

10. Arabic Summary

السمات النحوية والدلالية للتراكيب التي تسمح بالتحول من حالة المجرور إلى حالة الفاعل في العربية والإنجليزية

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الملخص العربي :

تهدف هذه الدراسة إلى الكشف عما إذا كانت اللغة العربية تسمح بظاهرة "التحول من حالة المجرور إلى حالة الفاعل" Oblique Subject Alternations ، و تتطرق كذلك إلى علاقة التراكيب التي تسمح بهذه الظاهرة بمنظومة "الأدوار الدلالية" Semantic Roles السائدة في نظريات الأدوار الدلالية مثل:

Beavers 2004, Ackerman & Moore 2001 , Croft 1998, Wechsler (1995) . كما تهدف الدراسة إلى التوصل إلى أهم أوجه الاختلاف و Grimshaw 1991 and التشابه بين العربية والإنجليزية فيما يتعلق بهذه الظاهرة.

وقد شملت الدراسة خمسة أنماط من التراكيب التي تسمح بالتحول من حالة المجرور إلى حالة الفاعل، وذلك حسب الدور الدلالي ذات الصلة، وتبين أن العربية تسمح بأربعة من هذه الأنماط بينما تسمح الإنجليزية بالخمسة أنماط، وقد كشفت الدراسة كذلك عن أوجه الاختلاف و التشابه بين اللغتين فيما يتعلق بالفرق بين مفهومي "الوساطة" و "التيسر" Facilitating /Intermediary Levin (1993) Distinction ومفهوم "التأثير" (Affectedness) Tenny (1987) و كذلك استخدام العربية "للوحدة الصرفية" -ta- وعلاقة ذلك بظاهرة التحول من حالة المجرور إلى حالة الفاعل.

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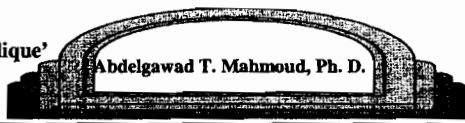
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[sh]	Voiceless alveo-palatal fricative	ش
[x]	Voiceless uvular fricative	خ
[gh]	Voiced uvular fricative.....	غ
[h]	Voiceless glottal fricative	هـ
[r]	Voiced alveolar flap/trill (when geminate).....	ر
[l]	Voiced alveolar lateral.....	ل
[m]	Voiced bilabial nasal.....	م
[n]	Voiced alveolar nasal.....	ن
[y]	Voiced palatal glide	ى
[w]	Voiced bilabial round glide.....	و
[i]	High front vowel.....	كسرة
[a]	Low front vowel	فتحة
[u]	High back rounded vowel.....	ضمة

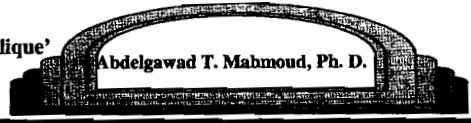
Appendix 2: Abbreviations used in the study are listed below in alphabetical order:

Acc.	Accusative Case
Arg.	Argument
Gen.	Genitive Case
Intrans.	Intransitivizer Morpheme
Nom.	Nominative Case
NP	Noun Phrase
PAS	Predicate Argument Structure
PP	Prepositional Phrase
Ref	Reflexive
Trans.	Transitive
V	Verb

8. Appendices

Appendix 1: Symbols Used to Represent the Arabic Data: These symbols are listed below with their corresponding Arabic graphemes. Consonant gemination and vowel lengthening are represented by doubling the respective consonant or vowel.

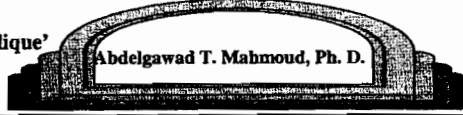
[b]	Voiced bilabial stop.....	ب
[t]	Voiceless dento-alveolar stop	ت
[T]	Voiceless dento-alveolar emphatic stop	ط
[d]	Voiced dento-alveolar stop	د
[D]	Voiced dento-alveolar emphatic stop	ض
[k]	Voiceless velar stop	ك
[q]	Voiceless uvular stop	ق
[?]	Voiceless glottal stop	ء
[j]	Voiced alveo-palatal affricate	ج
[H]	Voiceless pharyngeal fricative	ح
[']	Voiced pharyngeal fricative.....	ع
[f]	Voiceless labio-dental fricative	ف
[θ]	Voiceless dental fricative	ث
[đ]	Voiced dental fricative	ذ
[đ̣]	Voiced dental emphatic fricative	ظ
[s]	Voiceless dento-alveolar fricative.	س
[S]	Voiceless dento-alveolar emphatic fricative	ص
[z]	Voiced dento-alveolar fricative..	ز



languages, 'intermediary' instruments can turn up as subjects, while 'facilitating' instruments cannot.

Fifth, in English the 'source' subject alternation is restricted to the verbs whose action involves a source of benefit. In Arabic, on the other hand, this alternation is more productive in the sense that verbs other than those whose actions involve a source of benefit allow for this alternation. As illustrated in Section 6.3, this difference between English and Arabic is due to a basic morphological difference between the two languages. Specifically, while Arabic employs the infix *-ta-* as a productive device for the derivation of the 'source' subject alternation, English does not have a parallel morphological device.

Sixth, the treatment of the notion of subject in Arabic grammar on the basis of morphosyntactic principles only without reference to the semantic properties of the subject would obscure the diversity of the semantic roles associated with this notion. This type of morphosyntactic treatment does not capture the semantic generalizations which apply to the notion of subject, nor does it capture the syntactic implications associated with these semantic generalizations.



similarities between English and Arabic regarding the 'oblique' subject alternations have been characterized .

Five types of the 'oblique' subject alternations were included in this study: the 'instrument' subject alternation, the 'natural force' subject alternation, the 'source' subject alternation, the 'location' subject alternation and the 'locatum' subject alternation. Below is a list of the main conclusions and findings of this study:

First, the main distinctive feature of the phenomenon of 'oblique' subject alternations in both languages is that an oblique argument associated semantically with a variety of semantic roles (and morphologically with the genitive case marker in Arabic) can turn up in another variant as a subject (with a nominative marker in Arabic).

Second, while English allows for the five alternations discussed in this study, Arabic allows for four alternations only. As illustrated in Section 6.4. Arabic does not allow for the 'location' subject alternation.

Third, with the exception of the 'location' subject alternation, the actions depicted by the verbs that allow for these alternations in both languages are compatible with the notion of 'affectedness'.

Fourth, both languages exhibit the same behavior regarding the 'intermediary'/'facilitating' distinction. Specifically, in both

'locatum' role (i.e. the substance) and morphologically with the genitive case marker in (46.a - 50.a) turns up as a 'locatum' subject with a nominative marker in (46.b - 50.b). Hence, the Arabic verbs used in (46 - 50), just like their English counterparts in (41.b - 45.b), allow for the 'locatum' subject alternation. (Other Arabic transitive verbs that allow for this alternation include the following: *zaxrafa* 'enrich' *wassaxa* 'dirty' *ghaTTa* 'cover' *kasa* 'coat' *lawwaḥa* 'contaminate' *dannasa* 'impure' *dahana* 'anoint' *lamma'a* 'polish' *naḍḍafa* 'clean' *laTTaxa* 'stain' and *Hajaba* 'veil').

Finally, it should be noted that verbs which allow for the 'locatum' subject alternation in both languages are compatible with the notion of 'affectedness'. In other words, in both languages, the action depicted by the verb that allows for this alternation implies that the object argument undergoes some change that is brought about by the subject argument.

7. Conclusions

In this study I have shown that the Arabic language exhibits the phenomenon of 'oblique' subject alternations. I have also investigated the relevance of these alternations to the semantic role hierarchy as invoked by the semantic role theories. In addition, the syntactic, the semantic and the morphological differences and

46. a. mala?tu zzujaajata bilmaa?i
filled-I the-bottle-Acc. with-the-water-Gen.
'I filled the bottle with water.'
- b. mala?a lmaa?u zzujaajata
filled the water -Nom. the-bottle-Acc..
'The water filled the bottle.'
47. a. zayyantu lmadxala bizzuhuuri
decorated- I the-entrance-Acc. with-the-flowers-Gen..
'I decorated the entrance with the flowers.'
- b. zayyanat izzuhuuru lmadxala
decorated the-flowers-Nom. the-entrance-Acc..
'The flowers decorated the entrance.'
48. a. ?aHaaTu lmanzila bil?ashjaari
surrounded-they the-house-Acc. with-the-trees-Gen.
'They surrounded the house with the trees.'
- b. ?aHaaTaT il?ashjaaru lmanzila
surrounded the-trees-Nom. the-house -Acc
'The trees surrounded the house.'
49. a. ?aghlaqu TTariiqaa bilHawaajjizi
blocked-they the-road-Acc. with-the-barriers-Gen.
'They blocked the road with the barriers.'
- b. ?aghlaqat ilHawaajjizu TTariiqaa
blocked the-barriers-Nom. the-road-Acc.
'The barriers blocked the road.'
50. a. Tawwaqu lmakaana bil?ashjaari
surrounded-they the-place-Acc. with-the-trees-Gen.
'They surrounded the place with the trees.'
- b. Tawwaqat il?ashjaaru lmakaana
surrounded the-trees-Nom. the-place-Acc.
'The trees surrounded the place.'

As illustrated by the data above, the Arabic verbs that occur with the 'agent' subjects and an oblique PP in (46.a - 50.a) are alternatively used with the "locatum" subject in (46.b -50.b). Put differently, the oblique argument associated semantically with the

entity that fills in a certain 'location', while the latter- as explained in Section 6.4 - refers to the location or the container of a certain substance or entity. Consider the following examples:

41. a. I filled the bottle with water.
b. The water filled the bottle.
42. a. I decorated the entrance with the flowers.
b. The flowers decorated the entrance.
43. a. I adorned the house with the plants.
b. The plants adorned the house.
44. a. They blocked the road with the barriers.
b. The barriers blocked the road.
45. a. They surrounded the place with the trees.
b. The trees surrounded the place.

As illustrated above, verbs that allow for the 'locatum' subject alternation occur with the 'agent' subject and an oblique PP as in (41.a - 45.a). Alternatively, these verbs occur with the 'locatum' 'oblique' subject as in (41.b - 45.b). In other words, the oblique argument associated with the 'locatum' role in (41.a-45.a) turns up as a 'locatum' subject in (41.b - 45.b). According to Levin and Hovav (1995) and Levin (1993), other English verbs that allow for this alternation include the following: *adorn, anoint, bandage, bombard, carpet, coat, contaminate, cover, dam, dapple, deck, decorate, deluge, dirty, dot, encircle, enrich, infect, interweave, ornament, pollute, season, stain, surround* and *veil*.

Arabic, on the other hand, allows for the 'locatum' subject alternation. Compare the English data given in (41- 45) with the Arabic data given below:

(*taxziina*) '*ishreena Sanduuqan* 'The room is sufficient for (storing) twenty boxes'. Thus, based on the amount of data presented above, one may conclude that, unlike the other 'oblique' subject alternations discussed in this paper, the 'location' subject alternation does not seem to be possible in Arabic.

As pointed out earlier, the action depicted by the English verbs that allow for the 'location' subject alternation is not compatible with the notion of 'affectedness' in the sense that the action depicted by these verbs does not imply that the subject argument brings about some change that affects the object. The Arabic counterparts of these verbs have the same semantic property. The action depicted by these verbs (e.g. *?ajlasa* 'seat, Trans. V' and *xazzana* 'store, Trans. V') does not imply a change of state that affects the object argument. However, unlike their English counterparts, these verbs do not allow for the 'location' subject alternation.

6.5. 'Locatum' Subject Alternation

According to Levin and Hovav (1995) and Levin (1993), the term 'locatum' is used to refer to the 'locatum' argument, i.e. the argument associated with the substance or entity whose 'location' is described by the verb. The difference between the argument associated with the 'locatum' role and the argument associated with the 'location' role is that the former refers to the substance or the

'The perch seats three children.'

39. a. ?namnaa θalaaθata ?aTfaalin 'ala ssariiri
slept (Trans.)-we three-Acc. children-Gen. on the- bed-Gen.

'We slept three children on the bed.'

b. *yuniimu ssariiru θalaaθata ?aTfaalin
sleeps (Trans.) the-bed-Nom. three-Acc. children-Gen.

'The bed sleeps three children.'

40. a. xazzanna 'ishriina Sanduuqan fi lghurfati
stored-we twenty-Acc. box-Acc. in the-room-Gen.

'We stored twenty boxes in the room.'

b. *tuxazzin lghurfatu 'ishriina Sanduuqan
store the-room-Nom. twenty-Acc. box-Acc.

'This room stores twenty boxes.'

As illustrated by the data above, the oblique arguments associated semantically with the 'location' role and morphologically with the genitive case marker in (38.a – 40.a), unlike their English counterparts in (35.a-37.a), cannot turn up as a 'source' subject. Hence, the 'location' subject alternations in (38.b – 40.b) are ungrammatical. Instead of these ungrammatical constructions, Arabic employs alternative constructions. For instance, instead of **yujliso lmiq'adu θalaaθata ?aTfaalin*. 'The perch seats three children', the following construction is used: *yattasi' lmiq'adu θalaaθata ?aTfaalin* 'The perch is sufficient for three children'. Similarly, instead of **yuniimu ssariiru θalaaθata ?aTfaalin*, Arabic employs the following construction: *yattasi' ssariiru θalaaθata ?aTfaalin* 'The bed is sufficient for three children'. In the same way, instead of **tuxazzin lghurfatu 'ishriina Sanduuqan*, Arabic employs this construction: *tattas'u lghurfatu*

35. a. Five people sleep in each room.
 b. Each room sleeps five people.
36. a. We seated three people on one perch
 b. One perch seats three people.
37. a. We stored twenty boxes in this room.
 b. This room stores twenty boxes.

As illustrated by the English examples above, verbs that allow for the 'location' subject alternation occur with the 'agent' subject and an oblique PP as in (35.a-37.a), and they are alternatively used with the 'location' oblique subject as in (35.b-37.b). In other words, the oblique argument associated with the 'location' role in (35.a-37.a) turns up as a 'location' subject in (35.b-37.b). As pointed out by Perlmutter & Postal (1984) and Levin (1993), the following English verbs allow for the 'location' subject alternation: *carry, contain, fit, feed, hold, house, include, incorporate, seat, serve, sleep, store, take, and use*. It should be noted here that the action depicted by these verbs does not seem to be compatible with the notion of 'affectedness'. In other words, the action depicted by these verbs does not imply that the subject argument brings about some change that affects the object argument.

Arabic, by contrast, does not seem to allow for the 'location' subject alternation. Compare the English data given in (35-37) with the Arabic data given below:

- | | | | | | |
|--------|--|-----------------|---------------|---------------|------------------|
| 38. a. | ?ajlasnaa | θalaaθata | ?aTfaalin | 'ala | lmiq'adi |
| | seated-we | three-Acc. | children-Gen. | on | the- perch -Gen. |
| | 'We seated three children on one perch.' | | | | |
| b. | *yujliso | lmiq'adu | θalaaθata | ?aTfaalin | |
| | seats | the- perch-Nom. | three-Acc. | children-Gen. | |

'The people got annoyed due to the scene.'

b. ?az' aja	almashhadu	nnaasa
annoyed	the-scene-Nom.	the-people-Acc.

'The scene annoyed the people.'

34. a. taxawwafa	nnaasu	mina	l?amri
felt afraid	the-people-Nom.	form	the-matter-Gen.

'The people felt afraid of the matter.'

b. ?axaafa/xawwafa	al?amru	nnaasa
frightened	the-matter-Nom.	the-people-Acc.

'The matter frightened the people.'

On the basis of the data presented above, it is evident that the 'source' subject alternation in Arabic is not restricted to the verbs whose action involves a source of benefit as it is the case in English. Rather, as illustrated by the Arabic data in (28-34), this productivity of the 'source' subject alternation in Arabic is due to a basic morphological difference between the two languages. Specifically, while Arabic employs a productive morphological device whereby a systematic relation holds between the reflexive constructions in (28.a-34a) and their causative counterparts in (28.b-34.b), English does not have a parallel morphological device.

6.4. 'Location' Subject Alternation

Verbs that allow for the 'location' subject alternation take oblique subjects that can be semantically characterized as 'locations'. In other words, these verbs are used with 'location' subjects to describe the capacity of the 'location' with respect to the action depicted by the verb. Consider the English examples below, which are taken from Levin (1993:82):

have reflexive/causative interpretation allow for the 'source'

subject alternation. Consider the following constructions:

28. a. sa'ida nnaasu binnaba?i
 felt happy the people-Nom. with the-news-Gen.
 'The people felt happy with the news.'
- b. ?as'da nnaba?u nnaasa
 made happy the-news-Nom. the-people-Acc.
 'The news made the people happy.'
29. a. fariHa nnaasu bi nnaba?i
 felt/were pleased the people-Nom. with the-news-Gen.
 'The people felt/were pleased with the news.'
- b. ?afraHa nnaba?u nnaasa
 made pleased the-news-Nom. the-people-Acc.
 'The news pleased the people.'
30. a. raDiya nnaasu bi lHalli
 felt content the people-Nom. with the-solution- Gen.
 'The people felt content with the solution.'
- b. ?arDa lHallu nnaasa
 made- content the- solution-Nom. the-people-Acc.
 'The solution made the people feel content'
31. a. taHarraja nnaasu mina lmawqifi
 felt embarrassed the people-Nom. from the- situation -Gen.
 'The people felt embarrassed from the situation.'
- b. ?aHraja lmawqifu nnasa
 embarrassed the-situation-Nom. the-people-Acc.
 'The situation embarrassed the people.'
32. a. ghaDiba nnaasu min haada l'amri
 felt angry the people-Nom. from this the-situation -Gen.
 'The people felt angry due to this matter.'
- b. ?aghDaba haada l'amru nnaasa
 angered this matter-Nom. the-people-Acc.
 'This matter angered the people.'
33. a. ?inza'aja nnaasu mi almashhadi
 got annoyed the-people-Nom. from the-scene-Gen.

b. nafa'a	lmashruu'u	nnaasa
profited	the-project-Nom.	the-people-Acc.
'The project has profited the people'		
27. a. ?ightana	nnaasu	mina lmashruu'i
to get rich-Ref	the-people-Nom.	from the-project-Gen
'The people have become rich due to the project'		
b. ?aghana	lmashruu'u	nnaasa
made-rich	the-project-Nom.	the-people-Acc.
'The project has made the people rich.'		

As illustrated by the data above, the Arabic verbs that occur with the 'agent' subjects in (25.a–27.a) are alternatively used with the 'source' subject in (25.b–27.b). In other words, the argument associated semantically with the 'source' role and morphologically with the genitive case marker in (25.a–27.a) turns up as a 'source' subject with a nominative marker in (25.b–27.b). It is also noted that when the verb occurs with 'source' subject, the 'agent' argument is no longer expressed. Hence, based on the data above, Arabic allows for the 'source' subject alternation.

Careful morphological/semantic examination of the constructions given in (25-27) reveals that when the verb is used with the oblique PP as in (25.a–27.a), it implies a reflexive interpretation due to the infixation of the morpheme *-ta-*. By contrast, when the verb is used with the oblique subject as in (25.b–27.b), it has a causative interpretation. The claim made here about the reflexive/causative interpretation is supported by further evidence whereby some of the verbs of psychological states that

associated with these subjects is the 'source' role. The 'source' subject alternation occurs with certain verbs of 'benefiting' that take as 'oblique' subject the 'source' of the benefit. As illustrated by the English example below, these verbs occur with the 'agent' subject and an oblique PP as in (24.a), and they are alternatively used with the 'source' oblique subject as in (24.b). It is also noted that, just like the other 'oblique' subject alternations, when the verb occurs with the 'source' argument as its 'oblique' subject, the 'agent' argument is no longer expressed.

24. a. The people will benefit from the project.

b. The project will benefit the people.

As pointed out by Levin (1993: 83), this type of 'oblique' subject alternation appears to be found with very few verbs in English, (e.g. *benefit* and *profit*).

Let us examine the data below to see if Arabic allows for the phenomenon of 'source' subject alternation:

- | | | | |
|--|-----------------|-----------------|------------------|
| 25. a. ?istafaada | nnaasu | mina | lmashruu'i |
| benefited-Ref. | the-people-Nom. | from | the-project-Gen. |
| 'The people have benefited from the project' | | | |
| b. ?afaada | lmashruu'u | nnaasa | |
| benefited-Caus. | he-project-Nom. | the-people-Acc. | |
| 'The project has benefited the people.' | | | |
-
- | | | | |
|---|-----------------|------|------------------|
| 26. a. ?intafa'a | nnaasu | mina | lmashruu'i |
| profited-Ref | the-people-Nom. | from | the-project-Gen. |
| 'The people have profited from the project' | | | |

- b. Saharat innaaru lHadiida
 melted the-fire-Nom. the- iron -Acc.
 'The fire melted the iron.'

As illustrated by the data above, the Arabic transitive verbs used in these constructions occur with the 'agent' subjects as in (20.a –23.a), and they are alternatively used with the 'natural force' subject as in (20.b –23.b). It is also noted that when the verb occurs with 'natural force' subject, the 'agent' argument is no longer expressed. This means that Arabic indeed allows for the 'natural force' subject alternation. It should be pointed out that when referring to this type of alternation, Levin used verb *dry* only. However, as illustrated by the English translations in (20–23), the English counterparts of the Arabic verbs included in these constructions allow for the 'natural force' subject alternation.

It is also noted that, just like verbs that allow for the 'intermediary' instrument alternations, verbs which allow for the 'natural force' subject alternation in both languages (e.g. *jaffafa* 'dry' *saxxana* 'heat', *jammada* 'freeze' and *Sahara* 'melt') are compatible with the notion of 'affectedness'. In other words, in both languages, the action depicted by these verbs implies that the subject argument brings about some change that affects the object argument.

6.3. 'Source' Subject Alternation

This type of 'oblique' subject alternations is characterized as 'source' subject alternation in the sense that the semantic role

'natural force' subject as illustrated in (18.b-19.b). It is also noted that, just like the 'instrument' subject alternation, when the verb occurs with the 'natural force' subject, the 'agent' is no longer expressed.

It is sometimes difficult to draw the line between noun phrases that qualify as 'natural forces', and those that qualify as 'instruments'. However, as pointed out by Levin, the two notions are more likely to be treated as distinct notions. (For a discussion of this issue, see Levin 1993 and Wechsler 1995). Let us examine the data below to see whether Arabic allows for the 'natural force' subject alternation:

- | | | | | |
|--------|------------------------------------|--------------------------------|----------|--------------------------------|
| 20.a. | jaffaftu
dried-I | lmalaabisa
the-clothes-Acc. | fi
in | lhawaa?i
the-air-Gen. |
| | 'I dried the clothes in the air.' | | | |
| b. | jaffafa
dried | lhawaa?u
the-air-Nom | | lmalaabisa
the-clothes-Acc. |
| | 'The air dried the clothes.' | | | |
| 21.a. | saxxantu
heated-I | lmaa?a
the water-Acc. | fi
in | shshamsi
the-sun-Gen. |
| | 'I heated the water in the sun.' | | | |
| b. | saxxanat
heated | ishshamsu
the-sun-Nom. | | lmaa?a
the-water-Acc. |
| | 'The sun heated the water.' | | | |
| 22. a. | jammadtu
froze-I | ssamaka
the-fish-Acc. | fi
in | θθalji
the-ice-Gen. |
| | 'I froze the fish in the ice.' | | | |
| b. | jammada
froze | θθalju
the-ice-Nom. | | ssamaka
the-fish-Acc. |
| | 'The ice froze the fish.' | | | |
| 23. a. | Saharu
melted-they | lHadiida
the-iron-Acc. | fi
in | nnaari
the-fire-Gen. |
| | 'They melted the iron in the fire' | | | |

and *qatala* 'kill') are also compatible with the notion of 'affectedness'. In other words, the action depicted by these verbs implies that the subject argument brings about some sort of change that affects the object argument. By contrast, verbs which are compatible with 'facilitating' instruments (e.g. *kataba* 'write', *shariba* 'drink' *ra?a* 'see' and *?a'lana*, 'announce') are incompatible with the notion of 'affectedness' in the sense that the action depicted by these verbs does not imply that the subject argument brings about some change that affects the object argument. (For an elaborate discussion of the notion of 'affectedness' and its syntactic implications, see Tenny 1987.)

6.2. 'Natural Force' Subject Alternation

To illustrate what is meant by this type of 'oblique' subject alternation, consider the English examples below, which are taken from Levin (1993):

18. a. I dried the clothes in the sun.
 b. The sun dried the clothes.
19. a. I dried the clothes in the air.
 b. The air dried the clothes.

'Oblique' subjects of this type are characterized as 'natural forces' in the sense that the semantic role associated with these subjects is the 'natural force' role. In other words, the transitive verbs used in these constructions occur with the 'agent' subjects, as illustrated in (18.a –19.a), and they are alternatively used with the

14. a. *katabtu ddarsa bilqalami*
 wrote-I the-lesson-Acc. with-the-pen-Gen.
 'I wrote the lesson with the pen.'
 b. **kataba lqalamu ddarsa*
 wrote the-pen-Nom. the-leson.Acc.
 '*The pen wrote the lesson.'
15. a. *sharibtu l'aSiira bilmaSSaaSati*
 drank-I the-juice -Acc. with-the-straw -Gen.
 'I drank the juice with the straw.'
 b. *.*sharibat ilmaSSaaSatu l'aSiira drank*
 the-straw-Nom. the-juice -Acc.
 '*The straw drank the juice.'
16. a. *ra?aytu lqaariba bilminḍaari*
 saw-I the-boat-Acc. with-the-telescope-Gen.
 'I saw the boat with the telescope.'
 b. **Ra?a lminḍaaru lqaariba*
 saw the-telescope-Nom. the-boat
 '*The telescope saw the boat.'
17. a. *?a'lantu nnaba?a bimukabbir iSSawti*
 announced-I the-news -Acc. with-the-mike -Gen.
 'I announced the news with the mike.'
 b. **mukabbir uSSawti ?a'lana nnaba?a*
 the-mike-Nom. announced the-news -Acc.
 '*The mike announced the news.'

As illustrated by the English translation, the English counterparts of *kataba*, *shariba*, *ra?a* and *?a'lana* are incompatible with 'intermediary' instruments because they take 'facilitating' instruments. Hence, English verbs such as *write*, *drink*, *see*, *announce* - just like their Arabic counterparts - do not allow for the 'instrument' subject alternation.

It is noted that, in both languages, verbs which are compatible with 'intermediary' instruments (e.g. *jaraHa* 'wound'

examples below, I will examine the compatibility of other verbs with the 'intermediary'/'facilitating' distinction.

12. a. *qatala* 'aliyyun lHasharata bissummi
 killed Ali-Nom. the-insect-Acc. with-the-poison
 'Ali killed the insect with the poison.'
 b. *qatal* ssummu lHasharata
 killed the-poison-Nom. the-insect-Acc.
 'The poison killed the insect.'

13. a. *jaraHa* 'aliyyun ?aHmada bissikkiinati
 wounded Ali-Nom. Ahmad-Acc. with-the-knife-Gen.
 'Ali wounded Ahmad with the knife.'
 b. *jaraHat* issikkiinatu ?aHmada
 wounded the-knife -Nom. Ahmad-Acc.
 'The knife wounded Ahmad.'

By virtue of the acceptability of (12.b) and (13.b), the Arabic verbs such as *jaraHa* and *qatala* are compatible with 'intermediary' instruments. Therefore these verbs allow for the 'instrument' subject alternation. The English counterparts of these verbs, as illustrated by the English translation, are also compatible with 'intermediary' instruments; hence, English verbs such as *wound* and *kill* allow for the 'instrument' subject alternation.

On the other hand, as illustrated below, Arabic verbs such as *kataba* 'write', *shariba* 'drink' *ra?a* 'see' and *?a'lana*, 'announce' are incompatible with 'intermediary' instruments because they take 'facilitating' instruments. Hence, by virtue of the unacceptability of (14.b), (15.b), (16.b) and (17.b), these verbs do not allow for the 'instrument' subject alternation. Consider the data below:

- b. The hammer broke the window.
 9. a. John ate the rice with a spoon.
 b.*The spoon ate the rice.

This means that a verb like *break* allows for the 'instrument' subject alternation, while a verb like *eat* does not allow for such alternations because it only takes 'facilitating' instruments. It is interesting to note that the 'intermediary'/ 'facilitating' distinction holds true in Arabic as well. Specifically, the Arabic counterpart of *break* allows for the 'instrument' subject alternation, while the Arabic counterpart of *eat* does not. Compare (10) and (11) below:

- 10 a. kasar 'aliyyun shshubbaka bilmiTraqati
 broke Ali-Nom. the-window-Acc. with-the- hammer Gen.
 'John broke the window with a hammer'.
 b. kasart ilmiTraqatu shshubbaka
 broke the- hammer -Nom. the-window-Acc.
 'The hammer broke the window.'
11. a. ?akala 'aliyyun il?urza bilmil'aqati
 ate Ali-Nom. the-rice -Acc. with-the- spoon-Gen.
 'Ali ate the rice with a spoon.'
 b. * ?akalat ilmil'aqatu l?urza
 ate the-spoon-Nom. the-rice -Acc.
 '*The spoon ate the rice.'

Thus, by virtue of the acceptability of (10.b) and the unacceptability of (11.b), a verb like *kasara* allows for the 'instrument' subject alternation because this verb is compatible with 'intermediary' instruments, while a verb like *?akala* does not allow for such alternations because it only takes 'facilitating' instruments.

In fact Levin's discussion of the 'intermediary'/ 'facilitating' distinction was confined to verb *break* and verb *eat*. In the Arabic

function has replaced it. Thus, morphologically, the oblique argument in Arabic alternates between the genitive marker when used as an oblique NP within the PP and the nominative marker when used as a subject NP.

6. Analysis of the 'Oblique' Subject Alternations in Arabic and English

A number of studies (e.g. Beavers 2004, Levin 1993, Levin 1992 Langacker 1991 and Dixon 1991) have dealt with the 'oblique' subject alternations in English. For this reason, the main focus of the analysis undertaken in this paper is on the Arabic 'oblique' subject alternations. Reference to English is primarily for the sake of contrasting the syntactic and semantic features of these alternations in the two languages.

6.1. 'Instrument' Subject Alternation

The English and the Arabic alternations given in (4) and (5) are instances of the 'instrument' subject alternation. 'Oblique' subjects of this type are characterized as 'instrumental' in the sense that the semantic role associated with these subjects is the 'instrument' role. However, as pointed out by Levin (1993), a significant distinction can be made between 'intermediary' instruments, which can turn up as subjects, and 'facilitating' instruments, which cannot. Hence, (8.b) is acceptable, whereas (9.b) is unacceptable. Compare (8) and (9) below:

8. a. John broke the window with a hammer.

roles associated with the English 'oblique' subject alternation given in (4) and its Arabic counterpart given in (5) may be formulated as shown in (6) and (7). Specifically, the representation given in (6) stands for the English alternation given in (4.a) and its Arabic counterpart given in (5.a), while the representation given in (7) stands for the English alternation given in (4.b) and its Arabic counterpart given in (5.b):

6. a. Argument Structure: Arg. 1 Arg.2 Arg. 3
 ↓ ↓ ↓
 b. Grammatical Functions: Subject Object Oblique
 ↓ ↓ ↓
 c. Semantic Roles: Agent Theme Instrument

[e.g. kasara 'aliyyun shshubbaaka bilHajari]
 'Ali broke the window with a stone.']

7. a. Argument Structure: Arg. 1 Arg.2
 ↓ ↓
 b. Grammatical Functions: Subject Object
 ↓ ↓
 c. Semantic Roles: Instrument Theme

[e.g. kasara IHajaru shshubbaaka
 'the stone broke the
 window.']

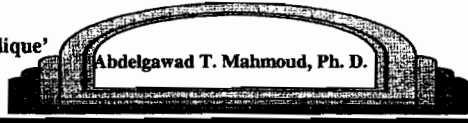
It should be pointed out that, according to this representation, it is assumed that the alternation represented in (7) is derived from the one represented in (6). Accordingly, the subject argument associated with the agent role in (6) does not appear in (7) since the argument associated with the instrument role and the 'oblique'

a change in the number of NPs used with the verb. Thus, in (5.a) there are three NPs, while in (5.b), there are only two NPs. The only difference between the two languages so far has to do with the case marking. While the subject NP in Arabic is marked with the nominative case, the object with the accusative case and the oblique with the genitive case, English NPs do not carry case markers.

It should be pointed out that the distinction between the 'agent' subject *'aliyyun* in (5.a) and the 'instrument' subject *lHajaru* in (5.b) is not captured in the Arabic grammar, simply because the subject is defined according to morphosyntactic principles without reference to the semantic role associated with it. Similarly, the 'oblique' PP *lHajari* in (5.a) is simply treated in the Arabic grammar as *?ism majruur* (i.e. an NP in the Gen. Case). Hence the 'instrument' semantic role performed by this NP is ignored.

5. Theoretical Background

As pointed out in Section 2, the basic assumption behind the semantic role theories is to classify the arguments of the verb according to the semantic role which the participants corresponding to those arguments play in the action depicted by the clause in question. (Wechsler 1995 and Ravin 1990). Thus, according to the theoretical assumptions and the semantic role hierarchy stated in Section 2, the predicate argument structure (PAS) and the semantic



when the verb takes the 'oblique' subject, the 'agent' is no longer expressed, since the 'oblique' subject *the stone* is associated with the semantic role 'instrument'. It should also be pointed out that the 'oblique' subject alternations do not involve a change in transitivity, but they do involve a change in the number of NPs found with the verb. More specifically, the verb is found with one less noun phrase in one alternation than in the other. Hence, in (4.a) we have three NPs, while in (4.b), there are only two NPs.

Arabic, on the other hand, allows for the same 'oblique' subject alternation given in (4). Consider the example below:

5. a. *kasara* 'aliyyun shshubbaaka bilHajari
 broke Ali-Nom. the-window-Acc. With-the-stone-Gen.
 'John broke the window with a stone'.
 b. a. *kasara* lHajaru shshubbaaka
 broke the-stone-Nom. the-window-Acc.
 'The stone broke the window.'

Obviously, based on the data in (5), Arabic seems to exhibit the same syntactic and semantic properties distinctive of the English 'oblique' subject alternation given in (4). As illustrated in (5.a), the transitive verb *kasara* occurs with the 'agent' subject 'aliyyun, and it is alternatively used with the 'oblique' subject *lHajaru* as shown in (5.b). It is also noted that, just like English, when the verb occurs with the 'oblique' subject as in (5.b), the 'agent' is no longer expressed, since the 'oblique' subject *lHajaru* takes the semantic role 'instrument'. Similarly, the Arabic 'oblique' subject alternation given in (5) does not involve a change in transitivity, but it involves

this study is to find out whether Arabic exhibits the phenomenon of 'oblique' subject alternations and to investigate the relevance of the semantic roles associated with the subject to these alternations. In addition, the study attempts to characterize the main similarities and differences between Arabic and English regarding the main semantic, syntactic and morphological properties of the 'oblique' subject alternations.

4. What Are 'Oblique' Subject Alternations?

'Oblique' subject alternations involve verbs that have 'agent' subjects, but alternatively occur with subjects that can be expressed in some type of prepositional phrases. Such subjects have been referred to as 'oblique' subjects because the prepositional phrases (PPs) associated with them are referred to as 'oblique' phrases. Hence, such alternations are known as 'oblique' subject alternations. (See, among others, Beavers 2004, Ackerman & Moore 2001, Levin 1993, Langacker 1991, Dixon 1991, Ravin 1990, Fillmore 1987 and Perlmutter & Postal 1984). Before examining the different types of the 'oblique' subject alternations in Arabic, consider the English example below:

4. a. John broke the window with a stone.
- b. The stone broke the window.

The transitive verb *broke* occurs with the 'agent' subject *John* as illustrated in (4.a), and it is alternatively used with the 'oblique' subject *the stone* as illustrated in (4.b). It should be pointed out that

(For more details regarding the (in) adequacy of the semantic role theories and the semantic role hierarchy, see Malmkjar 2004 Croft 1998 Wechsler 1995 and Grimshaw 1991)

Thus, according to the semantic role hierarchy stated above, the subject arguments in the Arabic constructions given in (1.a –1.d) may be classified as illustrated in (3):

3.a. fataHa	'aliyyun <Agent>	lbaaba
b. fataHa	lmuftaaHu <Instrument >	lbaaba
c. fataHa	rriiHu <Force >	lbaaba
d. ?in-fataHa	lbaabu <Theme >	

3. Objective of the Study

As pointed out in Section 1, the notion of subject in Arabic is generally defined on the basis of purely morphosyntactic principles. Hence, no much attention is given in the Arabic linguistics literature to the issue of subject alternations or the possibility of classifying subjects into a variety of types on the basis of their semantic properties. On the other hand, as stated in Section 2, the definition of subject according to the semantic role theories emphasizes the semantic roles associated with these subjects.

In this study an attempt is made to explore the semantic properties of the subject in Arabic and the syntactic implications associated with these properties. Specifically, the main objective of

2. The Notion of Subject in Modern Linguistics

The relationship between semantics and syntax in general has received substantial attention in modern syntactic theories. For instance, modern lexical semantics theories have shown in enormous studies that the syntactic variations associated with verbs including the subject variations and the semantic roles associated with these subjects are mainly determined by the meaning of the verb (See, among others, Saint -Dizier & Viegas 1995, Levin & Rappaport 1995, Palmer 1994, Levin 1993 and Fillmore 1987). Similarly, modern syntactic theories share the assumption that significant aspects of the syntactic analysis including the syntactic and semantic properties of the subject are determined by the verb meaning. (See, for instance, Bresnan 2001 and 1982, Smith 1999, Perlmutter & Postol 1984).

One of the main approaches of lexical semantic representation is known as the semantic role theories. The basic assumption behind these theories is to classify the arguments of the verb according to the semantic role which the participants corresponding to those arguments play in the action depicted by the clause in question. (See, for instance, Wechsler 1995 and Ravin 1990). Accordingly, these theories usually invoke a semantic role hierarchy similar to the one given in (2) to determine argument selection.

2. Semantic Role Hierarchy:

Agent > Instrument > (Natural) Force > Receptient > Theme > Location > Locatum > Source. (Adapted from Wechsler 1995:7-15)

proposed a functional approach of linguistic analysis where focus is primarily placed on the semantic and contextual properties of forms. (For more details regarding Aljurjani's approach of linguistic analysis, see Aljurjani 1992). Similarly, some of the contemporary Arab grammarians (e.g. Hasan 1996, Saad 1982, and Hassan 1979) have also made references to the relevance of semantics to the syntactic analysis. (For a detailed discussion of the main characteristics of the subject in Arabic, as well as the semantic difference between the subject that 'carries out the action', i.e. *?alqaa?imu bilHadaθ* and the subject that 'undergoes the action', i.e. *?alwaaqi'u 'alayhi lHadaθ*, see for instance Hasan 1996: 62-95).

Nevertheless, despite these references regarding the relevance of semantics to syntactic analysis, the notion of subject in the Arabic grammar is generally defined on the basis of purely morphosyntactic principles. Thus, as illustrated above, the four underlined NPs in the constructions given in (1) are analyzed in the Arabic grammar sources as 'subject marked with the nominative case', (i.e. *faa'ilun marfuu'un biDDammah*), regardless of the significant semantic differences among them. This means that no much attention is given in the Arabic linguistics literature to the issue of subject alternations/ variations or the possibility of classifying subjects into a variety of types that exhibit fundamental semantic differences.

Obviously, the semantic roles associated with the subject in the constructions stated in (1) are significantly different. While the subject in (1.a) is agentive in the sense that it brings about the action depicted by the verb, the subject in (1.b) is a mere 'instrument', and the situation depicted in (1.b) implies that a human agent is probably involved in order for the action to take place. Similarly, the subjects in (1.c) and (1.d) are semantically different: while the former is semantically a 'force' whereby the action takes place, the latter does not cause the action depicted by the verb simply because it undergoes that action. Despite these differences, the underlined NPs in the constructions in (1) are analyzed in the Arabic grammar sources as 'subject marked with the nominative case', (i.e. *faa'ilun marfuu'un biDDammah*). (See, for instance, Al-Andalusi 1998, Naasif et al. 1997 Al-Asmar 1997, Fayyadh 1995 and Ni'mah 1973). In this sense, the notion of subject in Arabic grammar is defined on the basis of purely morphosyntactic principles without reference to the semantic implications underlying this notion.

It should be pointed out that the remark made above would never underestimate the pioneer contributions of the prominent early Arab grammarians, particularly Aljurjani (1992) and Sibawayah (1982), regarding the interface between syntax and semantics and the relevance of semantics and lexical semantics to syntactic analysis. In fact, Aljurjani, who lived in the ninth century, has

alternations discussed in this study with the notion of 'affectedness' (Tenny 1987).

1. The Notion of Subject in Arabic Grammar

The notion of subject in Arabic grammar is generally defined on the basis of purely morphosyntactic principles without reference to the semantic role associated with it. For instance, in the constructions given in (1) below, despite the significant semantic differences between the underlined NPs regarding the action depicted by the verb, these NPs are analyzed in the Arabic grammar as 'subject marked with the nominative case' (i.e. *faa'ilun marfuu'un biDDammah*). Consider these constructions:

- 1.a. fataHa 'aliyyun lbaaba
 opened Ali-Nom. the-door-Acc.
 "Ali opened the door."
- b. fataHa lmuftaaHu lbaaba
 opened the- key-Nom. the-door-Acc.
 "The key opened the door."
- c. fataHa rriiHu lbaaba
 opened the-wind-Nom. the-door-Acc.
 "The wind opened the door."
- d. ?in-fataHa lbaabu
 Intrans.-opened the-door-Nom.
 "The door opened."

(Throughout this paper, reference to Arabic is to the Standard variety. Appendix 1 contains the symbols used to represent the Arabic data together with their corresponding Arabic graphemes).

Abstract

The main objective of this study is to show that Arabic exhibits the phenomenon of 'oblique' subject alternations and to investigate the relevance of these alternations to the semantic role hierarchy as invoked by the semantic role theories (Beavers 2004, Ackerman & Moore 2001, Croft 1998, Wechsler 1995 and Grimshaw 1991). In addition, the study provides a characterization of the main semantic, syntactic and morphological similarities and differences between Arabic and English with respect to these alternations.

Five types of the 'oblique' subject alternations are investigated in this study: the 'instrument' subject alternation, the 'natural force' subject alternation, the 'source' subject alternation, the 'location' subject alternation and the 'locatum' subject alternation. With the exception of the 'location' subject alternation, Arabic allows for these alternations, while English allows for the five alternations.

The study explores the differences and similarities between the two languages regarding such issues as the 'intermediary'/'facilitating' distinction (Levin 1993), the infixation of the Arabic morpheme *-ta-* and its relevance to the derivation of the 'source' subject alternation and the compatibility of the 'oblique' subject

The Syntactic and Semantic Properties of 'Oblique' Subject Alternations in Arabic and English

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