Chapter 2

Syntactic structure

2.0.Introduction

The first step in the exploration of the syntax, semantics and pragmatics interface in the grammatical system of human language is to characterize the nature of syntactic structures. It includes the structure of clauses, adpositional phrases and noun phrases. In this chapter, I will investigate the structure of phrases and clauses in Farsi simple sentences. The organization of this chapter is as follows: in Section (2.1) the notion of layered structure of the clause (LSC) in RRG will be introduced. Section (2.2) is devoted to the layered structure of the clause in Farsi and its universal and language specific aspects. Section (2.3) presents the structure of adpositionals and simple noun phrases. In Section (2.4), the notion of syntactic template will be presented.Then, the main examples of Farsi syntactic templates will be proposed. Finally, Section (2.5) summarizes the analysis of this chapter. I will argue that RRG offers a very efficient framework for the analysis of Farsi LSCs.

2.1.The layered structure of the clause

RRG rejects the idea of multiple levels of syntactic representation and abstract underlying representation which is assumed in formal theories like Government and Binding (Chomsky, 1981) or

Relational Grammar (Perlmutter, 1980). VanValin and LaPolla (1997) state that there is no empirical fact in any human language that absolutely requires a theory of syntax posit multiple levels of syntactic representation. From an RRG perspective, there are two general considerations that a theory of clause structure must meet. First, a theory of clause structure should capture all of the universal features of clauses without imposing features on languages in which there is no evidence for them. Second, the theory should represent comparable structures in different languages in comparable ways.

Thus, the RRG theory posits only a single level of syntactic representation for a sentence which is mapped directly into the semantic representation of the sentence. VanValin and LaPolla (1997) sketch the organization of RRG as the following figure.

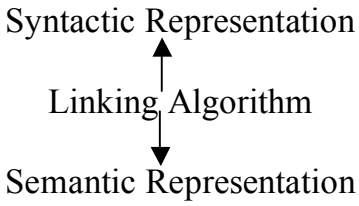


Figure 2.1 Organization of RRG.

According to RRG's assumptions, the clause embodies two fundamental structures, relational and non-relational structures. Relational structure refers to the relation between a predicate and its arguments. Non-relational structure, on the other hand, refers to the hierarchical organization of constituents in a sentence. These two

types of relations are considered to be universal in that all languages have a distinction between predicate and arguments and also have hierarchical groupings of the elements in a sentence. Since they are so fundamental and universal, the two structures should be explicitly spelled out by any syntactic theory. Lexical Functional Grammar (Bresnan, 2001) has distinct formal representations for the relational structure (f-structure) and the non-relational structure (c-structure). Relational Grammar (Perlmutter, 1980) for instance deals only with the relational structure, while Generalized Phrase Structure Grammar (Gazdar et al. 1985) concerns itself only with the non-relational structure. Government and Binding theory, on the other hand, posits the non-relational structure, from which, it derives the relational structure. RRG, more like LFG, has explicit representations of both relational and non-relational structures. In this chapter, I will concentrate on the non-relational structure in simple sentences.

2.1.1. Constituent structure

Hierarchical structure in RRG is not based on the X-bar schema familiar to most syntacticians but is instead more semantically based (VanValin, 1999d). However, this theory has an explicit, generative phrase structure. This phrase structure is distinguished from phrase structure in formal theories in that RRG provides an

account of the direct causal roles played by the semantics and pragmatics of utterances in their syntax, i.e. the linearity and configurationality of natural language grammar (Everett, 2002). This theory uses a concept of the layered structure of the clause [LSC]. LSC is different from the other syntactic approaches in that it is based on two fundamental contrasts: the contrast between the predicate and its arguments, and the contrast between arguments and non-arguments. The predicating element is normally a verb, but it can also be a non-verbal predicate with some kind of copular verb. In some languages, however, predicate may be a non-verbal element without any sort of copula.[1] A predicate, therefore, refers only to the predicating element which is a verb, an adjective or a nominal of some sort. The contrast between predicating and non-predicating elements are represented in Figure (2.2)

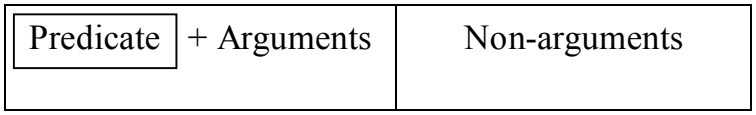


Figure 2.2 Universal opposition underlying clause structure

RRG distinguishes three layers which constitute a clause, each enclosing the lower one: the innermost layer is the nucleus, which corresponds to the predicate; the nucleus plus all the arguments of its predicate form the core; the outermost layer is the clause. The periphery consists of adjuncts, e.g. locative and temporal

adverbials, which modify the core within the clause. The relation among these three layers is diagrammed as Figure (2.3).

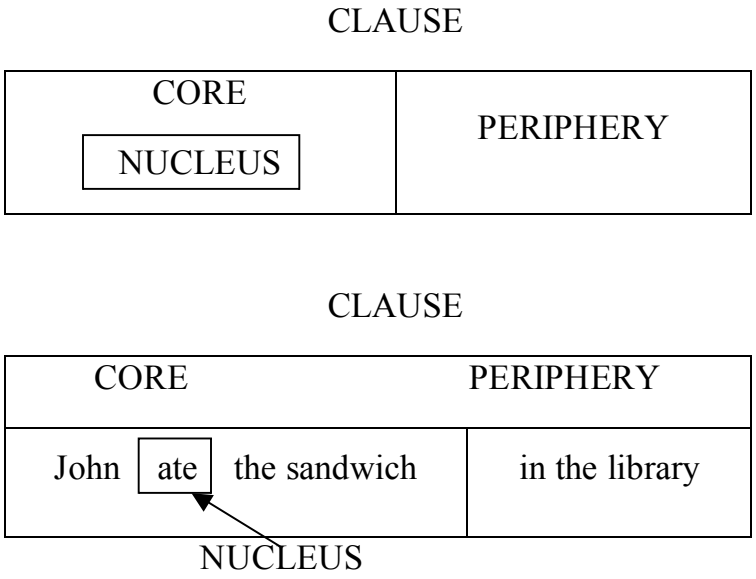


Figure 2.3 Components of the layered structure of the clause (from VanValin and LaPolla 1997:26)

This layered structure is universal, because every language distinguishes between predicates and their arguments, and also distinguishes between NPs/PPs which are arguments of the predicate and those which are not. These contrasts are found in all languages, regardless of whether they are free word order or fixed word order, configurational or non-configurational, head-marking or dependent-marking (Yang, 1994). This is completely independent of all those considerations.

The universal aspect of the layered structure of the clause in RRG can be represented as in Figure (2.4). This type of tree

diagram differs substantially from the constituent-structure trees used in X-bar syntax. The clause consists of the core with its arguments, and the nucleus, which subsumes the predicate. The periphery is represented on the margin, and the arrow there indicates that it is an adjunct.

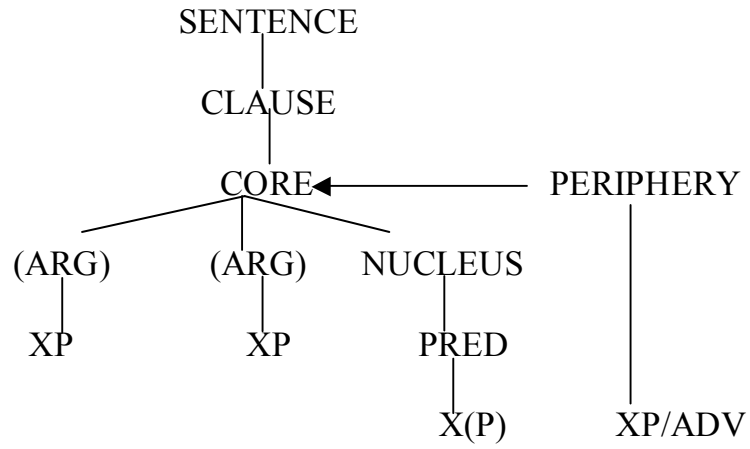


Figure 2.4 Formal representation of the LSC

The linear order of the core arguments and the predicates is irrelevant to the determination of whether an element is in the nucleus, core or periphery. The representation in Figure (2.4) will work for any linear order because none of these relationships depends upon linear order. An example of English clause is given in VanValin and LaPolla (1997:32) as the following tree diagram.

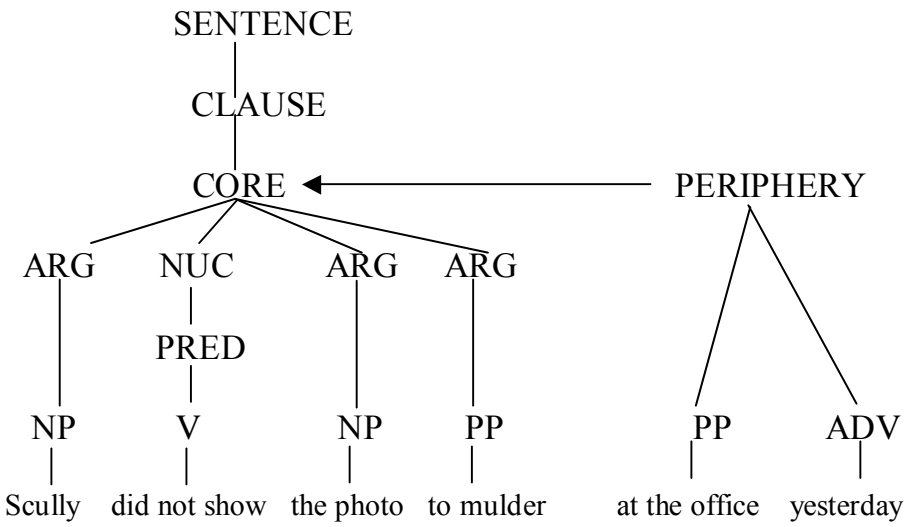


Figure 2.5 English LSC

2.1.2. Non-universal aspect of the layered structure of clause

In a single-clause sentence, the LSC has some other elements beyond the ones represented in Figures (2.4) and (2.5). Two of these elements are the precore slot [PCS] and the Left-Detached Position [LDP] in languages such as English. These elements are not universal, and linear order is relevant to the determination of their positions. The PCS is clause-internal, but core-external. It is the position in which question words occur in languages such as English. This position is also the location for non-WHNPs or PPs in sentences like *"That book you put on the table"* or *"To Bana Pat gave a new watch"*. NPs and PPs of this sort are separated from the rest of the sentence by a pause or intonation break. In addition to the PCS, it is also possible to have an initial phrase set off from the

rest of the sentence by a pause or intonation break. Examples of this construction are given in (2.1).

(2.1) a. At the park, I talked to Leslie.

b. Yesterday, I walked on the beach with Kim.

This initial position, termed the left-detached position, is outside of the clause but within the sentence. Sentence (2.2) is an English example which contains all of nucleus, core, clause, PCS and LDP (VanValin and LaPolla:36).

(2.2) Yesterday, what did John show to Mary in the library?

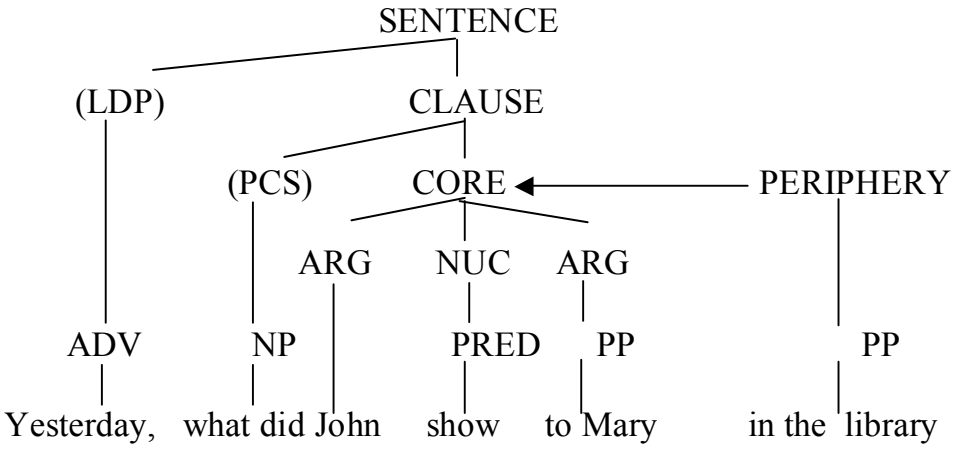


Figure 2.6 English sentence with PCS and LDP

VanValin and LaPolla (1997) show that in some languages there is a post core slot as well, Japanese is a good example of this kind of languages (Shimojo 1995). Furthermore, detached phrases may appear either before or after the clause, e.g. *"I have not seen them in two weeks, the smiths"*. Thus, it is necessary to distinguish the two types of detached positions. The abstract representation of the

clause containing the pre-and post core slots and the detached positions is given in Figure (2.7).

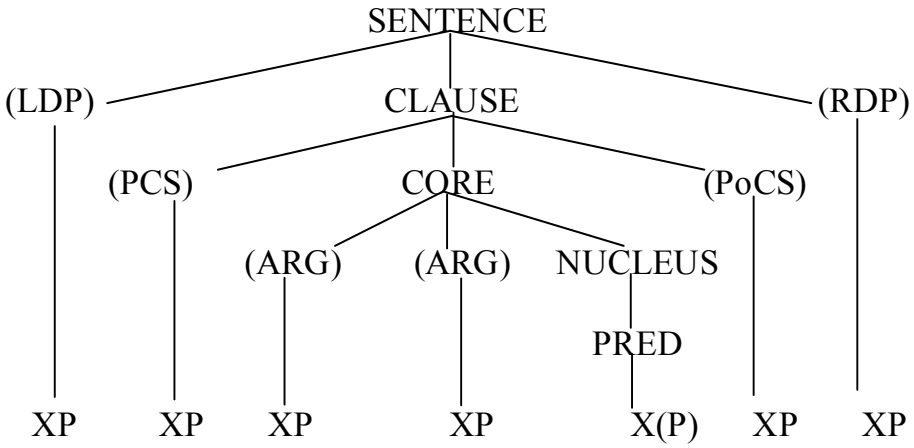


Figure 2.7 Abstract LSC including extra-core slots and detached positions

2.1.3 Operators and their representation

The grammatical categories such as aspect, tense, negation, modality, etc. are treated as operators modifying different layers of the clause, therefore, RRG represents the operators separately from the layered structure. The representation of layered structure itself is referred to as the constituent projection. The representation of operators is referred to as the operator projection, as shown in the following figure for simple sentences.[2]

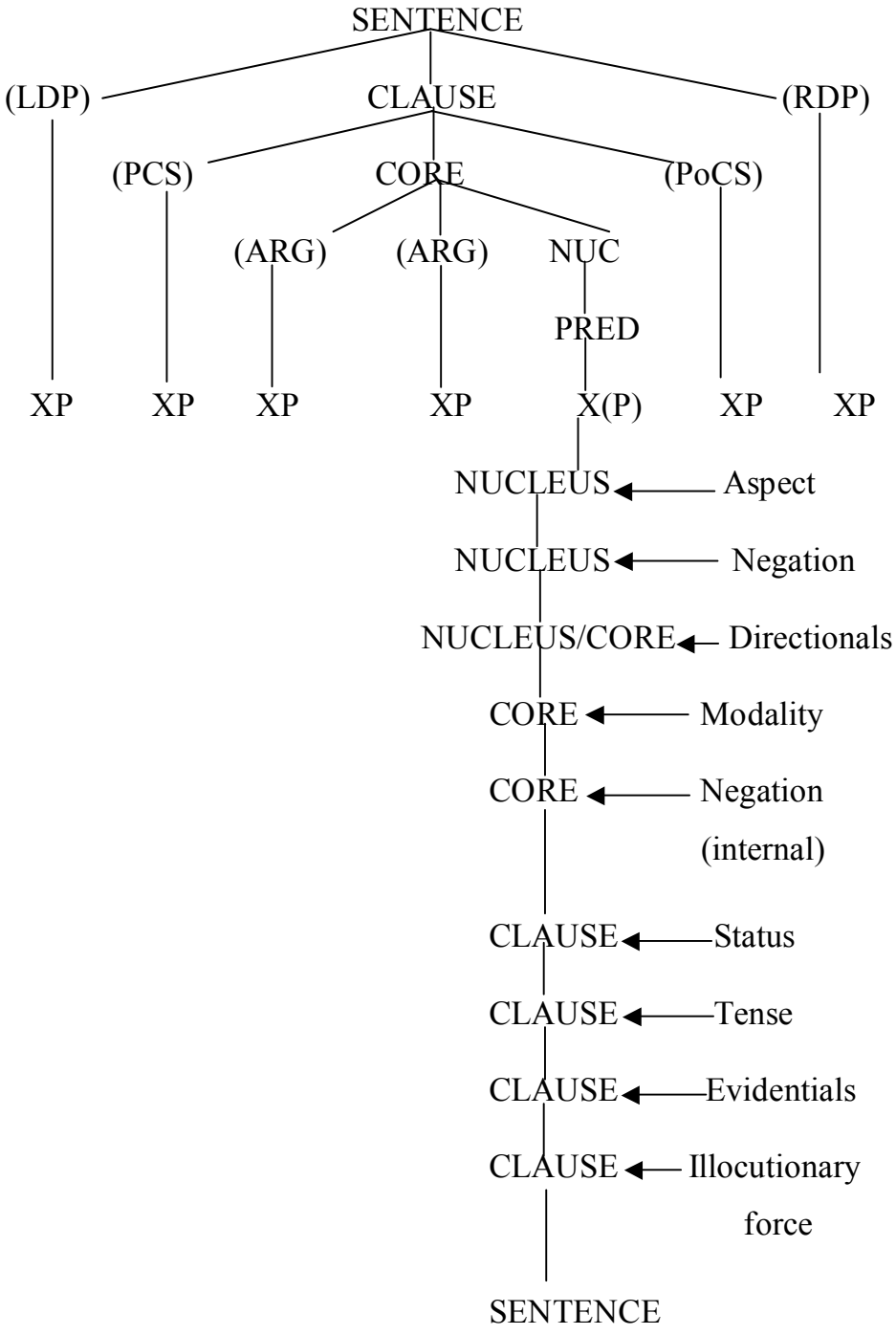


Figure 2.8 LSC with constituent and operator projections

The operators which have scope over the nucleus, i.e. the verb and the innermost layer of the clause, are nuclear operators like aspect

and some directionals. The core operators are those like modality or internal negation which have a scope over the core, consisting of one or two arguments and the predicate. The clausal operators like status, tense, evidentials and illocutionary forces have scope over the whole clause. The operators in Farsi will be investigated in Chapter four. In this chapter, I omit operator projection from the layered structure of the clauses in order to simplify the figures and diagrams.

2.2. The LSC of Farsi simple sentences

Farsi is a canonical SOV language. However, this word order is not rigid like English word order. Farsi is a verb final language, but it does not adhere to a strict word order and the sentential constituents may occur in various positions in the clause; this is especially the case for prepositional phrases and adverbials. The following examples illustrate different possible word orders in this language.

(2.3) a. **S- -O- IO- V**

man ketâb râ be Minâ dâd-am.

I book OBJ to Mina gave-1sg

'I gave the book to Mina.'

b. **O-S-IO-V**

ketâb râman be Minâ dâdam.

book OBJ I to Mina gave-1sg

c. **O-IO-V-S**

ketâb râ be Minâ dâd-am man.

book OBJ to Mina gave-1sg I

d. **IO-S-O.V**

be Minâ man ketâb râ dâd-am.

to Mina I book OBJ gave-1sg.

e. **O-S-V-IO**

ketâb râ man dâd-am be Minâ.

book OBJ I gave-1sg to Mina

As seen from the above sentences, word order in Farsi is to a great extent flexible. Of course, the unmarked and canonical order is SOV. What makes this variation of sentence constituents possible, unlike languages such as English, is the fact that each constituent has its own charactreristics. First, subject agrees with the verb in person and number. Second, direct objects are marked with the postposition *-râ*.[3] Finally, indirect objects are usually marked with prepositions. A very significant aspect of the layered structure of the clause in RRG, is that the distinctions among the layers are not dependent in any way on the linear order of elements in a clause. It can be seen from the examples in (2.3) that the elements of the core, nucleus, and periphery can in principle occur in any order in a clause.

2.2.1 Intransitive sentences

The simplest sentence construction in Farsi consists of a syntactic argument and a predicate without any other constituents. These intransitive sentences are of two distinct types: verbal sentences and copular sentences. In verbal intransitive sentences the predicate is always a verb.

(2.4) a. Ali âmad 'Ali came'

b. Bižan mord 'Bijan died.'

The layered structure of sentences in (2.4) is represented as Figure (2.9).

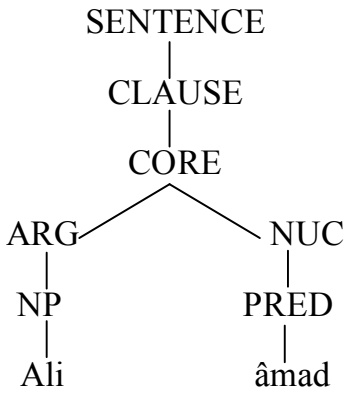


Figure 2.9 The LSC of a minimal intransitive sentence

2.2.2 Copular sentences

As it was mentioned in Section (2.1), there is no VP in the layered structure of the clause in RRG, because the predicate element is not necessarily a verb. It may be a noun, an adjective or a prepositional phrase (VanValin and LaPolla, 1997:25; Evertt, 2002). In Farsi, the

copula is *budan* ‘to be’. It is realized in three ways in the present to form copular sentences: as clitic inflected for person and number, as a free morpheme plus the person-number endings or as the free morpheme *bâš* in imperative and subjunctive sentences. In the past tense there is only one form of the copula, the past of the verb *budan* ‘to be’. The following examples illustrate different realizations of this copula.

(2.5) a. mâ xošhâl-im.

we happy-be1pl

‘We are happy.’

b. ân-hâ nârâhat hast-and.

they uneasy be-3pl.

‘They are uneasy.’

c. Mahin dâneš-âmuz ast.

Mahin student be-3sg

‘Mahin is a student.’

d. Xayyâm az ârefân ast.

Khayyam from mystics be-3sg

‘Khayyam is one of the mystics.’

e. Parviz dar pârk bud.

Parviz in park be-PAST-3sg

‘Parviz was in the park.’

f. zud bâš.

soon be-IMPER

'Be quick.'

The above sentences show different realizations of the copula *budan* 'to be' in Farsi. It may realize as a clitic inflected for person and number (2.5a), as the free morpheme *(h)ast* (2.5 b-d) or as a past form of *budan* (2.5e). All of these sentences include a subject and a predicate. The predicate is a noun in (c), an adjective in (2.5 a-b) and a prepositional phrase in (2.5 d-e). Sentence (2.5 f) shows the imperative form of this copula.

The 'to be' verb in (2.5) heads an AUX node, but not a VP, IP or any other phrase. Such verbs have a role to play in the LSC, but it is quite minimal. As Everett (2002) notes, the primary role of such copulas is to serve as the morphological host for semantic and grammatical information relevant to the temporal, aspectual, modal, etc. qualifications of the phrase. Following RRG treatment, the formal representation of the LSC of the above copular sentences with three different predicates are diagrammed as the following figures:

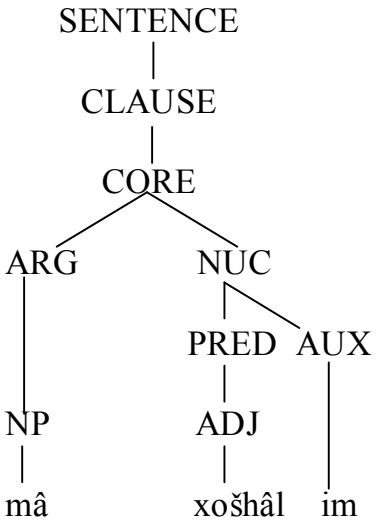


Figure 2.10 The LSC of a copular sentence with an adjective as predicate

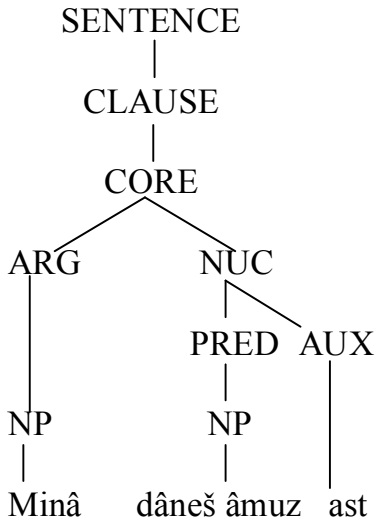


Figure 2.11 The LSC of a copular sentence with a noun phrase as predicate.

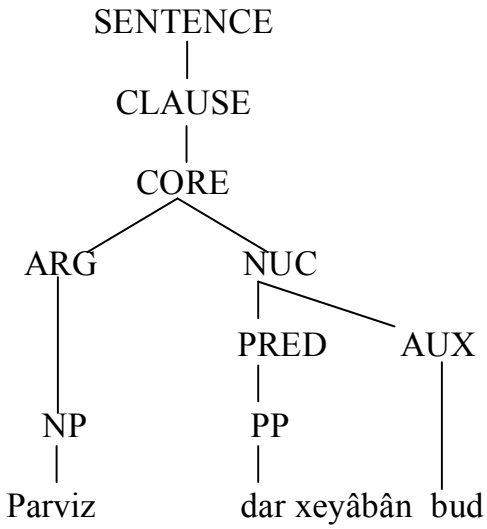


Figure 2.12 The LSC of a copular sentence with a prepositional phrase as predicate.

2.2.3. Transitive sentences

Transitive sentences consist of at least a predicate and two syntactic arguments. The two arguments of these sentences are equivalent with the two generalized semantic roles: actor and undergoer (see Chapter 3). The following sentences are typical examples of transitive sentences.

(2.6) a. Ali ketâb râ xarid.

Ali book OBJ bought.

'Ali bought the book.'

b. Farid dar râ bâz kard.

Farid door OBJ open did

'Farid opened the door.'

Sentences (2.6) can be represented as Figure (2.13).

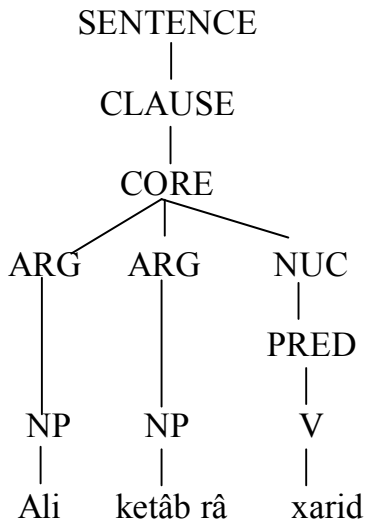


Figure 2.13 The LSC of a transitive sentence

Besides the two core arguments in transitive sentences, some predicates obligatorily take a third argument. These kinds of sentences are traditionally called ditransitive sentences.[4] RRG names this third argument non-macrorole core argument (VanValin 1999c, 2001c)

(2.7) a. Ali gol râ be Ahmad dâd.
Ali flower OBJ to Ahmad give-PAST-3sg.
'Ali gave the flower to Ahmad.'

b. man yek hedye barâye doxtar-am xaridam.
I one gift for daughter-Poss buy-PAST-3sg.
'I bought a gift for my daughter.'

These sentences show that Farsi typically codes core arguments differently from adjuncts. In this language, like English, NPs not marked by a preposition are normally core arguments, but the converse is not true. For example, in (2.7 a) *Ali* and *gol* 'flower' are not marked by a preposition, but the third argument *Ahmad* is prepositionally marked. Arguments such as *Ahmad* in (2.7 a) are core but not macrorole argument. The LSC of these sentences containing three core arguments can be diagrammed as Figure (2.14).

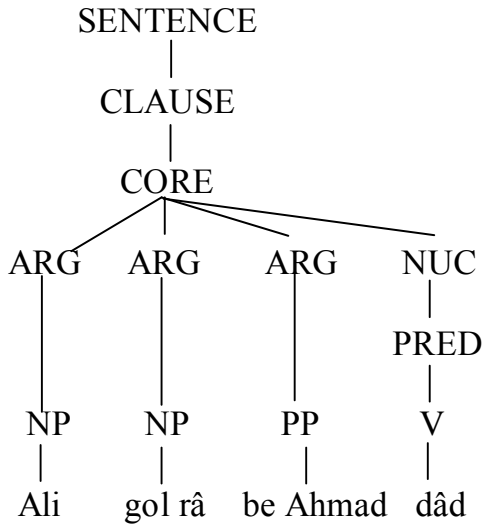


Figure 2.14 The LSC of three core argument predicates in Farsi

Examples of core arguments which are prepositionally marked include the *"be"*- phrases with verbs like *dâdân* 'to give' and *"az"*-phrases with verbs such as *gereftan* 'to take' like the following examples:

(2.8) a. Ali ketâb râ az Ahmad gereft.
Ali book OBJ from Ahmad take-PAST-3sg
'Ali took the book from Ahmad.'

b. Ahmad ketâb râ be Ali dâd.
Ahmad book OBJ to Ali give-PAST-3sg
'Ahmad gave the book to Ali.'

The NPs in these PPs are represented in the semantic representation of *dâdan* 'to give' and *gerftan* 'to take', respectively. In RRG (Foley and VanValin 1984:79) a distinction is made between direct

core arguments, i.e. core arguments which are either unmarked as *Ahmad* in (2.8 b) or marked by case as *ketâb* in the same sentence, and oblique core arguments, i.e core arguments which are adpositionally marked like *Ali* in (2.8 b).

2.2.4. Periphery

So far, I have presented the core layer of Farsi simple sentences, i.e. the core arguments and the nucleus. As it was mentioned in Section (2.1.1), in addition to core and nucleus there is another layer which is the outermost layer in the clause. It contains the elements of the clause which are left out of the core. These non-argument elements are referred to as periphery.[5] Generally, in Farsi, elements that go into the periphery are either bare NP adverbials such as those of time (e.g. *diruz* 'yesterday', *emruz* 'today', *fardâ* 'tomorrow', etc.), place (*injâ* 'here', â*njâ* 'there') or they are prepositional phrases which are adverbial in nature. Among the most common prepositions that are used to introduce adverbial phrases are *dar* 'in', *bâ* 'with', *be* 'to', *az* 'from', etc.

(2.9) a. dar xiyâbân 'in the street'

b. az forušgâh 'from the store'

c. be Tehrân 'to Tehran'

d. man fardâ ketâb râ barâye to mi-âvar-am.

I tomorrow book OBJ for you IMP-bring-1sg.

‘I will bring the book for you tomorrow.’

In the sentence (2.9d), there is an element outside of the core. It is neither a predicate nor an argument of the predicate. The NP *fardâ* ‘tomorrow’ is an adverb of time and a peripheral element. Using RRG's LSC, (2.9 d) can be represented as Figure (2.15).

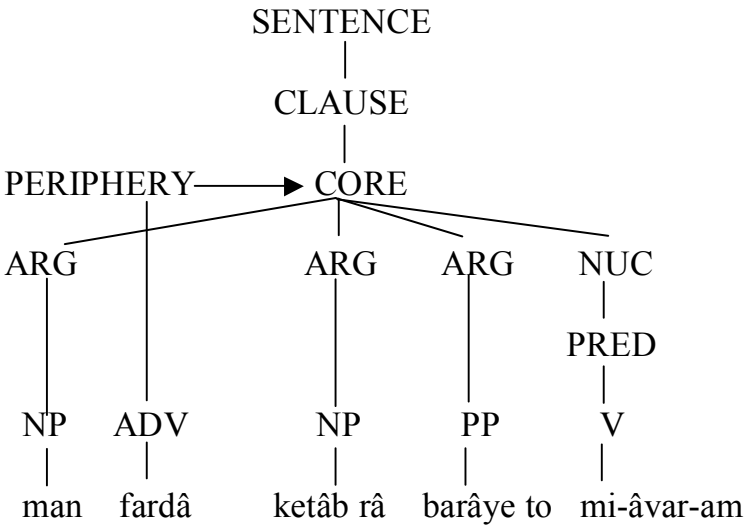


Figure 2.15 The LSC of a simple sentence with peripheral element

As Figure (2.15) shows both direct and oblique core arguments are labeled ‘ARG’ in this diagram, e.g. the NPs *‘man’* and *‘ketâb râ’* are direct core arguments and the NP *‘to’* in the PP *‘barâye to’* is an oblique core argument. The periphery is represented on the margin, and the arrow indicates that it is an adjunct; that is, it is an optional modifier of the core. As noted in the previous section, the linear order of the core arguments and the predicate is irrelevant to the determination of whether an element is in the nucleus, core or

periphery. This representational scheme will work for any linear order because non of these relationships depends upon word order.

2.2.5. Pre-core slots and left detached positions

As I mentioned in Section (2.1.2), a sentence may contain additional elements that are not components of the layered structure of the clause. These non-core elements are not universal, and linear order is relevant to the determination of their positions (VanValin and LaPolla:36). A single clause sentence in Farsi may contain pre-core slot (PCS) and a left detached position (LDP). The pre-core slot is inside of the clause but outside of the core. It is the position of question words that appear clause initially.[6] The PCS is different from the core initial position that the subjects usually occur in Farsi. It is also possible for a non-WHNP or PP to occur in this position as topicalized elements. In Chapter 5, I will demonstrate that PCS is also a marked position for focal elements. Let's look at the following examples.

2.10 a. čerâ Minâ jozve rât be Zohre na-dâd?
why Mina pamphlet OBJ to Zohre NEG give-PAST-3sg
'Why did not Mina give the pamphlet to Zohre?'

b. emšab râ Amir injâ mi-mânad.
tonight TOP Amir here IMP-stay-3sg
'Tonight, Amir is staying here.'

c. be Rezâ man gol-hâ rât dâdam

to Reza I flower-pl OBJ give-PAST-1sg.

'It was to Reza that I gave the flowers.'

In sentence (2.10 a) above, a question word appears in the clause-initial position. In Farsi wh-words usually occur in-situ, however, when they are focused or topicalized, they may appear in the PCS. As sentences (b-c) illustrate, topicalized non-WHNPs or PPs also can appear in this clause-initial position. Sentence (2.10a) can be diagrammed as follows:

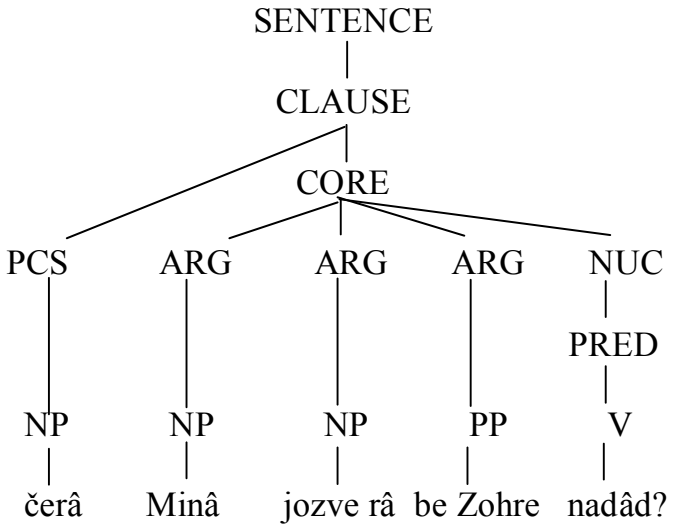


Figure 2.16 The LSC of a sentence containing PCS

In addition to the pre-core slot, it is also possible to have an initial phrase, set off from the rest of the sentence by a pause or intonation break. As Gholam-Alizadeh (1996:126) points out, there are some adverbs or other constructions in Farsi, that have a scope over the whole sentence. He calls these initial phrases "transitional

expressions" and argues that they have no specific syntactic roles. Afterwards, he shows that these expressions always occur in the initial position and are normally set off from the rest of the sentence by a pause. Interestingly enough, these transitional expressions are equivalents of what is called left detached element in RRG. This is illustrated by the following sentences:

(2.11) a.dar vâqe‘ man hargez u râ na-dide-am.
In fact I never 3sg OBJ NEG-seen-1sg
‘In fact, I have never seen him/her.’

b. be har hâl, man u râ mi - pazir-am.
However I 3sg OBJ IMP-accep-1sg
‘However, I accept him.’

c. be nazar-e šoma, čerâ Ahmad mâ râ da‘vat na-kard?
In opinion-EZ you why Ahmad we OBJ invite NEG-did.
‘In your opinion, why did not Ahmad invite us?’

These initial phrases in (2.11) differ from the pre-core slot NPs in two important ways. First, as noted they are set off from the following clause by a pause, and second, these elements can not be focused at all. In fact, as we will see in Chapter 5, these detached elements are outside of the focus domain. Example (2.11c) shows that the detached phrase cannot be in the pre-core slot, because there is a WH-word in the pre-core slot in the sentence; consequently, the position of the detached element is distinct from

the pre-core slot. This position is outside of the clause but within the sentence. Other elements that can appear in the LDP position are adverbials like *mosalaman* 'certainly', *ma'mulan* 'usually', *xošbaxtâne* 'fortunately' and phrases such as *be onvâne mesâl* 'for example' *be nazare man* 'in my opinion' etc.

To summarize the layered structure of the clause in Farsi, I give the following sentence in which all components of Farsi clause structure, i.e. core, periphery, PCS and LDP cooccur.

(2.12) be nazar-e šomâ čerâ Ali diruz aks râ be mâ na-dâd?

to opinion-EZ you why Ali yesterday picture OBJ to us NEG-gave.

' In your opinion, why did not Ali give the picture to us yesterday.'

Having presented the universal and non-universal aspects of Farsi clause structure, now, I can suggest the following LSC for Farsi simple sentences. Periphery is omitted, since it appears in a number of different positions.

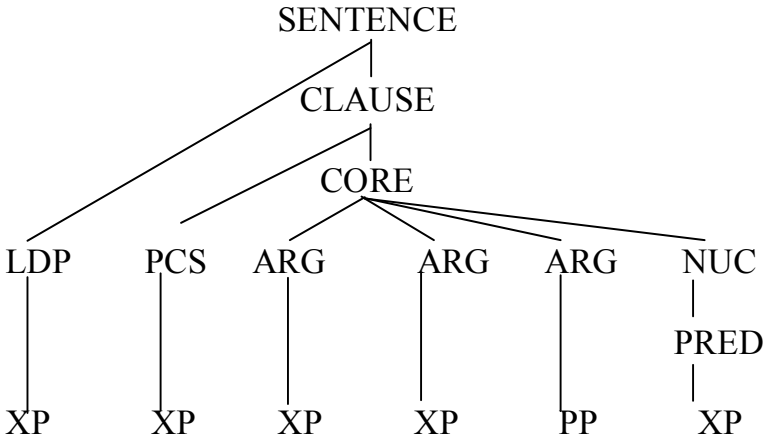


Figure 2.17 LSC for Farsi simple sentences.

2.2.6. Head and dependent-marking features of Farsi

Some languages signal predicate-argument relations on the head and some signal the same relations on the dependent. Nichols (1986) called these two types of languages head-marking and dependent-marking languages, respectively.[7] In a head-marking language, the independent nominals acquire the syntactic status of subjects or objects solely by virtue of their appositional relationships to the bound pronouns. In a dependent-marking language, on the other hand, the cross-referencing forms on the verb are superfluous since independent forms are clearly marked for function. A crucial feature of head-marking languages is their ability to drop any nominal arguments cross-referenced by a suffix on the head. VanValin (1993b) cites the following example from Lakhota.

(2.13) a. lakhota ki thathaka ota wicha-ø-kte.
Indian the bison many 3pu-3sg A-kill
'The Indian killed many bisons.'

b. wicha-ø - kte.
3pu- 3sgA-kill
'He killed them.'

VanValin (1985, 1999d) argues that in languages like Lakhota the pronominal affixes on the verb are core arguments, not the independent NPs as in dependent-marking languages. The sentence

(b) above, shows that the two indepedent NPs can be omitted and yet the remaining head verb is grammatical.

As VanValin and LaPolla (1997) noted the opposition between dependent and head-marking features are not absolute. There are dependent-marking languages with some head-marking features, and there are head-marking languages with some dependent-marking aspects. Farsi, like many European languages (Italian, Spanish, Polish, etc.) is basically dependent-marking, but because it has verb agreement which expresses the person and number of the subject, an independent pronoun is not necessary. This is illustrated by the examples below:

(2.14) a. ânhâ šiše râ šekast-and
they glass OBJ break-PAST-3pl
'They broke the glass.'

b. šiše râ šekast-and.
glass OBJ braek-PAST-3pl
'They broke the glass.'

As it can be seen, Farsi sentences like (2.14a) would be analyzed as a purely dependent marking structure with subject agreement, just like English. However, in (2.14b) the independent subject NP *ânhâ* is omitted and the subject would be the bound pronominal on the verb.

A question that immediately arises is that which element in a sentence like (2.14a) is the true syntactic argument, the bound pronominal or the independent NP? VanValin and LaPolla (1997: 331) claim that the bound morphemes count as the core arguments in head-marking languages like Lakhota (see 2.13) and independent NPs are not adjuncts but instead are part of a discontinous argument consisting of it and the bound morpheme (VanValin 1999d). But in dependent-marking languages independent NPs count as the core arguments with the bound morphemes merely being agreement markers. Therefore in (2.14a) the independent pronoun ânhâ 'they' is the subject, and the bound pronominal on the verb the agreement marker.

The second question that arises here is that which element in a sentence like (2.14b) is the syntactic argument? As it was seen in this sentence the independent subject is dropped. VanValin and LaPolla (ibid) argue that this phenomena is an intermediate situation, in which the independent NP counts as the core argument if present, but if it is absent, the bound marker on the verb functions as the argument. It is a characteristic of so-called "pro-drop" languages like Spanish, Italian and Croatian (Dahm-Draksic 1997).

In addition to the independent subject, it is also possible to drop the independent object in Farsi. This situation is more common in everyday spoken form of the language. In this case both

subject and object are omitted and suffixed to the verb. For example, a sentence like (2.14b) maybe uttered as a single phonological word which is by itself a clause.

(2.15) šekast - and - eš

break-PAST-3plSUB-1sg OBJ

'They broke it'

In this sentence no independent subject or object is present, so the bound pronominals function as arguments.

The observations above tell us that we should extend the domain of cross-reference into Farsi which is primarily a dependent-marking language. The major motivation for this analysis is the general avoidance of deletion rules in RRG. If we consider the relationship between the subject and verb in Farsi as agreement rather than cross-reference, the derivation of subjectless clauses requires postulating an independent subject for purpose of agreement and then subsequently deleting it. Hence, as Siewierska (1991:193) has pointed out, the bound forms are semantically empty agreement markers. On the other hand, in the absence of the independent elements the bound morphemes function as arguments.

2.3 The layered structure of adpositional and noun phrases

VanValin and LaPolla (1997) extend the three-layered scheme to noun phrases and adpositional phrases. Many linguists have argued

that there are strong structural parallels between clauses and noun phrases, e.g. Chomsky (1970), Jackendoff (1977), Langacker (1991) among others. In this section the layered structure of adpositional and noun phrases in Farsi will be investigated using the RRG framework.

2.3.1. Adpositional phrases

Adpositional phrases include prepositional phrases like *dar xiyâbân* 'in the street' or *be Ali* 'to Ali'. These prepositional phrases are classified in terms of whether they license the occurrence of an NP in the clause or not (VanValin and LaPolla:52). The preposition *be* 'to' in a sentence like (2.16) does not license the NP *Ahmad* in the clause, on the contrary, the NP is a function of the meaning of the verb *dâdan* 'to give'.

(2.16) Ali ketâb râ be Ahmad dâd.

Ali book OBJ to Ahmad give-PAST-3sg

'Ali gave the book to Ahmad.'

On the other hand, the preposition *dar* 'in' in a sentence like (2.17) does make possible the occurrence of the NP *xiyâbân* 'street'.

(2.17) man Bižan râ dar xiyâbân did-am

I Bijan OBJ in street see-PAST-1sg

'I saw Bijan in the street.'

The NP *xiyâbân* ‘street’ in this sentence is not related to the meaning of the verb *didan* ‘to see’ and is licensed by *dar* ‘in’. Prepositions like *be* ‘to’ in (2.16) that do not license their objects are termed as non-predicative prepositions in RRG (Jolly 1993), whereas, those like *dar* ‘in’ in (2.17) functioning as predicates, are labeled predicative prepositions. Prepositions in the periphery of the clause are always predicative, while non-predicative adpositions normally mark oblique core arguments. It is important to note that a preposition may function either predicatively or non-predicatively depending upon which verb it appears with; for example, the preposition *az* ‘from’ is non-predicative when it occurs with a verb like *gereftan* ‘to take’ in a sentence like (2.18a), whereas it is predicative with a verb like *mordan* ‘to die’ as in (2.18b).

(2.18) a. Sinâ pul - aš râ az Farid gereft.
Sina money-POSS OBJ from Farid took-3sg.
‘Sina took his money from Farid’

b. heyvân-ât az gorosnegi mord-and.
animal-pl from hunger died-3pl
‘Animals died of hunger.’

In (2.18a) the preposition licenses a source argument and functions basically like a case marker. As Mahootian (1997:262) has pointed out, the most basic function of the preposition *az* ‘from’ is indicating the origin of location and source. On the other hand, in

(2.18b) the preposition *az* does not license an argument, but functions as the head of a peripheral element.

Predicative and non-predicative prepositions have different structural representations. VanValin and LaPolla (1997:53) state that predicative prepositions function as predicates and have a layered structure in which there is a prepositional predicate in the nucleus, and its semantic argument is treated as a core argument structurally. The syntactic representation of these two types of prepositional phrases can be diagrammed as Figures (2.18) and (2.19).

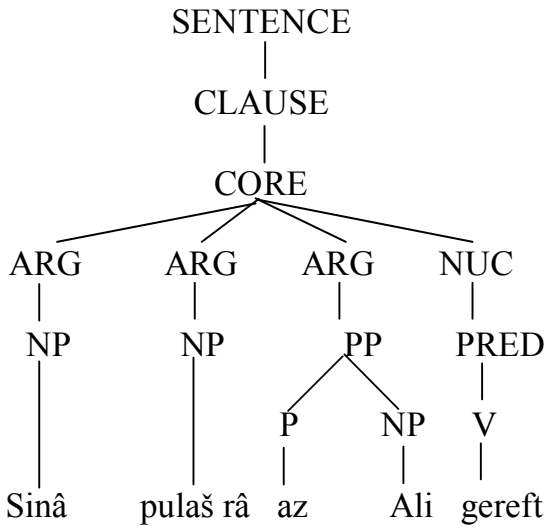


Figure 2.18 Syntactic representation of non-predicative preposition

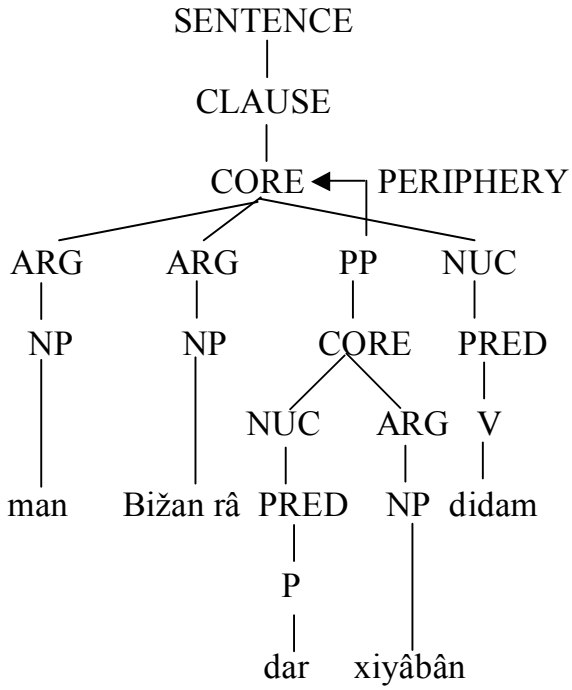


Figure 2.19 Syntactic representation of predicative prepositions

2.3.2. The layered structure of noun phrases

VanValin and LaPolla (1997) have noted that there are fundamental similarities in the structure of NPs and clauses, especially when the NPs are complex derived nominals. The primary correspondence between NPs and clauses in RRG is that both have a layered structure and in both there are operators modifying the layers. The layered structure of the NP (LSNP) contains a nominal nucleus (NUC_N) which dominates a referring element (REF) which is a noun (N). If the NUC_N dominates a relational noun, the nominal core $CORE_N$ also dominates an argument in a PP headed by a non-

predicative preposition. Figure (2.20) from VanValin and LaPolla (1997:54) illustrates the LSNP in English.

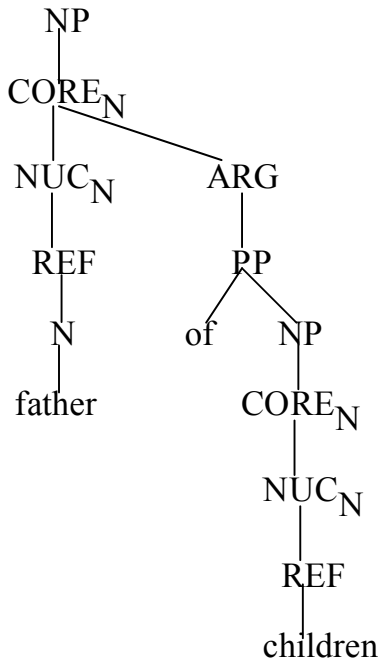


Figure 2.20 LSNP in English

The parallels between the structures of NPs and clauses are further illustrated by NPs headed by deverbal nominals, in which there is a core-periphery distinction. For example the NP *"arrest of Bill by FBI agents in New York"* corresponds to the clause *"Bill was arrested by FBI agents in New York"*. The NP reflects the argument structure of the source verb *"arrest"*, with *"Bill"* and *"FBI agents"* as core arguments and *"in New York"* as the periphery. Figure (2.21) from VanValin and LaPolla (1997:55) illustrates the layered structure of this noun phrase.

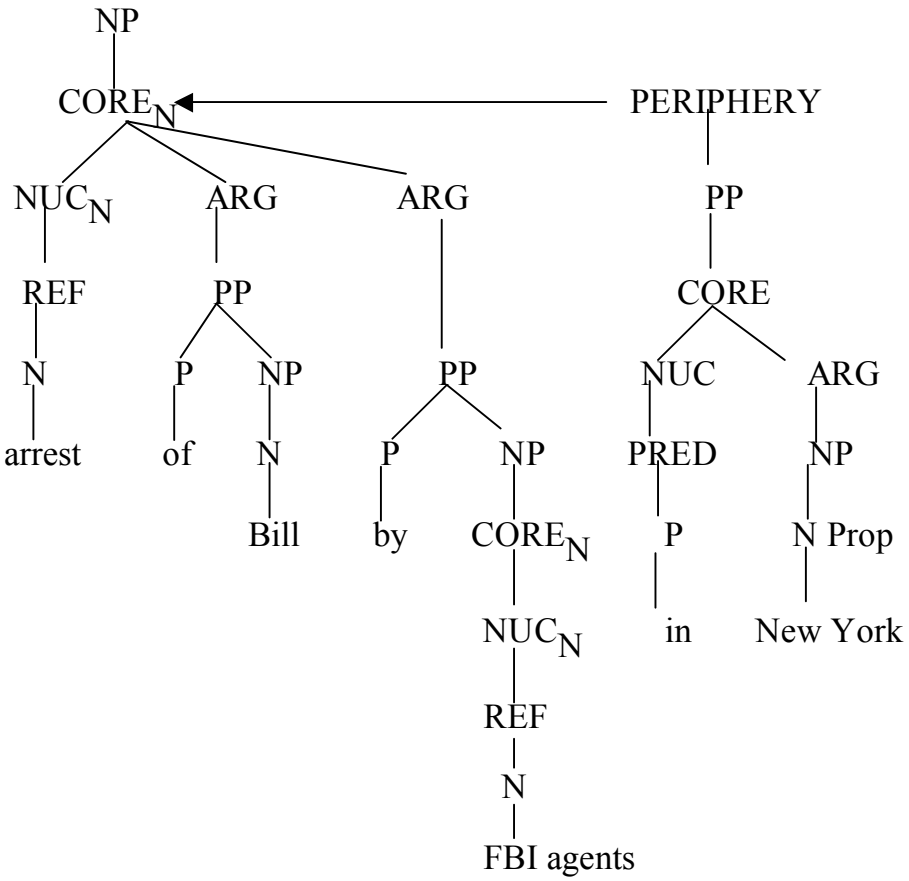


Figure 2.21 LSNP of English NP headed by deverbal nominal

VanValin and LaPolla (ibid) claim that NPs headed by pronouns and proper nouns do not have a layered structure like those headed by common nouns. They take no kind of argument or peripheral modifier. Consequently *Bill* and *New York*, both proper nouns in Figure (2.21) lack 'CORE$_N$' and 'NUC$_N$' nodes as well as a REF node.

An important feature of the RRG view of clausal syntax is a separation between constituent structure and operator projection.

This also constitutes an essential feature of the layered structure of the NP. Clausal operator projection will be discussed in chapter 4. But NP level operators are surveyed in this section. These operators include determiners, quantifiers, numbers, negation, nominal aspect, and adjectival/nominal modifiers. VanValin and LaPolla (ibid) present the overall structure of the layered structure of the NP with its operators as Figure (2.22) below.

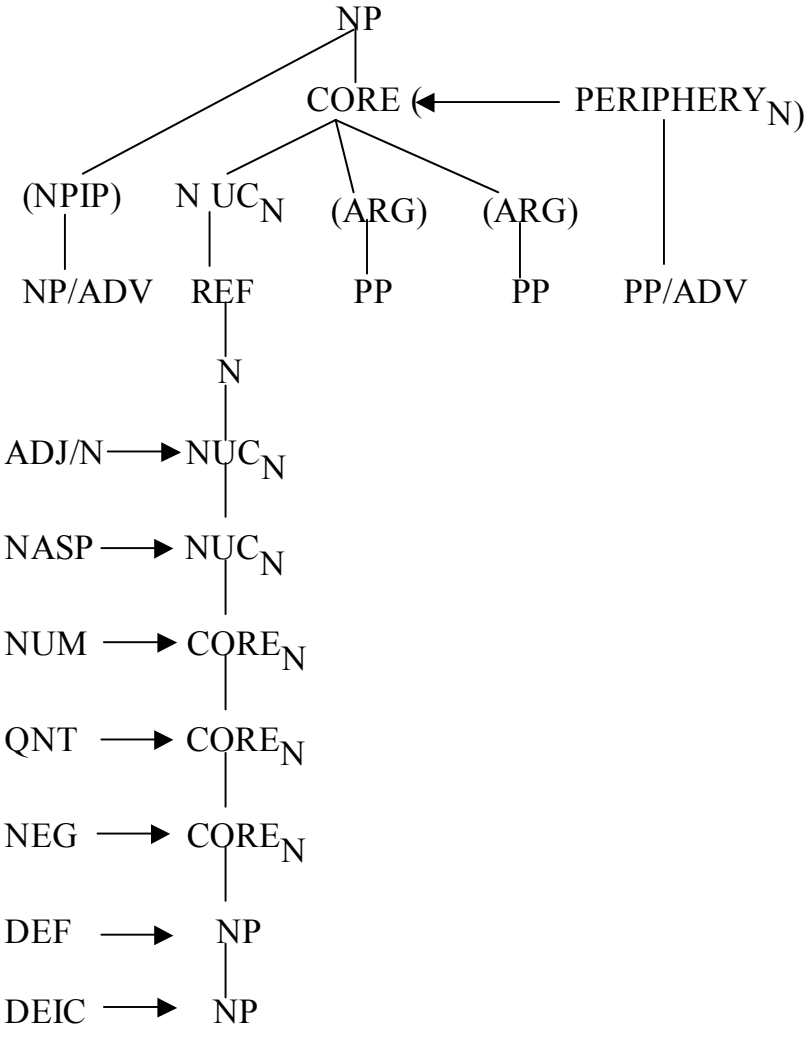


Figure 2.22 The general schema of the LSNP

An example from English with all three types of operator is given in VanValin and LaPolla (1997:59) as Figure (2.24)

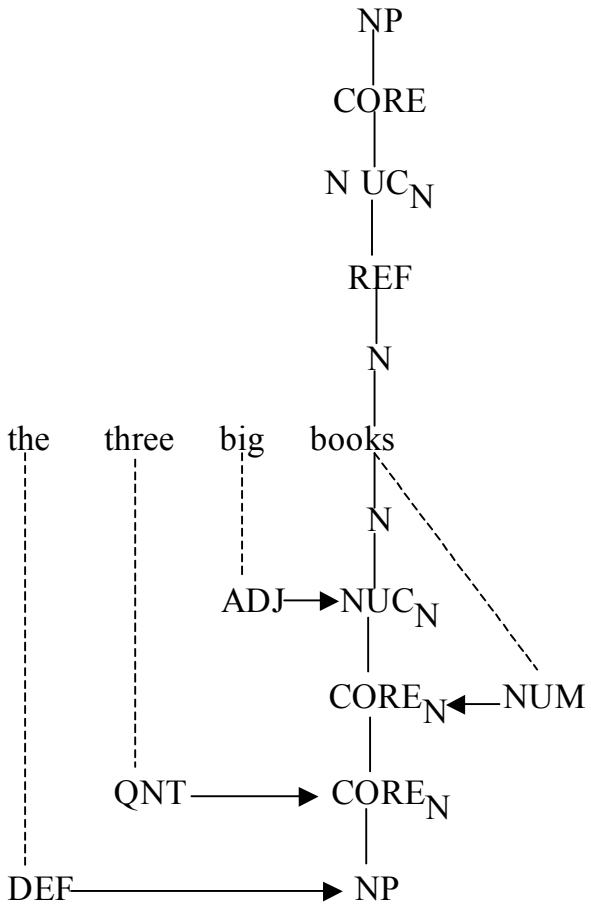


Figure 2.24 LSNP with operators in English

2.3.2.1. The layered structure of noun phrases in Farsi

Having introuduced the RRG treatment for noun phrase and its layered structure, let us now investigate the noun phrases in Farsi to see whether they follow the general schema of the LSNP proposed by VanValin and LaPolla or not.[8]

The head of a noun phrase could be a noun or an infinitival verb. Pronouns and proper names may also head noun phrases and they function as possessors in forming complex noun phrases. However, I exclude pronouns and complex noun phrases from this discussion. This section will be concerned primarily with the internal structure of simple NPs whose obligatory elements are head-nouns. A general picture of the composition of such NPs will look like the following formula, in which both prenominal and postnominal NP-modifiers are of different categories (Hassanian 1980:89).

Prenominal modifiers + N + postnominal modifiers

Bateni (1970) states that prenominal modifiers fall into three categories. The first category consists of demonstratives. The most commonly used demonstratives are *in* 'this' and *ân* 'that' as in the following examples.

(2.20) a. in zan 'this woman'

b. ân mard 'that man'

The most typical characteristic of demonstratives is that they precede all other types of prenominal modifiers.

The second category of prenominal modifiers is that of quantifiers. This category comprises words such as č*and* 'some' and numerals like *panj* 'five' as in the following examples.

(2.21) a. čand ketâb 'some books'

b. panj safhe ‘five pages’

Finally, the third category of prenominal modifiers consists of superlative adjectives (Meshkatodini 1994, Hassanian 1980 among others). Here are some examples of prenominal adjectives.

(2.22) a. behtarin dust ‘the best friend’

b. bozorgtarin šahr ‘the largest city’

Among the above mentioned categories of prenominal modifiers, numerals and quantifiers are in complementary distribution, i.e, if one of these elements is present the other cannot occur within the NP.

(2.23) a. * čand se nafar

some three person

b. *se čand nafar

three some person

The ungrammaticality of the coocurrence of quantifiers and numerals provide significant evidence that these two modifiers belong to the same position in the layered structure of the NP. Unlike quantifiers and numerals, demonstratives can cooccures with either of these.

(2.24) a. in se doxtar ‘these three girls’

b. ân čand ketâb ‘those some books’

c. *se in doxtar.

three this girl

d. *čand ân ketâb.

some that book

Noun phrases in (2.24) show that demonstratives have scope over all other types of NP operators. Thus, this precedence of demonstratives substantiates the RRG's claim that demonstratives (deictics) are operators modifying the NP as a whole. As VanValin and LaPolla (1997:58) noted, the NP operators are primarily concerned with expressing the location of the referent with respect to a reference point, usually the interlocutors (deictics), and with indicating the speaker's assumptions about the identifiability of the referent by the hearer.

The grammaticality of (2.24 a-b) and the ungrammaticality of (2.24 c-d) show another important fact, that quantifiers are $CORE_N$ operators and can not precede the NP layer operators. It is interesting to note that quantifiers and numeral modifiers can not occur with plural nouns, i. e. nouns having a plural marker such as -*hâ* or -*ân*.

(2.25) a. *čand ketâb-hâ

some book-pl

b. *panj pesar-ân

five boy-pl

Demonstratives, in particular the simple forms *in* 'this' and *ân* 'that' can, in many cases, also be interpreted as definite articles in

Farsi (Hassanian 1980, Mahootian 1997). With such interpretation, NPs in (2.24 a-b) can also be translated as 'the three girls' and 'the books'. Using RRG the layered structure of (2.24-ab) can be represented as the following figure.

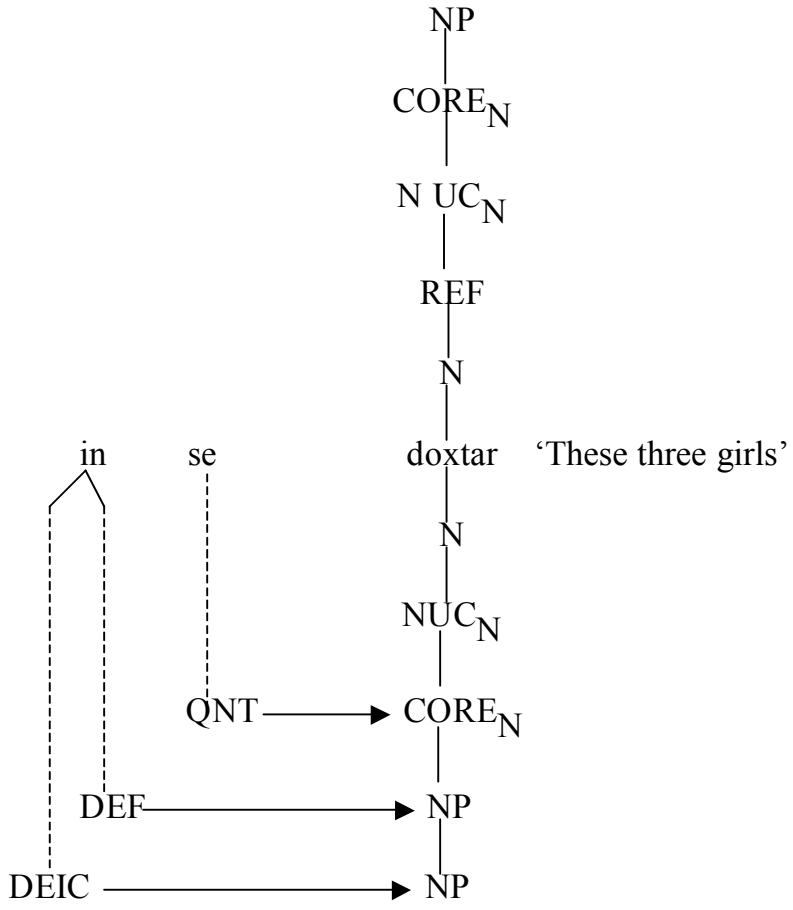


Figure 2.25 Representation of prenominal modifiers in terms of LSNP

Postnominal modifiers of NPs can be categorized into two different groups. The first category consists of post -nominal adjectives.

Examples of these modifiers are *xub* ‘good’ and *bozorg* ‘big’ in the following NPs.

(2.26) a. pedar-e xub ‘the good father’

b. xâne-ye bozorg ‘the big house’

As it can be seen, the postnominal modifiers are linked to the head noun with the linking morpheme-*e*. The typical characteristic of postnominal adjectives is that they invariably precede any other postnominal modifiers. This can be demonstrated by examples such as (2.28)

The second category of postnominal modifiers comprises possessive phrases. These modifiers must take linking morpheme to attach to their head-nouns. Examples of such cases are as follows.

(2.27) a. dust-e man ‘My friend’

b. pedar-e Ali ‘Ali’s father’

As their most distinguishing characteristics, these modifiers follow postnominal adjectives.

(2.28) a. dust-e xub-e man ‘My good friend’

b. barâdar-e bozorg-e to ‘Your elder brother’

Having analyzed the different modifiers of simple noun phrases in this section, now I can propose the following general schema of the LSNP in Farsi. It was mentioned in Section (2.1) that the linear order of the core arguments and the predicate is irrelevant to the determination of whether an element is in the nucleus, core or

periphery. Interestingly, it is true for LSNPs too. Being prenominal or postnominal modifiers does not affect the status of these elements. Farsi LSNP can be represented as Figure (2.26).

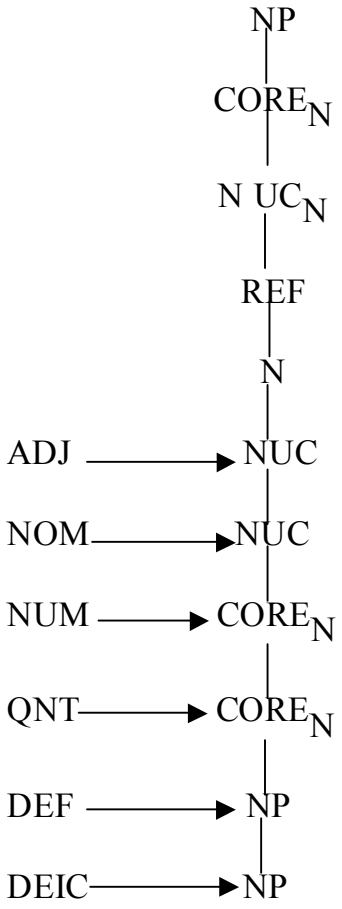


Figure 2.26 Farsi LSNP

Using this schema of Farsi LSNP, I can represent the LSC of a sentence including the LSNP of its NPs.

(2.29) Man in do ketâb-e xub-e šoma râ xânde-am.

I this two book-EZ good-EZ you OBJ read-1sg

'I have read these two good books of you'.

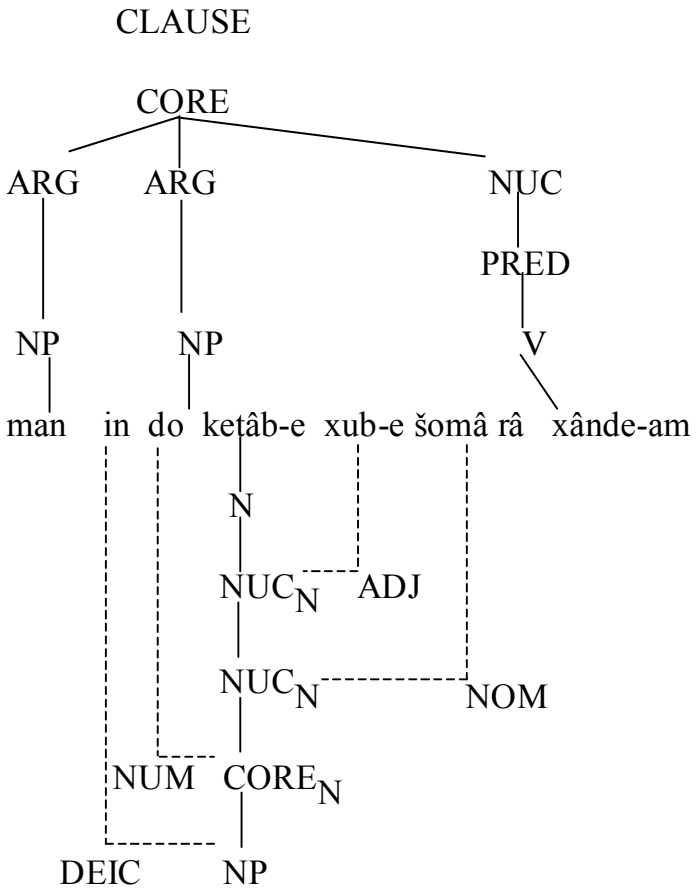


Figure 2.27 A Farsi sentence with the LSNP

The above analysis shows that lexical and functional categories are represented quite differently in RRG.[9] On the contrary, Chomskyan theory treats lexical and functional categories alike in terms of phrase structure (X-bar theory). Radford (1997:40) considers NP-level operators such as deictics, definition, quantifiers and numerals as determiner.Attributive adjectives are not regarded as determiners since they are not functional categories. The primary head of an NP

is the determiner which includes all of functional categories. Hence, in an English NP like *'the dog'*, *'the'* and *'dog'* do not belong to separate projections. Accordingly, the determiner *'the'* is consideread as the head of the NP.

2.4 Syntactic templates

RRG is a monostratal theory of grammar. There is no abstract syntactic level in this theory. Consequently, different syntactic representations discussed in this chapter are not abstract, but they are intended to be concrete, in the sense that they should represent the actual form of the sentences. Representations of constituent projections is viewed as constructional templates in RRG (VanValin and LaPolla:73). Following Constructional Grammar (Fillmore 1988) VanValin and LaPolla proposed that grammatical structures are stored as constractional templates, each with a specific set of morphosyntactic, semantic and pragmatic properties, which may be combined with other templates to form more complex structures. In the RRG approach to constructional templates, it is postulated that there is a set of syntactic templates representing the possible syntactic structures in the language. These syntactic templates are stored in the "Syntactic Inventory" and there is a separate lexicon containing lexical items, morphemes and other types of lexical entities. The syntactic templates have a universal

basis in the layered structure of the clause. However, the templates in the syntactic inventory of any particular language will reflect the properties of clauses in that language. Figure (2.28) illustrates a sentence resulted from combining templates in English.

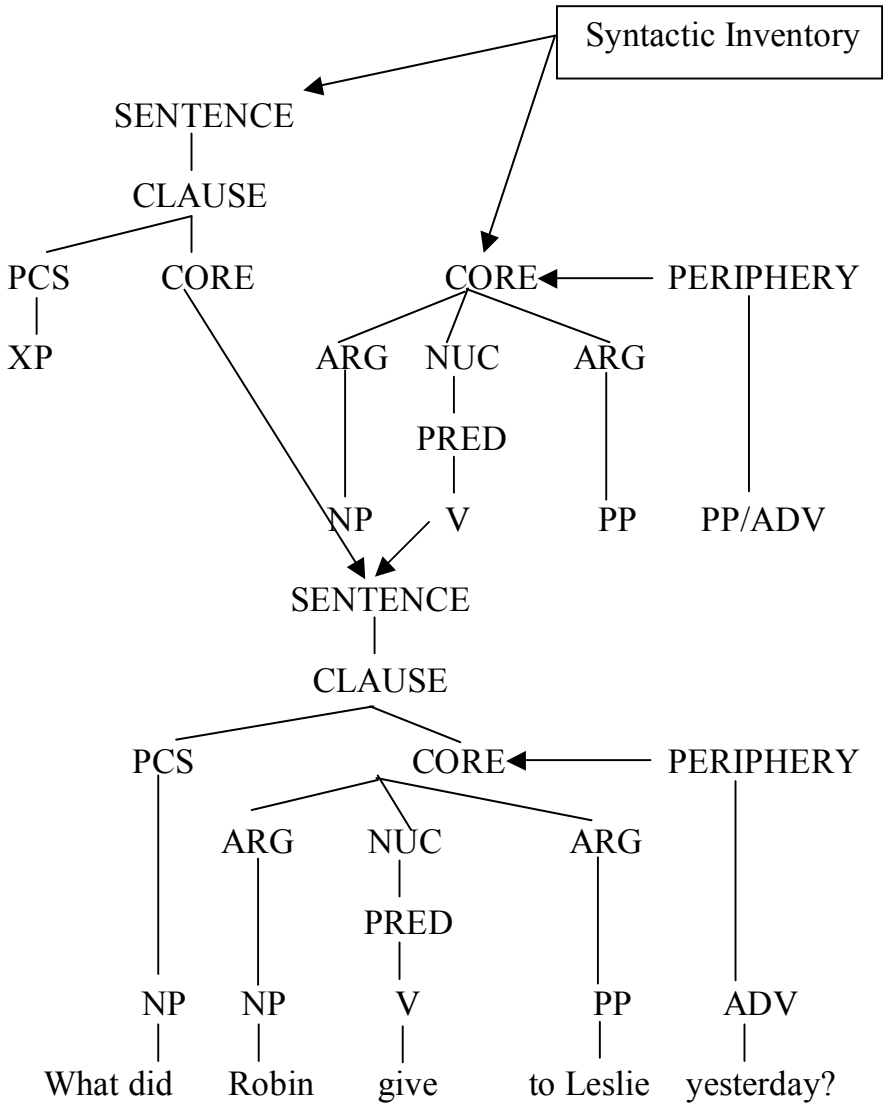
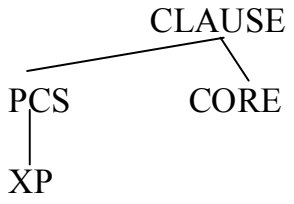


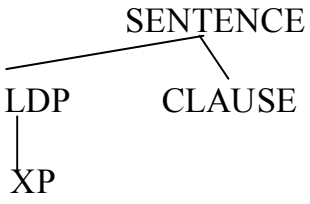
Figure 2.28 Combining syntactic templates from the syntactic inventory

Considering different LSCs represented in Section (2.2), we can find the properties of Farsi syntactic templates. Farsi syntactic templates reflect the fact that this language has left-detached position, as well as pre-core slot and other properties such as the number of core arguments, etc.

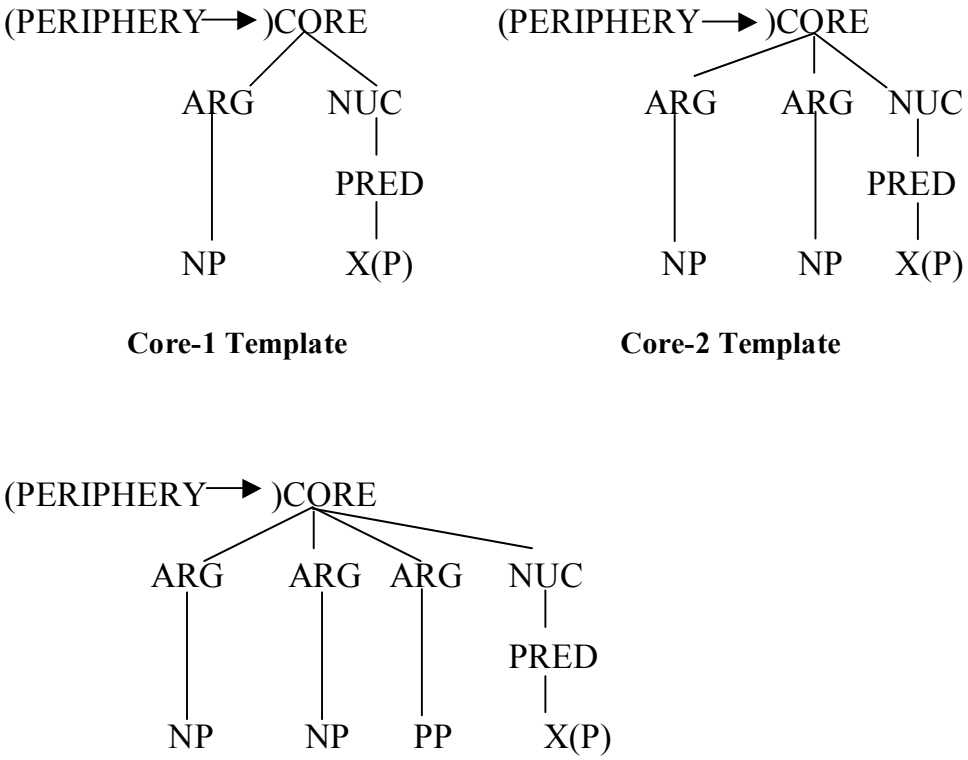
In Figure (2.29) I represent examples of templates from the syntactic inventory of Farsi. These are core templates labeled 1 through 3, along with a pre-core slot template and a left detached position template. It should be noted that in a full description, a constructional template must carry syntactic, semantic and pragmatic properties and other types of information. The syntactic templates in Figure (2.29) represent only the syntactic structure of construction. As I go on and talk about semantic representation and information structure, it will be seen how different types of information can be integrated into constructional templates. All of these core templates may be realized as simple sentences.[10]



PCS Template



LDP Template



Core-1 Template **Core-2 Template**

Core-3 Template

Figure 2.29 Examples of templates from the syntactic inventory of Farsi

Core -1 would be the structure of copular and verbal intransitive sentences like those in (2.3) and (2.4 a-e) diagrammed as Figures (2.9) and (2.10-12). This template may also be the structure of imperative sentences like (2.30).

(2.30) zud dar râ be - band.

Quickly door OBJ IMPER-close

'Close the door quickly'

Core-2 template is the structure of transitive sentences like (2.5 a-b). It can be combined with the PCS template yielding the

structure of a WH-question such as (2.31) diagrammed as Figure (2.31)

(2.31) čerâ šomâ nâme râ na -xând -id?

why you letter OBJ NEG-read-PAST-2pl

'Why did not you read the letter?'

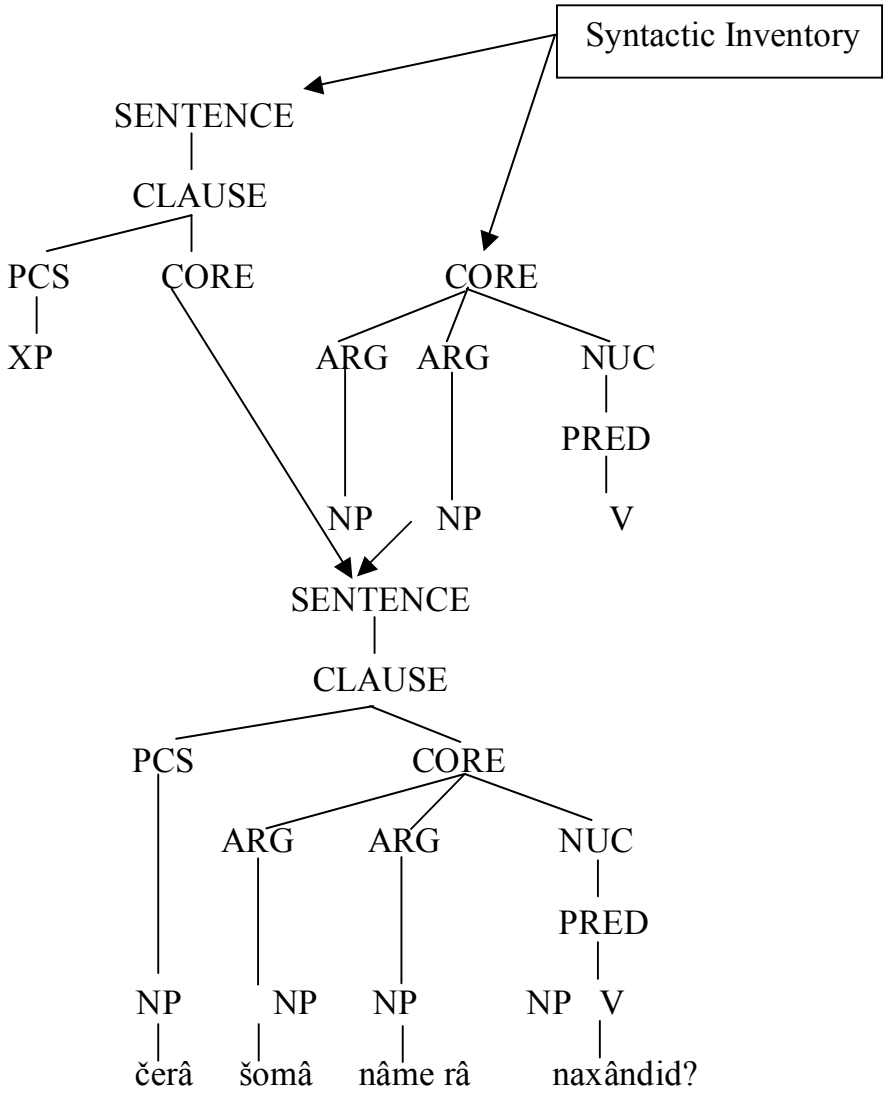


Figure 2.30 Combining syntactic templates in Fars

Ultimately, core-3 is the structure of sentences

containing three core arguments like sentences (2.6 a-b) diagrammed as Figure (2.14). These sentences are referred to as three-place predicates by VanValin (2002a).

2.4 Summary

This chapter dealt with the layered structure of simple sentences and noun phrases in Farsi. It was shown that the layered structure of the clause proposed in RRG works for Farsi as well. The structure of verbal and copular intransitive sentences, transitive sentences and ditransitive sentences have been studied. I showed that in addition to the core layer, including a nucleus, one to three core arguments, and possibly some peripherals, there are a PCS position and an LDP in Farsi. Examining these different elements in a simple sentence, I have proposed the LSC for Farsi simple sentences as Figure (2.17). This LSC offers strong support for Role and Reference Grammar. One big advantage of the layered reprensentation of clause structure as in (2.17) is that it is semantically motivated and highly suited to analyzing the form-meaning correlation and can explain a wide range of phenomena when combined with other concepts of RRG.

The layered structure of adpositionals and simple noun phrases have also been analyzed in Section (2.3). It was shown that Farsi

supports the distinction between predicative and non-predicative adpositional phrases. Having investigated the prenominal and postnominal modifiers of noun phrases, I have argued that the layered structure of noun phrases follow the LSNP proposed in RRG. I have also introduced the concept of syntactic templates in RRG and proposed the main examples of this in Farsi. The process of combining these templates with PCS and LDP templates to yield the structure of larger syntactic structure, was also presented.

Notes to Chapter 2

1 This is found in languages such as Russian and Arabic. A sentence like 'John is a doctor' would be expressed as following sentences in these two languages:

Ivan vrač
John doctor-NOM

Jan-on doctur-on
John doctor-NOM

2 Operator projection in Farsi will be discussed in Chapter 4.

3 It should be noted that the status of-*râ* is controversial. This postposition morpheme is traditionally known as a marker for definite direct object. This view is held by scholars like Lambton (1984), Sadeghi (1970) among others. On the other hand, some linguists claim that-*râ* is a sign of topicalization (Peterson 1974, Dabir-Moghaddam 1991). Additionally, Karimi (1992, 1996, 2001b) argues that this postposition follows a direct object if and only if the direct object is specific. In this study, I maintain that the primary function of -*râ*, glossed as OBJ in this dissertation, is that of marking a specific direct object (undergoer in RRG terms). This is supported by VanValin and LaPolla (1997:) who argue that macrorole arguments (actor and undergoer) must be specific.

4 For a detailed analysis of ditransitive clauses in RRG, see VanValin (2002b).

5 The distinction between core and periphery is not unique to RRG. Some linguists employ similar oppositions. For example Pike and Pike (1982) term this distinction as nucleus and margin; and Dik (1987) proposes a comparable opposition between nuclear and satellites.

6 As I will demonstrate in Chapter 5, WH-elements in Farsi are primarily in-situ. The occurrence of these elements in the PCS position is an instance of topicalization or focalization.

7 For a more detailed discussion of head and dependent marking typology see Nichols (1986) and Song (2001).

8 See Hassanian (1980) for a study of the noun phrases in Farsi within the framework of Generative Syntax.

9 For advantages of RRG operators over functional projections of generative theories see Chapter 4.

10 The operator projection in these templates are omitted.