\_\_\_\_\_

Language in India www.languageinindia.com ISSN 1930-2940 Vol. 15:8 August 2015

# Spatial Prepositions in Modern Standard Arabic\*

# Mustafa Ahmed Al-humari, Ph.D. Scholar

\_\_\_\_\_\_

### 1. Abstract

The paper investigates syntactic and semantic properties of spatial prepositions in Modern Standard Arabic (MSA). In this paper, I argue that the so-called, by traditional grammarians, *dhruuf al-makaan* 'Adverbs of Place' such as *fawq* 'above', *taħta* 'under', *xalf* 'behind' etc are just another class of prepositions. Hence, there are two classes of preposition in Arabic: Class 1 Prepositions (henceforth C1 Ps) which contain true prepositions such as *Gala* 'on', *fi* 'in' etc, and Class 2 Prepositions (henceforth C2 Ps) which contain a group of so-called adverbs of Place. To motivate my argument for existence of two classes of prepositions in MSA, certain diagnostics are set in line with Svenonius's (2004, 2006) Axial Part (henceforth *Ax*Part) and Pantcheva's (2008) Silent Place. Further, I attempt to unify these proposals in order to capture the co-occurrence of Silent Place and *Ax*Part in the language.

**Key words:** spatial prepositions, Modern Standard Arabic, syntactic and semantic properties

### 2. Overview and Theoretical Issues

In this paper, I follow the same idea in the traditional grammar books of Arabic (e.g., Wright (1874), Haywood & Nahmad (1965), Sibawayhi (1938), Ibn Siraj (1986) and Alshamsan (1987) among others) that a preposition is a semantic letter associated with nouns; it changes the Case-marking when inserted. In MSA, prepositions can be either morphologically separated from nouns e.g. *min* 'from' *ila* 'to' *fi* 'in/at' etc or attached to the

\_

I would like to thank Prof. Ayesha Kidwai, my guide, for her incessant encouragement and support. Also, thanks for Deepak Alok for the discussion and good company. Being a native speaker of the language under investigation, I mainly rely on my intuitions as well as some Arabic grammar books for the data collection. The abbreviations used throughout the paper are as follows: PRES = present tense, 3SM = 3rd singular masculine, 3SF = 3rd singular feminine, acc = accusative, nom = nominative, gen = genitive, Pl = Plural, Indef = Indefinite Marker, C1 P = Class 1 preposition, C2 P = Class 2 preposition, TAM = Tense and Aspect Morphology, s-selection = semantic selection, c- selection = categorial selection, MSA = Modern Standard Arabic.

noun e.g. *li*- (for/to), *ka*- (like/as). Interestingly, prepositions are literally called *hruuf al-garr* 'Letters of Genitives' in Arabic because they associate with genitive-marked nouns. That is, a preposition is responsible for licensing of a genitive Case on the noun phrase complement. However, this does not necessarily mean that we could not think of a situation where a genitive Case is assigned without presence of a P Case-assigner. The noun phrase complement in Construct State<sup>1</sup> and that in *dhruuf al-makaan* 'Adverbs of Place' are clear evidence to support this conclusion. This line of reasoning results in an inquiry: whether a genitive Case can also be assigned by another category, an adverb for instance and to what extent the two distinct categories might share some properties.

### 2.1 Facts and Diagnostic Tests

In this section, I show some syntactic and semantic properties of Arabic prepositions in line with Svenonius' (2004) typical crosslinguistic generalizations and examine the extent to which the so-called adverbs can be comfortably fit with these generalizations.

Preposition expresses binary relations between entities.

1. a) al-kitaab Sala at<sup>s</sup>-t<sup>s</sup>aawilat-i
the-book On the-table-gen
'The book is on the table.'

b) al-kitaab Taħta at<sup>ç</sup>-t<sup>ç</sup>aawilat-i the-book On the-table-gen 'The book is under the table.'

The Arabic preposition f ala 'on' in (1a) expresses a relation between two entities: al-kitaab 'the book' and  $at^{r}$ - $t^{r}$ aawilat 'the table' and so is for  $ta\hbar ta$ ' under' in (1b). In this respect, there is no point in distinguishing between prepositions and adverbs in the language.

• Preposition forms a syntactic constituent with a DP complement. It is clear from the example (1a) that the head preposition *Sala 'on'* forms a constituency with its DP complement and this is expressed by a realization of the Case-marking on the dependent

For the details of the Construct State in Arabic, (see Fassi-Fehri (1993a), Mohammad (1999), Ritter (1986, 1991), Siloni (1991, 2001), among others). However, this is not my concern in the current paper.

noun phrase and the same Case-marking is shown on the complement of the adverb *tahta* 'under' in (1b).

• Preposition c-selects properties of its complement. The Arabic prepositions *min/ila* 'from/to' c-selects a DP or PP complement. But the so-called adverb *taħta* 'under' c-selects a DP complement only. Again, the examples (1a) and (1b) show that head adverbs, like head prepositions, categorically select DP complements. The only difference is that a head preposition can also select PP complement whereas an adverb cannot. Consider the following example:

2. a) min/ila  $\Omega$  sala at $^{\varsigma}$ -t $^{\varsigma}$ aawilat-i from/to on the-table-gen 'from/to on the table'

The inability of so-called adverbs to take PP-complements is predictable due to the fact this group cannot express Source Path or Goal Path. They are locatives in nature.

- Like prepositions in Arabic, the so-called adverbs can semantically select properties of their complement. The so-called adverb *fawqa* 'above' like the preposition *Sala*, would impose a requirement on its DP complement to somewhat have a sense of contact. Thus, most of the time, it is difficult to draw a distinction between them in this regard.
- Preposition cannot combine with Tense and Aspect morphology (TAM). Actually, only verbs in Arabic show their combination with tense and aspect morphology and this makes the category V distinct not only from prepositions but also from all other categories, including adverbs.
- 3. a) ja-ktub ad-dars-a

  PRES-write.3SM the-lesson-acc
  - b) \*ja-Sala /-taħta at<sup>s</sup>-t<sup>s</sup>aawilat-i PRES-on/-under the-table-gen

4

The lack of TAM property in prepositions suggests that the category P specifies with [-V] feature. The so-called adverbs are similar to prepositions in lacking of this property.

To conclude, there are many similarities between prepositions and this group of adverbs but there is a slight difference as well. It suggests that the so called adverbs are not true prepositions as their functions are limited to expressing location.

Now, let us examine how this kind of adverbs draws apart from the common properties of adverbs/adverbials in Arabic.

Unlike other Adverbs of Arabic, this kind of adverb cannot be nunated<sup>2</sup>, that is, it cannot take an indefinite accusative marker suffix *-an* to express spatial or even temporal dimensions of the event/action.

- 4. a) Passed miil-an (Adverb of Place)

  passed.3SM mile-Indef.acc

  'He passed a mile.'
  - b) was<sup>c</sup>ila al-manzil ð<sup>c</sup>uuhr-an (Adverb of Time)
    arrived. 3SM the-home noon-indef.acc
    'He comes back home at noon.'
  - c) al-kitaab-u fawqa-\*an at<sup>c</sup>-t<sup>c</sup>aawilat-i (*So-called adverb*) the book-nom above-indef.acc the-table-gen 'The book is above the table.'
  - d) al-kitaab-u Sala-\*an at<sup>c</sup>-t<sup>c</sup>awilat-i (*Preposition*) the-book on-ndef.acc the-table-gen 'The book is on the table.'

<sup>&</sup>lt;sup>2</sup> One of distinguishing properties of adverbs is that they can show some form of nunation; that is to take the indefinite accusative Case marker suffix -an.

The ungrammaticality of (4c) would not be predictable, if we take into our account the traditional claim that *fawq* 'above' is an adverb. It does not even share main characteristics of true adverbs: a necessity of taking the indefinite accusative Case marker - *an*. Further, it raises the question of whether this is an adverb at all. In the same connection, the example (4d) is ruled out by the fact that true prepositions such as *Gala* 'on' never take indefinite accusative case morphology that the true adverbs normally take. This might draw true prepositions and this kind of adverbs apart from true adverbs. From the above discussion, I conclude that the behavior of so-called adverbs is different from that of true adverbs and that the so-called adverbs are neither true prepositions nor true adverbs.

### 2.2 Characterization of C1 Ps from C2 Ps

On par with proposals made for other languages, e.g., Terzi (2008) in Greek, Dekany (2009) in Hungarian, Botwinik-Rotem (2006) in Hebrew, Pantcheva (to appear) in Persian etc, this paper argues for a possibility of dividing prepositions of MSA into two classes: C1 Ps and C2 Ps. C1 Ps include true prepositions such as *min* 'from', *ila* 'to', *san* 'about/away from', *sala* 'on', *fi* 'at/in', *masa* 'with', *li*- 'for/to' *ka*- 'like/as' *etc* and C2 Ps which include the so-called adverbs such as *fawqa* 'above', *taħta* 'under', *xalf* 'behind/back', *?amaam* 'in front of/front', *naħwa* 'towards'. Hence, MSA is compatible with the assumption of Svenonius (2006) and Pantcheva (2008) that C1 Ps are a closed class whereas C2 Ps are a larger class. The property of being a larger class may suggest that this class is derived from open-class categories, particularly nouns.

• C1 Ps never stand without a complement whereas C2 P can.

```
5. a) *al-kitaab Sala (at<sup>s</sup>-t<sup>s</sup>awilat-i)
the-book on the-table-gen
'The book is on the table.'
```

b) al-kitaab taħta (at<sup>c</sup>-t<sup>c</sup>awilat-i) the-book under at<sup>c</sup>-t<sup>c</sup>awilat-i

The book is under the table.'

The ungrammaticality of (5a) can be explained by the fact that there is no possibility for the C1 P *Sala* 'on' to stand without a complement. Likewise, the C2 P *taħta* 'under' can occur with or without a complement as shown in (5b).

• C1 P can take another PP as its complement whereas C2 P cannot be.

The examples (6a) and (6b) show the order is crucial: a C1 P must precede a C2 P and not vice versa. That is to say, locative prepositions cannot precede directional ones.

### 2.3 Similarities between C2 Ps and Nouns

In this section, I examine the extent to which C2 Ps retain some nominal properties. According to Samiian (1994) and Ghomeshi (1996), C2 PPs can occupy an argument position.

- 7. a) \*Sala at faawilat-i Wasixun
   on the-table-gen dirty-indef.nom
   'The SPACE on the table is dirty.'
  - b) taħta at<sup>s</sup>-t<sup>s</sup>aawilat-i Wasixun under the-table-gen dirty-indef.nom 'The PLACE under the table is dirty.'

C1 PPs in (7a) cannot occupy an argument position whereas C2 PPs as in (7b) can. This explains a crucial difference between C1 Ps and C2 Ps in that the latter can modify the SPACE (Silent Place).

Another property of Arabic C2 Ps is that very few of them, particularly *xalf* 'behind' *?amaam* 'front' can at times take a definite article and a genitive Case marker.

8. a) waqafa-t xalfa/?amaama as-sayyarat-i

stood-3SF behind /in front of the-car-gen

'She stood behind /in front of the car'.

b) jalasa-t Fi al-xalf-i/al-?amaam-i

sat-3SF in/at the-behind-gen/the-front-gen

'She sat in/at the back/ the front.'

These examples show that C2 Ps retain some nominal properties, i.e., they can be used as nouns with the definite article *al*- as in (8b). However, there are some differences between C2 Ps and nouns.

- Pluralization is a distinct characteristic of nouns but it is not the case with C2 Ps which lacks this nominal property. Arabic nouns takes plural suffixes like -uun/-aat but this is not applicable on C2 Ps.
  - 9. a) muudaris-uun /-aat

teacher-Pl.M /Pl-F

b) xalf/?amaam-\*uun /\*-aat

behind/front - Pl.M/Pl.F

- In MSA, nouns can be modified by adjectives whereas C2 Ps cannot be.
  - 10. a) muudaris-un nasiit-un

teacher-nom.Indef active-nom.Indef

b) ?amaam wad<sup>s</sup>ih-un

Although C2 Ps can take the definite article al- 'the' as in (8b), they do not allow demonstratives to precede them as nouns do.

11. Fi haaða/ðaalika al-bass a)

> In this/that the-bus

> > 'in this/that bus

b) \*fi haaða/ðaalika al-xalf/al-?amaama

> this/that the-behind/the-front In

> > 'in this/that behind/front'

#### 2.4 Silent PLACE and AxPart in MSA

Kats & Postal (1994) argue for the presence of a noun Silent PLACE in English. They claim that the single-words here and there are identical to complex adverbials at this place and at that place respectively. The difference is that a Place noun is silent in the former but overt in the latter. This is supported by Kayne's (2004) argument that empty nouns in English can be even overt in some dialects of English as in (12).

#### 12. This here/that there place

Ι

n parallel, MSA has enough empirical evidence for the presence of a Silent PLACE. The Arabic single-word adverbials huuna 'here' and huunaak 'there' have essentially identical meanings to those of complex adverbials fi haaða al-makaan 'at this the place' and fi ðaalik al-makaan 'at that the place' respectively.

Crucially, Arabic C2 PP is possible to occur in the argument position. Consider the example (7b) repeated in (13).

13. Taħta at<sup>c</sup>-t<sup>c</sup>aawilat-i wasix-un

> Under the-table-gen dirty-indef.nom

### 'The PLACE under the table is dirty.'

The example (13) strongly supports the fact that Arabic and English have a uniform structure and the only difference is that Arabic has a Silent PLACE whereas English has an Overt PLACE. This suggests that the C2 P  $ta\hbar ta$  'under' must be located in AxPart in order to modify the Silent Place. Thus, we need to capture the presence of a Silent Place and an AxPart in the language.

# 3. Existing Proposals

There have been several proposals made in literature on internal structure of PPs<sup>3</sup>, namely Svenonius's (2006) AxPart Projection and Pantcheva's (2008) Silent PLACE. The two proposals are more crucial to me in this paper.

# 3.1 Svenonius's AxPart Projection (2006)

Svenonius (2006) argues for the existence of an AxPart projection to host elements exhibiting both nominal and adpositional properties. It is called Axial Part because it hosts the elements that occur in the regions or axial parts of objects. His examples are given in (14) from English.

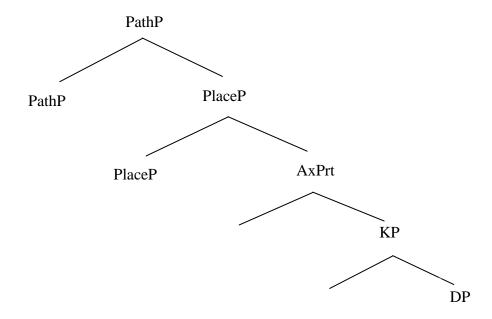
14. a) There was a kangaroo in *front* of the car. (AxPrt)

b) There was a kangaroo in the *front* of the car. (N)

For Svenonius, an AxPart is a category that is distinct from both a noun and an adposition. His basic structure is illustrated in (15).

-

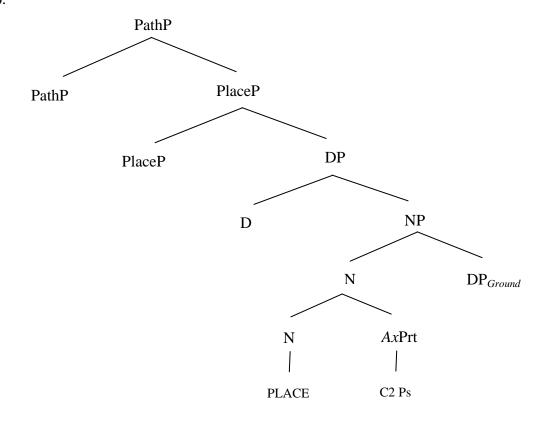
Other Proposals include Koopman (2000), Den Dikken (2003), Svenonius (2004) for minimal distinction between locative and directional Ps and Van Riemsdijk (1990) for an extra projection to host more functional element. I think I do not need them here. In the same connection, Amritavalli (2007) gives distribution of Axial Parts in Kannada.



In the above structure, a PP contains three heads: a Path head, a Place head and an AxPart head. The highest two heads host C1 Ps: a Path head hosts directional C1 Ps such as to and from whereas a Place head hosts locative Ps such as in and on. These functional heads select an AxPart as a complement that licenses the DP complement. But the problem of this proposal is that it cannot capture a Silent PLACE attested in Arabic as shown in (13).

# 3.2 Pantcheva's (2008) Silent Place

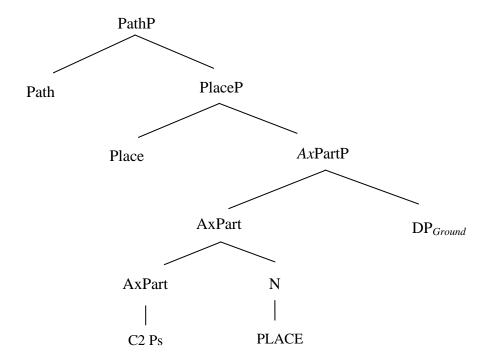
Pantcheva (2008) extends Svenonius's (2006) proposal to include a Silent Noun PLACE selected by a C1 P. That is, the two heads (Path and Place) take a DP containing an *Ax*Part head which in turn modifies a Silent place. Her proposed structure is given in (16).



Introducing a Silent PLACE is essentially attractive but the position of this element in the structure may not be convincing. First, there is no justification for proposing a head N and the Axpart to be located under another N. Second, heads like Path and Place are not able to take directly the Axpart but a DP which contains the AxPart.

### 4. The Account

I attempt to unify Svenonius' (2006) AxPart Projection and Pantcheva's Silent PLACE proposals in a straightforwardly manner. However, it is closer to Svenonius's than it is to Pantcheva's in that the AxPart is taken as a separate category and not just a modifier of the Silent PLACE under N. My proposed structure for both Silent PLACE and AxPart in Arabic PPs is given in (17).



The two highest functional heads are positions for C1 Ps. A Path head is a host for directional C1 Ps, but a Place head for locative C1 Ps. The hierarchical order of Path over Place may be universally favored. These highest functional heads select the *Ax*PartP containing a separate head. I depart from Pantcheva's proposal in that *Ax*Part takes a Silent PLACE as a complement and not just a modifier. This is to ensure the presence of a Silent PLACE whenever a C2 P in the *Ax*Part position exists. I among others borrow Talmy's (1978) term *the Ground* to show an asymmetric relation between the Figure and the Ground.

The proposed structure in (17) can capture several facts related to the behavior of spatial prepositions in MSA.

• It can account for simple spatial prepositional phrases containing a C1 P and a DP complement.

b) fi/Sala al-kitaab-i (Place + DP-Ground)

in/on the book-gen

The Source Path min 'from' or the Goal Path ila 'to' is hosted by a Path head which takes immediately a  $DP_{Ground}$  al-madrasat 'the school'. In the same vein, a Place head hosts prepositions denoting location such as fi 'in' and fala 'on', taking directly the DP-Ground al-kitaab 'the book' as in (18).

It can capture the behavior of spatial prepositional phrase containing C2 Ps modifying a
 Silent PLACE along with a DP complement.

19. taħta/ fawqa at<sup>r</sup>-t<sup>r</sup>aawilat-i (AxPart + PLACE+ DP-Ground)

under/above the-table-gen

'under/above the table'

The C2 P  $ta\hbar t$  'under' or fawq 'above' with a DP<sub>Ground</sub> complement occupies an AxPart head which in turn modifies a Silent PLACE.

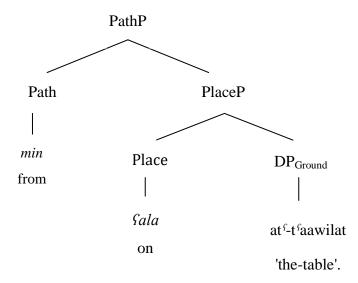
■ It can capture the behavior of a complex structure of spatial PPs that contain two prepositions from the same class, say two C1 Ps, along with their DP<sub>Ground</sub> complement.

20. Min Sala at<sup>s</sup>-t<sup>s</sup>aawilat-i

from On the-table-gen

The Goal Path min 'from' and fala 'on' in (20) are hosted by a Path head and a Place head positions respectively. A Place head takes  $DP_{Ground}$   $at^{f}$ - $t^{f}$ aawilat 'the table'. The truncated structure (21) illustrates the hierarchical order of C1 Ps.

21.



It can account for a combination of two prepositions from different classes.

22. a) min Taħta at
$$^{\varsigma}$$
-t $^{\varsigma}$ aawilat-i ( $Path > C2 P$ )

from under the table '

b) (fi) Tahta at
$$^{\varsigma}$$
-t $^{\varsigma}$ aawilat-i ( $Place > C2 P$ ) in under the-table-gen

The example (22a) shows that a combination of a C1 P and a C2 P is also possible but with a caveat. C2 Ps can never precede C1 Ps. The Goal Path *min* 'from' takes *Ax*Part complement where an *Ax*Part head takes a Silent PLACE. A Place head *fi* 'in' selects C2 P *taħta* 'under' which in turn takes a silent PLACE as a complement. The example (22b) shows something interesting that C1 Ps such as *fi* 'in' denoting Place can be omitted. It suggests that the presence of an *Ax*PartP projection that hosts C2 P *taħta* 'under' shall be associated with a Silent PLACE complement.

It gives an explanation for the Arabic fact that *fi haaða al-makaan* 'at this the place' and *fi ðaalik al-makaan* 'at that the place' have an identical meaning to single-word adverbials *huuna* 'here' and *huunaak* 'there' respectively. This would support Kayne's (2004) assumption for decomposing single-word adverbs 'here' and 'there' in English.

# **5.** Concluding Remarks

The paper is mainly devoted to distinguishing between two classes of spatial prepositions in MSA. It has shown that Arabic spatial Ps are of two types: C1 Ps which contains all pure prepositions and C2 Ps which contain the so-called *dhuruuf al-makaan* 'Adverbs of Place' in traditional Arabic grammar books.

\_\_\_\_\_

### References

- Al-shamsan, I. (1987). Huruuf Al-garr: dalalatiha wa alaqatiha. Al-madani Press, Jeddah.
- Amritavalli, R. (2007). Parts, Axial part and Next part in Kannada. *Tromso Working Papers on Language & Linguistics; Nordlyd* 34.2, special issue on Space, Motion, and Result, ed. by Monika Basic, Pantcheva, Son and Svenonius, pp. 86-101. CASTI.
- Botwinik-Rotem, I.(2006). Why are they different? An exploration of Hebrew locative PPs. In *Proceedings of Conference on Syntax and Semantics of Spatial P*. Utrecht, 2-4 June, 2006.
- Dekany, E. (2009). The nanosyntax of Hungarian postpositions. *Special issue on Nanosyntax*, ed. Peter Svenonius, Gillian Ramchand, Michal Starke, and Knut Tarald Taraldsen, pp. 41–76.CASTL, Tromsø.
- Fassi-Fehri, A.(1993). Issues in the Structure of Arabic Clauses and Words. Dordrecht: Kluwer.
- Ibn Siraj A. (1986), *Alawsuul fi al-nahaw*. Al-haniji Library: Cario.(third edition)
- Kayne, R.(2004). Here and there. IN *Lexique, Syntax et Lexique-Grammaire/Syntax, Lexis& Lexicon-Grammar*: Papers in Honor of Maurice Gross, edited by C. Leclere, E. Laporte, M.Piot, and M.Silberztein, pp.253-275. John Benjamins, Amsterdam.
- Koopman, H. (2000). Prepositions, Postpositions, circumpositions, and particles. In *The syntax of Specifiers and Heads*, edited by Hilda Koopman,pp. 204-260. Routledge, London.
- Mohammad, M. A. (1999). Checking and licencing inside DP in Palestinian Arabic. In E. Benmamoun (Ed.), *Perspectives on Arabic Linguistics XII: Papers from the twelfth annual symposium on Arabic Linguistics*, pp. 27–44. Amsterdam: John Benjamins Publishing Compan
- Pantcheva, M.(2006). Persian Preposition Classes. In *Nordlyd: Tromso Working Papers in Linguistics*, 33.1, edited by Peter Svenonius, pp. 1-25. CASTL, Tromso.
- Pantcheva, M. (2008). The Place of PLACE in Persian. In *Proceedings of conference on Syntax and Semantics of Spatial P*, Utrecht, 2-24 June, 2006.

- Ritter, E. (1991). Two functional categories in noun phrases: Evidence from Modern Hebrew. Syntax and Semantics: Perspectives on Phrase Structure: Heads and Licensing 25, 37–62.
- Samiian, V. (1994). The Ezafe Construction: Some implications for the theory of X-bar Synatx. In *Persian Studies in North America*, edited by Mehdi, Marashi,pp. 17-41. Iranbook, Bethesda, Maryland.
- Sibawayhi, Amr. 8th century [1938]. *Al-Kitaab*. Cairo: Bulaaq.
- Siloni, T. (2001). Construct states at the PF interface. *Linguistic Variation Yearbook 1*, 229–266.
- Svenonious, P. (2008). Spatial P in English. In Guglielmo Cinque and Luigi Rizzi (Eds.). To appear in Cartography of Syntactic Structures, vol. 6, Oxford university Press.
- Svenonius, P., (2006). Adpositions, particles and the arguments they introduce. in: *Reuland*, *E*, *Battacharya*, *T.*, *Spathas*, *G*., (Eds.) John Benjamins, Amesterdam, in press.
- Svenonius, P.(2006). The Emergence of Axial Parts. In *Nordlyd: Tromso Working Papers in Linguisitics*, 33.1, (Ed) by Peter Svenonius, pp.50-70. CASTL, Tromso.
- Terzi, A. (2008). Locative Prepositions as Modifiers of an Unpronounced Noun. *Proceedings* of the 26th West coast Conference on Formal Linguistics WCCFL26. 471- 479
- Terzi, A. (2007). Locative Prepositions and Place. In Cinque, G., Rizzi, L. (Eds.), *The cartography of PPs*, Oxford University Press, Oxford, in Press.
- Wright, W.(1874). *A Grammar of the Arabic Language*. 3rd ed., Cambridge University Press.

Mustafa Ahmed Al-humari, Ph.D. Scholar Centre for Linguistics, SLL & CS Jawaharlal Nehru University New Delhi 110067 India mustafa4008@gmail.com