

# A Parametric Approach to Persian Syntax

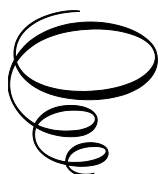


# A Parametric Approach to Persian Syntax

By

Dr. A. Soheili

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Dedicated to K.M. Y.



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# INTRODUCTION

Persian syntax has been analyzed within various theoretical models such as: traditional grammar, structural grammar, transformational grammar, and Governing and Binding (G&B) Theory, amongst others, according to their epistemological system and the philosophy of language (Soheili, 2017). Persian traditional grammarians were primarily concerned with the *analysis*, 'tajziye' and synthesis 'tarkib' of the syntactic constructions. More specifically, they emulated the Arabic models, which were, in turn, adopted directly or indirectly from the Greek philosophers and grammarians (see Da'i Javad, 1966).

Structuralist grammarians, on the other hand, used segmentation and classification to determine the patterns of the language in terms of the syntagmatic or paradigmatic relations of the elements in a sentence. The first refers to the linear arrangements of elements in the surface structure and the latter to the substitutions that may happen to the literal succession of the first elements (e.g., Bateni, 2006).

The model proposed in the earliest work of transformational grammar (Chomsky, 1957, 1965) provided two types of rules, namely, phrase structure rules that represent the categorial structure of the sentence and transformational rules that convert phrases into phrases via operations such as: addition, deletion, substitution, and movement. For instance, applying phrase structure rules and transformational rules, Meshaktod Dini (2002) describes the formation of simple, compound, and complex sentences in Persian. His description also encapsulates the properties of lexical categories, the internal structure of phrases and clauses.

A survey of traditional grammar, structural grammar, and the earliest model of transformational grammar shows that they provided detailed information about the form and interpretation of various syntactic constructions. However, they failed to deal with the question of how the reader of the grammar uses his or her information to attain the knowledge he or she uses to form and interpret new sentences. Furthermore, these systems rely heavily on rules to describe a specific aspect of sentence formation (Chomsky, 1986:6). To achieve descriptive adequacy and explanatory adequacy, all the rules may be reduced to principles that govern a set of utterances rather than individual constructions. Notice that in Persian complement clauses, relative clauses, Ezafe constructions and phrasal categories, except for VP, there is a head and a complement. The

information that the independent rules provide may be considered the general properties of these expressions; or for some general consideration of economy, they may be deduced from an invariant principle of Universal Grammar (UG) with its parametric variation. In these expressions, the complement occurs to the left of its head in Persian (to the right in English). As Cook (1989:73) notes “knowledge of language does not consist of rules as such but of underlying principles from which rules are derived.”

The immediate problems of syntactic analysis on the basis of a system of rules, and later investigations in English and other languages, brought about some major shifts in the study of language within generative grammar. The most prominent shift of focus was the leading idea that language no longer consists of a system of rules for forming grammatical constructions. The rule system culminated in a Principle and Parameter model, according to which UG has a modular system, which consists of various interacting subsystems of principles such as, the Case system, Theta system, etc. Many of these subsystems are associated with parameters that must be fixed by experience. Once the parameters are fixed in one of the permitted ways, a particular grammar is acquired called “core grammar” (Chomsky, 1998:146). In addition, there might be a further structure called a “periphery” with marked exceptions. These exceptions are not predictable from UG and might be historical residues, imports from other languages, and idiomatic expressions (Cook, 1989:23).

A more advanced version of generative syntax is called the Government and Binding (G&B) Theory, which incorporates the leading ideas of the P&P approach, although the latter is more comprehensive because it consists of some new concepts from the recent research in the Minimalist Program. However, Haegeman (1998: 620) argues that it is possible to elaborate on the concepts of the Minimalist Program in the G&B framework, as she has done in her own book.

In a dramatic departure from the earlier versions of generative grammar, Miremadi (1997) analyzes the syntactic component of Persian grammar within the GB framework and its core concepts, such as the Case System, Government, Thematic Roles, wh-movement, etc. He also incorporates some prominent concepts and elements of the Minimal Program into his analysis such as, *Procrastinate*, *Greed*, *Reconstruction*, the *Shortest Move Condition* (SMC) and the *Copy Theory*. At every step of syntactic analysis, Miremadi does not extrapolate his results from the evidence of other languages but attempts to demonstrate to what extent the theory can accommodate the data from Persian. In this connection, he examines some examples with wh-movement and casts serious doubt on structural wh-movement in Persian. Moreover, the data from Persian illustrates the fact

that wh-phrases follow the complementizer *ke* ‘that’ and do not move into the Spec of CP—*ke chera: ke chetowr, ke ki*, etc. Consider this example and compare it with its gloss in English: ‘*Ali porsid **ke che** ba:yad bexorim,*’ ‘Ali asked **what** we must eat.’

Our book differs from both G&B and MP in some considerable respects. First, our goal is to exclusively analyze the principles and parameters, ignoring other fundamental concepts and elements in both models. Second, we attempt to investigate the clustering properties associated with each parameter. Third, drawing the significant implications of P&P approach for first-language acquisition, second-language learning, translation, and typology constitutes an essential motivation for writing this book.

## ORGANIZATION OF THE BOOK

This book is divided into three chapters. The first chapter, for the most part, is devoted to the analysis of the major syntactic properties of Persian. This chapter serves as a prelude to the subsequent chapters because the syntactic information leads towards a better understanding of how the principles and parameters apply to the Persian corpus data. Ideally, we do not make extrapolation based on artificially constructed or authentic examples from other languages. Rather, we intend to check how the theory can accommodate the data from Persian. Each chapter is followed by a summary which highlights the key ideas discussed in the chapter. The second chapter is concerned with the analysis of a number of prominent principles, as discussed in the relevant literature. Delineating the nature and functions of principles constitutes a major goal of this chapter by virtue of the fact that language faculty incorporates a set of invariant principles of UG. These principles, in essence, highly constrain and determine the structure of language and govern the grammatical operations that are permitted in natural languages. On the other hand, a child who is endowed with language faculty and its principles does not need to learn the principles but learns those structural properties that belong to the language she/he is acquiring (Radford, 1998:12-4).

The second chapter contains a description of the parameters. Obviously, not all aspects of natural languages are uniquely determined by universal principles. Language acquisition consists of the values of the parameters, some elements of the periphery, and the lexicon of the language (Chomsky, 1986:1500). A child who is learning Persian observes that finite verbs in this language license a null pronominal subject. In other words, he/she becomes aware that Persian is a pro-drop language. Interestingly enough, the child uses an overt pronoun before acquiring the inflections system of the language. Later, they drop the subject when they learn the finite verbs used in the language. Now, consider the difference between *man sib* and *pro sib mixa:m*. 'I want an apple.'

The third chapter of the book deals with the significant implications of the P&P approach for first-language acquisition, second-language learning, translation, and the typology of languages. In this chapter, we provide concrete examples to show how it is possible to use the principles and parameters of UG to account for the data in each relevant field.

## ACKNOWLEDGMENTS

As we have said, this book is, in certain respects, less comprehensive than we intended with respect to the numbers of principles and parameters. Quite candidly, writing this book would have been virtually impossible had it not been for the advice and comments of many colleagues and friends. We owe a deep gratitude to Professor Chomsky who recommended Professor Ian Roberts and Professor Guiseppe Longobardi for their comments on our work. We thank them for their comments and for providing us with their recent investigations on some new aspects of the principles and parameters of UG. We are also indebted to Professor Miremadi for his comments that inspired qualitative and quantitative revisions in the book. Our thanks are also due to Dr. Cholthicha Sudmuk for reading the first draft of the book and giving us her comments. We also thank Audrey Anderson, Editor of the book, and especially Cambridge Scholars Publishing for their great contributions to successfully publishing works on various aspects of Persian grammar. We must also thank Bethany Gadsby, Typesetter and Adam Rummens, Commissioning Editor, and Courtney Dixon, Designer of the book cover. Finally, our thanks are due to our family members for their patience, staunch support, and encouragement while the book was being compiled.



## CHAPTER ONE

### MAJOR SYNTACTIC PROPERTIES OF PERSIAN

Before embarking upon a detailed analysis of the principles and parameters, it is necessary to discuss the major syntactic properties of Persian. This will provide a rich background of information for our readers to better understand how the general principles interact to form the structures in the uncharted territory of Persian syntax. We present some of these major properties in alphabetical order, as follows:

#### 1. 1 Case-Markers

In some languages, case is morphologically manifested (Latin), while in others it has little (English), or is without overt realization (Chinese) (Chomsky,1997:110). Persian falls into those categories of languages that have a mixed type of case. The subject is assigned an abstract nominative case, while the direct object is marked by the postposition *-ra*: and the indirect object by a preposition. The genitive marker generally appears after the first element of an Ezafe construction to conceptually connect the first element (*Moza:f*) to the second element as (*Mozaf- elaih*) (Lotfi, 2014: 57).

Examples:

1-1-1 mehma:n-a:n    a:mad-and.  
      guest-    pl    came-3pl.  
      ‘The gusts arrived.’

1-1-2 Parviz keta:b-ra: be man da:d.  
      Parviz book-obj to I    gave  
      ‘Parviz gave the book to me.’

1-1-3 keta:b-e        man  
      book-Ez.        I  
      ‘My book’

Notice that in (1) the subject (*guests*) is morphologically unmarked, and in (2) the objects are Case-marked by *-ra*: and the preposition *to*, respectively. In (1, 3) the Ezafe marker *-e* appears after the NP-possessed and connects the two elements in the construction.

## 1.2 Double Complementizer (COMP)

In English, the landing-site of the *wh*-movement is the [Spec, CP] position, and there is a restriction in that only one element can be moved into this position, as the following inadmissible sentence shows (Haegeman, 1988:383):

1-2-1 \* John wondered for **whom which** book Bill bought.

Because of this restriction, the co-occurrence of a *wh*-phrase and an overt complementizer in the same position makes the sentence ungrammatical (Ouhalla, 1999:80).

1-2-2 \* I know the problem which that Mary solved.

This restriction traditionally referred to as a “Doubly Filled Comp Filter” is not a universal one, and Haegeman reports (1989:182-3) that there are many languages in which we find sequences of a *wh*-word followed by an overt complementizer, as in Dutch, Bavarian German, Early English, and Flemish, which is a dialect of Dutch. Consider the following sentence from Dutch:

1-2-3 Ik weet niet **wie of** Jan gezien heft.  
 I know not whom whether Jan seen has  
 ‘I don’t know whom Jan has seen.’

Persian is another language in which we find a sequence of an overt complementizer *ke*, followed by a *wh*-phrase. In other words, the *wh*-phrase occurs to the left of the complementizer (to the right) in English, as illustrated by the following example:

1-2-4 hich -kas ne-mi da:n-ad **ke chera**: Hedayat xod-koshi kard.  
 not - person not-dur-know-3sg. that why Hedayat self-killing did  
 ‘No one knows why Hedayat committed suicide.’



Some more corroborating testimonials cited by Karimi (2005:137) are:

1-2-5 pro fekr mi-kon-ni **ke ki-ro** Kimea to mehmuni be-bine-e?  
 you thought dur-do-2sg. ke who-obj kimea in party subj. see-3sg.  
 ‘Lit: you think who is it that Kimea will see at the party?’

1-2-6 to fekr mi-kon-ni **ke ki ba: ki** be-raqs-e?  
 you thought dur-do-2dg. that who with who subj.dance-3dg.  
 ‘Who do you think will dance with whom?’

A comparison between the examples in Dutch and Persian strongly suggests that *wh-phrases* are not landed in the [Spec, CP] position, and that the Doubly Filled Comp Filter is not a condition of the application of transformations, but rather a condition of the representations derived by transformations, which Ouhalla (1999-81) shows, as below:

1-2-7 \*[Comp wh-XP that], if wh-XP is overt (non-dull)

### 1-3 Double Prepositions

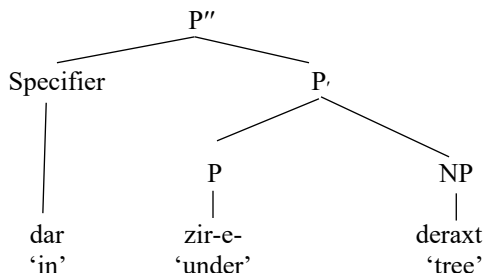
In traditional analysis, the prepositions in Persian are divided into simple and compound categories, as shown below:

1-3-1 ma: **ba:** ta:ksi be ba:za:r raft-im.  
 we by taxi to bazaar went-1pl.  
 ‘We went to the bazaar by taxi.’

1-3-2 bache-ha: dar zir-e deraxt neshaste bud-and.  
 child-pl. **in under** tree sat were-pl.  
 ‘The children were sitting under the tree.’

In sentence (3,1) there is a simple preposition *ba:* ‘by’, while in (3,2) we have a compound form, consisting of *in* and *under*. Miremadi (1997:40) argues that the first preposition of the compound form is optional, and some natural speakers of the language tend to delete it and use a simple form. This tendency may be attributed to the idea that the compound form is stylistically marked in the sense that it is formal, with a literary flavor. For an explanatory account, we may plausibly assume that a simple or a compound preposition and its following NP forms a prepositional phrase which is amenable to an X-bar analysis. In other words, the prepositional phrase (2) consists of a specifier, a head, and a complement, as schematically shown below:

## 3-3-3



One way to analyze (3,3) is to say that preposition *zir-e* ‘under’ is the head of the complement *deraxt* ‘tree’ and *dar* ‘in’ is the specifier of *under*, which is optional. Radford (1998:90) presents the following examples from English, with a similar X-bar analysis.

1-3-4 straight to bed

1-3-5 such a pity

If our assumptions about the Persian examples in (3,1-3) are correct, the prepositional phrases consist of *specifier+ head+ complement*, suggesting that these phrasal categories are both **head-first** and **specifier-first**. Later, we will discuss the properties of other phrasal categories in Persian. Now, consider the following elegant and melodious couplet in the second line of which the poet uses the compound preposition *dar miya:n-e* ‘Lit: in amongst’.

1-3-6

یاد ایامی که در گلشن فغانی داشتیم در میان لاله و گل آشیانی داشتیم. (رهی معیری)  
 ya:de 'a'yya:mi ke dar golshan faqa:ni da:shtim dar miya:ne la:levo gol 'a:shiya:ni da:shtim.  
 “May we remember the days when we were groaning in a rose-garden,  
 And built a nest amongst tulips and flowers as a term of a bargain.”

(Rahi Mo'ayyeri)

## 1-4 Ezafe Construction

Another syntactic property worthy of consideration in Persian relates to a productive construction under the rubric of an “Ezafe Construction” in which two constituents called Mozaf (the added) and Mozaf Elaih (the annexing) are conceptually connected in that order by the Ezafe marker *-e* or the Genitive Case attached to Mozaf, serving as the realization of Case

for the constituent to which it is affixed. Thus, it is assigned to the object or the possessed *keta:b-e Parvin* ‘Parvin’s book.’ (In English, the case is assigned to the subject.) This construction expresses an array of semantic relationships, such as possession, modification, specification, description, metaphorical interpretation, etc., (Phillott, 1919:53; Mahyar, 1997:41). Some illustrative examples, respectively:

1-4-1 - *keta:b-e Hedayat*  
Book-EZ. Hedayat  
‘Hedayat’s book’

1-4-2 *keta:b-e xub1-*  
Book-EZ. good  
‘A good book’

1-4-3 *dare- ba:q*  
door-EZ. garden  
‘The door of the garden’

1-4-4 *sa:’at-e tala:*  
watch-EZ, gold  
‘Gold watch’

1-4-5 *dast-e sarnevesht*  
hand-EZ. destiny  
‘The destiny’s hand’

In case the first constituent terminates in a vowel, there would be a phonological environment which requires a glide-insertion for “ease of pronunciation.” For example:

1-4- 6 *xa:ne -y-e Reza*  
House-EZ Reza  
‘Reza’s house’

Finally, there is a tendency to delete the Ezafe marker in some constructions, or invert the constituents, without a marker:

1-4- 7 *pedar zan*  
father wife  
‘Father-in-law’

1-4-8 sar cheshme  
 head spring  
 ‘The head of a spring’

1-4-9 sa:heb honar  
 owner art  
 ‘Artist’

1-4-10 pana:h-e ja:n/ >/ ja:npana:h  
 asylum-EZ. world > world asylum  
 ‘World asylum’

## 1-5 Head-Complement Order

The analysis of phrasal categories within the X-bar syntax, rather than in other components of grammar, such as phrase structure rules or categorial rules, assumes that it provides generality and symmetry across languages in the sense that “phrases typically consist of a head and an array of complements determined by lexical properties of the head properties of the head.” (Chomsky, 1986:81).

The phrasal categories of Persian, namely NP, VP, AP, PP, and ADVP, share a common syntactic property in that the head precedes its complement, except for VP in which the verb head follows its complement. Interpreted differently, the verb assigns case to its complement to the left (to the right in English), while a lexical head assigns a thematic role to its complement to the right (to the left in English). Let us consider some representative examples:

1-5-1 - taxrib-e xa:ne-ha: [N<sup>o</sup> spec [N<sup>o</sup> [N destruction] of the houses]]  
 demolition-Ez. house-pl.  
 ‘Demolition of the houses’

1-5-2 mast az mey-e na:b [A<sup>o</sup> spec [A<sup>o</sup> [A intoxicated] with pure wine]]  
 intoxicated from wine-Ez. Pure  
 ‘Intoxicated with pure wine’

1-5-3 xir- e nur-e mahta:b [P<sup>o</sup> spec [ P<sup>o</sup> [P under] the moonlight]]  
 under-Ez. light-Ez. moon  
 ‘Under the moonlight’

1-5-4 xeyli tond [(ADV<sup>o</sup> very [ADV<sup>o</sup> [ADV fast]]  
 very fast  
 ‘Very fast’

1-5-5 *pro* keta:b-ra: xa:nd [V" *pro* [NP the book [V' [V read]]  
 he book-obj read  
 'He read the book.'

Notice a couple of points about these categories. First, the specifier position in each phrasal category is empty. Second, in (5,5) the VP phrase is head-final, as its constituent structure shows. Finally, the head of the adverbial phrase is the AVD *tond* 'fast' and it is expanded into an ADV-double-bar by the addition of *very*, as a determiner.

In addition to phrases, relative clauses and noun clauses are also head-initial. Notice the following pairs of relative clauses:

1-5-6

a- *ye doxtar-i* [ *ke ziba:st*] *va:red-e kela:s shod*.  
 one girl-IND. that beautiful-is arrive class became-3sg.  
 'A girl, who is beautiful, came into the class.'

b- *un doxtar-e ziba:-y- i ke va:red-e kela:s shod xa:hare man-e*.  
 that girl-EZ. beautiful-y-RES. that arrive class became-3sg. sister-Ez . my-is  
 'The beautiful girl who came into the class is my sister.'

In both relative clauses, the head *doxtar* 'girl', precedes the whole clause and is marked by the suffix / - i /, but their difference lies in the type of suffix added to the head noun phrase, which is a highly controversial issue in this part of Persian syntax. Aghaei (2015:211) argues that, in Persian, the indefinite / -i / in (6a) is homophonous with the relative restrictive / -i / in (5, 6b). One major difference between them is that while the restrictive marker /-i / is compatible with a definite determiner, the indefinite marker / -i / is not, as the following ungrammatical sentence shows:

1-5-7\* 'un doxtar-i 'umad

Another difference is that while the restrictive / -i / attaches to the right edge of the head NP, the indefinite / -i / may attach to the modifier or a proper subpart of the head NP:

*doxtar-e ziba:--'i va:red-e kela:s shod*.  
 girl-Ez. beautiful-y-INDF arrive class became-3sg.  
 'A beautiful girl came into the class.'

We will discuss some more properties of the relative clauses in another part of this chapter.

Now, let us examine some noun clauses:

1-5-8

- a- hame ( **in-ra:** )<sub>i</sub> mi-da:n-and [ke 'omr kuta:h ast].  
 all (this-obj) Imp.-know- 3pl. that life short is  
 'Everybody knows that life is short.'

In this sentence, the pronoun *in* 'this' functions as an optional head for the object *ke- clause* extraposed to the end of the sentence. The pronominal head is, however, obligatory in the subject position:

- b. [in k e 'omr kuta:h ast] bar hame roshan ast.  
 this that life short is to all clear is  
 'That life is short is clear to everybody.'
- c. (in) bar hame roshan ast [ke 'omr kuta:h ast].  
 (this) to all clear is that life short is  
 'It is clear to everybody that life is short.'

Notice that in (5, 8c) the *ke- clause* is in an extraposed position, but the pronominal head is optional since Persian is a pro-drop language. The English translation of this sentence shows the difference between Persian and English, which is a non-pro-drop language.

We observe that in (8a) the pronominal head is Case-marked and co-indexed with the *ke- clause* through a chain. Now, the question arises as to how the object complement CP receives its thematic role. As far as noun clauses in English are concerned, Culicover (1997:52) argues that there should be an empty NP postulated in the VP that is linked to the exposed CP through a chain:

1-5-9 I [VP [vp believe [<sub>NP</sub> *t<sub>i</sub>*] [<sub>CP</sub> that you should have called <sub>*i*</sub> ]]].

Similarly, a CP binds an empty NP in the subject position, as in (10):

10- [<sub>CP</sub> that you should have called]<sub>*i*</sub> [<sub>IP</sub> [<sub>NP</sub> *t<sub>i</sub>*] is obvious].

Culicover's assumption about the underlying NP in English CP complements is compatible with the D-structure of the nominal clauses in Persian (Soheili, 1976), and the difference between their surface manifestations may be accounted for in terms of a parametric variation.

## 1-6 Interrogative Markers

The three major syntactic devices to form interrogative sentences in Persian include the use of an interrogative marker *a:ya:* ‘whether’, wh-phrases, and a rising intonational pattern (Bateni, 2006a:85-8). The interrogative marker *a:ya:* occurs at the beginning of yes-no questions, followed by a rising intonation:

- 1-6-1 **a:ya:** shoma: Farsi sohbat mi-kon-id?↑  
 whether you Farsi speaking dur.-do-2sg.  
 ‘Do you speak Farsi?’ ↑

The wh-phrases generally occur *in situ* but may move to a clause-peripheral position for scope, or other practical purposes, during the derivation. As a special supra-segmental feature of the language, the question is followed by a falling intonation, but it may have a rising intonation, based on the speaker’s intention and pre-supposition. The question word generally carries the primary stress in the sentence. Examples:

- 1-6-2 dishab **key** be xa:ne pro a:mad i?↓  
 last night when to house you came-2sg.  
 ‘When did you come home last night?’

- 1-6-3 **chera:** dast-at zaxm shode ast?↓  
 why hand-poss. scratched became-2dg?  
 ‘Why is your hand scratched?’

Interrogative sentences may be formed by using a rising intonational pattern alone, without *a:ya:* or any wh-words, as the following example shows:

- 1-6-4 be-baxsh-id, shoma: Irani hast-id?↑  
 IMP-excuse-2dg. you Irani are-2sg.  
 ‘Excuse me, are you Iranian?’

In general, interrogative sentences in Persian are formed without using any auxiliary verb or inversion, as the case is in English and other languages. Khanlari (1994:107) presents some examples in which multiple interrogative markers, namely *a:ya:* and a question word may be used to emphasize a question:

1-6-5

a. **a:ya: che** pro shenid-id?  
 whether what you heard-2dg,  
 ‘What did you hear?’

b. **a:ya: che** xabar pro da:r-id?  
 whether what news you have-2dg.  
 ‘What news do you have?’

Thus, Persian falls into the category of languages, such as Japanese and Chinese, in which both an interrogative marker and a *wh*-phrase are used to form a question (Chomsky, 1997:69). Consider an example from Japanese (Shirato, 1985:330):

1-6-6 Itsu kimashita ka?  
 when arrived Q  
 ‘When did it arrive?’

The English translation shows that English uses a single question word in the [Spec, CP] position.

## 1-7 Negative Element

Sentential negation in Persian is expressed by means of the head negative marker *-na-* attached to the head of VP or the nearest auxiliary verb, if there is one used in the sentence (Bateni, 2006a:122):

1-7-1 man diruz be kela:s **na-raft-am**.  
 I yesterday to class not-went-1sg.  
 ‘I did not go to the class yesterday.’

1-7-2 shoma: **na-ba:yad** siga:r be-kesh-id.  
 you not-must cigarette subj. smoke- 2dg.  
 ‘You must not smoke.’

The negative marker does not have a fixed position, according to the above distributional criteria, and may undergo movement from the VP head to another head (auxiliary verb) (Head-to Head Movement) in the sentence, making a difference in the semantic interpretation (Miremadi, 1997:256).

Compare the following pairs of sentences:



1-7-3

a. shoma: *na-ba:yad* *siga:r* *be-kesh-i*.  
 you not-must- cigarette subj.-smoke-2sg.  
 ‘You must not smoke.’

b. shoma: *ba:yad* *siga:r* *na-kesh-i*.  
 you must cigarette not-smoke-2sg.  
 ‘You are advised not to smoke.’

The negative modal in (7, 3a) ‘prohibits’ smoking, while the negative verb in (7, 3b) admonishes the addressee not to smoke for his health.

In addition to *na-*, there are three other negative markers, namely *ne-*, *ni-* and *ma-* which may be accounted for in terms of their distributional patterns and the morphemes they attach to. The marker *ne-* is used before the durative suffix *mi-*, with an incomplete regressive vowel harmony, namely the change of /a/ to /e/ before the suffix vowel /i/ in written Persian. A complete vowel harmony occurs in spoken Persian. Compare the following examples

1-7-4

a. ma: **ne-mi**-tava:n-im a:nja: *be -rav -im*.  
 we not-dur.-can-1pl. there subj.-go-1pl.  
 ‘We cannot go there.’

b. ma: **ni-mi**-tunim unja: *berim*.

Notice how *ne-* changes *ni-* before the suffix in spoken Persian.

The negative marker *ma-* is chiefly used in imperatives to convey the idea of prohibition. This negative form is stylistically marked as a literary form, which is rarely used in contemporary Persian because the use of *na-* in an imperative form conveys the same meaning.

1-7-5 *ka:r e emruz be farda: ma-fekan*.

work-EZ today to tomorrow neg-put

‘Don’t put off until tomorrow what you can do today.’

The last negative *ni-* is used to make a copula negative and appears in a contracted form:

1-7-6

ast → ni-st

is → neg-is

1-7-7 Now, consider the use of this negative form in the following poem, as a reflection on the beauty of a rose:

کار ما نیست شناسائی راز گل سرخ (سهراب سپهری)  
 کار ما شاید این است  
 که در افسون گل سرخ شناور باشیم

ka:re ma: nist shena:sa:'ie ra:ze gole sorx  
 ka:re ma: sha:yad in as  
 ke dar 'afsune gole sorx shena:var ba:shim  
 "It's not our job to discover the secrets of a rose.  
 Our job is perchance,  
 To float in the dazzling charm of a rose."

(Sohrabe Sepehri)

In addition to the negative markers above, there is a set of words in Persian, which co-occur with a negative verb to express sentential negation (Kwak, 2008:69). They include, *digar*, 'no longer', *qera:n/sanna:r/ pashiz*, *sha:hi/ qa:z* 'a penny', *yek vajab* 'an inch' (negative concord), and *aslan*, 'at all', *hargez*, 'never', *abadan* 'by no means, and *hich* 'no, nothing' (negative polarity items). For example:

1-7-8 in kola:h **yek qera:n** ham ne-mi-arz-ad.  
 This hat a penny also not-dur.-worth-3sg.  
 'This hat is not worth a penny.'

1-7-9 man **hargez** doruq ne-mi- gu-y-am.  
 I never untruth not-dur.-tell-1sg.  
 'I never tell a lie.'

1-7-10 hich kas ba: man sohbat na-kard.  
 no person with I speaking not-did  
 'No one talked to me.'

Finally, in the lexicon of the language there are many words that can express sentential negation without using a negative marker, including *hazar kardan*, 'to avoid', *rad kardan* 'to reject', *ha:sha: kardan* 'to deny', etc. Example:

1-7-11 az mosa:hebat-e sharir-a:n **hazar kon!**  
 from company-Ez. wicked-pl. avoiding-do  
 'Avoid the company of the wicked.'

Now, consider a short exchange between a poet and his beloved:

تو به من گفتی: "از این عشق حذر کن."  
 با تو گفتم: "حذر از عشق ندانم."  
 to be man gofti az in eshq hazar kon  
 ba: to goftam hazar az eshq nada:na  
 "You said: 'Avoid this love.'  
 I said: "I don't know how to avoid it."

(Fereydun Moshiri)

For reasons of space, we just discussed the three main syntactic ways (e.g., negative markers, words co-occurring with negative verbs, and inherently negative verbs) which are used to express sentential negation in Persian. The status of NegP and its relationship with other functional phrases will be treated in more detail in subsequent chapters of the book.

## 1-8 Null Pronominal Subjects

One of the prominent syntactic properties of Persian is its pro-drop parameter, which it shares with some other languages such as Spanish, Italian, Arabic, etc. Khanlari (1994: 347-50) compares English with Persian and argues that Persian has a rich morphological system of inflections/agreements that can fulfill the same syntactic functions as subjects. As a result, there is no pronominal subject, unless it is required in some contexts to indicate notions such as contrast, emphasis, identification, etc. Compare the following examples:

1-8-1 *pro* har ruz dast -ha:-y-am-ra: se b a:r mi- shuy-am.  
 I every day hand-pl.-y-poss.obj three time dur.-wash-1sg.  
 'Every day I wash my hands three times.'

The Persian sentence has a phonologically null pronoun (designated by a small *pro*) in the subject position, and this null pronoun fulfills the same syntactic and semantic role as the overt pronoun in the English translation. Thus, Persian is said to be a pro-drop language and English a non-pro-drop one. Consider the full inflectional paradigm of the verb *shostan* 'to wash' in the following paradigm, in terms of at least number and person.

1-8-2

Singular		Plural	
man	mishuy-am 'I wash'	ma:	mishu- <b>im</b> / 'We wash'
to	mishuy-i 'You wash'	shoma:	mishu- <b>id</b> 'You wash'
'u	mishuy-ad 'S/he washes'	a:nha:/isha:n	mishuy- <b>and</b> 'They wash'

Now, a fundamental question to ask is why postulate a null pronominal subject in Persian, rather than say that the sentence is without a subject. One strong argument in support of this hypothesis may be adduced in terms of the lexical property of the verb used in the sentence. The verb in (1) is a transitive verb which requires an external argument (subject) and an internal argument (object), and this lexical property must be projected in the syntax, according to the Projection Principle (PP) (Chomsky, 1986:75). Regardless of the argument structure, every sentence must have a subjective accordance with the Extended Projection Principle (EPP). These two requirements may be sufficient to claim that the sentence has a *pro* subject and is grammatically correct. In a more technical sense, the presence of the null subject in (8,1) is licensed by the rich inflection/agreement on the verb capable of identifying the feature content of the null subject. This condition may be formulated as follows (Ouhalla, 1999:313):

1-8-3 *pro* is licensed by the rich Agr category co-indexed with it.

Persian is said to be a complete pro-drop language in the sense that there is no tense restriction and that it allows the thematic null subject and the demonstrative pronoun *in* ‘this’ (English expletive *it*) in the subject position:

1-8-4 Arash be Iran raft [ke *pro* aqva:m-ash-ra: be-bin-ad].  
 Arash to Iran went [that he relatives-poss.-obj subj.see-3dg.]  
 ‘Arash went to Iran to visit his relatives.’

1-8-5 *pro* lazem ast [ke hame ma:sk be-zan-and].  
 this necessary is [that all mask subj.-wear-3pl]  
 ‘It is necessary for everybody to wear a mask.’

In (8, 4) *pro* appears in the subject position of the subordinate clause and is co-referential with the matrix clause subject, but they do not form a chain because < Arash, *pro* > has two arguments and two independent theta roles to perform. The fact that Persian allows both *pro* and a pronoun in the subject position may not come as a surprise to us because the inflection/agreement on the verb can identify the features of both in a similar fashion.

The schema in (8, 3) stipulates the condition under which a head, as a lexical property, can license *pro* under government. Now, what is the condition on the interpretation of *pro*? The data from Persian supports the empirical observation that an overt pronoun is free in its governing category, but *pro* is co-indexed with a specific subject in the sentence (Miremadi, 1997:228):

1-8-6 'Ali<sub>1</sub> mo'taqed ast ke ['u<sub>1,2</sub>, **pro**<sub>1</sub> ba: hush ast].  
 Ali believer is that he pro with intelligence is  
 'Ali believes that he<sub>1,2</sub> / pro<sub>1</sub> is intelligent.'

As indicated by the numerical indices, the overt pronoun in this sentence may refer to the subject of the matrix clause or may be freely co-indexed with another entity outside the sentential domain. In contrast, the null pronoun *pro* is co-indexed with the matrix clause subject and receives a definite interpretation, while the overt pronoun is arbitrary in reference. We observe a non-specific interpretation in (7), too:

1-8-7 **pro** mi-gu-y-and [ke kovid-e nunzda xatar da:r-ad].  
 they dur-say-y-3pl, that Covid 19 danger has-3dg.  
 'They say that Covid-19 is dangerous.'

In this sentence, *they* is arbitrary in reference and may refer to *people, doctors, nurses, government officials*, etc. The same null pronoun might be said to be definite in interpretation with a specific reference, as in:

1-8-8 doktor-ha: mi-xa:h-and [ke **pro** bache-ha:-ra: vaksan be-zan-and  
 doctor-pl. dur.-want-3pl. that they children-obj vaccination subj.-give-3pl.  
 'Doctors want to vaccinate the children.'

From the comparison of an overt pronoun with *pro* in (1) and the sentences in (7) and (8) we can tentatively conclude that a distinction must be made between two mechanisms for the formal licensing conditions and interpretation conditions of *pro* in Persian. The licensing conditions (i.e., conditions which determine the distribution of *pro*) depend, crucially, on a rich morphology, where the null element in the subject position is governed by INFL. On the other hand, the interpretation conditions (i.e., conditions which determine what *pro* can refer to) depend on the accessibility of a specific reference. The difference between languages in terms of licensing and interpretation conditions may be accounted for via a parametric variation.

## 1.9 The Resumptive Pronoun and Complementizer *ke* in Relative Clauses

Two distinguishing properties of relative clauses in Persian relate to the way they are introduced and their internal structure. Relative clauses are not derived by movement and an alternative strategy is used in that the relative clause is headed by the invariable complementizer *ke* and it contains a

resumptive pronoun co-indexed with the relativized head noun. The appearance of the resumptive pronoun depends on the syntactic position of the head. Examples:

- 1-9-1 osta:d-i [ **ke** inja: tadris mi-kon-ad ] Irani ast.  
 professor-rel. that here teaching dur.- do -3dg. Iranian is  
 ‘The professor who is teaching here is Iranian.’

In this sentence, the head is in the subject position and no resumptive pronoun is used. The resumptive pronoun, however, appears optionally in the direct object position, and obligatorily in the indirect position and possessive, as illustrated below:

- 1-9-2 osta:d-i [ **ke (u-ra: )** mi-shena:s-id ] Irani ast.  
 professor-rel. that he-obj dur.- know- 2dg.  
 ‘The professor whom you know is Iranian.’

- 1-9-3 osta:d-i [ **ke ba: u** dars gerefte-id ] Irani ast.  
 professor-rel. that with he courses taken -2dg. Iranian is.  
 ‘The professor with whom you have taken a course is Iranian.’

- 1-9-4 osta:d-i [ **ke keta:b u -ra:** xa:nde-id ] Irani ast.  
 professor-rel that book-EZ he-obj read-2dg. Iranian is.  
 ‘The professor whose book you have read is Iranian.’

The appearance of the resumptive pronoun may be shown in a hierarchy, as follows:

**1-9-5 Table of Resumptive Pronoun**

Subject	Direct Object	Indirect Object	Possessive
-	+	+	+
	-		

In a less formal context, the case markers may appear on the head of the relative clause:

- 1-9-6-osta:d-i -(ra): [ **ke** mi-shena:s-id ] Irani ast  
 professor-rel. (obj) that dur.-know-2dg. Iranian is.  
 ‘The professor you know is Iranian.’

There is overwhelming evidence that Persian uses an invariable clause-introducing complementizer *ke*, rather than a pronoun. The first argument relates to the logical structure of the relative clause in that a relative clause