

Arabic Verbs And Their Theta - Grid

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Abstract

This paper discusses the manner in which the Traditional Arab Grammarians classified the Arabic verbs; they, basically, referred to the theory of transitivity for this purpose. As this theory was unable to account for the grammatically and the ungrammatically of various Arabic sentences, we opt for theta - theory of Chomsky (1991) to solve the problems faced by the traditional analysis. With the help of theta - theory, we put Modern Standard Arabic verbs in specific sub - groups on the basis of their semantic. All intransitive verbs require one essential argument. However, the nature of that essential argument differs from verb to verb depending on some semantic factors. For instance, we find that some intransitive verbs may take an agent, others a theme or an experiencer as their argument. Transitive verbs that need two essential argument can also be divided in subgroups on the basis of the types of theta - roles that their argument will have. We find that ditransitive verbs may require three essential argument in a well - formed sentence. We have realized that Arabic, like languages, has some unique verbs that take a CP as one of their argument. The nature of these verbs and their theta - roles have also been discussed in detail in the course of our analysis. As this theory regards NP, IP, PP & CP essential argument, all the problems of classification verbs are solved.

ملخص

تناقش هذه الورقة الطريقة التي صنف بها النحويون العرب أفعال اللغة العربية، حيث اعتمدوا نظرية التعللي مرجعاً لتصنيف الأفعال. وقد لوحظ أن هذه النظرية غير قادرة على إعطاء تصنيفات قواعدية ودلالية لكثير من الجمل الصحيحة وغير الصحيحة في اللغة. وبدلاً لذلك فقد اعتمدنا في بحثنا هذا نظرية theta-theory للعالم Chomsky 1991، التي من خلالها صنفنا أفعال اللغة العربية إلى مجموعات متميزة حسب طبيعتها الدلالية؛ فعلى سبيل المثال الأفعال اللازمة تحتاج إلى سعة دلالية وإحاطة لبنية الجملة، وهذه السمة قد تقوم بالحديث أو يقع عليها الحدث أو تحس وتمارسه لا إرادياً سواء أكان ذلك نفسياً أو حسياً. ولوحظ أيضاً أن الأفعال التمعية هي قسبان: منها ما يحتاج إلى سميتين وأخرى إلى ثلاث سمات دلالية متميزة في الدلالة لتركيب جملة عربية صحيحة. وقد لوحظ أيضاً أن اللغة العربية تحتوي على أفعال خاصة تشكل إحدى سماتها الدلالية جملة تامة. وبما أن النظرية الجديدة اعتبرت كل من CP, IP, PP, NP سمات دلالية وقواعدية ضرورية لبنية الجملة، استطعنا حل المشاكل المترتبة على تصنيف الأفعال.

The Traditional Approach

Arabic is an inflectional language in which a verb can be conjugated into various forms. The Arab grammarians divided the verbs phonologically into (a) trilateral and (b) quadrilateral forms of the root. Their analysis indicates that the maximum number of verbs used in Arabic are trilateral. However, the quadrilateral verbs are less in number and rarely used. They realized that the tri-consonantal form *fa'ala* is the unique base - root for all trilateral verbs and out of which many other forms are derived in different ways to express modifications of the meaning conveyed by the same base - root. As for the quadrilateral verbs, the base - root form is *fa'alala* and out of which three other forms are derived. The resulting forms of the verbs in this fashion do not convey the meaning carried by the base - form as compared to that of the trilateral *fa'ala*. They correspond in their syntactic properties to a few derived forms of the trilateral. At first, we explain the trilateral verb forms the

Arab grammarians' point of view and illustrate the way they used these forms as criteria to classify the Arabic verbs into transitive and intransitive.

The base - form *fa^cala* is generally transitive or intransitive in significance. If the vowel of the second consonant is *a*, the derived forms are either transitive as in *qatala* 'to kill' or intransitive as in *dahaba* 'to go'. The vowel *i* in the same position generally has an intransitive significance; the derived forms indicate a temporary state as in the verb *fariha* 'to be glad'. The vowel *u* in the same position also produces intransitive verbs that indicate a permanent state as in *hasuna* 'to be beautiful'. Out of the paradigm *fa^cala*, the derived forms (i) *fa^{cc}ala*, (ii) *fa^cala*, (iii) *?af^cala* (iv) *?ifta^cala* and (v) *?ista^cala* are generally transitive in significance. The form *fa^{cc}ala* yields transitive verbs that show intensiveness or extensiveness. It implies the intensive sense if the act is done with great violence as in *darraba* 'to make someone beat violently'. likewise, it shows the extensive sense of the verb if the act is done violently either during a long period of time as in *farraga* 'to disperse', or by a number of individuals as *tawwafa* 'to make someone go round often', or by a repeated act as in *qattala*, 'to massacre'. The intensive root *fa^{cc}ala* yields the causative sense of the verb. For instance, the verb which is basically intransitive in the form *fa^cila* as in *fariha* 'to be glad' becomes mono - transitive in *fa^{cc}ala* as in *farraha* 'to gladden someone'; the verb which is mono - transitive in *fa^cala* as in *kataba* 'to write' becomes di - transitive in *fa^{cc}ala* as in *kattaba* 'to make someone write something'. The second form *fa^cala* expresses the effort that acts upon the object, in which case, the concept of reciprocity is created i. e., the effort is accidentally a mutual one as in *qatala* 'to fight with someone'. If the verb in the root *fa^cula* is intransitive and denotes a state as in *khasuna* 'to be rough', it becomes mono - transitive in *fa^cala* and retains the same quality as in *khāṣana* 'to treat someone harshly'. The third form *?af^cala* indicates that if the verb in

fa^cala is intransitive as *jalasa* 'to sit', it becomes a mono - transitive in *?af^cala* as in *?ajlasa* 'to make someone sit down'. However, if the verb is mono - transitive in *fa^cala* as in *?akala* 'to eat', it becomes di - transitive in *?akkala* 'to give someone something to eat' in the new form. The fourth from *?ifta^cala* is basically a transitive verb, it indicates the reflexive sense because it reflects the quality of the object in the form *fa^cala*. For instance, the verb *kasaba* 'to earn' becomes *?iktasaba* 'to earn one's living'. Out of the reflexive form, the reciprocal sense can be derived; this syntactic phenomenon is common in Arabic, for example, the verb *qatala* 'to fight' in *fa^cala* becomes *?iqtatala* 'to fight with someone' in this form. The fifth form *?istaf^cala* converts the factual significance of the verb in *?af^cala* into a reflexive denotation form of the verb. For instance, the verb *?aslama* 'to give up' becomes *?istaslama* 'to give oneself up'.

The paradigm *fa^cala* is also a source of other forms such as: (i) *tafa^{cc}ala*, (ii) *?infa^cala* (iii) *?ifta^cala* (iv) *tafa^cala*, and (v) *?if^calla*. All these forms are generally intransitive in their nature. The first form *tafa^{cc}ala* is a source of inchoative intransitive verbs in Arabic. The intransitive verb reflects the state of object denoted by its transitive equivalent and is brought by to be its result. For instance, the transitive verb *kassara* 'to break something into pieces' becomes *tukassara* 'to get broken into pieces' in the new form. the second source of inchoative intransitive verbs is the base - form *?infa^cala*. The verb, in this case, reflects the quality of the object of the transitive verb in the form of *fa^cala* as in *kasara* 'to break' to be its effect in the intransitive sense in the form of *?infa^cala* as in *?inkasara* 'to get broken into pieces'. The third source of inchoative intransitive verbs in Arabic is the form *?ifa^cala*. The verb in this form changes the result of action happens to the object in the transitive sense into a state in the intransitive sense. For instance, *sawa* 'to roast' is changed into intransitive *?istawa* 'to roast meat' to

denote the state resulted from the act of roasting. The fourth form *tafā'ala* is an intransitive form which is, basically, derived from the intransitive root *fa'ala*. For instance, the intransitive verb *baka* 'to cry' becomes *tabāka* 'to pretend to cry'. However, if the root in *fa'ala* is transitive, as in *qatala*, the resulting form is also transitive as in *taqātala* 'to fight with someone'. The fifth form of this group is *?if'alla* which is very rarely used in Arabic. It normally expresses the colors in an intensive manner. For instance, the color *?asfar* 'yellow' as a noun becomes an intransitive verb as *?isfarra* 'to become yellow' in the form of *?if'alla*.

The second criterion to which the Arab grammarians referred in classifying the verb is the quadriliteral base - form *fa'ala*. It carries the same syntactic properties of the triliteral root *fa'ala*. In other words, this form denotes transitive sense of the verb that shows action as in *dahraja* 'to roll something' and it also denotes intransitive sense of the verb to show intensiveness as in *harwala* 'to run quickly'. There are three other forms derived out of *fa'lala*. These forms includes (i) *tafa'lala* (ii) *?ifa'nala* and (iii) *?if'alalla*. We start with *tafa'lala* which syntactically corresponds to the triliteral root *tafa'ala*. It yields intransitive verbs, for example, the verb *tašaytana* 'to act like a devil' is a specimen of the verbs. The second form *?if'anala* matches the triliteral form *?infa'ala* in producing intransitive sense of verbs. The quadriliteral verbs that belong to this category are less in number and rarely used. The verb *?ibransāqa* 'to flourish' is an example of the verbs. The third form *?if'alalla* is also intransitive and expresses an extensively or intensively high degree of act, state or quality as in *?idlahamma* 'to be very dark', *?itma'anna* 'to be at rest' and *?isma'alla* 'to be very hard' respectively.

The Arab grammarians concluded their analysis that the verbs that designate a state, a condition or a quality are intransitive verbs and can only be in the

active form since they are confined to the subject (as in *marīḍa* 'to be sick'); the verbs that donate an act and take an object are transitive and can be in the active and passive forms as in (*qatala* 'to kill' and *qutīla* 'to be killed') respectively.

The Adopted Approach

The transitivity theory as a paradigm used by the Traditional Arab Grammarians is not an adequate mechanism to categorize the verbs of Arabic in a precise manner. This is because it cannot guarantee the well - formedness of sentences in which a transitive verb is used. For instance, *wada^ca* 'to put' is a mono-transitive verb in Arabic needs only one object NP; however, (1a) is not a well - formed sentence of Arabic.

1a.	* wada ^c - a	al-	kitāb-	a
	put	past, 3 rd , sg, masc, NOM	DET	book ACC

*'He put the book'

1b.	wada ^c - a	al-	kitāb-	a
	put	past, 3 rd , sg, masc, NOM	DET	book ACC
	^c ala	al-	[ṭawīlat table hunāka there]	-i
	on	DET		LOC

'He put the book [on the table'
there]

The difference between (Ia) and (Ib) cannot be shown in terms of transitivity of *wadaʿa* 'to put'; in both the sentences, the object NP *al-kitāba* 'the book' is overt. It can however, be shown by pointing out that (Ib) has a locative NP/or PP, which (Ia) does not have. In other words, the verb *wadaʿa* needs three arguments, namely, the agent, theme and location. The theta - theory of Chomsky (1981, 1986 & 1992) and Chomsky and Lasnik (1991, [1995]) helps us in explaining the ungrammaticality of (Ia) and the grammaticality of (Ib) in a principled manner which the concept of transitivity cannot explain adequately. This is due to the fact that the principles of theta - theory account for the thematic relations of a predicate with its essential arguments. The term "essential argument" is a cover term for the entities that must be overtly used to guarantee the grammaticality of the sentence. The thematic relations ensure that each argument bears one theta - role and each theta - role is given to one and only one argument, (see Chomsky, 1986: 184-185). We opt for theta - theory to categorize, in particular, Modern Standard Arabic verbs into specific semantic classes on the basis of the nature of the theta - roles they might have in their theta - grid. We find that Arabic has intransitive verbs that take one essential. This argument bears the theta - role of agent as discussed in section (1.1), or argument an experiencer as in (1.2) or a theme as in (1.3). It has mono-transitive verbs that take two essential arguments; these arguments bear the theta - roles of agent and theme as discussed in (2.1), or agent and goal as in(2.2), or agent and accompaniment as in (2.3), or experiencer and theme as in(2.4). There are di-transitive verbs that take three essential arguments; these arguments have the theta - roles of agent, theme and goal as discussed in (3.1), or agent, theme and location as in (3.2) or agent, experiencer and theme as in 3.3). The verbs are discussed as follows:

VERBS WITH ONE ESSENTIAL ARGUMENT

Intransitive verbs of Arabic can be classified in sub-groups on the basis of the nature of essential arguments they take. In this paper, we will discuss them separately.

1.1. Verbs That Need Only Agent as an Essential Argument

There are intransitive verbs that take agent as an essential argument. For instance, we can put verbs such as *sabaḥa* 'to swim' in one sub-group, the subject of which has the agentive thematic relation with the verb. We may look at (2) to illustrate this point.

2a	SABAḤA	'to swim':			Agent	
2b	sabaḥ	-a	-t	al	-bint	-u
	swim	past, 3 rd , sg	fem	DET	girl	NOM

'The girl swam'.

(2b) can be expanded, as in (2c):

2c	sabaḥ	-a	-t	al	-bint	-u	^c abra
	swim	past, 3 rd , sg	fem	DET	girl	NOM	across
	al	-nahr	-i				
	DEL	river	LOC				

'The girl swam across the river'.

In (2c), the subject NP *al-bintu* 'the girl' is the essential argument for the verb *sabaḥa* 'to swim' and has the theta - role of agent. The prepositional phrase ^c*abra al-nahr* 'across the river' is the location. It is not essential part of the theta - grid of the verb *sabaḥa* 'to swim'. However, it gives additional information about the place of swimming.

The agentive thematic role is an essential part of the theta - grid of the verb *ṣaraxa* 'to cry', as in (3):

- 3a. *ṢARAXA* 'to cry': Agent
- ab. *ṣarax* -a al -tifl -u
cry past, 3rd, sg, masc DET child NOM
'The child cried'.

(3b) can be expanded into a sentence such as (3c):

- 3c *ṣarax* -a al -tifl -u fi al -firās -i
cry past, 3rd, sg, masc DET child NOM in DET bed LOC
'The child cried in the bed'.

In (3c) the NP *al-tifl* 'the child' is the essential argument. The prepositional phrase *fi al-firās* 'in the bed' is an additional element and has the theta - role of location.

We notice that in (2) and (3) the essential arguments are agents because they voluntarily do the action. Other arguments are adjuncts as they give additional information. Some other verbs of the type are given in (4):

4. i) *ʿada* 'to gallop' ⁽¹⁾ ii) *ḡatasa* 'to dive'
iii) *jalasa* 'to sit' iv) *tazallaja* 'to ski'
v) *zana* 'to commit adultery' vi) *ʿāla* 'to yell'
vii) *rakaʿa* 'to kennl down' viii) *hamasa* 'to whisper'
xi) *sajada* 'to prostrate' (for prayers) ix) *zaḥafa* 'to creep'
xii) *ḥalafa* 'to swear' xii) *masa* 'to walk' ⁽²⁾

All these verbs in Arabic indicate activity (as against 'state').

There are intransitive verbs in Arabic that take only one essential argument; it could be agent if it is [+ voluntary] or theme if it is inanimate. The verb *gādara* 'to depart' illustrates the points, as in (5) and (6) respectively.

5a GĀDARA 'to depart': Agent

5b gadar -a zaid -un ila irbid -i
depart past, 3rd, sg, masc Zaid NOM for Irbid Loc
al - bārihata
DET - yesterday
'Zaid departed for Irbid yesterday'

In (5b), the argument *zaidun* 'Zaid' is the agent; it voluntarily wills the action of departure. However, *gādara* 'to depart' may take an inanimate subject in which case it has the theta - role of the theme, as in (6):

6 ḡādar -a al -qīṭār - u ila
depart past, 3rd, sg, masc DET trsin NOM for
al - ʿqabat - i mundu ṣāʿatayin - i
DET Aqaba LOC for two hours LOC
'The train left for Aqaba two hours ago'

In (6), the argument *al-qīṭāru* 'the train' is the theme because it undergoes the action of departure. Some other verbs of this type that take agent / theme are given in (7):

7 i)	<i>ṣaqata</i>	'to fall'	ii)	<i>waṣala</i>	'to arrive'
iii)	? <i>ihtazza</i>	'to wobble'	iv)	<i>habata</i>	'to come down'
v)	<i>balaga</i>	'to reach'	vi)	<i>ṭāfa</i>	'to roam'
vii)	? <i>inzalaqa</i>	'to slide'	viii)	? <i>ikhtaṭa</i>	'to disappear'
ix)	<i>ṭabata</i>	'to stand firm'	x)	? <i>ata</i>	'to come'
xi)	<i>dahaba</i>	'to go'			

Some Arabic verbs of this type do not have exact equivalents in English. For instance, the Arabic verb ?*abida* 'to run wild like an animal' is different from *rakada* 'to run', though they need the same type of theta - role i. e., the agent.

8a ? ABIDA	'to run wild like an animal':	Agent
8b ? abid	- a	zaid - un
run-wild-like-an-animal	past, 3 rd , sg, masc	Zaid NOM
'Zaid ran wild like an animal'		

(8b) specifies that the argument *zaidun* 'zaid' ran exactly like a wild animal for instance, *tawrun* 'a bull' or ? *asadun* 'a lion', etc). If the agent runs a race so as to exercise or imitate a peaceful animal like a horse while running, we cannot use verb ? *abida*. In this case, we have to use a more general verb like *rakada* 'to run'. as in (9):

9a RAKADA	'to run' Agent			
9b [rakad *?abida]	- a	zaid	- un	bisur ^c atin
run	past, 3 rd , sg, masc	Zaid	NOM	quickly
mitlu	al	- hiṣānu		
like	DEL	horse		
'Zaid ran fast like a horse'				

9c rakad	- a	zaid	- un
*ʔabida			
run	past, 3 rd , sg, masc	Zaid	NOM
'Zaid ran'.			

As the agent *zaidun* 'Zaid' runs like *al-hiṣānu* 'the verb ʔ *abida* 'to run wild like an animal' is not used. Nor can it be used in (9c). Some other verbs that have a more restrictive sense than their English counterparts are listed in 10):

- | | | |
|-------|-----------------------------|--|
| 10 i) | ʔ <i>anīta</i> | '(for a man) to pose as a woman in dress and behaviour' |
| ii) | ʔ <i>ahila</i> | '(for a man) to get ready to marry a girl' |
| iii) | <i>barbara</i> | 'to chat noisely at a stretch' |
| iv) | ʔ <i>inbalaha</i> | 'to behave like a stupid' |
| v) | <i>tarifa</i> | 'to live in luxury' |
| vi) | <i>jakhkha</i> | 'to dress up in a funny manner' |
| vii) | ʔ <i>iḥtaba</i> | 'to sit with one's legs drawn up and rapped in his/her garments' |
| viii) | <i>ḥada</i> | 'to sing while riding a camel' |
| ix) | <i>taḥammaṣa</i> | 'to work with zeal' |
| x) | ʔ <i>adlaja</i> | 'to set out at night' |
| xi) | ʔ <i>istad</i> ʔ <i>aba</i> | 'to act cruelly like a wolf' |
| xii) | <i>samsara</i> | 'to act as a broker' |

We may note that some of these verbs has a meaning, the range of which is narrower than that of its broad English equivalent. For instance, the verb to pose' has a wider range of connotation than the verb ʔ *anīta*, but that does not make a difference insofar as the number of arguments needed by them is

concerned. However, some Arabic verbs are different from English from this point of view. For instance, ? *istakhāra* 'to ask God for guidance' is overtly an intransitive verb which needs only one argument, the agent, whereas the English verb 'to ask' needs three arguments agent, source and theme. The difference can be illustrated by the example in (11):

11. ? istakhār	-a	zaid	- un	fi
ask-God-for-guidance	past,3rd,sg,masc	Zaid	NOM	at
al - masjid	i			
DET mosque	LOC			

'Zaid asked God for guidance at the mosque'

Some other verbs of this type are listed in (12):

12 i)	? istağfara	'to ask God for forgiveness'
ii)	? irtazaqa	'to gain livelihood'
iii)	? irtasa	'to accept bribe'

There are some verbs in Arabic that are basically intransitive but can be used transitively, in which case they take cognate objects (i. e, an object which is derived from the same root of the matrix verb). For instance, we may look at *ḡanna* 'to sing' which is used as an intransitive in (13b) but as a transitive in (13c):

13a	ḠANNA	'to sing': Agent, (Theme)	zaid	- un
13b	ḡann	- a	Zaid	NOM
	sing	past,3 rd ,sg,masc		
		'Zaid sang'		

13c	ḡann	- a	zaid	- un	?uḡniyat	- an
	sing	past,3 rd ,sg,masc	Zaid	NOM	a song	ACC

'Zaid sang a song'.

Another verb of this type is *kaḡaba* 'to lie', as uses in (14):

	KADABA	'to lie' :	Agent, (Theme)	
14b.	kaḡab	- a	^c amr	- un
	lie	past,3 rd ,sg,masc	Amr	NOM

'Amr lied'

14c.	kaḡab	- a	^c amr	- un	kaḡbat	- an
	lie	past,3 rd ,sg,masc	Amr	NOM	lie	ACC

'Amr lied a lie'

We may note that (14c) is a natural expression in Arabic but its English counterpart is not. Some other Arabic verbs that can be used transitively with cognate objects are listed in (15):

15a	i)	<i>maṣa</i>	'to walk'	ii)	<i>nāma</i>	'to sleep'
	iii)	<i>khāfa</i>	'to be scared'	iv)	<i>jalasa</i>	'to sit'
	v)	<i>zaḡrada</i>	'to trill'	vi)	<i>la^ciba</i>	'to play'
15b	vii)	<i>ṣarakha</i>	'to cry'	viii)	<i>ʿaṭasa</i>	'to sneeze'
	i)	<i>raqaṣa</i>	'to dance' (a dance)			
	ii)	<i>rakaḡla</i>	'to run' (a race)			
	iii)	<i>ḡanna</i>	'to sing' (a song)			

We may point out that the English equivalents in (15b) (i. e. 'to dance', 'to run' and 'to sing') are intransitive and can be used transitively to take cognate objects. (See Jackendoff (1990: 185-186)).

1.2. Verbs That Need Experiencer as an Essential Argument

Another type of intransitive verbs takes experiencer rather than agent as the only essential argument. The argument involuntarily experiences the event which can be mental or physical. We may look at (16) to illustrate this point.

- 16a. ^cATASA 'to sneeze'⁽³⁾ Experiencer
 16b. ^catas - a al -rajul - u
 sneeze past,3rd,sg,masc DET man NOM

'The man sneezed'.

In (16b), the NP *al-rajulu* 'the man' is the experiencer; it is the essential argument for the verb ^catas 'to sneeze'. This NP involuntarily experiences sneezing. Suppose this essential argument voluntarily sneezes to draw the attention of someone, then it is an agent rather than an experiencer. We may contrast (17) with (16) to illustrate this point.

17. ^catas - a al -rajul - u muta^camidan
 sneeze past,3rd,sg,masc DET man NOM deliberately

'the man sneezed deliberately'.

We may look at similar other verbs whose essential argument is experiencer, as in (18) and (20):

- 18a. TA?TA 'to stammer' : Experiencer
 18b. ta? ta - a zaid - un
 stammer past,3rd,sg,masc Zaid NOM

'Zaid stammered'.

In another context the same essential argument may indicate a deliberate action, as in (19):

19. taʔtaʔ - a zaid - u qaṣīdan
stammer past,3rd,sg,masc Zaid NOM Intentionally

'Zaid stammered intentionally'.

- 20a. ^CARAJA 'to limp : Experiencer

- 20b. ^caraj - a lā^cib - u kurata al -qadam i
limp past,3rd,sg,masc player NOM ball DET foot GEN

'The football player limped'.

In (20b), the NP *lā^cibu kurata al-qadami* 'the football player' is the experiencer; he limps unwillingly perhaps because of an accident whereas in (21) he is the agent because he limps deliberately.

21. ^caraj - a lā^cib - u kurata al - qadam i
limp past,3rd,sg,masc player NOM ball DET foot GEN
li ^carqalati naḍīra - hu
to obstruct opponent his

'The football player limped to obstruct his opponent'.

It is evident from (18-21) that these verbs require an experiencer as their essential argument when the action is not volitional. However, the same argument NPs can be used in another context as agents when the action is done wilfully. Some other verbs that express physical event and take an experiencer as their argument are given in (22).

- 22.i) taʔāʔ aba 'to yawn' ii) ^ssaxara 'to snore'
iii) sa^cala 'to cough' iv) tanahhada 'to sigh'
v) ^cariqa 'to perspire' vi) ?ariqa 'to feel'
vii) barada 'to feel cold' viii) ?istadfa? 'a sleeplessness'
ix) ḥawzaqa 'to hiccup'
xi) ?ihatalama 'to reach puberty' x) dākha 'to feel dizziness'
xii) khankhana 'to speak in a nasalised manner'
xiii) tadarrana 'to suffer from tuberculosis'

In addition to the type of verbs discussed above, Arabic has verbs that indicate mental state and require experiencer as their essential arguments. We may look at (26-28) to illustrate this point.

- 26a. ^ʿABASA 'to be gloomy' : Experiencer
- 26b. ^ʿabus -a ?ab - -i
 be gloomy past, 3rd, sg, masc. father NOM my

'My father was gloomy'.

In (26b), the subject NP *?abi* 'my father' is the only essential argument that the verb ^ʿ*abasa* 'to be gloomy' needs. This argument is the experiencer because it indicates the mental state in which the person is. Another verb of this type is *fariḥa* 'to be happy', as in (27):

- 27 a. FARIḤA 'to be happy' : Experiencer
- 27 b. rariḥ -a al -mulākīm -u
 be happy past, 3rd, sg, masc. DWT boxer NOM

'The boxer was happy'.

In (27 b), the NP *al-mulākīmu* 'the boxer' experiences an emotional state of happiness. (28) is another instance of this type.

- 28a. ?IKTA?ABA 'to be happy' : Experiencer
- 28b. ?ikta?ab -a al -marīd -u
 be depressed past, 3rd, sg, masc. DET patient NOM

'The patient was depressed'.

In (28b), the subject NP *al- marīḍu* 'the patient' has the theta - role of experiencer who is in the state of depression. Some other stative verbs of the type are given in (29):

- | | |
|--|--|
| 29.i) <i>hazina</i> 'to be sad' | ii) <i>sama</i> 'to be in high spirits' |
| III) <i>qanīṭa</i> 'to be despondent' | iv) <i>hāja</i> 'to be agitated' |
| v) <i>sa^cida</i> 'to be comfortable' | vi) <i>zaha</i> 'to be glad' |
| vii) <i>tariba</i> 'to be gleeful' | viii) <i>ʔibtahaja</i> 'to be cheerful' |
| ix) <i>ʔindahasa^v</i> 'to be excited' | x) <i>malla</i> 'to be bored' |
| xi) <i>ʔakhtaʔa</i> 'to be mistaken' | xii) <i>raḍiya</i> 'to be satisfied' |
| xiii) <i>^cazuma</i> 'to be famous' | xiv) <i>ḥaruna</i> 'to be stubborn' |
| xv) <i>^cajiba</i> 'to be astonished' | xvi) <i>ra^cunat</i> 'to be frivolous' |
| xvii) <i>fakiha</i> 'to be happy' | xviii) <i>majuda</i> 'to be glorious' |
| xix) <i>ʔinza^caja</i> 'to be worried' | xx) <i>halu^ca</i> 'to be impatient' |
| xxi) <i>qasa</i> 'to be cruel' | xxii) <i>ḡadiba</i> 'to be angry' |
| xxiii) <i>ʔimta^caḍa</i> 'to be annoyed' | xxiv) <i>taḥammasa</i> 'to be over- zealous' |
| xxv) <i>tawāḍa^ca</i> 'to be humble' | xxvi) <i>khasuna^v</i> 'to be rough' |

We may note that these verbs in Arabic have predicative adjectives as their English counterparts which are linked to the experiencer by the verb to be.

We may also note that most Arabic verbs that indicate involuntary physical event or mental state take only experiencer as their argument as do their English counterparts even though there is difference in regard to their structure. An Arabic sentence with any of these verbs needs only an NP, a linking verb and a predicative adjective. However, some verbs of this group such as *ʔinjariba* 'to have scabies' and *ʔajhadat* 'to have miscarriage' differ in regard to their thematic structure. They take only one argument, namely, the

experiencer whereas their English equivalents need two arguments, and theme.

1.3 Verbs That Take Theme as an Essential Argument

Arabic has a group of verbs which requires theme as an essential argument, as in (30):

30a. <i>MĀTA</i>	'to die' :	Theme	
30b. <i>māt</i>	-a	<i>zaid</i>	-un
dic	past, 3 rd , sg, masc.	<i>Zaid</i>	NOM

'Zaid died'.

In (30b) the NP *zaidun* 'Zaid' is the only essential argument for the verb *māta* 'to die' which has the theta - role of theme. If we compare (30b) with (18b), the difference between the theme and the experiencer becomes clear.

18b. <i>taʔtaʔ</i>	-a	<i>zaid</i>	-un
stammer	past, 3 rd , sg, masc.	<i>Zaid</i>	NOM

'Zaid stammered'

In (30b), *zaidun* 'Zaid' undergoes an event which indicates a change of state whereas (18b) merely indicates what *zaidun* 'Zaid' does; there is an indication of the change of state or the theme undergoing the action indicated by the verb.

The verbs which have theme as the essential argument in the subject position are inchoative or change - of - state verbs. They include intransitive verbs which have their transitive counterparts⁽⁴⁾ Such transitive verbs take theme as one of the essential arguments whereas the intransitives have only theme as their argument. For instance, we may look at (31) and (32):

- 31a. ?INFAJARA 'to get exploded' : Theme
- 31b. ?infajar -a -t al -qunbula -t -u
 get exploded past, 3rd, sg, fem DET bomb fem NOM

faj?atan

suddenly

'The bomb (got) exploded suddenly'

in (31b), the subject NP *al- qunbulatu* 'the bomb' is the theme. The inchoative intransitive verb *?infajara* 'to get exploded' in (31b) is different from the transitive verb *fajjara* 'to explode' in terms of the essential arguments that it needs; the latter needs two essential arguments, the agent and the theme. We may look at (32) to illustrate this point.

- 32a. FAJJARA⁽⁵⁾ 'to explode' Agent, Theme
- 32b. fajjar -a al ?irhābiy -u al -qunbula -t -a
 explode past DET terrorist NOM DET bomb fem ACC

'The terrorist exploded the bomb'

- 32c. *fajjar -a al -?irhābiy -un
 explode past, 3rd, sg, masc. DET terrorist NOM

*'The terrorist exploded'

- 32d. *fajjar -a al -qunbula -t -a
 explode past, 3rd, sg, masc. DET bomb fem ACC

*'--exploded the bomb'

In (32b). the subject Np *al-?irhābiyu* 'the terrorist' is the agent and the object NP *al- qunbulata* 'the bomb' is the theme. The fact that (32c) is ungrammatical indicates that the transitive verb *fajjara* 'to explode' needs two

essential arguments. The ungrammaticality of (32d), in relation to (32b) indicates that the theme cannot be used as the only argument with the transitive verb *?infajjara* if the sentence is in the active voice. The arguments in (32b) will bear the same thematic relations with the verb even when it is in the passive form of the sentence, as in (33):

33. fujjir -a -t al -qunbula -t -u 'alayadi
 be exploded past, 3rd, sg fem DET bomb fem NOM by
 al -?irhābiyu
 DET terrorist

'The bomb was exploded by the terrorist'

Some inchoative intransitive verb of Arabic which take theme as their only argument have *ta* as the prefix, as in (34a), some others start with *? in* , as in (34b):

- 34a. i) *tabarra?a* 'to get acquitted' ii) *takhaddara* 'to get anaesthetized'
 iii) *taḍarra* 'to get winnowed' iv) *takhandaqa* 'to get trenched'
 v) *taṣallaba* 'to get stiffened' vi) *ta^caddaba* 'to get tortured'
 vii) *tadammara* 'to get damaged' viii) *taḥaṭama* 'to get crashed'
 ix) *tajammada* 'to get frozen' x) *ta?abbada* 'to get jailed'
 xi) *takassara* 'to get broken' xii) *tafarraqa* 'to get dispersed'
 xiii) *taqaṭṭa^ca* 'to get cut into pieces' xiv) *tadarraba* 'to get agitated'
 xv) *takhawafa* 'to get afraid' xvi) *takabbara* 'to get proud'
 xvii) *ta^carraba* 'to become an Arab' xix) *tanaṣṣara* 'to become Christian'
 xx) *ta?assada* 'to become as a lion' xxi) *ta^callama* 'to become learned'
- 34b. i) *?infataḥa* 'to get opened'⁽⁶⁾ ii) *?inxadaṣa* 'to get scratched'
 iii) *?inkasara* 'to get broken' iv) *?inqaṭa^ca* 'to get cut'
 v) *?inxada^ca* 'to get cheated' vi) *?inhadafa* 'to get deleted'

vii) ?inbatara 'to get amputated'	viii) ?inbatta 'to get transmitted'
ix) ?inbarama 'to get twisted'	x) ?inbatra 'to get trimmed'
xi) ?intaqaaba 'to get pierced'	xii) ?inħalla 'to get untied'
xiii) ?inkħatafa 'to get kidnapped'	xiv) ?inṣaṭala 'to get intoxicated'
xv) ?indaġama 'to get contracted'	xvi) ?inkaṣafa 'to get uncovered'
xvii) ?indmaja 'to get incorporated'	xviii) ?inqāla 'to get uttered'
xix) ?indatara 'to get hidden'	xx) ?inhazama 'to get defeated'
xxi) ?inqāda 'to get led'	xxii) ?injarra 'to get dragged'
xxiii) ?inħamaqa 'to get stupid'	xxiv) ?in ^c adama 'to get non- existed'
xxv) ?in ^c āda 'to get repeated'	xxvi) ?inġalaqa 'to get bolted'
xxvii) ?iniṭafa?a 'to get extinguished'	xxviii) ?inṣalaba 'to get crucified'
xxix) ?inza ^c aja 'to get worried'	xxx) ?intalaqa 'to get started'
xxxi) ?intaṣara 'to get victory'	

There are some other verbs that take theme as argument though they are not inchoative verbs.

35. i) ^c ama 'to float'	ii) tadaffaqa 'to flow'
iii) dāra 'to rotate'	iv) talāṣa 'to vanish'
v) ṭāra 'to fly'	

It may be noted that the verb ^cama 'to float' is used only when the theme is inanimate, as in (36) and (37).

36a. ^c AMA	'to float' :	Theme			
36b. ^c am	-a	-t	al	-?akhsab	-u
float	past, 3 rd , sg,	fem	DET	wood	NOM
ma ^c	al	-tayyar	-i		
with	DET	current	COMM		

The wood floated with the current'

37.	^c am	-a	al	-jasad	-u	-ma ^c
	float	past, 3 rd , sg,masc	DET	body	NOM	with
	al	-tayyar	-i			
	DET	current	COMM			

'The body floated with the current'

in case a swimmer floats (rather than swims) in a swimming pool, a different verb *tafa* 'to float' is used, as in (38) but not ^cama, as in (39):

38.	taf	-a	al	-sabbah	-u	
	float	past, 3 rd , sg,masc	DET	swimmer	NOM	
	-ma ^c	al	-tayyar	-i		
	with	DET	current	COM		

'The swimmer floated with the current'.

39.	* ^c am	-a	al	-sabbah	-u	
	float	past, 3 rd , sg,masc	DET	swimmer	NOM	
	-ma ^c	al	-tayyar	-i		
	with	DET	current	COM		

*'The swimmer floated with the current'.

The verb *sabaḥa* 'to swim' takes only an animate subject which will be the agent (rather than the theme) as in (40):

40.	sabah	-a	zaid	-un	khamisa	-a	māiyata
	swim	past, 3 rd , sg,masc	Zaid	NOM	five	ACC	hundred
	mitr	-in	bi	khamisa		^c asrati	
	meters	GEN	in	five		ten	
	daqiqat	-in					
	minutes	GEN					

'Zaid swam five hundred meters in fifteen minutes'

The kind of animate and inanimate distinction that is relevant for *ʿāma*, *ṭafa* and *sabaha* is not applicable to *tara* 'to fly'. It may take either an inanimate theme, as in (41) or an animate theme, as in (42):

41. <i>ṭār</i>	-a	it	al	- <i>ṭaʿīrat</i>	-u
fly	past, 3 rd , sg	fem	DET	kite	NOM
al	-waraqīyyat		-u		
DET	paper		NOM		

'The kite flew'.

42. <i>ṭār</i>	-a	al	- <i>ʿuṣfur</i>	-u
fly	past, 3 rd , sg	DET	bird	NOM

'The bird flew'

The verb *khafaqa* 'to beat' and *nama* 'to grow' are used intransitively in a unique manner. The former is used only with reference to the beating of the heart and the latter with reference to the growth of plants.

43a. KHAFAQA	'to beat'	Theme		
43b. <i>khafaq</i>	-a	al	- <i>qalb</i>	-u
beat	past, 3 rd , sg, masc	DET	heart	NOM
<i>bisur^catin</i>	<i>kabiratin</i>			
fast	very			

'The heart was beating very fast'.

In (43b), *al-qalbu* 'the heart' is the theme. In case this argument is replaced by another argument, say *baiyāḍu al-baiyḍi* 'the white of the egg'; the sentence becomes ungrammatical, as in (44):

44.	*khafaq	-a	baiyād	-u	al	-baiyd	-i
	beat	past, 3 rd , sg, masc	white	NOM	DET	egg	GEN

*'The white of the egg was beating'

however, the ungrammaticality of (44) cannot be attributed to the theme being inanimate. In (45) the same NP is the theme but the sentence is grammatical. It is because the verb has been used as a transitive.

45a. KHAFAQA	'to beat'	Agent,	Theme	
45b. khafaq	-a	^c amr	-un	
beat	past, 3 rd , sg, masc	Amr	NOM	
baiyād	-a	al	-baiyd	i
white	ACC	DET	cgg	GEN

'Amr beat the white of the egg'.

46a.	NAMA	'to grow'	Theme				
46b.	nam	-a	-t	al	-ḡarsa	-t	-u
	grow	past, 3 rd , sg	fem	DET	plant	fem	NOM

'The plant grew'.

In (46), the argument *al-ḡarsatu* 'the plant' is the theme. In case this argument is replaced by another argument, the sentence will be ungrammatical, as in (47):

47.	*nam	-a	al	-ṭifl	-u	bisur ^c atin
	grow	past, 3 rd , sg, masc	DET	baby	NOM	fast

'The baby grew fast'.

If *al-ṭiflu* 'the baby' is the theme, Arabic will use another verb *kabura* for 'to grow up', as in (48):

48.	kabur	-a	al	-tifi	-u	bisur ^c atin
	grow up	past, 3 rd , sg, masc	DET	baby	NOM	fast

'The baby grew up fast'.

It may be pointed out that some of the Arabic verbs discussed above are similar to their English counterparts with regard to their thematic structure, i. e., they need the theme as the only essential argument. However, they differ with regard to the nature of the theme. For instance, Arabic has two verbs for the English verb 'to float'; *ʿama* takes an inanimate theme whereas *tafa* takes an animate theme.

To sum up, intransitive verbs in Arabic need only one essential argument. That argument may be agent, experiencer or theme. The intransitive verb that indicates a volitional event takes an agent, the one that indicates a non-voluntary physical event or a mental state takes an experiencer and the one that indicates the change of state takes a theme as its argument. Inchoative intransitive verbs which are semantically and morphologically related to their transitive counterparts take the theme as the only essential argument.

2.1 Verbs Which Take Agent and Theme as Essential Arguments

Some transitive verbs that take agent and theme as essential arguments are inchoative; they express the change of state of an entity. Inchoatives may be intransitive or transitive. If they indicate merely the change of state, they are intransitives (as in the door opened); if they also indicate what brought about the change of state, they are transitives (as in John opened the door). We have already discussed the theta - role requirement of intransitive inchoative verbs in 1.3. We now discuss some transitive verbs of this type. Let us consider the theta - grid of the verb *hadama* 'to demolish', as in (49):

'The enemy demolished the bridge'.

*'The enemy demolished'.

'The bridge was demolished'.

(49b) indicates that the NP *al-^caduwu* 'the enemy' is the agent and the NP *al-^cjisra* 'the bridge' is the theme. As the theme is an essential argument, its absence makes the sentence ungrammatical, as in (49c); the agent alone cannot make this sentence grammatical. (49d) is grammatical because it is the theme that occupies the subject position in the passive sentence. The fact that in (49d) the theme alone is able to make the sentence grammatical indicates that it is an obligatory element in the structure. We may note that (49c) is also a possible sentence of Arabic.

49c. *inhadam* -a al -jisr -u
 got demolished past, 3rd, sg, masc DET bridge NOM

'The bridge got demolished'.

The difference between (49d) and (49c) is that (49d) implies an agent theta - role whereas (49c) has no such implication⁽⁷⁾ Some transitive inchoative

verbs that belong to this set are listed in (50):

- | | | | |
|-------------------------------|---------------|--------------------------------|-------------------|
| 50. i) <i>farama</i> | 'to chop' | ii) <i>jazza?z</i> | 'to divide' |
| iii) <i>mazzaqa</i> | 'to splinter' | iv) <i>ja^{cc}ada</i> | 'to crumple' |
| v) <i>fattata</i> | 'to mutilate' | vi) <i>dammara</i> | 'to destroy' |
| vii) <i>kasara</i> | 'to break' | viii) <i>ṣada^ca</i> | 'to crack' |
| ix) <i>ṣaqqā</i> | 'to split' | x) <i>ḥaraqa</i> | 'to burn' |
| xi) <i>lawwana</i> | 'to color' | xii) <i>khaddara</i> | 'to anaesthetize' |
| xiii) <i>jammada</i> | 'to freeze' | xiv) <i>fataḥa</i> | 'to open' |
| xv) <i>ʔaḡlaqa</i> | 'to close' | xviii) <i>ṣallaba</i> | 'to stiffen' |
| xvii) <i>qallasa</i> | 'to shrink' | xx) <i>ṣaḥaqa</i> | 'to pulverize' |
| xix) <i>qaṭa^ca</i> | 'to cut' | xxii) <i>mazzaqa</i> | 'to tear' |
| xxi) <i>barama</i> | 'to twist' | xxiv) <i>rabaṭa</i> | 'to tie' |
| xxiii) <i>batara</i> | 'to amputate' | xxvi) <i>ṭabaxa</i> | 'to cook' |

xxv)	<i>hazza</i>	'to shake'	xxviii)	<i>bara</i>	'to trim'
xxvii)	<i>taqaba</i>	'to pierce'	xxx)	<i>laffa</i>	'to fold'
xxix)	<i>halla</i>	'to untie'	xxxii)	<i>datara</i>	'to hide'
xxxi)	<i>hammara</i>	'to roast'		<i>balama</i>	'to tighten'
xxxiii)	<i>dabaġa</i>	'to tan'			

2.1.2 Verbs Of Accomplishment

Some other verbs that take agent and theme as essential arguments are verbs of accomplishment which, according to Vendler (1967: 106- 107), "imply the notion of unique and definite time periods". Vendler considers *running a mile* and *srawing a circle* examples of verbs of accomplishment whereas simply *running*, an example of an "activity" We think the difference between the two can be pointed out in terms of number and nature of arguments they overtly take. The verb of accomplishment will have not only an agent but also a theme, which is not necessary for an activity verb. Thus, (51) has only one argument but (52) has two:

51. I ran

52. I pushed the cart.

Arabic sentences with verbs of accomplishment need two essential arguments. For instance, we may look at the verb *sajjala* 'to record'.

53a. SAJJALA 'to record': Agent, Theme

53b.	sajjal	-a	al	-muṭrib	-u	al-
	record	past, 3 rd , sg, masc	DET	singer	NOM	DET
	?ugniya	-t	-a			
	song	fem	ACC			

'The singer recorded the song'.

53c.	*sajjal	-a		al	-muṭrib	-u	
	record	past, 3 rd , sg, masc	DET	singer	NOM		
	*' The singer recorded'.						
53d.	sujjil	-a	-t	al	-?uḡniya	-t	-u
	be recorded	past, 3 rd , sg	fem	DET	song	fem	NOM
	' The song was recorded'.						
53c.	*insajjal	-a	-t	al	-?uḡniya	-t	-u
	get recorded	past, 3 rd , sg	fem	DET	song	fem	NOM
	'The song got recorded'.						

In (53b), the NP *al- muṭribu* 'the singer' has the theta - role of agent and the NP *al- ?uḡniyatu* 'the song' has the theta - role of theme. When the theme is deleted, the sentence becomes ungrammatical, as in (53c); whereas its occurrence in the passive form makes it grammatical, as in (53d). The fact that (53c) is not possible indicates that this verb has no intravertive counterpart and is not inchoative. Some other verbs that can be used in the same way are as follows:

54. i) *tawwara* 'to revolutionize' ii) *tawwaja* 'to crown'
 iii) *jallada* 'to cover/ bind' iv) *khābara* 'to contact'
 v) *ʿataqa* 'to release' vi) *?antaja* 'to produce'
 vii) *?istawla* 'to capture' viii) *sada* 'to construct'
 ix) *sawwa* 'to level' x) *?alqa khiṭāban* 'to deliver a speech'

2.1.3 Verbs of Achievement

Vendler (1967) differentiates the verbs of accomplishment from the verbs of achievement. While verbs of accomplishment refer to a unique and definite

period of time, verbs of achievement indicate that "achievements occur at a single moment" (p. 103). In other words, verbs of achievement "involve unique and definite time instances" (p. 103).

Some verbs of achievement in Arabic take agent and theme as their essential arguments. We may look at the verb *rāhana* 'to bet' as an example, as in (55):

55a.	RĀHANA	'to bet':	Agent,	Theme.			
55b.	rāhan	a	zaid	-un	anna	-ha	
	bet	past, 3 rd , sg, masc	Zaid	NOM	that	it	
	sawfa	tumtīru	ḡadan				
	would	rain	tomorrow				
		'Zaid betted that it would rain tomorrow'					
55c.	*rāhan	a	zaid	-un			
	bet	past, 3 rd , sg, masc	Zaid	NOM			

*'Zaid betted'

In (55b), the argument *zaidun* 'Zaid' is the agent and the argument *annaha sawfa tumtīru ḡadan* 'that it would rain tomorrow' is the theme. (55c) is ungrammatical due to the absence of the theme; the agent alone is insufficient to make it grammatical. Some other verbs of achievement that take agent and theme are given in (56):

56.	i)	<i>tallaqa</i>	'to divorce'	ii)	<i>rahana</i>	'to mortgage'
	iii)	<i>?intaqada</i>	'to criticize'	iv)	<i>lāḥaza</i>	'to notice'
	v)	<i>?ankara</i>	'to deny'	vi)	<i>barhana</i>	'to prove'
	vii)	<i>?istantaja</i>	'to conclude'	viii)	<i>^crifa</i>	'to know'(8)
	ix)	<i>qāla</i>	'to say'	x)	<i>?ajjala</i>	'to adjourn'
	xi)	<i>qarrara</i>	'to decide'	xii)	<i>?aqarra</i>	'to report'
	xiii)	<i>?i^ctarafa</i>	'to confess'			

However, not all verbs of achievement take agent and theme as their arguments, some of them take agent and goal, as in 2.2.

In short, inchoative verbs and some verbs of accomplishment and achievement take agent and theme as their essential arguments.

2.2 Verbs Which Take Agent and Goal as Essential Arguments

Some verbs of achievement in Arabic take the theta - roles of agent and goal rather than agent and theme as their essential arguments. For instance, we may look at (57):

- 57a. RAHHABA 'to welcome': Agent, Goal
 57b. ?urahhib u bi daif - -i
 welcome past,I,sg,masc NOM of guest GEN my
 'I welcome my guest'.

In (57b), the verb ?urahhibu 'to welcome' indicates the action performed by the speaker who may not be overtly mentioned. The null subject may then be reflected by the AGR of the verb and have the theta - role of agent. The PP bi daifi 'of my guest' has the theta - role of goal. Some other verbs of this type can be listed as follows:

58. i) hann?a 'to congratulate' ii) šalla 'to pray'
 iii) tađarra^ca 'to supplicate to' iv) ?i^ctađara 'to apologize'
 v) naḥaba 'to lament' vi) bāraka bi 'to bless'
 vii) la^cana 'to curse' viii) saxira min 'to deride'
 ix) ?ašfaqa^cala 'to pity' x) tađammara min 'to complain'
 xi) ?ihtarama 'to respect' xii) madaḥa 'to praise'
 xiii) ?ihtaḡara 'to ridicule' xiv) ?^ctaraḡa^cala 'to object to'
 xv) ?u^cjibabi 'to admire' xvi) wabbaxa 'to scorn'

- | | | | |
|----------------------|----------------|---------------------------------|----------------|
| xvii) <i>?ijṭāza</i> | 'to cross' | xviii) <i>baḥlaqa bi</i> | 'to gaze at' |
| xix) <i>tāqa ila</i> | 'to yearn for' | xx) <i>?atan^cala</i> | 'to extol' |
| xxi) <i>tāraba</i> | 'to befriend' | xxii) <i>tawassala ila</i> | 'to appeal to' |

Another class of verbs in Arabic that takes the theta - roles of agent and goal involves some verbs of motion, such as in (59):

- 59a. ṢA^cADA 'to ascend': Agent, goal
- 59b. ṣa^cad -a -al -xatib -u ^cala
 ascend past, 3rd, sg, masc DET speaker NOM on
 al -minbar -i
 DET pulpit loc
 'The speaker ascended the pulpit'.
- 59c. su^cid -a -al -minbar -u
 be ascended past, 3rd, sg, masc DET pulpit NOM
 'The pulpit was ascended to'.

In (59b), the NP *al- xatibu* 'the speaker' is the agent and the PP *^cala al-minbari* 'the pulpit' is the goal. (59c) indicates that the theta - role of goal is enough to have a well- formed sentence. Some other verbs that can be used in this manner are as in (60):

60. i) *daxala* 'to enter' ii) *tasallaqa^cala* 'climb up'
 iii) *qafaza fauqa* 'to leap over' iv) *wataba^cala* 'jump up'

2.3. Verbs Which Take Agent and Accompaniment as Their Essential Arguments

Arabic has a class of verbs that take the theta - roles of agent and accompaniment. The term *accompaniment* indicates a mutual dependence of action between two arguments in the sentence. A verb of this category needs the theta - roles of agent and accompaniment⁽⁹⁾, as in (61):

- 61a. ?ISTAHABA 'to accompany': Agent, Accompaniment
 61b. ?istahab -a zaid -un hind -an
 accompany past, 3rd, sg, masc Zaid NOM Hind ACC
 'Zaid accompanied Hind'.
 61c. ?ustuhib -a t hind -un bi zaid -in
 be accompanied past, 3rd, sg, fem Hind NOM by Zaid INST
 'Hind was accompanied by Zaid'.

In (61b), the NP *zaidun* 'Zaid' bears the theta - role of agent and the NP *hindan* 'Hind' bears the theta - role of accompaniment. The latter can function as the subject of the grammatical sentence, as in (61c). Some other verbs of this type are given in (62):

62. i) *tasājara ma^c* 'to quarrel with' ii) *tanāfasa ma^c* 'to compete with'
 ii) *masa ma^c* 'to walk with' iv) *wākaba* 'to escort'
 v) *taqātala ma^c* 'to fight with'

Gruber (1976: 72 - 75) uses the verb 'pursue' to illustrate the theta - roles of agent and accompaniment. *Laḥiqā*, the Arabic equivalent of 'pursue' has the same theta - role requirement, as is shown in (63):

63. laḥiq -a zaid -un al -liṣṣ -a
 pursue past, 3rd, sg, masc Zaid NOM DET thief ACC
 'Zaid pursued the thief'.

In (63), *zaidun*, 'Zaid' is the agent and *al- liṣṣa* 'the thief' is the accompaniment. Some other verbs of this type used by Gruber (1976) are *to chase* 'ṭarada', *to follow* 'tabi^ca' and *lead* 'qāda':

2.4. Verbs Which Take Experiencer and Theme as Their Essential Arguments

Arabic has verbs of physical and mental perception which require two essential arguments to have a well-formed sentence. We may look at the verb *raʔa* 'to see' to illustrate the point.

64a.	RAʔA	'to see':	Experiencer,	Theme		
64b.	raʔ	-a	zaid	-un	al	-jamal
	see	past, 3 rd , sg, masc	Zaid	NOM	DET	camel
	-a	al	-bāriḥata			
	ACC	DET	yesterday			

'Zaid saw the camel yesterday'.

64c.	*raʔ	-a	zaid	-un	al	-bāriḥata
	see	past, 3 rd , sg, masc	Zaid	NOM	DET	yesterday

'Zaid saw yesterday'.

64d.	ruʔiy	-a	zaid	-un	al	-bāriḥata
	see	past, 3 rd , sg, masc	Zaid	NOM	DET	Yesterday

'The camel was seen yesterday'.

(64b) has *zaidun* 'Zaid' as the experiencer and *al-jamala* 'the camel' as the theme. The theme cannot be deleted; if it is deleted, the sentence becomes ungrammatical, as in (64c), whereas the sentence becomes grammatical if the only overt argument is the theme in the passive sentence, as in (64d). the verb *raʔa* 'to see' indicates the involuntary act of seeing, i. e., it can be used in the abilitative sense, as in (65):

65.	yastati ^c	-u		zaid	-un	?an	yara
	can	past, 3 rd , sg, masc		Zaid	NOM	to	see

'Zaid can see'.

We may note that the verb *ra?a* 'to see' in (65) is different from the verb *nazara ila* 'to look at' in (66). The latter indicates only a volitional action:

66.	nazar	-a	-t	ila	al	-wardat	-i
	look	past, 3 rd , sg	fem, NOM	to	DET	rose	LOC

'She looked at the rose'.

In (66), the null subject is recoverable from the AGR of the verb *nazarat ila* 'to look at' and it is the agent; the NP *al-wardati* 'the rose' is the theme. The verb *nazara ila* 'to look at' is different from the verb *ra?a* 'to see' in the sense that the former cannot absorb the theme, as in (67), but the latter can, as in (65) given above.

67.	*nazar	-a	-t	ila
	look	past, 3 rd , sg	fem, NOM	to

*'She looked at'.

Similar other verbs of sensory perception in Arabic are listed in (68):

68. i) *daqa* 'to taste' ii) *samma* 'to smell'
 iii) *lamasa* 'to touch' iv) *sami'a* 'to hear'
 v) *sa'ara bi* 'to feel'

We may now look at some emotive verbs that take theme and experiencer as their essential arguments, as in (69):

- 69a. SARRA 'to please': Theme, Experiencer
- 69b. sarr -a taşarufu -O -ha zaid -an
 please past, 3rd, sg, masc behavior NOM her Zaid ACC
 'Her behavior pleased Zaid'.
- 69c. surr -a zaid -un
 bepleased past, 3rd, sg, masc Zaid NOM
 'Zaid was pleased'.

(68b) indicates that *taşarufu* 'her behavior' is the theme and *zaidan* 'Zaid' is the experiencer.⁽¹⁰⁾ (69c) indicates that the experiencer is enough to produce a well- formed sentence. In other words, the verb *sarra* 'to please' may permit the suppression of the theme. Some other verbs of this type are: *?isma?azza* 'to disgust' *?arbaka* 'to confuse' and *?aħraja* 'to embarrass'.

In short, most of the transitive verbs of Arabic that need two essential arguments to produce a well- formed sentence take agent and theme as their essential arguments. Most of these verbs fall in some natural semantic classes. They are inchoative verbs, and some verbs of accomplishment and achievement. Some verbs of achievement and motion select agent and goal rather than agent and theme. Some verbs of motion take agent and accompaniment. Some verbs of physical and mental perception and some emotive verbs take experiencer and theme in their theta - grid.

VERBS THAT NEED THREE ESSENTIAL ARGUMENTS

Arabic has some transitive verbs that require three essential arguments in a well- formed sentence. The nature of these arguments depends on the nature of the verb. The arguments might be realized in the form of an NP, PP, IP or CP.

3.1. Verbs Which Take Agent, Theme and Goal as Essential Arguments

the verbs of this type describe the change of possession of an entity from one argument to another, they are verbs of transaction or exchange. They may take the agent and the theme in the form of an NP and the goal, either in the form of an NP or a PP. We may look at the verb ?ac ʔa 'to give', as in (70), to illustrate the point.

70a.	?A ^c ʔA	'to give':	Agent,	Theme,	Goal	
70b.	?a ^c t	-a		zaid	-un	kitāb -an
	give	past, 3rd, sg, masc	Zaid	NOM	book	ACC
	li	hind		-in		
	to	Hind		DAT		
70c.	?a ^c t	-a		zaid	-un	hind -an
	give	past, 3rd, sg, masc	Zaid	NOM	Hind	ACC
	kitāb	an				
	book	ACC				

'Zaid gave a book to Hind'.

70d.	ʔa ^c t	-a	zaid	-un	hind	-an
	give	past, 3 rd , sg, masc	Zaid	NOM	Hind	ACC
	kitab	an				
	book	ACC				

'Zaid gave Hind a book'.

70c.	*ʔa ^c t	-a	zaid	-un	hind	-an
	give	past, 3 rd , sg, masc	Zaid	NOM	Hind	DAT

*'Zaid gave Hind'.

70f.	*ʔa ^c t	-a	zaid	-un	hind	-an
	give	past, 3 rd , sg, masc	Zaid	NOM	Hind	ACC

*'Zaid gave a book'.

In (70b), the NP *zaidun* 'Zaid' is the agent, the NP *kitabān* 'a book' is the theme and the PP *li hindin* 'to Hind' is the goal. In (70c) the goal *li hindin* 'to Hind' precedes the theme *kitāban* 'a book' and is in the form of a PP whereas in (70d) it is an NP. (70e) and (70f) are ungrammatical because the theme has been deleted from (70e) and the goal from (70f). In the passive form of the sentence the theme or the goal may be used as the subject, as in (71a) and (71b) respectively:

71a.	ʔu ^c tiy	-a	kitāb	-un	li	hind	-in
	be give	past, 3 rd , sg, masc	book	NOM	to	Hind	DAT

'A book was given to Hind'.

71b.	$\text{?u}^c \text{tiy}$	-a	-t	hind	-un	kitāb	-an
	be give	past, 3 rd , sg	fem	Hind	NOM	book	DAT

'Hind was given a book'.

71c.	$\text{?u}^c \text{tiy}$	-a	-li	hind	-in	kitāb	-un
	be give	past, 3 rd , sg, masc	to	Hind	DAT	book	NOM

'(To) Hind was given a book'.

'Hind was given a book'.

Both in (71a) and (71b) the agent has not been overtly mentioned. We may note that (71c) has the passivized form of the verb $\text{?a}^c \text{ta}$ 'to give' but the goal, which is expressed by the PP *li hindin* 'to Hind' in the dative form, remains unchanged; it does not become the subject of the passive sentence. This is not the case with English, as is obvious from (72):

72. *To him was given a book.

some other verbs of exchange that have agent, theme and goal in their theta - grid are listed in (73):

73.	i)	$\text{?a}^c \text{āra}$	'to lend'	ii)	<i>wahaba</i>	'to bestow'
	iii)	<i>sallama</i>	'to hand over'	iv)	<i>zauwwada</i>	'to supply'
	v)	?ahda	'to present'	vi)	<i>manaḥa</i>	'to grant'

In these verbs, some of the essential arguments are expressed in the form of NPs and others in PPs whereas in some other verbs of this class the theme is expressed as an infinitival construction. We may look at (73) to illustrate the point:

73a.	NAṢAḤA	'to advise':	Agent,	Theme,	Goal		
73b.	naṣaḥ	-a	zaid	-un	^c amr	-an	
	advise	past, 3 rd , sg, masc	Zaid	NOM	Amr	ACC	
	[PRO	?an	ya?tiya	mubakkiran]			
	IP						
		to	come	early			

'Zaid advised Amr [PRO to come early]'.

73c.	*naṣaḥ	-a	zaid	-un	[PRO	?an	
					IP		
	advise	past, 3 rd , sg, masc	Zaid	NOM		to	
	ya?tiya	mubakkiran]					
	come	early					

'Zaid advised [PRO to come early]'.

In (73b), the NP *zaidun* 'Zaid' is the agent, the NP ^c*amran* 'Amr' is the goal and the IP *PRO ?an ya?ti mubakkiran* 'PRO to come early' is the theme. 73c) is ungrammatical because the goal, which is an essential argument, is missing in it. We may note that the verb *naṣaḥa* 'to advise' cannot have theme in the form of a CP, as is obvious from (74).

74.	*naṣaḥ	-a	zaid	-un	^c amr	-an	
	advise	past, 3 rd , sg, masc	Zaid	NOM	Amr	ACC	
	[anna	^c ala	hind	-an	ta?tiya	mubakkiran	
	cp						
	that	should	Hind	ACC	come	early	

'Zaid advised Amr [that Hind should come early]'.

Some other verbs of this type that have agent, theme and goal are listed in 75):

75. i) ?arsada 'to direct' ii) tarajja 'to request'

v) $\overset{v}{s}ajja^c a$ 'to encourage'

We may note that each of these verbs may have an infinitival clause as the theme but not a CP as is obvious from (76 - 80):

76 a.	ʔarsad ^v	-a	zaid	-un	^c amr	-an
	direct	past, 3 rd , sg, masc	Zaid	NOM	Amr	ACC
	[PRO IP	liʔan	yamkuta	fi	^c ammān	- i]
		to	stay	in	Amman	LOC

'Zaid directed Amr to stay in Amman'.

76b. *ʔarsad -a zaid -un ʕamr -an
 direct past, 3rd, sg, masc Zaid NOM Amr ACC
 [anna ʕalai -hi yamkuta fi ʕammān -i]
 CP
 that should to stay in Amman LOC

'Zaid directed Amr [that he should stay in Amman]'.
 (10)

77a. taraj	-a	zaid	-un	^c amr	-an	
request	past, 3 rd , sg, masc	Zaid	NOM	Amr	ACC	
[PRO IP	?an	ya ^c tiya	hind	-an	ba ^c da	al - nuqūd
	to	give	Hind	ACC	some	DET money

'zaid requested Amr to give Hind some money'.

77b. *tarajj -a zaid -un c_iamr -an
request past, 3rd, sg, masc Zaid NOM Amr ACC
[anna c_ialai -hi , ya^c_itīya hind -an ba^c_ida al - nuqūdi
CP
that should to give Hind ACC some DET money

'Zaid requested Amr [that he should give Hind some money]'.
 (10)

- 78a. raj -a zaid -un ^camr -an
beg past, 3rd, sg, masc Zaid NOM Amr ACC
[PRO ?an yasūqa al -sayyārat - a]
IP
to drive DET car ACC
'Zaid begged Amr to drive the car'.
- 78b. *raj -a zaid -un ^camr -an
beg past, 3rd, sg, masc Zaid NOM Amr ACC
[anna ^calai -hi yasūqa al -sayyārat - a]
cp
that should he drive DET car ACC
'Zaid begged Amr [that he should help Hind]'.
- 79b. ^vnasad -a zaid -un ^camr -an
implore past, 3rd, sg, masc Zaid NOM Amr ACC
[PRO ?an yusa^cida hind - an]
IP
to help Hind ACC
'Zaid implored Amr [that he should help Hind]'.
- 79b. *^vnasad -a zaid -un ^camr -an
implore past, 3rd, sg, masc Zaid NOM Amr ACC
[anna ^calai -hi yusa^cida hind - an]
cp
that should he help Hind ACC
'Zaid implored Amr [that he should help Hind]'.
- 80a. ^všajja^c -a zaid -un ^camr -an
encourage past, 3rd, sg, masc Zaid NOM Amr ACC
[PRO ?an yasbaḥa]
IP
to swim
'Zaid encouraged Amr to swim'.

80b. * ^v sajja ^c	-a	zaid	-un	^c amr	-an
encourage	past, 3 rd , sg, masc	Zaid	NOM	Amr	ACC
[anna cp	^c alai	-hi	yasbaḥa]		
that	should	he	swim		

'Zaid encouraged Amr [that he should swim].'

3.2. Verbs Which Have Agent, Theme and Location as Essential Arguments.

Arabic has verbs of location that need agent, theme and location as essential arguments. With these verbs, the agent and the theme are in the form of NPs and the location is in the form of NP or PP. We may look at the verb *wada^ca* 'to put', as in (81), to illustrate the point.

81a. WADA ^C A	'to put':	Agent, Theme, Location				
81 b. wada ^c	-a	zaid	-un	al	-kitāb	-a
put	past, 3 rd , sg, masc	Zaid	NOM	DET	book	ACC
^c ala	al	-tāwila	- t	- i		
on	DET	table	fem	LOC		

'Zaid put the book in the table'.

81c. wada ^c	-a	zaid	-un	al	-kitāb	-a
put	past, 3 rd , sg, masc	Zaid	NOM	DET	book	ACC
hunāka						
there						

'Zaid put the book there'.

81c. *wada ^c	-a	zaid	-un	al	-kitāb	-a
put	past, 3 rd , sg, masc	Zaid	NOM	DET	book	ACC

*'Zaid put the book'.

81c.	*wada ^c	-a	zaid	-un	hunāka
	put	past, 3 rd , sg, masc	Zaid	NOM	there

*'Zaid put there'.

In (81b), the verb wada^c 'to put' has the NP *zaidun* 'Zaid' as the agent, the object NP *al-kitāba* 'the book' as the theme and the PP *ala al-ṭāwilati* 'on the table' as the location. (81c) has the NP *hunāka* 'there' as the location. (81d) is ungrammatical because the location has been omitted and (81e) is ungrammatical because the theme has been deleted. In a passive sentence with this type of verb, the agent may be deleted, as in (82a) but not the location, as in (82b):

82 a.	wudi ^c	-a	al	-kitāb	-u
	be put	past, 3 rd , sg, masc	DET	book	NOM
	al	-ṭāwila	-t	-i	
	DET	table	fem	LOC	

'the book wad put on the table'.

82 b.	*wudi ^c	-a	al	-kitāb	-u
	be put	past, 3 rd , sg, masc	DET	book	NOM

*'The book was put'.

Some other Arabic verbs that have agent, theme and location are listed in 83):

83. i) *?adxala* 'to insert' ii) *ḥafīza* 'to keep'
 iii) *sakaba* 'to pour'

3.3. Verbs That Take Agent, Experiencer and Theme as Their Essential Arguments.

This group of Arabic verb takes agent, experiencer and theme as essential arguments. It describes a verbal action that leaves a psychological impact on the experiencer. The impact is conveyed in the form of an IP or PP but not a CP. We may examine the verb *hatta* 'to urge' in (84) to illustrate the nature of theta - roles it might have.

84 a.	HATTA	'to urge':	Agent,	Experiencer,	Theme,
84 b.	hatt	-a	zaid	-un	^c amr -an
	urge	past, 3 rd , sg, masc	Zaid	NOM	Amr ACC
	[PRO	?an	yadrusa	al	-riyadiyātī]
	IP				

to study DET maths

'Zaid urged Amr to study maths'.

84c.	*hatt	-a	zaid	-un	^c amr -an
	urge	past, 3 rd , sg, masc	Zaid	NOM	Amr ACC

*'Zaid urged Amr'.

84d.	hatt	-a	zaid	-un	^c amr -an
	urge	past, 3 rd , sg, masc	Zaid	NOM	Amr ACC
	lakinna	-hu	lam	yastatī ^c u	hatta ġairi -hi
	but	he	not	could	urge else someone

'Zaid urged Amr but he could not urge someone else'.

84 e.	hatt	-a	zaid	-un	^c amr -an	^c ala
	urge	past, 3 rd , sg, masc	Zaid	NOM	Amr ACC	of
	al	-dirāsāt	i			
	DET	study	LOC			

'Zaid urged Amr of the study'.

In (84b), the verb *hatta* 'to urge' has the NP *zaidun* 'Zaid' as subject and the NP *ʿamran* 'Amr' and the IP *PRO ?an yadrusa al- riyadīyātī* 'to study maths' as its complements. They bear the theta - roles of agent, experiencer and theme respectively. As the theme is an IP, its predicate *?an yadrusa* 'to study' has its own theta - grid. The lack of IP as an essential argument makes the sentence ill- formed as in (84c). however in a contrastive situation, such as (84d), the theme may not be overt. (84c) indicates that the theme is *ʿala al- dirāsati* 'of the study' in a form of a PP. The Arabic verb *hatta* 'to urge' cannot take a theme in the form of a CP, as in (85):

85.	* <i>hatt</i>	-a		zaid	-un	ʿamr	-an	[anna	
								CP	
	urge	past, 3 rd , sg, masc		Zaid	NOM	Amr	ACC	that	
	ʿali	hi		yadrusa	al	-riyadīyātī]			
	should	he		study	DET	maths			

'Zaid urged Amr [that he should study maths]'.

We may note that the Arabic verb *hatta* 'to urge' differs from its English equivalent in regard to the form of its theme; in Arabic only an infinitival construction can be the theme whereas in English it could be a CP an IP, an infinitival clause or a PP. Some other verbs of this type are given in (86):

86. iv)	<i>haddara</i>	'to warn'	vi)	<i>?amara</i>	'to command'
viii)	<i>?argama</i>	'to coerce'	x)	<i>?ajbara</i>	'to compel'
xii)	<i>haffaza</i>	'to urge'	xiii)	<i>manaʿa</i>	'to prevent'

we may note that each of these verbs in (86) may have an infinitival construction as the theme as in (87) but not a CP, as in (88):

Arabic Verbs And Their Theta - Grid

Jalabneh

87. haddar	-a	/ʔ amara	/ʔ argama/
warn	past, 3 rd , sg, masc	command	coerce
ʔajbara	/ħaffaza	zaid	-un
compel	urge	zaid	NOM
^c amr	-an	[PRO	ʔan
Amr	ACC	IP	to
yadhaba	ila	^c amman̄	-i
go	to	Amman	LOC

'Zaid warned/ commanded/ coerced/ compelled/ urged Amr to go to Amman'.

88. *haddar	-a	/ʔamara	/ʔargama/
warn	past, 3 rd , sg, masc	command	coerce
ʔajbara	/ħaffaza	zaid	-un
compel	urge	zaid	NOM
^c amr	-an	[anna	^c alai
		CP	-hi
Amr	ACC	that	should
			he
yadhaba	ila	^c amman̄	-i
go	to	Amman	LOC

'Zaid warned/ commanded/ coerced/ compelled/ urged Amr that he should go to Amman'.

In brief, the verbs that need three arguments have something in common; they take agent and theme as their first two arguments. However, they are distinct from each other with regard to the nature of the third theta - role. For instance, some verbs have goal, some location and some experiencer as the third argument. Another important point to note is that when the theme is a

proposition, it is in the form of an infinitival clause or a PP rather than a CP.

To sum up, in this paper we have discussed some Arabic verbs from the point of view of essential arguments they may take in their theta - grid. We have found that the predicates that indicate volitional event (e. g. *sabaḥa* 'to swim') take agent, those which indicate mental state (e. g. *ʿabisa* 'to be gloomy') or physical event (e. g. *ʿaṭasa* 'to sneeze') take experiencer and inchoative intransitive predicates (e. g. *ʔinfajara* 'to get exploded') take theme as their essential argument. Among the verbs that need two essential arguments, change of state (i. e., inchoative) verbs (e. g. *dammara* 'to demolish') and some verbs of accomplishment (e. g. *sajjala* 'to record') and some verbs of achievement (e. g. *rāhana* 'to bet') take agent and theme. Some verbs of achievement (e. g. *raḥḥaba* 'to welcome') and some verbs of motion (e. g. *šaʿada ala* 'to ascend') take agent and goal. Another class of verbs of motion (e. g. *wākaba* 'to escort') take agent and accompaniment. Verbs of physical and mental perception (e. g. *raʔa* 'to see') take experiencer and theme. Two arguments- agent and theme- are common to all verbs that need three arguments. However, they differ in regard to the nature of their third argument. For instance, some verbs take goal (e. g. *ʔaʿta* 'to give'), some verbs take location (e. g. *wadaʿa* 'to put') and some take experiencer (e. g. *hatta* 'to urge'). However, the form of the theme with *hatta* urge type verb is an infinitival clause or a PP but not a CP.

In earlier studies Marantz (1948), Belletti and Rizzi (1988), Grimshaw (1990), Jackendoff (1990) and Pesetsky (1995) have discussed in detail the issues involving the argument- structure (or theta - grid) of verbs but they have not attempted to group them together in terms of semantic similarities. Though there may be a controversy about some of the verbs being put in one

semantic class rather than another, we have found this kind of subclassification useful to understand the Arabic verbs from a new perspective.

CONCLUSIONS

We began this article with a detailed analysis of some theoretical issues that have led to the categorization of Arabic verbs. We have noted that the concept of transitivity was not accurate enough to account for the grammaticality and ungrammaticality of the sentences in (1) because the Arab grammarians merely expressed the relation between the verb *wada^ca* 'to but' and the subject and the object in terms of transitivity; whereas, the addition of the prepositional phrase *^cala al- tawilati* 'on the table' is not regarded a part of the subcategorization properties of the verb *wada^ca*; and the location is added to *al- musnad ilayihi* 'the predication' to accomplish the meaning of the sentence. Due to this reason, we have adopted Chomsky's- theta - theory (1981, 1987 & 1992) and Chomsky and Lasnik (1991 [1995]). We have used it as a universal mechanism to examine the semantic as well as syntactic properties of a predicate to ensure the grammaticality of sentences in Arabic. We have found out that Chomsky's approach is better than the traditional one in the sense that, through it, we could discuss the thematic relations between a predicate and its arguments in a precise and economical manner and accounted for every entity in the predication. It has been proved that an argument bears one theta - role and each theta- role is given to one and only one argument, this theta - role is selected on the basis of the semantic as well as syntactic properties of its predicate. The theta - theory makes the analysis, easier because it considers NPs, PPs, IPs and CPs to be arguments and theta - role bearers; they are a part of the lexical properties of the predicate used in a sentence. It also makes an obvious distinction between the verbs of the same group on the basis on the basis of the kind of theta - role that the argument might denote. After all, we have concluded that Chomsky's

generalizations of theta - roles are basically correct. For instance, we have categorized the Arabic verbs in subgroups on the basis of the nature of the theta - roles that they may have in their theta - grids. We have started with intransitive verbs that require one essential argument. The theta - role may, however, differ depending upon the properties of the verb. It can be an agent if the verb indicates a volitional event, as in the case of *sabaḥa* 'to swim'. The verb *gādara* 'to depart' takes an agent if the only essential argument is animate, and theme if it is inanimate. The Arabic intransitive verb *ʔabida* 'to run- wild- like- an- animal' takes an agent. We may note that Arabic has many such verbs which do not have single units as their English equivalents. The intransitive verb *ʔistakhāra* 'to ask- God- for- guidance' needs only an agent. However, its nearest English counterpart 'to ask' needs three arguments agent, source and theme. It is so because the source God and the theme forgiveness are absorbed in the verb. The intransitive verb *ḡanna* 'to sing' needs only an agent as an essential argument. However, it can be used transitively in which case it takes a cognate object as another essential argument. In case an intransitive verb, in Arabic, indicates a non- volitional event, the only essential argument it takes is the experiencer. For instance, the verb *ʕaṭasa* 'to sneeze' indicates a physical event and takes an experiencer as its only argument. Some other verbs that indicate physical events are *sakata* 'to be silent' and *ʔinjaraba* 'to have scabies'; they take an experiencer as an essential argument. Verbs that indicate mental state also need an experiencer as their only essential argument as the verb *fariḥa* 'to be happy'. Not only agent and experiencer but also theme can be an essential argument for some Arabic intransitive verbs, for instance, *māta* 'to die'. *ʔinfajara* 'to get exploded' and *ʕāma* 'to float'. We may note that *ʕāma* 'to float' takes an inanimate argument whereas *sabaḥa* 'to swim' takes an animate argument the

theta - role of which is agent. However, this kind of animate and inanimate distinction is not always relevant. For instance, the verb *tāra* 'to fly' takes theme as its argument whether it is animate or inanimate.

Transitive verbs in Arabic have also been sub- grouped on the basis of the essential theta - roles they may have. Verbs that take agent and theme include inchoative transitive verbs (e. g. *dammara* 'to demolish'), verbs of accomplishment (e. g. *sajjala* 'to record') and verbs of achievement (e. g. *rāhana* 'to bet'). Verbs that take agent and goal include some verbs of achievement (e. g. *raḥḥaba* 'to welcome') and some verbs of motion (e. g. *ṣ'ada ʿala* 'to ascend'). Verbs that take agent and accompaniment as their essential arguments include verbs like *ʔiṣatahab* 'to accompany' and *wākaba* 'to escort'. Some verbs of physical and mental perception (e. g. *raʔa* 'to see') and emotive verbs (e. g. *sarra* 'to please') need experiencer and theme as their essential arguments.

Verbs that take three essential arguments in their theta - grids have something in common; they have agent and theme as their first two argument. However, they differ in regard to the third argument. For instance, some verbs of exchange (e. g. *ʔaʿṭa* 'to give') need the theta - role of goal as their third argument whereas verbs indicating location (e. g. *wadaʿa* 'to put') need location as the third argument. The data from Arabic shows that *hatta* ('to urge') type verbs need experiencer as their third argument.

To sum up, this work has tried to test whether the theta - theory of the Principle and Parameters Theory (1991) can be suitably applied to Modern Standard Arabic verbs and we have found that it is the case. We have looked at various types of Arabic verbs to find out how many essential arguments they need to have well- formed sentences and what are the possible theme-

atic roles of these arguments. We have found that Arabic may need one, two, or at best, three arguments to have well- formed sentences. Insofar as the verbs that need only one argument are concerned, the important point of distinction seems to be [+ volitional]. Verbs indicating volitional act need agent whereas verbs indicating involuntary events or physical and mental states need experiencer. Inchoative intransitive verbs need only a theme. The verbs that need agent and theme as their two essential arguments are inchoative verbs, or verbs of accomplishment, or achievement. The verbs that need experiencer and theme as their two essential arguments are verbs of physical and mental perception and emotive verbs. Some verbs of achievement and motion need agent and goal, others, experiencer and theme. Among other, verbs that need three essential arguments are (a) verbs of exchange that need agent, theme and goal and (b) verbs of location that need agent, theme and location. In a few cases, Arabic verbs like English verbs insofar as the number and types of arguments that need are concerned, but many are different. The similarity is mainly because there are verbs that take cognate object. For instance, the verb *ḡanna* 'to sing' is an intransitive verb in Arabic, but it can be used transitively, in which case, it takes the cognate object *ʔuḡniyatan* 'a song'; likewise, its English counterpart, 'to sing' is an intransitive verb and is used transitively to take the cognate object 'a song'. The difference is mainly because of the nature of the theta - role of theme.

For instance, the verb *hatta* 'to urge' requires the theme in a form of IP and PP; however, in English the verb 'persuade' requires the theme in a form of CP, IP or a PP.

We can say that the theta - roles are universal properties and through them we are able to sort out Modern Standard Arabic verbs and put them in vari-

ous semantic groups on their basis, this unique exercise is economical and offers precise results. The theta - theory as a model is needed because we can say with certainty that every verb, in the paper, is precisely examined and listed in a distinct group. With this detailed analysis of Arabic verbs, we have succeeded in making the generalizations of theta - theory correct in Arabic; these generalizations contribute to better understanding of Arabic syntax; meanwhile, they enrich the field of research in Arabic by following new perspectives.

FOOTNOTES

- (1) Some linguists (e.g. Hale and Keyser (1993)) call such verbs 'unergative verbs'.
- (2) According to Vendler (1976: 106), such verbs "call for periods of time that are not unique or definite".
- (3) Pesetsky (1979: 19 - 18) calls such verbs 'experiencer predicates'.
- (4) As Sinha (1979: 254) points out, it is the characteristic of the inchoative verb that the action it describes transitively entails an event that can be described by its intransitive use.
- (5) Both the verbs *?infajara* 'get exploded' (intransitive) and *fajjara* 'explode' (transitive) are derived from the same verb- root *fajar* (transitive).
- (6) We may note that in English open, scratch, break, cut, crash and freeze are transitive as well as intransitive verbs. In Arabic, intransitive verbs of this type take *?in* or *ta* as their prefixes.
- (7) See Sinha (1979: 252 - 257) for the treatment of relation between a transitive inchoative verb and its intransitive counterpart.
- (8) It is difficult to treat verbs such as *ya^carifu* 'to know' categorically as a verb of "achievement". It is a verb of achievement in (i) but not in (ii):

i)	faja?tan	^c araf	-a	-ha	zaid	-un
	suddenly	know	past	it	Zaid	NOM

'Suddenly, Zaid knew it'.

ii) ya ^c rif	-u	zaid	-un	anna
know	pres	Zaid	NOM	that
al	-? ard	- a	mustadirtun	
DET	earth	ACC	round	

'Zaid knows that the earth is round'

- (9) The theta - role of accompaniment is used by Jackendoff (1990: 97) as it implies the relationship of mutual dependence between arguments. ✓
- (10) Another possible alternative is that *tasarufuha* 'her behaviour' is created as the instrument and *zaidan* 'Zaid' as the experiencer.

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Transliteration of the Arabic Writing Sustum

Arabic letter	Transliteration	Phonetic Value	Arabic letter	Transliteration	Phonetic Value	Vowels
ء	?	?	ض	d	ḏ	-
ب	b	b	ط	t	ṭ	-
ت	t	t	ظ	z	ẓ	-
ث	t;th	θ	ع	c	ʿ	a
ج	j	j	غ	g;gh	k	u
ح	h	h	ف	f	f	i
خ	x; kh	x	ق	q	q	a:
د	d	d	ك	k	k	u:
ذ	ḏ; dh	ḏ	ل	l	l	i:
ر	r	r	م	m	m	ʾ
ز	z	z	ن	n	n	و
س	s	s	هـ	h	h	ي
ش	š;sh	š	و	w	w	a
ص	ṣ	ṣ	ي	h	y	u
						i
						a:
						u:
						i:

the Arabic symbols on the left- hand column are used here for the transliteration of the Arabic text and the symbols on the right- hand column are used for transliterating Arabic names and titles, as is the common practice.

ABBREVIATIONS

The following abbreviation have been used in this paper:-

ABL: Ablative

ACC: Accusative

AGR: Agreement

COM: Comitative

CP: Complementizer Phrase

DAT: Dative

DET: Determiner

Fem: Feminine

GEN: Genitive

I: First Person

II: Second Person

III: Third Person

3rd : Third Person

INST: Instrumental

IP: Inflectional Phrase

LOC: Locative

Masc: Masculine

NOM: Nominative

NP: Noun Phrase

Past: Past Tense

PP: Prepositional Phrase

Sg: Singular

Vol: Volitional