step by Step: Essays on*

- Minimalist Syntax in Honor of Howard Lasnik*, 31-52. Cambridge, MA.: The MIT Press.
- Benmamoun, E. 1993. "Agreement and the Agreement Projection in Arabic", in *Studies in Linguistic Sciences*, 3, 61-71. University of Illinois.
- Benmamoun, E. 1997. "Agreement in Arabic and the PF interface", in Brian, A. and Sze-Wing, T. (eds.), *Proceedings of WCCFL XV*, 33-46.
- Benmamoun, E. 1999. "Arabic Morphology: The Central Role of the Imperfective", *Lingua*, 108, 175-201.
- Benmamoun, E. 2000. *The Feature Structure of Functional Categories: A Comparative Study of Arabic Dialects*. Oxford: Oxford University Press.
- Cheng, L. L. S. 1991. *On the Typology of Wh-Questions*. Doctoral dissertation, MIT.
- Chomsky, N. 1977b. "On Wh-movement", in Peter W. Culicover, Thomas Wasow, and Adrian Akmajian (eds.), *Formal Syntax*, New York: Academic Press, 71-132.
- Chomsky, N. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, N. 1986a. *Barriers*, Cambridge, MA.: MIT Press.
- Chomsky, N. 1989. "Some Notes on Economy of Derivation and Representation", in Itziar Laka and Anoop Mahajan (eds.), *Functional Heads and Clause Structure* (MIT Working Papers in Linguistics, vol. 10), Cambridge, MA.: MIT. [Published (1991), in Freidin (ed.), 417-54].
- Chomsky, N. 1991. "The Theory of Principles and Parameters", in Chomsky, N. 1995. (ed.) *The Minimalist Program*. 13-129. Cambridge, MA.: The MIT Press.
- Chomsky, N. 1992. "A Minimalist Program for Linguistic Theory", *MIT Occasional Papers in Linguistics*, 1. [Published (1993), in Kenneth Hale and Samuel Jay Keyser (eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, Cambridge, MA.: MIT, 1-52].
- Chomsky, N. 1995. "Bare Phrase Structure", in Webelhuth, G. (ed.); *Government and Binding Theory and the Minimalist Program*, 383-420. Oxford: Basil Blackwell.
- Chomsky, N. 1995. *The Minimalist Program*. Cambridge, MA.: The MIT Press.
- Chomsky, N. 1998, 2000. "Minimalist Inquiries: The Framework", in Martin, R., Michaels, D. and Uriagereka, J. (eds.), *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, Cambridge, MA.: MIT Press.
- Chomsky, N. 1999. "Derivation by Phases", Ms. Cambridge, MA.: MIT.
- Chomsky, N. 2001. "Beyond Explanatory Adequacy", Ms., Cambridge, MA.: MIT.

- Culicover, P.W. 1997. *Principles and Parameters: An Introduction to Syntactic Theory*. Oxford: Oxford University Press.
- Eid, M. 1982. "The Copula Function of Pronouns", *Lingua*, 59, 197-207.
- Eid, M. 1991. "Verbless Sentences in Arabic and Hebrew", in Comrie, B. and Eid, M. (eds.), *Perspectives on Arabic Linguistics III*, 31-63. Amsterdam: John Benjamins.
- Eid, M. 1992. "Pronouns, Questions, and Agreement", in Broselow, E., Eid, M. and McCarthy, J. (eds.) *Perspectives on Arabic Linguistics IV*, 107-143. Amsterdam: John Benjamins.
- Fakih, A. 1998. *The Mandeali Case System under Case Theory*. Unpublished M.A. dissertation, University of Delhi.
- Fakih, A. 1999. *Some Aspects of Agreement in Arabic and English Morphosyntax*. Unpublished M.Phil. dissertation, University of Delhi.
- Fakih, A. 2003. *The Syntax of Questions in Modern Standard Arabic and Minimalism*. Unpublished Ph.D. thesis. University of Delhi.
- Fakih, A. 2005. "Licensing: Movement and Feature Checking in Standard Arabic and Minimalism", *The University Researcher Journal*, published by Ibb University, Yemen, Issue no. 9, pp. 1-20.
- Fakih, A. (to appear). "The Minimalist Syntax of *wh*- and Multi-*wh*-Raising in Standard Arabic, English and the Slavic Languages and the LF Representation".
- Farghal, M. 1986. *The Syntax of Wh-Questions and Related Matters in Arabic*. Ph.D. dissertation, Indiana University, Bloomington.
- Fassi-Fehri, A. 1982. *Linguistique Arabe: Forme et Interpretation*. Rabat: Publications de la Faculté des Letters et Sciences Humaines.
- Fassi-Fehri, A. 1993. *Issues in the Structure of Arabic Clauses and Words*. Dordrecht: Kluwer.
- Haegeman, L. 1994. *Introduction to Government and Binding Theory*. Oxford: Blackwell.
- Haegeman, L. and Guéron, J. 1999. *English Grammar: A Generative Perspective*. Oxford: Blackwell.
- Hornstein, N. 2001. *Move! A Minimalist Theory of Construal*. Oxford: Blackwell.
- Huang, C.T.J. 1995. "Logical Form", in Webelhuth, G. (ed.) *Government and Binding Theory and the Minimalist Program*, 125-173. Oxford: Basil Blackwell.
- ~~Jelinek, E. 1981. *On Defining Categories: Aux and Predicate in Colloquial Arabic*. Ph.D Thesis, University of Arizona, Tuscon.~~
- Jelinek, E. 1996. "Topic and Focus in Navajo Inverse", in Agbayani, B and Tang, S. (eds.), *The Proceedings of the Fifteenth West Coast Conference on Formal Linguistics*, 241-255. Stanford Linguistic Association: CSLI.

- Karttunen, L. 1977. "Syntax and Semantics of Questions", *Linguistics and Philosophy*, 1, 3-44.
- Lasnik, H. 1992. "Case and Expletives: Notes Toward a Parametric Account", *Linguistic Inquiry*, 23, 381-405.
- Lasnik, H. 1993b. "Case and Expletives Revisited", Ms. University of Connecticut.
- Lasnik, H. 1999. *Minimalist Analysis*. Oxford: Blackwell.
- Lasnik, H. 1999. "On Feature Strength: Three Minimalist Approaches to Overt Movement", *Linguistic Inquiry*, 30, 197-217.
- Mahajan, A. 2002. "Types of Wh-in-situ and Hindi Type Languages", Paper presented at the International Workshop on Language, Cognition and Brain, held at the University of Delhi.
- Marantz, A. 1995. "The Minimalist Program", in Webelhuth, G. (ed.) *Government and Binding Theory and the Minimalist Program*, 349-381. Oxford: Basil Blackwell.
- Mohammad, M.A. 1990. "The Problem of Subject-verb Agreement in Arabic: Towards a Solution", in Eid, M. (ed.), *Perspectives on Arabic Linguistics I*, 95-127. Amsterdam: John Benjamins.
- Mouchaweh, L. 1986. *De La Syntaxe Petites Prepositions*. Doctoral thesis, Universite de Paris VIII, Paris.
- Ouhalla, J. 1991. *Functional Categories and Parametric Variations*. London: Routledge.
- Ouhalla, J. 1993. "Subject-extraction, Negation and the Anti-agreement Effect", *Natural Language and Linguistic Theory*, 11, 477-518.
- Ouhalla, J. 1994,1999. *Introducing Transformational Grammar: From Principles and Parameters to Minimalism*, 1st and 2nd edition, Oxford: Oxford University Press.
- Plunkett, B. 1993. "The Position of Subjects in Modern Standard Arabic", in Eid, M. and Holes, C. (eds.), *Perspectives on Arabic Linguistics V*, 231-260. Amsterdam: John Benjamins.
- Pollock, J.Y. 1989. "Verb-movement, Universal Grammar, and the Structure of IP", *Linguistic Inquiry*, 20, 365-424.
- Radford, A. 1997. *Syntax: A Minimalist Introduction*. Cambridge: Cambridge University Press.
- Rapaport, T. 1987. *Copula, Nominal and Small Clause*. Ph.D. dissertation, MIT.
- Watanabe, A. 1991. "Wh-in-situ, Subjacency and Chain Formation", Ms. MIT.
- Watanabe, A. 1992. "Subjacency and S-structure Movement of Wh-in-situ", *Journal of East Asian Linguistics*, 1, 255-91.
- Webelhuth, G. 1995. "X-bar Theory and Case Theory", in Webelhuth, G. (ed.) *Government and Binding Theory and the Minimalist Program*, 15-85. Oxford: Basil Blackwell.