Arabic Syntactic Structures A Linguistic Study According to the Neo-Khalilian Theory

Fatiha Khelout

Unité de Recherche en Science du Langage et Centre de Recherche Scientifique et Technique pour le Développement de la Langue arabe Algérie

Abstract

The neo-Khalilian theory (Hadj Salah: 1979, 2011) is a contemporary linguistic theory based on the *naḥw al-ʿarabī* (النّحو العربي) of early grammarians of Arabic. This paper presents a linguistic analysis of the syntactic structures in Arabic using what is known in the neo-Khalilian theory as the *tectonie*. This latter is made up of governing units (R), governed units (T_i) and peripheral units (D).

Keywords:

Arabic language - syntactic structures - tectonie - neo-Khalilian theory.

الملخص

يقدم هذا المقال دراسة لسانية للبنى التركيبية في اللّغة العربيّة في ضوء النّظريّة الخليليّة الحديثة، التي أسّسها صاحبها الأستاذ الدّكتور عبد الرّحمن الحاج صالح (1979، 2011)؛ ونستعين في ذلك بمفهوم البنية التركيبية القائمة على أساس العامل (ع) والمعمول (م) والوحدات الخارجة عن هذه البنية (المخصصات).

الكلمات المفاتيح :

اللغة العربية - البني التركيبية - العامل - المعمول - النظرية الخليلية الحديثة.

Résumé

La théorie néo-Khalilienne est une théorie linguistique fondée par le linguiste algérien Abderrahmane Hadj-Salah (1979, 2011) dans le cadre d'une interprétation globale du naḥw al-'arabi (النّحو العربيّة) (qui veux dire littéralement la grammaire arabe). Nous proposons dans cet article de décrire les structures syntaxiques de l'arabe en utilisant la tectonie, définie dans la cadre de la théorie néo-Khalilienne comme l'unité linguistique composée de termes régissants (R), de termes régis (T_i) et d'unités périphériques (D).

Mots clés:

Langue arabe - structures syntaxiques - tectonie - théorie néo-Khalilienne.

1. Introduction

This paper deals with the study of the fundamental Arabic syntactic structures as described by the early grammarians of Arabic and examines the patterns proposed in the neo-Khalilian linguistic theory (1979, 2011) in an attempt to formalize this description.

The neo-Khalilian theory is founded by the Algerian linguist Abderrahmane Hadj-Salah who has undertaken an investigatory research trying to bring some insights into the theoretical framework of the works of the early generations of Arab grammarians and define the fundamental concepts that were at the basis of 'ilm al-'Arabiyya (علم العربيّة). He has tried, as explained in his own words, to make:

a study as exhaustive as possible of the rational and experimental principles on which the grammar (al-nahw النحو) is generally based and the principles and methods, which were at the basis of the collection and control of the data of the 'Arabiyya (العربية); - as well as the deep analysis of the theories and patterns elaborated and made by these grammarians. (1)

In the neo-Khalilian theory, the analysis of language starts from a central level called the level of the lafza (مستوى اللفظة, i.e., the level of the lexie(2)) from which it is possible to reach both higher (i.e., the level of the tectonie and that of the super government) and lower levels (i.e., that of the kalim and that of the phonemes). As will be shown in the following sections, the level of the tectonie is the one that interests us most in this paper.

To analyse language at this level a structure made up of governing (R) and governed terms (Ti) is used. This structure belongs to an abstract level that does not result from the simple combination of the linguistic units of the inferior levels, since syntax does not exclusively appear at that level as can show the example of the verbal lexie darabtuhu, (ضريته, i.e., I hit him). In fact, syntax in the neo-Khalilian theory is based on a far more abstract level than the one of the "subject-verb-complement" (cf. Hadj Salah 2004: 8), going up to a level even more abstract known as the level of the super government in which the existence of "an initial structuring position" with an "abstract structuring effect" allows to have an indirect government of the element governed by the governing units. (cf. Ibid.: 16).

In fact, according to Hadj Salah, among what characterizes most *al-naḥw al-'arabi* and makes its conception different from the post-saussurian structuralism which operates generally by simple abstraction and where everything is based on intensive and inclusive abstractive processes is the use by the Arab grammarians of the *qiyās* (القياس) (cf. Ibid.: 28).

The operations of the $qiy\bar{a}s$ belong to "a constructive and extensive abstraction: the elements of the $b\bar{a}b$ -s are related directly. This shows then a more abstract structure that integrates and goes beyond them." (3). As will be shown in the following section, the concept of $qiy\bar{a}s$ is more than central to this approach of language analysis, since the $qiy\bar{a}s$ as a concept: "1-allows a simulation of the reality by the construction of models (generating schemes = $mu\underline{t}ul$, plu. of $mi\underline{t}\bar{a}l$); 2- makes emerge structures even more abstract (through a set of equivalences)." (4).

It is only by adopting this constructive and operatory approach that we can understand the importance given by the Arab grammarians to what Sībawayh called "tark al-'alāma" (قرك العلامة), i.e., an absence not considered for itself, but within the structured set in which it appears (cf. Hadj Salah 2003: 24). If not considered in this perspective, one cannot conceive that an absence can have a governing effect on another position of this structure (cf. Ibid).

2. The Basic Concepts of Language Analysis According to the Neo-Khalilian Theory

Before presenting in detail the Arabic syntactic structures, we propose to go through the concepts identified in the neo-Khalilian theory as being the basis of language analysis. These concepts are:

- The concept of qiyās (قياس), i.e., comparison between items to come out with a generalised pattern that can be used to generate the linguistic units of language;
- The concepts of bāb (باب), i.e., set of elements, and mitāl (باب), i.e., pattern;
- The concepts of aṣl (أصل), i.e., kernel element from which other elements are derived, and far (فرع), i.e., derived element;
- The concept of lafza (نفظة, i.e., lexie) and the three axioms by which it is defined:
 - The *infirād* (انفراد), *i.e.*, independence and separability ;
 - The ' $ibtid\bar{a}$ ' (ابتداء), i.e., beginning, and $infis\bar{a}l$ (انفصال), i.e., separability ;
 - The *tamakkun* (تمكّن), *i.e.*, capacity to receive additions.

2.1. The qiyās

The qiyās is one of the most important operatory concepts of the 'ilm al-'Arabiyya. It is defined as "an inductive device for extracting general principles from the data and as the means by which speakers create new utterances by extrapolating from speech patterns already known" (Strazny 2005: 78). What Hadj-Salah calls "la mise en qiyās" (~ comparison) is a huge work based on a rational thinking whose goal is the search for correspondences between individual linguistic items, groups of items and even operations, and the discovery of implicit mechanisms.

The qiyās, goes beyond the mere comparative analysis that is based on identity and inclusion. It is based on the notion of equivalence of structure, behaviour,... (cf. Hadj-Salah 1979: II, 418). The abstraction deriving from the qiyās⁽⁵⁾ allows the linguist to describe the linguistic units not for their own sake, since their analysis is not directed towards their static characteristics or only what differentiate them from the other units. This kind of linguistic analysis of items allows to study language as a whole network of intensive and extensive relations.

We can give as an example: kitāb (كتاب, i.e., book) which can be compared to the kalim (الكلم, i.e., plural of kalima) that share the same consonantal root: k-t-b such as: kataba ($\angle i.e.$, he wrote), kutub ($\angle i.e.$, books), $k\bar{a}tib$ (کاتب, i.e., writer), maktab (مکتب, i.e., desk). . We can also compare the kalim which have the same pattern, i.e., wazn (وزن)66. For example, maktab (مكتب, i.e., place where we write), mal'ab (ملعب, i.e., place where we play), mağma' (مجمع , i.e., place where we gather), have in common the pattern maf'al (مَفْعَل) and which means ism makān (اسم مكان, i.e., place where we do something). Another type of analogy can also be made at the level of discourse as shown in the following example where the sequences appearing in the second column occur in the same position in speech:

# ištaraytu	kitāban # ⁽⁷⁾
# ištaraytu	al- kitāba al-mufīda # ⁽⁸⁾

Figure 1

2.2. The *Bāb*

The $qiy\bar{a}s$ is entirely based on two other concepts: the $b\bar{a}b$ (باب) and the nazīr (نظير). The nazā'ir (نظائر, plural of nazīr) are "the elements that are similar to each other and that are similar to the representing element which is the pattern of the group to which they belong "(9). The $naz\bar{a}$ ir are regrouped in $b\bar{a}b$ -s(10). We speak, for example, of the $b\bar{a}b$ of the verbs: \underline{dahaba} ($\underline{a}\underline{a}\underline{b}$, i.e., i.

In each $b\bar{a}b$, there are elements which represent the $qiy\bar{a}s$. Some elements may behave in a different way from these ones. In this case, we say that these elements are $\check{s}\bar{a}\underline{d}a$ ($\dot{a}\dot{b}\dot{a}\dot{b}$, i.e., do not follow the general rule), since the $qiy\bar{a}s$ is based on the most frequent and not the scarce⁽¹²⁾.

2.3. The *Ḥadd*

The hadd (الخدا) or $mit\bar{a}l$ (الخال) is a pattern which defines the linguistic units at a given language level. It is a tool of simulation that is designed for simplification and schematization.

2.4. The Mawdi'

The positions of the <code>hadd</code> are called <code>mawādi'</code> (موضع, i.e., plural of <code>mawdi'</code>). The concept of <code>mawdi'</code> (موضع) is essential to the analysis of the Arab grammarians, since it exists at each level of language from the very lower to the higher ones. It has the meaning of a position in a structured pattern⁽¹⁴⁾ rather than the place of occurrence of an element in language. (15) The <code>mawādi'</code> are discovered through the comparison (i.e., using the <code>qiyās</code>) of two or more sequences. For the early Arab grammarians, each position of the pattern denotes a <code>dalāla wad'iyya</code> (عنا منابع) so that the pattern constitutes a formal basis for the analysis of the meaning deriving from the <code>wad'</code>.

The *mawdi'* is a virtual entity since it can be empty or contain one or more elements. In addition, a *kalima* can occupy more than one position. In fact, generally speaking, each position of the pattern can be empty, except that of the kernel.

2.5. The Tahwīl

The Arab grammarians gave a great importance to the notion of taḥwīl (تحویل, i.e., transformation), since they have considered the whole linguistic system as a transformational network in which each linguistic unit is to be considered to be either an aṣl (أصل), or a far' (فرع) deriving from the aṣl: "each linguistic entity is either a kernel upon which other elements are structurally integrated or is an entity which is derived from one or more kernels according to a given pattern"(16).

Within a linguistic pattern, the transformations allow to add elements to the left and the right of the kernel according to the rules of a given linguistic system and thus defining the linguistic units according to the different positions that can contain them. Each transformation has a corresponding operation which is the transformation in the opposite direction. The early ردّ الشيء إلى) Arab grammarians, in this case, speak of $raddu\ al ext{-}\check{s}ay'ilar{a}\ aslihi$ ردّ الشيء إلى أصله).(17) According to Hadj-Salah, this reversibility brings us to speak of a true algebra structure forming what is called in mathematics a group.

2.6. The Asl and Far'

The two concepts of așl and far', i.e., respectively kernel and derived element, identify the items of language. They allow the establishment of an order in the paradigmatic axis, since "the term asl applies to any element which (...) invariably occurs in other forms of elements which are its furū' (פֿעפָץ), i.e. plural of far') and which contain it and overlap it by virtue of some kind of material and/or formal addition." (Hadj-Salah 1987). Two items can be said to have the same martaba (مرتبة) if none of them is the aṣl of the other.

By classifying the linguistic units into 'uṣūl (أصول, i.e., plural of 'aṣl) and furū', and at the same time determining the martaba of each linguistic element (linguistic unit or operation), since, as we have mentioned in the preceding section, for the Arab grammarians everything in language is either an asl or a far' derived from an asl by means of a transformation (cf. Hadj-Salah 1979: I, 122):

all the linguistic phenomena whatever they are, are necessarily either $fur\bar{u}$ or uṣūl, or both of them at the same time [...]. This way of being of linguistic elements or these phenomena of dependence have been interpreted by the Arab linguists according to two points of view: that of a genetic derivation and that of a logico-mathematic combinatory. (18)

The aṣl is "what exists and functions by itself with regard to its furū'. It is also what is given and not what is constructed (mā yu-bnā 'alayhi wa-lā yu-bnā 'alā ġayrih ما يبنى عليه ولا يبنى على غيره (cf. Ğurğānī))"(19).

To distinguish the aṣl from its $fur\bar{u}$, it is important to know that :

the a
otin l is not only what is first with regard to its $fur\bar{u}$, but also what, both in the objects themselves and in their behaviour, is invariable. It is the constant and permanent character of some phenomena which confers it the quality of a
otin l. (...) the invariants constitute for the variables which belong to the same class of objects of reference, a common denominator or a set of permanent characters that all the $fur\bar{u}$ must possess: it is then a prototype whose particular reproductions are the $fur\bar{u}$. (20)

In fact, the a
otin l does not need a ' $a l \overline{a} m a$ (alama), i.e., mark) to be distinguished from its $f u r \overline{u}$ '(21) We end this section by presenting the criteria which the a
otin l must meet whether it is an object or a process (c f. Hadj-Salah 1979: I, 136-137):

- 1- Invariability (istimrār al-aṣl استمرار الأصل): "compared to them [i.e., the furū'], it appears as a substance or as a form, at the level of the content and/ or of the expression, in all these elements, and, reciprocally that no element among them cannot be reduced to it by any transformation". (22)
- 2- Zero mark: (tark al-'alāma): "it includes always with regard to them [its furū'] the zero mark". (23)
- 3- Autonomy ($istign\bar{a}$ '): It can, consequently, "appear alone in some productions, while the other elements which are compared to it come only with it or in its context". (24)
- 4- Not resulting from other elements (ġayr musabbab غير مسبب): "It is not the effect or the consequence of none of these elements."⁽²⁵⁾

3. The Level of the Tectonie in the neo-Khalilian Linguistic Model

The *supra-lexical* level is a linguistic level which is made up by what Hadj-Salah (1979) calls the *tectonies*. These latter are made up of governing⁽²⁶⁾ (R) and governed elements (T_i) and some peripheral elements (D) which can be deleted without any structural damage to the whole *tectonie*⁽²⁷⁾.

According to the neo-Khalilian theory, the nature of the structure of the *tectonie* excludes any segmental analysis, because at this level we do not handle directly units of lower levels, but units of a more abstract nature. This

is why Hadj-Salah speaks of a real abstraction which transforms a group of true and virtual positions into a pattern in which the units of the inferior level and some *kalim*⁽²⁸⁾ are integrated in a specific way.

The generalized pattern of these syntactic structures is represented in the following formal way:

$$(R \rightarrow T_1), T_2 \pm D$$

The unit $(R \to T_1)$ constitutes the basic syntactic pattern at this level. It is called by Hadi-Salah the 'pivot' of the tectonie upon which T₂ (or eventually T_3 and $T_4^{(29)}$) is structurally integrated. The positions of the tectonie can contain a single kalima like Kāna in the position of R (cf. figure 1), or a lexie like # al-rağulu al-tawīlu al-ladī ra 'aytuhu # which appears in the position of T_1 (cf. figure 2) or an entire syntactic structure : a tectonie like # a 'lamtu Bakran # contained in the position of R (cf. figure 3):

R	T ₁	T ₂
# kāna (Ve)	Al-rağulu al-ṭawīlu al-ladī ra'aytuhu	qā'iman # (30)

Figure 2

R			Т.	Т
R	T_1	T_2	11	1 2
# a'lam	-tu	Bakran	Zaydan	qā'iman # ⁽³¹⁾

Figure 3

Three kinds of syntactic relations are defined at the level of tectonie as shown below:

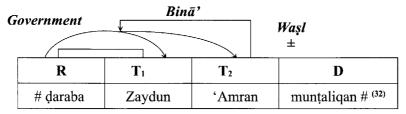


Figure 4

The tectonie can also be represented in the form of a tree as in the following figure showing the analysis of: # Kataba al-awlādu al-kibāru tamārīnahum # (33):

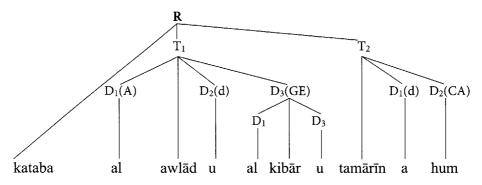


Figure 5 (Cf. Hadj-Salah 2004: 11)

4. Types of Syntactic Structures in Arabic

The pattern (R \rightarrow T₁), T₂ ± D is detailed further according to whether there is a $bin\bar{a}$ ' on the 'ism (البناء على الفعل) or on the fi' (البناء على الفعل). We have cases where the governing element can be expressed ((E (like Inna)/ Ve (like $K\bar{a}na$)/ V (like daraba)) or non expressed (Ø)⁽³⁴⁾. In this latter case, the position of the governing element is empty. This case of governance is called at-ta 'riya $min\ al$ -' $aw\bar{a}mil\ al$ -lafziyya (التعریة من العوامل اللفظیّة) and the governing element in this case is called al-' $ibtid\bar{a}$ ' (الابتداء).

To classify the Arabic syntactic structures, Hadj-Salah looks for the *aṣl* (*i.e.*, the kernel structure) from which derive the syntactic structure in question. Two formulae are thus proposed to describe all the syntactic units according to the type of the governor (R) (Hadj Salah 1979: II, 210).

- Formula A

This formula regroups, as will be shown in detail through the different types of Arabic syntactic structures, all the sequences which derive from the structure made up of an attribute and a predicate, respectively the first and second governed term. This latter, known as the habar (الخبر), i.e., a predicate) is structurally integrated upon $(mabn\bar{i} 'al\bar{a} _{\alpha})$ a noun known as being a mubtada' (مبتدأ), i.e., an attribute). Their governor can be $\mathcal{O}^{(35)}$, or $k\bar{a}na$ and its homologues $(k\bar{a}na\ wa\ 'ahaw\bar{a}tuh\bar{a})$;

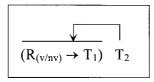


Figure 6: Formula A

- Formula B

In this formula the governing element is always a verb, or a verbal noun, or a verbal adjective. The second governed term is structurally integrated upon (mabnī 'alā مبني على) the verb and its subject.

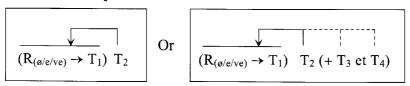


Figure 7: Formula B

It is the verb (f(l) is which governs the subject and also the complements. What is worth emphasizing here is that the Arabic verb always co-occurs with its subject in the following order Verb-Subject, as opposed to English where the order is rather Subject-Verb (except in interrogative statement patterns where the order is Operator-Subject).

In fact, the order of the elements in $(R \rightarrow T_1)$ is fixed. Thus, we cannot say: *hu-darabtu (i.e., him I hit). In this case, we can say : # iyyāhu darabtu # (إيَّاهُ ضريت) (36). In case the first governed term is not a pronoun, it can precede the verb in the following way: # Zaydan darabtu # (i.e., I hit Zayd) especially when the infliction at the end of the noun shows if it is the subject or the object of the verb⁽³⁷⁾ as in: # 'Amran daraba Zaydun #⁽³⁸⁾. We can also have the following sequence # daraba 'Amran Zaydun #(39) (cf. Hadj-Salah 1979: II, 214).

This kind of distortions which may occur in discourse can be analysed as follows:

Rø	Т		T ₂	
Νø	1 1	R _v	T_1	T ₂
# Ø	Zaydun	ḍaraba	Ø	'Amran # (40)

Figure 8

Т.	Rø	T ₁		
12	Νø	T_1	$\mathbf{R}_{\mathbf{v}}$	T ₂
# 'Amran	Ø	Zaydun	ḍaraba	Ø # ⁽⁴¹⁾

Figure 9

The second governed element, on the other hand, can precede the governing element as in the following example where the order of T_1 and T_2 is inverted:

R	T_2	T ₁
# daraba	'Amran	Zaydun# (42)

Figure 10

or:

T ₂	R	T_1
# 'Amran	ḍaraba	Zaydun # (43)

Figure 11

To 'reconstruct' the order of the linguistic units in each sequence, we have to detach our vision from the order which appears at the surface structure. This operation is called by the Arab grammarians: at-taq $d\bar{\imath}r$ (التقدير) (144). They "used this principle of a level beneath the surface level of speech utterances in order to explain the grammatical form of these utterances, in particular the declensional endings" (Versteegh 2006: 435). In fact, in the dikr (القدى, i.e. real discourse), we can find sequences like: $\{R, T_1, T_2\}$, $\{T_2, R, T_1\}$, $\{R, T_2, T_1\}$, but all these sequences have only one $taqd\bar{\imath}r$ (تقدير واحد): $(R \rightarrow T_1, T_2)$. We note also that even in Arabic, this distortion is possible only when we deal with units whose case shows their position in the structure. This is the case of Zaydan in the figures above, in whatever position it appears, the "-an" at its end indicates that it is the complement (i.e., T_2). This is not the case, for example, of ' $\bar{\imath}$ sa (نيور) or $ab\bar{\imath}$ (نيور) in # daraba ' $\bar{\imath}$ sa $ab\bar{\imath}$ # (نيور) $\bar{\imath}$, i.e., Aissa hit my $atter}$ and # $atter}$ $atter}$ at

5. Types of Governors in Arabic

If we have to classify the possible governors in Arabic in a schematic way, we can say that there is the non expressed governor "Ø", the non verbal governor, and the verbal governor consisting of an intensive verb like $K\bar{a}na^{(45)}$ (in the case of these three first units, we are dealing with constructions deriving from formula A, (*cf.* Figure 6)), or an extensive verb or a verbal noun or a verbal adjective (appearing in formula B (*cf.* Figure 7)).

Each type of these governors will be handled in the following sections, namely the non-expressed governor, the intensive verb, the monotransitive verb by itself, and the monotransitive verb through a preposition. These governors will be described according to the patterns in which they appear trying to find their corresponding clause types in English.

5.1. The Non Expressed Governor "Ø"

Al-'ibtidā' (46) R	Al-Mubtada' (47) T ₁	Al-Ḥabar ⁽⁴⁸⁾ T ₂
# Ø	Derna	madīnatun #
# Ø	al-mutaṣāri'ūn	yābāniyūn #
# Ø	aṭ-ṭalibu	mu'addabun #
# Ø	al-lawnu	bāhitun #

Figure 12

Hadj-Salah defines in a formal way the *mubtada*' as being a governed term which has no expressed governor, i.e., it is preceded by the 'ibtida', while the habar is the second term which is governed by this 'ibtida'. This structure, i.e., $[(\emptyset \to T_1), T_2]$, is described by Hadj-Salah as being the kernel from which derive the other nominal structures (i.e., a-t-tarākīb al-ismiyya التّراكيب الاسميّة) in which inna (إنّ), meaning literally: indeed, in fact) is the governor.

According to Hadi-Salah, most of the latest grammarians who came after Al-Halīl and Sībawayh, like Ibn Malek, have misinterpreted the writings of the early Arab grammarians and have analysed the *mubtada*' as being the first item by which starts what is called al-ğumla al-'ismiyya (الحملة الاسمية, i.e., the nominal sentence).

This state of 'ibtida' can be transformed by the introduction of a linguistic unit in the position of the gorverning unit. Sībawayh writes in this context: "wa 'innamā yadhulu an-nāsibu wa-r-rāfi'u siwā al-'ibtidā 'wa-l-ǧārru 'alā al-mubtada' "(53) (I, 48). This means that the we can put the mubtada' in the nominative case (مرفوع) as in # Kāna Zaydun munṭaligan #(54), or in the accusative case as in # Ra'aytu Zaydan muntaligan #(55), or in case of al-ğarr as in # Marartu bi-Zaydin muntaligan #(56).

These examples are represented by Hadj-Salah in the following way:

R	T ₁	T ₂	Outside the Binā'
# Ø	Zaydun	munțaliqun #	(57)
# Kāna	Zaydun	munțaliqan #	
# Ra'ay-	tu	Zaydan	munṭaliqan #
# Marar-	tu	bi-Zaydin	munṭaliqan #

Figure 13

It is interesting to note that Arabic allows the structural integration of a noun on a noun as in # Derna madīnatun # (درنة مدينة), i.e., Derna is a city) or an adjective on a noun as in # aṭ-ṭālibu mu'addabun # (الطّالب مؤدّب), i.e., The student is polite). This characteristic is generally underlined as "the most notable feature of Arabic syntax." (Kasem 2000: 183).

In English, this kind of structures needs intensive verbs. *The sky is blue* instead of **The sky blue*. *The blue sky* exists, but in addition to the fact that it is not a *tectonie*, the characteristic *blue* in the first sentence means that it is temporary in *the sky*, while in the second example we are speaking only of *the blue sky*.

Thus, the syntactic structures of the type $[(R_{\emptyset} \to T_1), T_2]$ correspond in English to the SVCs⁽⁵⁸⁾ clause pattern where the intensive verb (generally known as copular verb or linking verb) links the subject to its complement as in *He became angry*.

5.2. The Non Verbal Governor Like Inna⁽⁵⁹⁾

There are in the Arabic language some particles ($hur\bar{u}f$ عروف) which are comparable to verbs⁽⁶⁰⁾. These occur in the position of the governor in formula A (cf. Figure 6). What is specific to this kind of constructions is that we cannot interchange the order of T_1 and T_2 , except when T_2 is an adverb of place or time ($zarf zam\bar{a}n \ aw \ mak\bar{a}n$ فلرف زمان أو مكان (cf. Hadj-Salah 1979: II, 213).

Inna and its homologues are of the number of six: Inna (انّ), anna (انّ), lakinna (كأنّ), layta (علّ), la'alla (علّ) or 'alla (علّ), ka'anna (كأنّ). These are some examples of constructions where this kind of governors appear:

R	T_1	T ₂	
# Inna	'Abdallāhi	munṭaliqun #	(61
# Inna	Zaydan	muğtahidun#	(62
# Inna	Zaydan	šuǧā'un#	(63

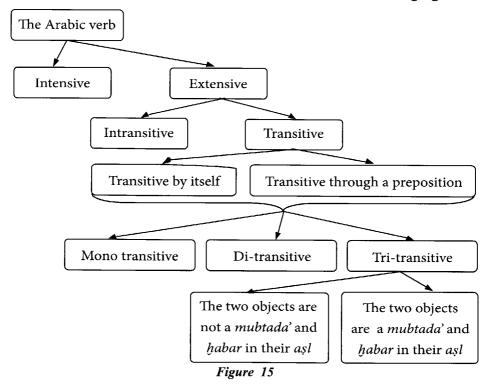
Figure 14

As we can see when *Inna* appears in the position of the zero governor, *i.e.*, al-' $ibtid\bar{a}$ ', the first governed term becomes Zaydan (Zayd in the accusative case) instead of Zaydun and it is called $ism\ inna$ (اسم الماء), i.e., the noun of inna), while the second term $mu\check{g}tahidun$ (مجتهد) remains $marf\bar{u}$ (its case remains unchanged) and it is called $habar\ inna$ (خبر ان i.e.), the predicate of inna). The two terms T_1 and T_2 in this kind of constructions have the same referent. # Inna

Zaydan šuǧā 'un #, for example, is translated to English in the following way: Zayd is courageous indeed. Thus, it has the same structure as the translation given to # Kāna Zaydun šuǧā 'an # (i.e., Zayd was courageous), except of course the tense of the verb To be. The tawkīd (emphasis) denoted by the particle *Inna* is translated in English by *indeed*, while the relation between the subject and the complement is possible through the linking verb be.

5.3. The Verbal Governor

Verb categories in Arabic can be summarised in the following figure:



The Arabic verb can be either intensive (64) or extensive. When it is non intensive, the Arabic verb can be intransitive or transitive. The transitive verb, i.e., Al-fi'l al-muta'addī (الفعل المتعدى), needs more than its subjects to complete its meaning. In Arabic, the transitive verb can have in addition to its subject, one or two or three objects. The governing effect of the transitive verb puts the subject in the nominative case (which is in Arabic ar-raf' الرفع) and the object (al-maf'ūlu bihi النصب) in the accusative case (an-nașb). We add to this the distinction that is usually made between the verb which is transitive by itself and the verb which is transitive through a preposition.

5.3.1. The intensive Verb: Kāna and its Homologues

 $K\bar{a}na$ (کان) and its sisters (=homologues) (Kāna wa 'aḥawātuhā) are classified in Arabic as being a special class of verbs. In fact, the early Arab grammarians distinguished three word classes: "al-kalimu ismun wa fi 'lun wa ḥarfun ğā'a li-ma 'nā laysa bi-ismin walā fi 'l''(67). This means that the kalim (68) were classified only into: the noun, the verb and the ḥarf (69). In this context, Kāna and its homologues are considered to be 'af'āl nāqiṣa (ناقصة) and 'af'āl nāsiḥa (ناقصة). They are verbs, because they are linked to their subjects and they are $n\bar{a}qiṣa$ (ناقصة), because to complete their meaning, they need a subject and an object.

This is why *al-af'ālu-n-nāqiṣa*⁽⁷⁰⁾ are sometimes considered as auxiliaries. But, not at a hundred percent since they can occur alone without other full verbs⁽⁷¹⁾, while the auxiliaries occur alone only in context determined syntactic constructions like the short answers. Thus, we propose rather to refer to this kind of verbs as "*linking verbs*" (or *copular verbs*).

They are also 'af'āl nāsiḥa (أفعال ناسخة) and this is important with regard to the transformations it causes on its attribute and its predicate. In the case of $K\bar{a}na$ and its homologues, they occur in the position of the 'ibtidā' and the attribute is put in the nominative case and is called the ism of $K\bar{a}na$ (i.e., its noun), while the predicate is put in the accusative case and is called the habar of $K\bar{a}na$.

Al-'ibtidā'	Mubtada'	Habar	
R	T ₁	T ₂	
# Kāna	'Abdullāhi	fariḥan #	(72)

Figure 16

The English translation for this example, *i.e.*, *Abdullah was happy*, shows that a possible corresponding English clause for this type of Arabic constructions, whose governor is *Kāna* and its sisters, is the SVC clause. Another example for this kind of constructions is # *Kāna Zaydun nā'iman* #, which can be translated into English by the following statement: *Zayd was sleeping*.

5.3.2. The Extensive Verb

As shown in Figure 15, the extensive verb can be either intransitive or transitive (by itself or through a preposition).

5.3.2.1. The Intransitive Verb

The intransitive verb, i.e., Al-fi 'l al-lāzim (الفعل اللدّن , governs only its subject and does not have an effect on what comes after this latter. This is the case of the verbs like dahaba (نهب, i.e., He went) and harağa (خرج, i.e., He went out).

Fi'l (Verb)	Fāʻil (Subject)
# dahaba	Ø#
# ḫarağa	Ø#

Figure 17

These two examples function as tectonies, since they are comparable to constructions of the kind harağa al-waladu. Hadi Salah represents them as an $R \rightarrow T_1$ construction:

D	T_1	<u>-</u>
K	Pronoun	Lexie
# dahaba	Ø#	-
# ḫarağa	Ø#	_

Figure 18

These constructions are thus analysed through formula B (cf. Figure 7), since R is a verb. It corresponds in English to the SV clause pattern where the verb is intransitive, dynamic and extensive as in: The child went out.

We note here that the $f\bar{a}$ 'il (الفاعل, i.e., subject) in both languages is necessary to actualise the action of the verb. It is important to underline here that the clause containing an intransitive verb cannot be transformed to its corresponding passive voice statement both in Arabic and English: *He went* \rightarrow **He is went. dahaba* \rightarrow **duhiba.*

 $S\bar{\imath}bawayh$ classified this kind of verbs in a $b\bar{a}b^{(73)}$ which he called " $b\bar{a}b$ alfā'il al-ladī lam yata'addahu fi'luhu 'ilā maf'ūl'"(14) (I, 66) with the object which has no subject (i.e., a logical subject) and whose verb has no other objects: "al-maf'ūl al-ladī lam yata'adda ilayhi fi'lu fā'ilin wa lā ta'adda fi'luhu ilā maf'ūlin 'āḥar''(75) (Ibid.).

Thus, iğtahada al-waladu (اجتهد الولد) and Kutiba ad-darsu (کُتبَ الدرس) كُتبَ الدرس) (٢٦٥) belong to the same $b\bar{a}b$. These two examples are represented by Hadj-Salah in the following way:

R	T_{t}
# iğtahada	al-waladu#
# Kutiba	ad-darsu #

Figure 19

Al-waladu is the subject of iğtahada and ad-darsu is the object of kataba, but in this representation, it occupies the position of the subject and it is called $n\bar{a}'ib$ al- $f\bar{a}$ 'il (نائب الفاعل), i.e., the grammatical subject replacing the logical subject.

The construction $(R \to T_1)$ constitutes the pillar of the tectonie since "the verb must have an effect of government on at least one term "(78) and in Arabic, even the intransitive verb can govern in addition to its subject, one of these six units: al-masdar (الصدر), zarf al-makān (ظرف المكان), i.e., the locative object adverb of place), zarf az-zamān (ظرف الزمان, i.e., the temporal object -adverb of time-), al-ḥāl (الحال), al-maf'ūl ma 'ah (المفعول معه, i.e., the comitative object), and al-maf'ūl lah or li-'ağlih (الفعول له أو لأجله, i.e., the causative object) as shown in the following examples:

- al-maf'ūl al-muṭlaq (الفعول المطلق, i.e., the absolute object) as in : # qāma zaydun qiyāman # (79).
- al-maf'ūl lah or li-'ağlih as in # sāfartu 'ilā firansā raġbatan fi-t-ta'allumi # (80).
- al-maf'ūl ma'ah as in : # mašaytu wa-l-bahra # (81).
- zarf az-zamān, as in : # tanāwaltu al-'ašā'a qabla 'awānihi # (82).
- zarf al-makān as in : # iḥtaba'a al-qiţţu taḥta al-mā'idati # (83).
- $al-h\bar{a}l$ as in : # aqbala al-waladu musri 'an # (84).

All these units are put by Hadj-Salah in the position of the muḥaṣṣiṣāt الخصّصات), i.e., peripheral elements (D)) which are defined as syntactic determiners.

5.3.2.2. The Transitive Verb

A. The Transitive Verb by Itself

A.1. The Monotransitive Verb

The monotransitive verb is known as al-fi'l al-muta'addi li-maf'ūlin *wāhid*⁽⁸⁵⁾. This is the case of the verbs like *kataba*.

Fi'l (Verb)	Fā'il (Subject)	Maf'ūl bih (Object)
# kataba	Zaydun	risālatan # ⁽⁸⁶⁾

Figure 20

These verbs occur in the syntactic constructions of the type: $(R \to T_1) T_2$. They are represented by Hadi Salah in the following way:

D	T ₁		T ₂	
, ,	Pronoun	Lexie	Pronoun	Lexie
# kataba	-	Zaydun	-	risālatan #

Figure 21

Formula B (cf. Figure 7) allows to describe this type of syntactic structures, since R is a verb. It corresponds to the SVO_d English clause pattern in which the verb is monotransitive and extensive. An example of this kind of clauses is: John wrote a letter.

As already mentioned, the clause containing a monotransitive verb, both in Arabic and English, accepts a passive transformation. In Arabic, during the passivization process, the verb is transformed from the wazn (i.e., pattern) fa 'ala (فَعَلُ) to fu 'ila (فُعِلُ) and from yaf 'alu (فَعَلُ) to yuf 'alu (فُعَلُ); in addition, the subject (الفاعل, i.e., al-fā'il) loses its position as a first governed term and is replaced by the object (الفعول به, i.e., al-maf'ūl bih) which becomes the grammatical subject of the sentence (نائب الفاعل, i.e., nā'ib al-fā'il) in the following way:

Position of the governing element R	Position of the 1^{st} governed element T_1	Position of the 2^{nd} governed element T_2	
# ḍaraba	'Abdullāhi	Zaydan #	(87)
# ḍuriba	Zaydun #		(88)

Figure 22 (cf. Hadj-Salah 2004: p. 9)

Thus, $[(R_{v-active} \rightarrow T_1), T_2]$ becomes $(R_{v-passive} \rightarrow T_1)$. When the voice of the verb is active, the first governed term is a subject, and when the voice of the verb is passive, the first governed term is a nā'ib fā'il (i.e., grammatical but not logical subject).

A.2. The Ditransitive Verb

The ditransitive verb, i.e., al-fi'l al-muta 'addi ilā maf'ūlayn(89), governs in addition to its subject, two objects. In Arabic, these two objects can be derived from a kernel structure in which they are either a mubtada' and a habar or not.

A.2.1. The ditransitive Verb Whose Two Objects

Are Not a Mubtada' and Habar in Their Aşl(90)

This type of verbs is described by Hadj-Salah through formula B (i.e., $(R \rightarrow T_1), T_2)$ in which the second object (here the third governed term) appears outside the binā' (i.e., outside the structural integration). Sībawayh puts this category of verbs in a group which he entitles: the group of "verbs" which govern two objects: if you want you can keep only the first object, or the verb transits to the second object as it does for the first one"(91).

This is the case of the verbs like $a't\bar{a}$ (i.e., He gave)⁽⁹²⁾ in the example: $a't\bar{a}$ Zaydun 'Amran risālatan (i.e., Zayd gave Amr a letter).

Fil (Verb)	Fāʻil	1 st Maf'ūl bih	2 nd Maf'ūl bih
	(Subject)	(1 st object)	(2 nd object)
# a'ṭā	Zaydun	'Amran	risālatan # ⁽⁹³⁾

Figure 23

First of all, we have to note that the two complements of the Arabic clause VSOO are not in their *aṣl* (primitive form) an attribute and a predicate (ليس such as # as-sama'u zarqā'u # (أصلهما مبتدأً وخبراً, i.e., The sky is blue) in # zanantu as-sama 'a zarqā 'a # (ظننت السّماء زرقاء, i.e., I thought the sky was blue). This latter is treated as being derived from formula A (Figure 6). For Sībawayh, # a'ṭā Zaydun 'Amran risālatan # is grammatical as well as # a'tā Zaydun 'Amran # or # a'tā Zaydun risālatan #.

According to Hadj-Salah, the second object is governed by the verb $a't\bar{a}$ just like the first object Zayd since it is in the accusative case (, i.e., $man s \bar{u} b$), but as we have just seen, since it can be omitted from the formal point of view, it is outside the binya (النية) $(R \to T_1)$, T_2 . It is represented as follows:

R (fi'l)	T ₁ (fā'il)	T ₂ (1 st maf'ūl bih)	Outside the binā' (2nd maf'ūl bih)
# a'ṭā	Zaydun	'Amran	risālatan #

Figure 24

This brings us to deal with the units which can appear outside the binya. In the clauses of the type VSO like # ra'ā Zaydun 'Amran #, many linguistic units can appear and disappear without destroying the syntactic construction at this level. These units are called peripheral units and are symbolised in the tectonie by D:

R	T_1	T_2	D	
# Ra'ā	Zaydun	'Amran	munṭaliqan #	(9
# Ra'ā	Zaydun	'Amran	yanṭaliqu #	(9:
# Ra'ā	Zaydun	'Amran	yaktubu risālatan #	(9
# Ra'ā	Zaydun	'Amran	abūhu qā'imun #	(9
# Ra'ā	Zaydun	'Amran	al-yawma#	(9:
# Ra'ā	Zaydun	'Amran	fi-d-dāri #	(9:
# Ra'ā	Zaydun	'Amran	ḥaqqan #	(1

Figure 25

To distinguish this kind of units appearing at this position from other ones which can appear inside the positions constituting the binya, Hadj-Salah proposes the test of substituability of the subject by the object in the passive, since this cannot be applied on the units occupying the position of D.

- The test of position change:

The clause containing a ditransitive verb, both in Arabic and English, accepts the following possible passive transformation:

R	T_1	T ₂	Outside the binā'	
# a'ṭā	'Abdullāhi	Zaydan	risālatan#	(101)
# uʻṭiya	Zaydun	risālatan#		(102)

Figure 26

While this position change is not possible with the other units appearing also outside the binya, but this time as true additional units. These linguistic units never occur in the position of the first or second governed term even in the passive voice sentences as is shown by the following examples:

R	T_1	T ₂	D	
# Ra'ā	Zaydun	'Amran	munțaliqan#	(103)
# * Ra'ā	Zaydun	munțaliqan#		(104)
# Ra'ā	Zaydun	'Amran	yanṭaliqu#	(105)
# * Ra'ā	Zaydun	yanṭaliqu#		(106)
# Ra'ā	Zaydun	'Amran	yaktubu risālatan #	(107)
# * Ra'ā	Zaydun	yaktubu risālatan #		(108)

Figure 27

According to Hadj-Salah, "what does not allow to consider the sequence: # darabtu muntaliqan .. # a tectonie at the same title as # darabtu Zaydan .. #, otherwise, what does not allow « muntaliqan » to be the second governed term as «Zaydan » is"(109), is the fact that " T_2 is, in its primitive form (i.e., aṣl), either an attribute (in formula A, Figure 6), or an object (i.e., maf'ūl) (in formula B, Figure 7)"(110) and "only the attribute in A and the object in B can substitute the attribute for the first and the subject of the verb for the second"(111). To clarify this, the following examples are given (cf. Hadj-Salah 1979: II, 216):

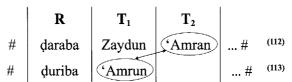


Figure 28

	R	T ₁	T ₂		
#	Ø	al- : rağulu	qā'imun	#	(114)
#	Ø	al- : qā'imu	al-rağulu	#	(115)
#	kāna	al- : rağulu	qā'iman	#	(116)
#	kāna	al- : qā'imu	al-rağula	#	(117)

Figure 29

As Hadj-Salah underlines it, this is not a mere inversion of position, but a true position change. For example, the $h\bar{a}l$ (mainly adverb of manner)⁽¹¹⁸⁾ muntaliqan in # $Ra'\bar{a}$ Zaydun 'Amran muntaliqan #⁽¹¹⁹⁾ cannot become # * $Ra'\bar{a}$ Zaydun muntaliqan # (120) (as is shown in Figure 27 above).

This test of position change is then used to differentiate the object from the $h\bar{a}l$. This is important, because in the pattern proposed by Hadj-Salah (1979: II, 209), munțaliqan and al-tawba appear both outside the binya. But munțaliqan is described as being a DH ($H\bar{a}l$) in # $Ra'\bar{a}$ Zaydan 'Amran munțaliqan # (121), while tawban in # kasawtu Zaydan al-tawba # (122) is a direct object. The proof is that al-tawba can occur in T_1 (# kusiya al-tawbu # (123)), while munțaliqan, as we have just seen, cannot. In addition, the $h\bar{a}l$, as we have mentioned, appears even in the syntactic constructions containing the verbs which can govern only their subjects (i.e., the intransitive verbs). Thus, if munțaliqan was a second governed term in # dahaba Zaydun munțaliqan #,

this would have meant that it could be replaced by units such as Amr. This is being impossible, since # *dahaba Zayd Amr # is ungrammatical. (cf. Sībawayh (I, 20) cited in Hadj-Salah (1979: II, 218)). This is also the case of the adverbs of place and time which occur as syntactic determinants, i.e., in the position of D for Hadi-Salah. This position being a free one and its content can be deleted without any damage to the structure of the tectonie.

Nevertheless, there are some cases where the adverbs may occur as true second governed terms as in these examples quoted by Hadi-Salah (1979: II, 218):

		R		T_1	T ₂ ou D			
#	,	ḍaraba		Zaydun	ḍarban ḍaʻīfan # (12	4)		
#		duriba	ḍar	bun ḍaʻīfun # (125)	•••			
	Figure 30							
	i	F	ł	T_1	T ₂ ou D			
i	#	sāra 'al	ayhī	Zaydun	yawmayni # (126)			
7	#	sīra 'al	ayhī	yawmāni # (127)				

Figure 31

These syntactic structures correspond in English to the SVOO clause type in which the verb is ditransitive (extensive and dynamic) as in: "She gives me expensive presents" or "John gave Peter a letter".

A.2.2. The Ditransitive Verb Whose Two Objects are a Mubtada' and Habar in Their Asl(128)

The verb which governs, in addition to its subject, two objects whose structure in its primitive form (asl) is an attribute + predicate, are intensive verbs like *Kāna* and its homologues, but they are not *nāqisa* as these latter. These verbs are ditransitive full verbs which need a subject to govern the two objects which follow them. The two objects being in their asl a mubtada' and habar (i.e., their two objects are in their primitive form respectively an attribute and a predicate). These verbs are af'āl al-zann wa ar-rağaḥān (أفعال الظن والرجحان) (أفعال الظن والرجحان) (أفعال الظن والرجحان) and $af'\bar{a}l$ at- $tahw\bar{l}l$ (أفعال التحويل).

We can give the example of zanna (غن, i.e., He thought) in: # zannantu Zaydan nāgiḥan #(132) (i.e., I thought Zayd winning). This verb puts in the accusative case (yanṣibu mafʿūlayn ينصب مفعولين) two objects, which can be replaced by the sequence $Anna^{(133)}$ + attribute + predicate (i.e., Anna and its ism and its habar) in the following way:

# ẓannan	-tu	Zaydan	nāğiḥan # ⁽¹³⁴⁾
# zannan	-tu	anna Zaydan nāğiḥun # (135)	

Figure 32

We can give also the following example:

# zannan	-tu	-ka	marīḍan # ⁽¹³⁶⁾
# zannan	-tu	annaka marīḍun # (137)	

Figure 33

We note here that the meaning of the verb zanna itself is very important, because when it has the meaning of 'to think/ to imagine' it is ditransitive, but when it has the meaning of 'to accuse', it becomes monotransitive as in : zanna al-qādī Zaydan (i.e., The judge thought Zayd -literal translation), with the meaning of 'ittahamahu (i.e., Itahamahu), i.e., He accused him).

This kind of syntactic constructions are treated by Hadj-Salah as being part of formula A (Figure 6) in the following way $(R \rightarrow T_1, T_2, T_3)$ and are represented in a way which is comparable to the structure $(R \rightarrow T_1, T_2)$:

R		T_2	T ₃	
\mathbf{R} \mathbf{T}_1		1 st object	2 nd object	
# ḥasib	-tu	Zaydan	ğālisan # (138)	

Figure 34

This kind of syntactic structure correspond in English to the SVOC clause pattern as in the following example: *I imagined her beautiful* (Quirk & al. 1988: 170).

A.3. The Tri Transitive Verb(139)

The verbs which are tri-transitive in the Arabic language require in addition to the subject, three objects. But what is specific to the clauses made up of these verbs is the fact that the second and third objects are in their *aşl*

respectively an attribute and a predicate. This class of verbs need in addition to its subject an object in order to govern two other objects. The most known verbs in Arabic of this kind are: $ar\bar{a}$ (زعل), 'a'lama (أعلم), 'anba'a (أنبأ), nabba'a (نتّا), 'aḥbara (أخبر), ḥabbara (خبّر), ḥaddaṯa (حدّث).

One example of this kind of verbs in Arabic is the verb 'a 'lama (i.e., to inform) whose "first object is in its aṣl an explicit noun (ism ẓāhir اسم ظاهر) or a pronoun (damīr صنمير), while the second and third are in their aṣl an attribute and a predicate" (cf. Yakoub 1984: 31). For example, in: # 'a 'lamtu Zaydan 'Amran dāhiban al-yawma # (i.e., I informed Zayd that 'Amr is going today), the two last objects can also be replaced, just as for the second and third object of the verb zanna, by the al-maṣdar al-maʾul (المصدر المؤول): anna Amran d̄ahib (i.e., that 'Amr is going today):

# 'a'lam	-tu	Zaydan	Amran	dāhiban#
# 'a'lam	-tu	Zaydan	anna Amran	dāhibun #

Figure 35

These constructions are described by Hadj-Salah through formula A (Figure 6) in the following way (140):

R			T	Т	
R	$R \qquad T_1 \qquad T_2$		13	14	
# 'a'lam	-tu	Zaydan	Amran	dāhiban#	
# 'aray	-tu	ka	al-sayyārata	musri'atan #	

Figure 36

We underline here that what is specific to formula A is that the first and second governed terms (which are structurally equivalent to T₃ and T₄) have the same referent, while this is not the case in formula B, where T₁ and T₂ refer respectively to the subject and the object.

If we look at the English grammatical system, we find that there is no reference to tri transitive verbs. But, let us try to analyse carefully the corresponding English construction for one of the examples given above in an attempt to find a corresponding construction to this kind of Arabic tri transitive verbs namely: I informed Zayd that 'Amr is going today. Thus, we propose an SVOO structure with "Amr is going" as a second object. It is outside the binya. It can enter the bina, in case we transform this clause into its corresponding passive voice: Zayd was informed Amr is going.

B. The Transitive Verb Through a Preposition

The transitive verb by itself does not need a preposition to govern its object like: # baraytu al-qalama # (بریت القلم, i.e., I sharpened the pencil). There are in the Arabic grammatical system some verbs which need a preposition to govern their objects like dahaba in: dahabtu bika (خمیت بك) with the meaning of adhabtuka (اذهبت بك , i.e., I made you go). The object which is linked to its verb through a preposition is mağrūr (معرور) (منصوب معلا) (منصوب معلا) (منصوب معلا) because it is also manṣūb maḥallan (منصوب معلا) (منصوب معلا). For this kind of verbs we can give the following representation proposed by Hadj-Salah (1979: II, 207):

R	T_1	T ₂	D
# marar-	tu	bi-'Amrin	munțaliqan # (143)

Figure 37

If we look at the English grammatical system, we find that the clause type that could be compared to such constructions is the SVA clause type, following the example: *He got through the window* (Quirk & al. 1988: 170).

The ditransitve verbs may also govern one of its objects directly, while the other object is related to its verb through a preposition like in: 'addū al-'amānāti 'ilā 'ahlihā (اثُوا الأمانات إلى أهلها). Following the first description given in the figure above, we can represent this example as follows:

R	T_1	T ₂	T ₃ (Outside the binya)
# 'addū	-	al-'amānāti	'ilā 'ahlihā #

Figure 38

The English clause type that could be compared to such syntactic constructions is the SVOA clause type such as: *I put the plate on the table*.

6. Concluding remarks

We end this paper by focusing again on the fact that the syntactic structures are not limited "to the level including the two structures of: fi'l and fā'il/mubtada' and habar for the existence of a level which is superior it that can delimit these two structures in one structure more abstract" (145).

According to Hadj-Salah, for the Arab grammarians a syntactic governing unit has always a governed term. With regard to this point also, both in Arabic and English it is the term that cannot be omitted in any case, because the governor must have an effect on at least one element, the only exception to this in English, are the short answers, though they are context dependent.

The order of the subject and the verb cannot be inverted in both languages. In English, for example, Takes in He takes never precedes the subject as opposed to the auxiliaries which appear in the position of the operator. In Arabic, this characterizes the linguistic units which are in the nominative case since they cannot precede their governors. The pronouns in the subjective case also cannot come after the full verb: *pay he. Instead of the subjective pronouns, as we have seen above, there are corresponding pronouns in the objective case that are inflicted forms of the pronouns in the subjective case: pay him. The same phenomena is observed also in Arabic: the pronouns are affixed and are inflicted forms of the subjective pronouns because they are governed by the verb. Instead of *daraba huwa hum (*منرب هو هم*, i.e., *he hit they) or *daraba anā anta (*ضرب أنا أنت, i.e., I hit you) we have darabahum (ضربهم) and darabtuka (ضربهم).

Notes

- 1- Our translation of:
 - "- l'examen aussi exhaustif que possible des principes rationnels et expérimentaux sur lesquels repose le *naḥw* d'une façon générale, ainsi que les principes et les méthodes qui ont été à la base de la saisie et du contrôle des données de la 'Arabiyya ; l'examen également approfondi des théories et des modèles élaborés et mis en œuvre par ces grammairiens." (Hadj-Salah 1979: I, 41)
- 2- The term *lexie* is used by Hadj-Salah (1979) to translate the term *lafza* that was used for the first time by *al-Radī al-'Astrābādī* (الرضي الاسترابادي) to refer to the linguistic units of the lexical level. *Sībawayh* refers to it as a group of *kalim* behaving as one *kalima*. The *lexie* is a "*kalima mufrada*" or "*mā bi- manzilati kalimatin wāḥida*" (Cf. Hadj-Salah 2003: 25).
- 3- "une abstraction *constructive* et *extensive*: les éléments relevant de deux *bāb*-s sont mis en rapport directement. Cela fait apparaître alors une structure plus abstraite qui les *intègre* et les *déborde*." (Ibid.: 28)
- 4- "1- permettre une *simulation* de la réalité par la construction de *modèles* (les *schèmes* générateurs = *mutul*, plur. de *mitāl*; 2- faire émerger des structures beaucoup plus abstraites (par une série de mises en équivalence)." (Ibid.: 19)
- 5- We have mentioned here only the use by the linguist of the *qiyās* as a tool of language analysis, but there is also the act of *qiyās* consisting in the intuitive use of the generating patterns by the speaker himself and which can be unconscious (Cf. Hadj-Salah 1979: I, 207). This is an important characteristic of the *qiyās* because the speakers do not only use the utterances which they have heard or learned, but use the *qiyās* to construct new utterances that conform to the structure of language.
- 6- Also called mital (i.e., pattern) which is a group of symbols in a given order that represent the structure of the $b\bar{a}b$.
- 7- i.e., I bought a book.
- 8- i.e., I bought the interesting book.
- 9- Our translation of: "... les *naẓā'ir* sont des éléments semblables entre-eux et semblables à un élément-type qui est le schème de la classe à laquelle ils appartiennent." (Hadj-Salah 1987).
- 10- A *bāb* is an organised set of elements having in common a characteristic, a behaviour, a pattern, etc: "le *bāb* est sémiologiquement considéré comme l'ensemble des *nazā'ir*." (Hadj-Salah 1979: I, 128)
- 11- Hadj-Salah gives the example of *fi ūl* which is a pattern that results from the lexical combinations of the *'Arabiyya* but which is non existent in the real usage of the Arab speakers.

- 12- Sībawayh gave the example of qāma which would have been qawama if it followed the qiyas of its bab (Cf. Ibid.: I, 213-223).
- 13- The linguistic unit at the central level of analysis according to the neo-Khalilian theory.
- 14- In the pattern of the nominal *lexie*, for example, each constituent of the *lexie* has a specific position: the determiner always appears in the first position on the right of the așl (i.e., kernel) (in the perspective of the Arabic language which is written from right to left).
- 15- In this case, the Arab grammarians use rather the term mawqi ' (موقع).
- "كل كيان لغوي إما أصل يبنى عليه غيره أو فرع يبنى على أصل أو أصول مع مثال سابق" (*Sībawayh*: I, 22).
- 17- The Arab grammarians used also the term of at-taḥwīl at-taqdīrī to refer to the transformation that allows the linguist to detach himself from the form that is directly observable to reach the virtual form. This was mainly used in the case of ambiguous terms, or in case of utterances in which there is an elision or deletion, or which do not conform to the intended structure compared to their homologues.
- 18- Our translation of: "Tous les phénomènes linguistiques, quels qu'ils soient, sont nécessairement soit des $fur\bar{u}$ soit des $us\bar{u}l$, ou les deux en même temps: furū 'par rapport à d'autres prototypes plus généraux, et uṣūl par rapport à des métatypes plus spéciaux. Cette manière d'être des éléments linguistiques ou ces phénomènes de dépendance ont été interprétés par les linguistes arabes selon deux points de vue: celui d'une dérivation génétique et celui d'une combinatoire logico-mathématique." (Hadj-Salah 1979: I, 129)
- 19- Our translation of "Le aşl est donc ce qui existe ou fonctionne par lui-même par rapport à ses furū'. C'est aussi ce qui est donné et non ce qui est construit (mā yu-bnā 'alayhi wa-lā yu-bnā 'alā ġayrih (Voir Ğurǧānī, Ta 'rīfāt, art, asl et far'))." (Ibid.: 1, 135-136).
- 20- Our translation of: "le așl est non seulement ce qui est premier par rapport à ses furū' mais aussi ce qui, tant dans les objets en eux-mêmes que dans leur comportement, est invariable. C'est le caractère constant et permanent de certains phénomènes qui leur confère la qualité de așl. (...) les invariants constituent pour les variables qui appartiennent à la même classe un objet de référence, un dénominateur commun ou un ensemble de caractères permanents que tous les furū' doivent posséder: il s'agit donc d'un prototype dont les reproductions particulières sont les furū " (Ibid.: I, 131).
- 21- Our translation of: "ce sont les $fur\bar{u}$ qui ont besoin de ' $al\bar{a}m\bar{a}t$ et non les $us\bar{u}l$ qui n'en ont guère besoin." (quoted by Hadj-Salah (Ibid.: I, 136)).

- 22- Our translation of: "comparé à eux, il apparaît comme substance ou comme forme, sur le plan du contenu et/ou de l'expression, dans tous ces éléments, et, réciproquement qu'il n'y ait aucun élément parmi eux qui ne puisse lui être réduit par une transformation quelconque (caractère invariant du *aṣl: istimrār al-aṣl*)" (*Ibid.*: I, 136-137).
- 23- Our translation of: "il comporte toujours par rapport à eux, la marque zéro (tark al-'alāma);" (Ibid.).
- 24- Our translation of: "il peut, par conséquent, se suffire à lui-même en ce sens qu'il peut se retrouver seul dans certaines réalisations, alors que les autres éléments qui lui sont apparentés ne se retrouvent qu'avec lui ou dans son sillage. C'est le principe d'autonomie ou *istignā*" (voir ci-dessous);" (Ibid.).
- 25- Our translation of: "il n'est l'effet ou la conséquence d'aucun de ces éléments (ġayru musabbab)." (Ibid.).
- 26- For Versteegh:

The choice of the words "governor" and "governance" in the translation of the Arabic terms conjures up the image of modern linguistics and specifically the government and binding model. This raises the question of the permissibility of such terms in translating Arabic grammatical theory. In fact, any translation of technical terms from another tradition poses a problem, since even terms such as "noun", "verb", "nominative", "accusative", "morphology", or "syntax" are closely connected with the Western grammatical tradition and therefore likely to distort the original meaning. (1997: 6)

- 27- In fact, the deletion of 'Inna or Kāna brings us back to the aṣl (# Zaydun munṭaliqun #) while the deletion of daraba or any other verb destroys entirely the binā'.
- 28- cf. endnote 67 of this paper.
- 29- The number of governed elements cannot exceed four because the verb in the position of the governing element can be mono-transitive (like *halaka*), ditransitive (like *ra'ā*) or tri-transitive (like *'a'lama*).
- 30- i.e., The tall man that I saw was getting up.
- 31- i.e., I told Amr that Zayd got up.
- 32- i.e., Zayd hit Amr going.
- 33- i.e., The big boys did their exercises. "R = governing element; T₁ = first governed term; T₂ = second governed term; D = determiner; A = article; d = declensional endings; CA = complément; GE = attribute." (Cf. Hadj-Salah 2004: footnote 5, p. 11)
- 34- Ø stands for the "*'ibtidā*" that is the zero mark; E stands for "exposant"; D for the peripheral elements; Ve for an exponential verb which is the only type of verbs that occurs as governor in the nominal construction. What is specific to

- these verbs is that it is possible to omit them with a return to the kernel made up of a governing element that is Ø and two governed terms; while, in other types of structures, the deletion of the verb destroys the tectonie. In addition, these verbs can govern up to four terms when they are tri-transitive.
- 35- This symbol means that the governor in this case is not expressed phonologically.
- 36- Pronoun specially used for the *nasb*.
- 37- In Arabic, Zayd for example is marfū' (i.e., in the nominative case) when it is a subject $(f\bar{a}'il)$ and takes the form : Zaydun, and it is $mans\bar{u}b$ (i.e., in the accusative case) when it is an object (maf'ūl bih) and takes the form Zaydan. Thus, whether we say: # daraba Zaydun 'Amran # (i.e., Zayd hit Amr) or # Zaydun daraba 'Amran # (i.e., Amr hit Zayd), we know in both examples through the case endings that Zayd is the subject and 'Amr is the object. The other possible inflection for nouns in Arabic is the genetive case $(al-iz\bar{a}fa)$ as in Zaydin. -u, -a and -i are called 'alāmāt al-i 'rāb.
- 38- i.e., Zavd hit Amr.
- 39- i.e., Zayd hit Amr.
- 40- i.e., Zayd hit Amr.
- 41- i.e., Zayd hit Amr.
- 42- i.e., Zayd hit Amr.
- 43- i.e., Zavd hit Amr.
- 44- The taqdīr means "literally 'estimating, guessing', viz. of the underlying structure" (Versteegh 2006: 435).
- 45- The verbal particles, al-adawāt al-fi'liyya (such as kāna and its homologues, $af'\bar{a}l~a\check{s}-\check{s}ur\bar{u}',...)$ are classified in grammar books with the non verbal particles (al-'adawāt al-ḥarfiyya like $m\bar{a}$ and laysa and ann and $l\bar{a}$), which are used for negation, because they all have in common the characteristic of changing the case of the linguistic units. In the neo-Khalilian theory, these appear at the supra-lexical level as part of the tectonie.
- 46- Absence of an expressed governor, also called by Sībawayh, at-ta'riya.
- 47- A linguistic unit which functions as an attribute.
- 48- A linguistic unit which functions as a predicate.
- 49- i.e., Derna is a city. (Mannā' 1967: 14).
- 50- i.e., The wrestlers are Japanese (Ibid.).
- 51- i.e., The student is polite (Ibid.).
- 52- i.e., The colour is dim.
- "وإنما يدخل الناصب والرافع سوى الابتداء والجار على المبتدإ" -53
- 54- i.e., Zayd was gone.

- 55- i.e., I saw Zayd going.
- 56- i.e., I went by Zayd going.
- 57- i.e., Zayd is going.
- 58- S=Subject; V = Verb; Cs = Subject complement.
- 59- Hadj-Salah calls it 'exposant corroboratif' (Cf. Hadj-Salah 1979, II: 189, footnote 11).
- 60- They are sometimes called "marqueurs d'évidentialités" (El Kassas 2005: 416).
- 61- i.e., Abdullah is (indeed) gone.
- 62- i.e., Zayd is (indeed) studious.
- 63- i.e., Zayd is (indeed) courageous.
- 64- Hadj Salah calls them "des verbes exponentiels".
- 65- Literally To be in the past.
- 66- The sisters of *Kāna* are: *Aṣbaḥa*, 'amsā, 'azḥā, bāta, ġadā, 'azhara, 'asḥara, 'afǧara, zalla. Each one of these verbs have a special denotation concerning the time when the action happened continuously.
- 67- According to Sībawayh ""الكلم: اسم، وفعل، وحرف جاء لمعنى ليس باسم ولا فعل" (Sībawayh: I, 2).
- 68- For Hadj-Salah, "the kalima is the linguistic unit that appears in one of the positions contained in the lexical pattern. It is a meaningful segment whose minimal nature derives from the pattern in question and not from its content (which is minimal only in relation to it)." (Hadj-Salah 1987)
- 69- To give an example of the harf, we can mention the preposition, harf al-ğarr "fi" (i.e., in), in "fī-l-kitāb" (i.e., in the book), and the determiner "al" (i.e., the) in "al-kitāb" (i.e., the book) and "lā" (i.e., not) in "lā 'urīd" (i.e., I do not want). Note that each of these three examples (i.e., "fī", "al". and "lā") are neither nouns nor verbs but they denote a meaning. The last one, for example, "lā" denotes the negation.
- 70- In Arabic, there are two sets of *al-af'āl nāqiṣa*: $K\bar{a}na$ and its homologues and $K\bar{a}da$ and its homologues.
- 71- Though, *Kāna* can function as an independent verb with complete meaning as in the Coran: "kun fa-yakūn" (مُنْ فَلَكُونُ).
- 72- i.e., Abdullah was happy.
- 73- For more details about the $b\bar{a}b$, cf. endnote 10 of this paper.
- باب الفاعل الذي لم يتعدّه فعله إلى مفعول -74
- المفعول الذي لم يتعدى إليه فعل فاعل ولم يتعدّه فعله إلى مفعول آخر -75
- 76- The boy has worked hardly.
- 77- The lesson was written.

- 78- Our translation of : "le régissant doit avoir un effet de rection sur au moins un terme". (Hadj-Salah 1979: II, 193).
- 79-i.e., Zayd got up (with energy). Or: daraba al-waladu aḥāhu darban mubriḥan, i.e., The boy hit his brother violently (cf. Homeidi: 8).
- 80- i.e., I travelled to France for studying. Or waqaftu ihtirāman li-'ustādī, i.e., I stood up in respect to my teacher. (Ibid.).
- 81-i.e., I walked along the sea. Or: sirtu wa-šāṭi', i.e., I walked along the seafront. (Ibid.).
- 82- i.e., I ate diner before time. Or: tașilu zawğati gadan, i.e., My wife arrives tomorrow. (Ibid.).
- 83- i.e., The cat hid under the table.
- 84- i.e., The boy came rapidally.
- الفعل المتعدى لمفعول واحد -85
- 86- i.e., Zayd wrote a letter.
- 87- i.e., Abdullahi hit Zayd.
- 88- i.e., Zayd was hit.
- الفعل المتعدى إلى مفعولين -89
- الفعل المتعدى إلى مفعولين ليس أصلهما المبتدأ والخبر -90
- باب الفاعل الذي يتعداه فعله إلى مفعولين، فإن شئت اقتصرت على المفعول الأول، وإن شئت -91 تعدّى إلى الثاني كما تعدى إلى الأوّل
- 92- These verbs are: 'a'ṭā (i.e., to give), manaḥa (i.e., to grant), sa'ala (i.e., to ask), kasā (i.e., to cover), 'albasa (i.e., to cloth), 'allama (i.e., to teach).
- 93- i.e., Zayd gave Amr a letter.
- 94- i.e., Zayd saw Amr going. (Cf. Hadj-Salah 1979: II, 216)
- 95- i.e., Zayd saw Amr, he was going. (Cf. Ibid.)
- 96- i.e., Zayd saw Amr, he was writing a letter. (Cf. Ibid.)
- 97- i.e., Zayd saw Amr, his father standing up. (Cf. Ibid.)
- 98- i.e., Zayd saw Amr today. (Cf. Ibid.)
- 99- i.e., Zayd saw Amr in the house. (Cf. Ibid.)
- 100- i.e., Zayd saw Amr really. (Cf. Ibid.)
- 101- i.e., Abdullah gave Amr a letter.
- 102- i.e., Zayd was given a letter.
- 103- i.e., Zayd saw Amr going.
- 104- i.e., *Zayd saw going.
- 105- i.e., Zayd saw Amr, he was going.
- 106- i.e., *Zayd saw, he was going.
- 107- i.e., Zayd saw Amr, he was writing a letter.
- 108- i.e., *Zayd saw, he was writing a letter.

- 109- « ce qui empêche de considérer la séquence: # darabtu munțaliqan .. # comme une tectonie au même titre que # darabtu Zaydan .. # autrement dit, qu'est-ce qui empêche que « munțaliqan » soit le second terme d'une tectonie comme l'est « Zaydan »?» (Hadj-Salah 1979: II, 216).
- 110- « T_2 est, dans son $a \le l$ ou état primitif, soit un habar ou attribut (dans la formule A) soit un $maf \hat{u}l$ ou complément (dans la formule B) » (Ibid.)
- 111- « seuls le *habar* dans A et le $maf'\bar{u}l$ dans B sont capables de se substituer en tant que tels au mubtada' pour le premier et au $f\bar{a}'il$ ou sujet du verbe pour le second. avoids the sequence. » (*Ibid*.)
- 112-i.e., Zayd hit Amr.
- 113- i.e., Amr was hit.
- 114- i.e., The man is standing up.
- 115- i.e., The one who is standing up is the man.
- 116- i.e., The man was standing up.
- 117- i.e., The one who is standing up is the man.
- 118- The hāl is most of the time an adverb of manner. It "describes the subject or the object when the action happens." (al-Sīrāfī in (Sībawayh I, 82, footnote 1)). "الحال وصف من أوصاف الفاعل أو المفعول في وقت وقوع الفعل منه".
- 119- i.e., Zayd saw Amr going.
- 120- i.e., *Zayd saw going.
- 121- i.e., Zayd saw Amr going.
- 122- i.e., I made Zayd wear the cloth I covered Zayd with the cloth.
- 123- i.e., He was covered with the cloth.
- 124- i.e., Zayd hit weakly.
- 125- i.e., Zayd was hit weakly.
- 126- i.e., Zayd has ridden it for two days.
- 127- i.e., It has been ridden for two days.
- الفعل المتعدي إلى مفعولين أصلهما المبتدأ والخبر -128
- 129- Such as: zanna, hāla, hasiba, za'ama, hağā, 'adda, ğa'ala, hab.
- 130- Such as : arā, 'alima, darā, wağada, alfā, ğa 'ala, ta 'alama.
- 131- Af'āl at-taḥwīl are : ṣayyara, ĕa'ala, radda, taraka, ttaḥaḍa, ittaḥaḍa, wahaba.
- 132- Example given by Yakoub (1984: 151).
- 133- Anna belongs to the class of Inna.
- 134- i.e., I thought Zayd winning.
- 135- i.e., I thought that Zayd is winning. These kind of constructions could be compared to the following English construction: I consider John intelligent (example given by Chomsky 1981, p. 35).

- 136- i.e., I thought you were ill.
- 137- i.e., I thought that you were ill.
- 138- i.e., I thought that Zayd was sitting.
- الفعل المتعدى إلى ثلاثة مفاعيل 139- Al-fi'lu al-mut 'addi ilā talātati mafā 'īl الفعل المتعدى إلى ثلاثة مفاعيل
- 140- We underline here that # 'a 'lamtu 'Amran Zaydan munţaliqan # is comparable to # $k\bar{a}na$ Zaydun muntaliqan # since T_3 et T_4 can enter in $((R \rightarrow T_1), T_2)$. Thus, the construction ((R \rightarrow T₁), T₂) (+ T₃, T₄) can be represented as an ((R \rightarrow T₁), T_2). through an embedding at the level of R.
- 141- In the genitive case.
- 142- In the position of the accusative case.
- 143- I passed by Amr going.
- 144- أدُّوا الأمانات إلى أهلها , i.e., Convey the trusts to their owners.
- «أما البني النحوية الخاصة بالكلام فإنها لا تنحصر فيما فهمناه من كلام الخليل وسيبويه، في -145 المستوى المتضمن للبنيتين: فعل وفاعل/ مبتدأ وخبر لوجود مستوى أعلى منه يمكن أن تتحدُّد فيه هاتان البنيتان في بنية واحدة تكون أعم وأشمل» (Hadj-Salah 2014: 20)

Bibliography

- Chomsky, N., 1981. Lectures on Government And Binding: the Pisa Lectures. Walter de Gruyter. (Republished in 1993).
- Cohen, M., 1924. Le Système Verbal Sémitique et l'Expression du Temps. Paris: Leroux, XXVII.
- El Kassas, Dina. Une Étude Contrastive de l'Arabe et du Français dans une Perspective de Génération Multilingue. Unpublished thesis. 2005. Paris 7. France
- Hadj-Salah, A., 2014. Muqaddima li-dirāssat al-bunā an-naḥwiyya. Revue de l'AALA. Numéro 19. Juin 2014. Algiers : ENAG, pp. 9-33.
- Hadj-Salah, A., 2011. Linguistique Arabe et Linguistique Générale: Essai de Méthodologie et D'épistémologie du 'Ilm Al-'Arabiyya. 2 Volumes. Algiers : ENAG.
- ____, 2004. Linguistique et Phonétique Arabes (2). Al-Lisaniyyat. Centre de Recherche Scientifique et Technique pour le Développement de la Langue arabe. Alger. N. 9. pp. 7-38.
- ____, 2003. Linguistique et Phonétique Arabes (1). Al-Lisaniyyat. Centre de Recherche Scientifique et Technique pour le Développement de la Langue arabe. Alger. N. 8. pp. 7-38.
- ____, 1979. Linguistique Arabe et Linguistique Générale: Essai de Méthodologie et D'épistémologie du 'Ilm Al-'Arabiyya. Typed doctorate thesis. Paris Sorbonne. 2 volumes.
- Kasem, A., 2000, 'The Acquisition of English Copula by Native Speakers of Lebanese Arabic', in Ibrahim, Z., et al (eds), Diversity in Language: Contrastive Studies in English and Arabic Theoretical and Applies Linguistics., The American University of Cairo and New York.
- Manna', Mohamed A. 1976. The Medium English. AL-Kharraz Library. Benghazi. Libya.
- Quirk, R. & S. Greenbaum, 1988. A University Grammar of English. Hon Kong: Longman. First publication of the ELBS edition 1979.
- Sībawayh. Al-Kitāb. Beyrout: Dar Al-Koutoub Al-'Ilmiyya. (Notes by Emil badi' Yakob, édition 1999).
- Versteegh, K., 2006. Arabic linguistic tradition. pp. 434-440. In: Brown, Keith (ed.). 2006. Encyclopedia of Language and Linguistics. Volume 1. Elsevier.
- ____, 1997. The Arabic Linguistic Tradition. London: Routledge.
- Yakoub, Emile badī'. 1984. Mu'ğam a-t-tulāb fi-l-i'rāb wa-l-'imlā'. Beyrout. Lebanon: Dar al-'ilm li-l-malāyīn...