A Functional Analysis of Present Perfect in Persian

Mansour Rahimifar University of Isfahan, Isfahan, Iran

Vali Rezai University of Isfahan, Isfahan, Iran

Rezvan Motavalian University of Isfahan, Isfahan, Iran

Abstract—The aim of this article is to establish the present perfect functions syntactically and semantically in Persian. Taking the definition of perfect, typically functioning to express anteriority or perfect aspect, the authors analyzed this construction in Persian in terms of function, meaning, and usage. Using functional-typological approach, the category of perfect was analyzed in regards to form, composition, meaning, expression, and its specific uses in Persian in order to determine its fundamental functions and meanings. From a synchronic point of view, the resultative, experiential and current-relevance meanings of this construction could be covered from the compound verb form. The discussion on the meanings of the Persian compound form of present perfect was based on the analysis of its occurrences in contemporary spoken standard texts, including movies, talk shows, and TV serials as well as written texts and the authors' intuitions, in rare cases. Fundamental to the present study were three assumptions: First, a closer look at the data indicates that there are both temporal and aspectual tendencies in this construction. Second, the findings lend support to the claim that indirect information, usually described under the label of evidentiality in many contexts, is a part of their functions. Third, a modified version of Kyparsky's theory of event structure is used and we promote the idea of "hierarchical structure, for the Persian perfect functions where the current relevance of a prior event is the main function and other functions are entailed from this.

Index Terms-Persian, aspect, evidentiality, perfect, form, function

I. INTRODUCTION

It is generally believed that undertaking investigations on present perfect construction, even if studied by several researchers including (Comrie, 1976; Dahl, 1985; Givon, 1982; Mahmoodi Bakhtiari, 2002; McCoard, 1978 and Taleghani, 2008), could hardly be described as plain sailing. This circumstance, in the main, arises from the complex structures of perfect, which, according to many linguists, are bound up with tense since it does show the features of tense at least as a relative tense and is indubitably tied to aspect. Such a dual relationship becomes even more appreciable when it comes to focusing on Persian since, few if any, investigations have been conducted in this relation so far. The data reported in this study provides convincing evidence that present perfect in modern spoken Persian has been reduced from compound to simple in terms of form, however, the function remains constant. It has a significant interaction with the past tense and perfect aspect on the one hand, and exhibits various time reference ambiguities on the other. The authors base their work on Givon's theory of perfect, however, they also use a modified version of the theory of event structure of perfect proposed by Kyparsky (2002) which is among the closest frameworks to Persian present perfect and present a hierarchical structure for the functions of present perfect in Persian. It is therefore of interest to further investigate the possible developments of the present perfect in its current use and describe some salient properties of this construction.

Investigating the functions of present perfect in contemporary spoken Persian is interesting in several ways. These concern a brief description on diachronic change of its form and function, reduction of the form in many occasions. First, the history of the perfect in terms of form and function from Old Persian to the Middle Persian and from the Middle Persian to the Modern Contemporary Persian is of great interest especially when it comes into competition with the morphologically marked past tense. Second, Persian language, like many other languages, has undergone enormous changes in the course of time. There is much evidence of diachronic variation with some studies showing a higher frequency of the reduced perfect form, participle without bound morphemes in Old Persian (Bagheri, 2013).

Given the fact that past research has examined the literature of comparative studies on perfect in Indo-European languages including English, (see for instance, Swart H. (2005), Molsing (2006), Rothstein (2006) and Koenig & Nishiyama (2010), it would be apposite to inquire, at this stage, why Persian speakers seem to use past form for present perfect in many contexts and omit the auxiliary in other occasions, especially in spoken contexts. The response is that

the syntactic and semantic function of perfect in Persian, as the focus of this study, is a breed apart. This abnormality, in comparison to simple past for example, is because of the fact that there is no consensus among linguists in describing aspectuality and temporality. There is consensus, however; where this construction is used to express concepts such as anteriority, resultativity, recent past, indirect information, experiential and current relevance. The category under investigation is characterized by its implications of form-reduction along with some kind of stress-shift pattern of the participle in many cases, if not all. Accordingly the present study aimed to answer the following questions:

- i. Does Persian perfect have temporal or aspectual tendencies?
- ii. Does present perfect bear evidentiality?
- iii. How does Kyparsky's theory of "Event structure and the perfect" adopt Persian present perfect functions?

As far as the arrangement of present paper concerns, it falls into four sections. The first section (the literature review) is committed to a theoretical elucidation of present perfect construction, which includes dealing with the time events, and the categories of tense, aspect and evidentiality. This comprises a scrutiny of the status of the anteriority and resultatives. The second section concentrates on the interpretation of illustrative materials and data, collected from daily conversations in the semi-real setting of talk shows, TV serials and movies, the authors intuitions to provide confirmatory evidence for the above claims. The third part examines the results of the elucidation in question and lays out a typology of the main semantic function of perfect in Persian. The last section, the conclusion, outlines the significant issues discussed in this paper and proposes some suggestions in the domain of perfect.

II. THEORETICAL PRELIMINARIES

The Functional-Typological Approach served as the theoretical basis of this study. As Halliday (1973) states "a functional approach to language means, first investigating how language is used...but it also means seeking to explain the nature of language in functional terms" (p. 7). Likewise, Givon (2001) believes that the core notions of functionalism, purpose or function, are invisible constructs that defy translation into the physicalist 'language of science'" (p. 5). The functional-typological approach became generally recognized in 1970s with works of Givon (1970, 2001), Hyman, Bybee and Thompson (1979), and Hopper (1985). A functional typologist bases his or her explanation based on priority of functions than form. In this research, aspectual differences and functions of Persian Perfect structures are taken into consideration with an attempt to adapt the theory of Perfect Readings promoted by Kyparsky (2002).

For the point of departure, it is assumed that perfect in general, operates along four distinct, although closely related, dimensions of tense, aspect, modality, and evidentiality.

A. Aspect and Tense

In recent decades, aspect has received considerable attention by linguists, including Comrie (1976), Hopper (1982), Dahl (1985), Givon (2001), Mahmoodi Bakhtiari (2002) and Taleghani (2008) in studying tense, aspect, and mood crosslinguistically. Some linguists including Kurylowicz (1964, p. 90) claimed that no relationship existed between inflection and the type of aspect. He believed that inflections did not denote the type of aspect. In fact, perfect aspect, to Kurylowicz (1964), carried no certain verb inflections. He claimed the pretended opposition tense-aspect, correspond neither to historical nor to contemporaneous facts. He adds tense occurrs in all Indo-European languages. What characterizes a language from another, are anteriority, reference of an action, whether present or past to a certain moment, moment of speaking, etc. Perfect is a kind of relative aspect: the verbal form does not denote perfectivity as a feature of action itself, but only the anteriority of the action referred to a moment of time.

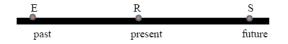
Aspect and tense are manifestations of aspectuality and temporality, respectively. The difference between tense and aspect is, in principle, quite clear. Comrie (1985, p. 6) argues that aspect refers to the grammaticalization of expression of internal temporal constituency. Aspects demonstrate features like perfectivity, imperfectivity, ongoing condition or habitual ones. Some aspectologists treat aspect in terms of a binary opposition between perfective and imperfective. Perfective aspect refers to a verbal form, which considers an event as a single whole and focuses on the completion of the event. (Givon, 2001: 297)

Imperfective aspect on the other hand refers to a verbal form, which is incomplete, has continued for some time and demonstrates the ongoing situation or denotes the repetition of the event. In other words, different ways of viewing the internal temporal constituency of a situation is termed aspect. It is connected with time and locates the situation with reference to the present moment. Some linguists including Vendler (1957) prefer to call this lexical aspect or "aktionsart", while others such as Comrie (1976) call this "aspect" as long as it is marked grammatically, and "aktionsart" when it is a part of a verbal lexeme. He considers aspect as the internal tense of a situation. In a comparison, he considers aspect as situation-internal time, while tense is considered the situation-external time. Moreover, in specifying the distinction between aspect and tense, Comrie (1985) argues that aspect refers to the grammaticalization of expression of internal temporal constituency (p. 6). He exemplifies this distinction using tense and progressive aspect in English, the difference between *Johns was singing* and *John is singing* in English is one of tense, namely a location before the present moment versus a location including the present moment; while the difference between *John was singing* and *John sang* is one of aspect. He argues that since tense locates the time of a situation relative to the situation of the utterance, we may describe tense as "deictic".

Also, Hopper (1982) tried to establish the fundamental notion of aspect as discourse-pragmatic rather than a local semantic one. He argues that it is characterizable as completed event in discourse. In a comparison between aspect and time, Givon (1984) argues that tense, involves primarily, though not exclusively, time as seen in terms of points in sequence, whereas aspect is concerned with the boundedness of spans of time. In *John sang*, the speaker presents the event as one, which occurred within a bounded span of time, while in *John was singing*, the relevant time span is unbounded.

As Jacob (2016) claims, there are at least three different understandings of the term "aspect": a morphological opposition, whose two poles are usually called "perfective" and "imperfective" e.g. Russian, or Romance, distinguish between "perfect" and "imperfect" and cover quite different functions in different languages. It should be noted that perfectivity indicates the duration of a complete action with a beginning, a middle and an end, while imperfectivity refers to a situation that is not complete and may be ongoing, like the progressive forms. A morphological category denoting the "internal temporal constitution" of an event and a function (expressed grammatically) can be described as "discoursive background." In other words, there is a relational function that always needs a reference point (i.e. another assertion) within the discourse and without expressing anteriority or posteriority.

For the sake of discussion, it should be mentioned that "time in terms of space" or a "timeline" is emphasized as far as tense is concerned. The timeline is a line, which is unlimited from both sides and is divided into three parts: past, present and future. Points located on the line may or may not be contemporary with the events and could be judged separately. As Lyons (1977) states, tense can be a deictic category, which gives information about the event (p. 71). Reichenbach's (1947) theory of time with three points is shown below in which E, S, and R refer to the event time, the speech time and the reference time, respectively. For perfect structures, the order of the points is as follows: E-S, R, which means that reference time and the speech time overlap and the event time is before these two.



Tenses express two types of temporal relations: (i) between R and S, and (ii) between R and E. It is important to note that relative position of E and S is not specified. (Comrie, 1985, p. 125). Some scholars argue about subcategories of tense and talk about absolute versus relative tenses. Absolute tenses express a relation between S and E. According to Comrie (1985), absolute tenses take the present moment as a deictic center, i.e. the time of utterance (p. 122). In other words, the grammatical relevance of time reference is made relevant to the moment of speech. The three absolute tenses are 'present', 'past' and 'future'. Relative tenses are defined relative to an additional reference point which does not (necessarily) correspond with the moment of utterance.

Also, Bhatt and Pancheva (2005) propose a two-tiered theory for aspect: viewpoint aspect, and lexical aspect. Viewpoint aspect (also called grammatical aspect or outer aspect) locates events in time. Aktionsart concerns the temporal constituency of events. It is related to the internal temporal constituency of events. A traditional view, still endorsed by many, that concerns the "inherent temporal features of the lexical content." (Klein, 1994).

Among the few Iranian traditional grammarians who distinguished aspect with tense, is Farshidvard (2004) who had plausible views about aspect. He defined aspect or his term *had-e-fel* (the extension of the verb) the features of the verb such as its implication to the beginning, continuity, termination, perfectivity, imperfectivity, and incompletion. He also classified the verb into five types of absolute or ambiguous, incomplete or continuous, perfect, half perfect, and ingressive. He seemed to confuse the perfect with perfective aspect and stated that perfect aspect, in contrast to progressive, terminated in a specific point of time and supported his idea with the following example:

1) væqti to āmæd-i mæn ræfte būd-æm

when you come-you._{PST.2SG}go-_{PP Copula-P-1SG}

When you came, I had gone.

He claimed that the perfect aspect shows completed action while it was not always true noting that perfect may have some state of perfectivity but not considered perfective in Persian.

B. Modality

Modality, as a semantic category, is simply defined as the speaker's attitudes and opinions towards an event. Bybee et. al (1994) claim that modality is not so easily defined as tense and aspect. They define it as the grammaticization of speakers' attitudes and opinions; however, they believe it does not fully cover all aspects of this linguistic term. They classify modality as the *agent-oriented modality*, which reports the existence of internal and external conditions on an agent with respect to the completion of the action expressed in the main predicate (p. 177). They claim the agent-oriented modality can be expressed by lexical or grammatical morphemes, for example; strong obligation can be explained with *must* and weak obligation with *should*. They classify *directives* which include commands, demands, requests, and entreaties in *speaker-oriented modality*. The grammatical terms they used in their study for *speaker-oriented modality* are *imperative*: the form used to issue a direct command to a second person; *prohibitive*: a negative command; *optative*: the wish or hope of the speaker expressed in a main clause; *hortative*: the speaker is encouraging or inciting someone to action; *admonitive*: the speaker is issuing a warning; and permissive: the speaker is granting

permission. Finally, *Epistemic modality* which applies to assertions and indicates the extent to which the speaker is committed to the truth of the proposition. (p. 179)

C. Perfect

The term perfect is one of the most ambiguous concepts in linguistic terminology for it both refers to the aspect and tense domains. This category is considered as a construction which refers to as a marker of prior events that are included within the overall period of the present.

The point of departure for the review of perfect is Lyons (1968) who considers English perfect as a relative tense, mentions the intersection between tense and aspect. He notes that by taking the "perfect aspect" into consideration, the pieces of evidence can be found so that the English perfect can be regarded as a secondary or relative tense, rather than an aspect. Comrie (1976) considers perfect as an aspect, which is used as a grammatical form for describing an event that happened in the past and may have relationship to the present or a state, which is the result of an event happening in the past. He considers four different functions of resultative, experiential, recent past and present relevance for English perfect. Dahl (1985) claims that perfect is well known in Turkish, Bulgarian, Macedonian, and Georgian and is sometimes regarded as an areal phenomenon. However, Genetti (1986) believes that the same developments also occur in other parts of the world, as in Tibetan languages.

Concerning resultatives or anteriors, terminology of Bybee et al (1994), they are used for evidentials of indirect evidence. Givon (2001: 293) argues that perfect is functionally the most complex and most subtle grammatical aspect. He considers four features of anteriority, perfectivity, counter-sequentiality and lingering relevance in the same form but by no means universal. In his model of perfect readings, Kyparsky (2002) has proposed five different readings with examples for perfect and claims the perfect is truly polysemous for languages (p. 2). He distinguishes morphologically among the five following readings, grouping them in different ways into tense/aspect inflections. In fact he has proposed a modified Reichenbachian theory which allows perfects to be specified for how the event structure by the lexical content of the verb. He claims five different readings of existential, universal, resultative, recent past and stative present for English perfect, therein I adopt for Persian perfect with a modification. Arguably, perfect is considered complex but this complexity should not hinder us to find out their real function and their relationship to tense on the one hand and to aspect on the other. Regarding perfect meaning, Thelin (2016) claims that perfect meaning implies an intimate cooperation with both tense and aspect meanings in a system of hierarchical interrelations. Kotin (2016) believes that in Indo-European reconstructions, perfect is treated as a verbal aspect within the basic categorial opposition of imperfectivity vs. perfectivity in the Proto-Indo-European verbal system, being primarily a grammatical indicator of the so-called "viewpoint aspect". A similar definition remains for "aspect languages" like Slavonic. On the other hand, the term perfect is used in descriptions of the verbal systems of aspectless languages like Germanic, where it denotes the category of verbal tense. Moreover, aspect or aspectuality often refers to phenomena like the so-called "lexical aspect" (the opposition between telicity and atelicity¹), which is situated on the border between pure lexical categorization "aktionsart" and the viewpoint aspect.

Regarding perfect, Khan (2016), mentions two important functions for the perfect: primary function, which is the resultative² and secondary function that is indirective and expresses an event in the past, with either perfective or imperfective aspect. He adds that the term 'indirective' was introduced originally by Lars Johanson to refer to verbs with this function which were widely attested in Iranian and Turkic languages. Khan (2016) claims that English perfect is both a tense and an aspect. It has a temporal meaning, since it involves an event that is prior to the speech time, but it has also aspectual meaning since it involves a particular viewpoint of the event, i.e. a viewpoint of the event from speech time. And finally, findings of Roorick & Lau (2017) in this relation are worth mentioning. They claim that the relation between perfect aspect, indirect evidentiality in hearsay and reference, and mirativity can be best understood as the result of an underlying template, involving event stages or information stages.

D. Perfect versus Preterite

As mentioned above, the perfect is considered as a construction which refers to as a marker of prior events that are included within the overall period of the present whereas the preterit marks events assigned to a past occurence which is concluded from the present. Concerning the distinction between the English simple past and the present perfect in terms of location in time, (Comrie 1985) argues that the perfect is not distinct from the past" since both state an occurrence in the past" (p. 78).

Perfect with inclusion of the present moment can be the main reason why some linguists including McCoard (1978) considered its semantic meaning as indefinite past, unlike preterite which is taken as definite past, as:

2) She has eaten lunch. (Which implies that perhaps she does not need to eat food at the moment,) versus:

¹This term, taken from Greek, refers to the endpoint or the goal. Basically, it means that a verb or a verb phrase has a goal or endpoint (semantically) in some sense. When we say for instance: *Ali ran the marathon in 2 hours*. The whole sentence is telic because the meaning is that *Ali completed the marathon* i.e., the action has reached its endpoint. In linguistics, telicity is the aspectual property of a verb phrase (or of the sentence as a whole) which indicates that an action or event has a clear endpoint. A verb phrase presented as having an endpoint is said to be telic. In contrast, a verb phrase that is not presented

as having an endpoint is said to be atelic:

a) The mechanic finished repairing the roof. (telic verb) b) Maryam studied for 6 hours. (atelic verb)

² Resultative expresses a resultant state arising from a preceding situation that is temporally disjoined from the present.

3) She ate lunch. (Which deos not necessarily mean she is not hungry.)

With a typological view, as is well known, and unlike Persian, present perfect in English does not tolerate the presence of any temporal expressions explicitly referring to the past. Such an expression in any Persian past imperfective sentences triggers the use of either simple past tense or present perfect depending on the speaker's intention and verb forms.

Moreover, the choice between present perfect and simple past in English depends too much on how relevant the situation is considered to be for the present moment by a speaker and this is a subjective judgment. But when this intuition of relevance is very clear, especially in the presence of adverbial expressions like "already", the correlation between past imperfective and present perfect is very clear:

4) He has already eaten lunch.

III. PERFECT IN PERSIAN

The perfect is obviously attested in modern Persian as well, however; as far as the authors have studied, they have never been subject to theoretically or typologically oriented research until now, except for some peripheral works by Mahmoodi Bakhtiari (2002) and Taleghani (2008) on general dimensions of tense, aspect and modality. Persian belongs to the family of Indo-European languages. It is somehow between analytic and synthetic languages. If one asks about "the perfect", the individual has to determine what is talked about. In so doing, two choices exist: to speak of a certain paradigm of forms, inherited from Proto-Indo-European, which might have changed functions, leading to many different things in the actual languages, and might even have melted together with other categories, e.g. with aorist, and with indicatives, as in Persian. Or to define "perfect" cross-linguistically via a certain function and call "perfect" any category, one can find cross-linguistically that responds to these functions, even if it combines itself with other functions. It goes without saying that we are dealing with perfect as we find it in a specific language at a specific moment, here Contemporary Persian. We take a strictly onomasiological point of view, i.e., certain form categories we find in Persian. Let's start with the form of the perfects in Persian.

A. Present Perfect Form in Persian

In this part, the form present perfect is explained, however; the point worth mentioning is that according to Shariat (1988) we cannot have past participle from intransitive verbs but what he calls: subjective noun, as in: *xabide*,(slept or one who slept) or neshaste, (sat), etc. (p. 151). The present perfect, in Persian, mazi-e-naqli literally translated to "Past Narrative", consists of past participle form of the main verb plus present copulas or the enclitic pronouns.

The perfect in contemporary Persian appears to be constructed by so-called "shortened infinitive" (masdar-emorakham), which is the same as the past stem of any Persian verb and an adjectival suffix, which is henceforth called past participle³, as the shared element of all perfect constructions, plus the existential verb form of *astan* (to be), from Early New Persian, reduced to the enclitic present or past copula. It is a verbal suffix that marks person and number so that it makes the omission of the subject possible since the verb forms are finite. For third person singular, however, it can be retrieved especially in the written language because the subject is absent and the verb undergoes zero morpheme. As an example, the conjugation of the verb kardan (to do) for present perfect is as follows:

karde-am, (I've done), kærde-i (you sG have done), kærde æst (S/he has done), kærde im (we have done), kærde id (you PL. have done), *kærde im* (we have done)

B. A Diachronic Approach to Persian Perfect Stem

Some Iraninan Grammarians investigated the history of verb forms in Persian. Bagheri (2015) claims that for describing past events there are different tools such as types of past tenses. Moreover, using the past participle followed by a nominal in possessive case is another tool for describing the past events. For instance, instead of 10, sentence 11 is used:

5) in ra mæn kærdæm this._{D.O.} I do-P-1SG I did this. 6) in kærdeye mæn æst this done I is

This is what I have done.

Based on her claim, the past participle in Old Persian was mostly made from the weak root followed by inflectional ending of "-*ta*" like the following:

³ Along similar lines, Shariat (1367: 151) argues that with intransitive verbs, we can have subjective noun rather than past participle, and it seems he is right since verb forms such as xabideh (slept) and istadeh (stood) are considered subjective rather than objective, but the form is still the same as past participle. These forms can usually be judged as either the resultative perfect or experiential one, for instance: Xābide (S/he has slept (as a result, now s/he is not awake)

		TABLE 1:	
Stem		OLD PERSIAN VERB STEM Past participle	Persian equivalent
	\sqrt{kr}	Karta	کرده
	\sqrt{br}	Borta	بوده
	\sqrt{mr}	Morta	مردد

She claims that in the remained scripts from Old Persian, it is obvious that using past participle for events occured in the past, is preferred than using simple past, since plenty of phrases such as the following can be seen: (p. 95)

7) ima: tya: manā: katam

this that I do_{PP}

This is what I have done.

She believes that past stem of Persian verb system is the natural continuous and developed form of Old Persian past participle. Given this form is used very commonly for events happening in the past, in the Middle Persian, it is used as the stem for the past verb. She claims that the only difference between Old Persian PP and the Middle Persian past stem is the phonological development.

Accordingly, the vowel /a/ was deleted from the end of suffixes "-*ita*" and "-*ta*". The following table shows this development: (p. 196)

TABLE 2: Persian stem development						
Stem		PP in Old Persian	Past stem in M.P	Persian Equivalent		
	di	Dīta	Dīt	ديد		
\sqrt{r}	as	Rasīta	Rasīt	رسيد		
\sqrt{d}	lav	Davīta	Davit	دويد		
	ja	Jata	Jat	زد		

This diachronic change of the Persian perfect form is accorded with some other languages as well. Scholars who have studied the perfect in English do not believe this category has had the same form and functions in the course of the time but gradually developed and did undergo form and meaning change. Friden (1984) claims that perfect was first extended to the intransitive verbs then to the verbs with objects in genitive or dative cases and finally to the intransitive verbs (p. 217). Also, McCoard (1978) believes that unlike the argument of those scholars claiming modern perfect asserts information about the present only implying the prior event that brought about the present situation, our view is just the reverse (p. 217).

The perfect indicating continuing present relevance of a past situation, expresses a relation between two time-points, time of the state from a prior situation and time of that prior situation:

8) He has bought a car.« And he still owns it.»

C. Persian Perfect and Stress Pattern

There is a phonological rule for stress pattern of verb forms in Persian that in positive forms, the stress usually falls on the last syllable of the first constituent. Accordingly, for simple past forms, stress must fall on the last syllable of the past stem. If this rule is violated and stress falls on the last syllable of the whole form, then the construction plays the function of perfect. As an example, //didam/ (I saw) is past simple but /did'am/ (I have seen) is taken as present perfect. This phenomenon is confined to 3^{rd} person singular only. Samei (1995) adopts this rule, restricted it for the two verb forms of /daftam/, (to have), and /xordam/ (to eat), only but it cannot be confined to these cases.

IV. FUNCTIONS OF PERSIAN PERFECT

In this article, the idea of ahierarchical structure for Persian perfect functions is proposed where *current relevance* of a *prior event* is the main function of this catergory and other functions including evidentiality, resultative and experiential readings fall under the hierarchy. In the following section, these different functions are listed and explained.

A. Current Relevance and Resultative Functions

Shariat (1988) defines present perfect as an event that started from the past but the same action or its result can be witnessed at present, for instance:

9) The window has opened. (and it is still open)

He claims that present perfect has two meanings of (*soboot*) and (*hodoos*). His terminology is different from what is used in linguistics these days, however, he identifies two important functions for perfect. By "soboot" he means an action that happened in the past but has not finished yet:

10) Bæāreh zire deræxt istāde æst

Bahareh under tree stand.-3SG.PP-copula

Bahareh has stood under the tree.

A change of state happens and also she is still there.

By "hodoos" he refers to an action that has finished:

11) Amir sobhāne xorde æst

Amir breakfast eat-3SG.PP.copula

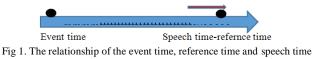
Amir has eaten breakfast. (As a result, he is now fed up.)

The two functions he identifies remind us of the current relevance function of perfect (*soboot*) together with resultative function (*hodoos*).

B. Relationship of Resultative and the Event Time

The result of an event which started just a few moments before the reference time. For perfect, the reference time overlaps speech time:

12) The police has arrested the suspect.



C. Relationship between Negation and Resultative

Shafai (2010: 80) is among few traditional grammarians who, like Farshidvard (2004), implies some linguistic views regarding present perfect. From syntactic point of view, he claims that in terms of perfect form in Persian, the past paerticiple refers to the past and the linking verb implies present. Current statement seems to validate Comrei's view on the two time points of perfect, the time of the situation in the past and the speech time. So the structure is a combination of present and past tenses. He, too, divides all Persian verbs into states and activities. He believes that in negative forms attention to the RESULT is more obvious:

13) Tā be hāl emāræti be in zibāi sāxe næʃode āst Until now palace._{IND} like beautiful buil-_{PP} not-become-_{PP. PRS. copula} Such a beautiful palace has not been built so far. (It means that a very beautiful palace has been built and we can see it.)

D. Recent Past or Hot News Function of the Perfect

Some Iranian grammarians have promoted linguistic ideas into Perian Grammar, including perfect. Anvari and Givi (1991) claim this construction is in contrast with simple past:

14) nāme rā neveste væ tūje pākæt gozāste æst

letter DO.marker write- 3SG.PP and inside the pocket put-3SG.PP copula-3SG

He has written the letter and has put it in an envelope.

They claim that present perfect is used for an action that happened in the past and continues to the present. So, they call it "*mazi-e_gharib*" literally translated to "near past." They apply the same terminology used by linguists with the name of recent past:

15) bætfe xābide æst

the baby sleep-3SG-PP copula-3SG

The baby has slept.

They claim this construction can also be used for an action that has not happened yet but it may happen in future: *16*) said be mosāferat rafte vai hanūz bar nagasfte

Saeed to travel go-3SG.PP and yet not return-3SG.PP

Saeed has taken a trip and has not returned yet.

This is an intersting point since they do not refer to the role of the negation adverb of *hanooz* (yet) which is usually used in present perfect and makes negative sentences. Of course, the role of sentence elements in selecting the verb forms can not be neglected. An example of "hot news,, from Iranian newspaper of "19 Dey,, Nov. 7th, 2016 follows:

17) osūlgærāhā mæqrūr sodeænd

foundamentalists proud become PP- 3PL

Foundamentalists have become proud.

It should be noted that hot news function of the Persian perfect does not necessarily refer to the recent events:

18) ... rezâ šâh 3 tâ zæn gerefte büd. Fætæli šâh 300 tâ zæn dâšte.

...Reza Shah had married 3 women. ..It is said Fathalishah would have had 300 wives!

(Shahrzad Serial, part 4, minute 11)

In Persian the first form is apparently past perfect, the second form seems to be present perfect but it can not be true since there is no current relevance. Thus, it is could be double perfect, and the third form could be past perfect progressive, because there is no current relevance to consider it present perfect progressive.

E. Perfect Used for Showing Probability

Persian perfect is highly influenced by specific adverbs. We should keep in mind that adverbs always impose some restrictions for selecting specific forms⁴. Perfect can be used instead of past subjunctive while the adverb of "probability,, is included:

19) ehtemālæn Saeed be xāne ræfte æst

Saeed might have gone home. The following list of Persian adverbs often restrict the verb forms to perfect: /tā hālā/ Until now, /tāzegihā/ Just, /hænūz/ Yet /tā konūn/ Already 20) tā hālā dærsefo tæmūm kærde Till now his/her lesson finish-3SG-PP S/he has finished her/his lesson until now.

F. Predilection for Using Simple Form Instead of Present Perfect Form with the Same Function

Persian has a tendency towards the use of a reduced *past*-form-like instead of Present perfect, but still contributes the perfect function. A closer look at the data indicates that diachronically perfect has been competeing with preterite however this trajectory and marked predilection for the preterite is due to the emphasis on this point that the concentration is mostly on the occurance of an event in the past, so this function should be presented in some syntactic form which seems simple past in written form, however position of stress is changed to indicate perfect meaning in spoken texts:

21) æbās: āqāje mohebi æz be nāmæjændegi æz sūje hæmsājehā do ta kompūt āværde.

Abbas: Mr. mohebi as representative of neighbours two compote for you bring-3SG-PP

Abbas: As the representative of neighbors, Mr. Mohabbi has brought two compotes for you. (Iran TV Serial)

The event happened in the past and is still going on; however, this form is used to indicate the current relevance.

What factors lead to the amalgamation of present perfect and simple past form in contemporary Persian?

There can be sociolinguistics, psycholinguistics, therapeuetic factors or syntactic, morphological and phonological aspect of Persian which may lead to such development. While Persian has perfect form, it also bears a form that expresses the perfective past. The past form construction probably originated as aspectual, but little by little obtained a past reference temporal value as well, like what has happened to the proto Indo-European perfect in other languages, and of the new compound perfects in modern Romance and Germanic languages. (Luraghi, & Inglese, 2016). This is consistent with well-known paths of language change, whereby resultative constructions develop into anteriors and eventually into past tenses (Bybee, Perkins,& Pagliuca, 1994).

Restrictive adverbs like *hanooz* and the degree of remoteness of the event may be two other reasons for this change. Comrie talks about the concept of remoteness which has been grammatical in some languages, including Paba-Yaguam with five grammatical markers for five degrees of remoteness. We think nearly all researchers who have worked on the English Present Perfect agree that in some sense it includes both the present moment and a situation located in the past. Both time points are crucial. Where they differ is the emphasis placed on each of these. The assumption is that while is talking about near past, Persian speakers use present forms:

22) /hast sāl æst ke dær opsālā zendegi mikonæm

Eight years is that in Uppsala life PROG.Do.1SG.

I have been living in Uppsala for 8 months.

Another important point is that in cases where Persian speakers apparently use past "forms,, to indicate present perfect, the 3rd person singular is always an exception. It means that we can never use simple form for third person singular to denote present perfect, there happens a phonological phenomenon in which the glottis blocks and compensatory lengthening happens instead:

23) mæn sobhūnæmo xordæm

I my breakfast eat. 1SG-P

I have eaten my breakfast.

24) ū sobhūnæfo xorde.

S/he her/his breakfast eat-3SG-PP

S/he has eaten her/his breakfast.

For the third person singular, this amalgamation doesnot work. The form must necessarily be perfect from, otherwise; it does indicate past "tense,,.

G. Using Present Perfect for an Action That Happened before Another Action

It is not always the case that, according to the definition stated by traditional grammarians, including Natel Khanlari (1976) about pluperfect that is used for an event happened before another. We can have cases that violates this definition:

⁴ In Persian "adverb" literally means "condition"!

25) Zamāi ke be manzel residam motavadze fodam kelidam rā gom kardeam When that to home arrive-ISG.P. learn-ISG.P. key-POSS.ISG. DO. marker lose-ISG-PP When I arrived home, I learned that I had lost my key.
As is is clear using using the form is in contrast to English learned.

As it is clear, using such form is in contrast to English language.

H. Perfect Used to Indicate an Action for Future

In some cases perfect is used to indicate a future event. Along similar lines Mahmoodi (2004) argues that sometimes one grammatical form can express more than one category and one category can be expressed by more than one form: 26) Sāle dige væqti be irān miāid mæn fāreqotæhsil fodeæm

Year another when to Iran IND.marker.come.3SG.PL. I graduation become.ISG.PP

By the time you travel to Iran next year, I will have graduated.

Tense projection is very common in Persian. It is a phenomenon in which the Persian past tense or present perfect forms are projected into the future to designate events, states, and processes. This phenomenon under consideration is by no means confined to Persian. Examples of Swedish, Turkish and Persian prove this:

27) kom sa° gick vi. (Swedish) come-imp so went we We are off now. Det var verkligen synd! That is (lit. was) a real shame! (Amoozadeh, 2006)
28) manageddim. Turkish I went. Isg I am about to leave.
29) bāzi rā færdā bāxteim Game DO.marker tomorrow lose-PP.3PL *We have lost the game tomorrow.

I. Evidential Function of Persian Perfect

As Aikhenvald (2004) puts forward, evidentiality is a grammatical category with source of information as its primary meaning. If the speaker watches the event happen, it is called visual evidential, if one hears but doesn't see it, she calls it non-visual evidential. If the speaker makes an inference based on general knowledge or visual traces, it is called inferential evidential respectively. She argues that if one is told about a piece of information, it is known as reported, secondhand, or hearsay evidential.

Evidentiality is one of the major functions of perfects in Persian. There are main arguments to be advanced to support the existence of evidentiality in Persian perfect. Among the publications about the expressions of evidentiality in Persian perfects is Jahani (2000) who argues when it comes to eye-witnessed information, both perfect and simple past are used. While, based on the different data in case of the eye-witnessed information, perfect is not used. This form is only used when one infers the information. Rezai (2013) states that concerning the terminology of so called *narrative past* (present perfect) in Persian is due to this fact that this verb phrase is narrating some event (which is not witnessed by the speaker) occurred in the past. An implication of evidentiality is understood from its Persian terminology.

Accordingly, when somebody who is not present to witness an event or an accident for instance, but is informed by somebody else, he MUST use present perfect or present perfect continuous to tell the truth- if he uses past form, one maxim of discourse as Grice explained is violated, he is telling untrue. The following data supports the idea:

30) Etfaq oftāde xode rānænde poſte tſerāq qermez ūmæde zæde be ſiſe goſte xæſe kon ūno! Rānænde dāſte milærzide mige bændæri gozāſtæm

Incident fall PP. that self-driver behind red light come PP 3SG. To glass hit PP.3SG. Said PP.3SG. Asphixiate that. Driver have PP.3SG. PROG. Marker shake PP.3SG. Say PRES. 3SG. Bandari put.P.1SG.

It happened once that the driver himself had come behind the traffic red light, had hit the window car had said:" Stop that"! He had said "I am listening to Bandari Music"?

(Mehran Modiri, TV show of "Getting together" *dowrehami*, Nov. 4, 2016)

Farshidvard (1383) believes that in the course of time the different meaning aspects of the verb have been reduced, as a result, the semantic value of the verb is reduced too (p. 272). For example in the past subjunctive was used instead of present perfect and present subjunctive. Perhaps this claim can be applied for the contemporary use of double perfect which seems to be used now as a marker of evidentiality only:

31)doktor jæzdi nemitūne dorūq gofte būde bāfe

Doctor Yazidi can not lie say-3rd. PP be-PP be-subjunctive

Doctor Yazdi could not have said lies. (Sadegh Zibakalam, Nov, 3, 2016, University of Sharif, Tehran)

J. Experiential Perfect

The experintial or existential reading of perfect, as Kyparsky (2002) terms it, refers to an event that can be repeated by the agent, so the example of:

32) Ali has visited Shiraz.

implies that it is possible for Ali, who is alive, to visit Shiraz again and that he has visited Shiraz for one or more occasions so far.

V. PRESENT PERFECT, ASPECT OR TENSE?

Many linguists including Bybee, Comrie and Dahl $(2016)^5$, have talked about the degree of temporality and aspectuality of perfect. What is important is that how grammatical structures are used in discourse. She adds that linguists invented the categories of tense and aspect and there is no evidence that they are always separable. Indeed, perfective aspect overlaps a great deal with past tense, and perfect (anterior) overlaps with both of them, depending upon how far it has grammaticalized. These days there is greater interest in how grammatical structures such as perfect are used in discourse (conversation or written discourse) and how they change over time than in questions of how they should be categorized.

Nevertheless, the linguists commented on the type of category of perfect. It does have some features of tense, including admission of deictic adverbs like yesterday, last year, at nine o'clock, etc. but it is not deictic, like tenses:

33) sāwt noh qorsāfo xorde

clock nine pills-_{POSS-M/F} eat-_{3SG-PP}.

***S/he has eaten her/his pills at nine.

It also has some features of aspect but still is not fully fit with aspects like progressive with the marker of "mi" in Persian.

Concerning the category of perfect in English, Khan (2016) thinks that it is both tense and aspect. Mahmoodi Bakhtiari (2002) claims it is tense. Comrie believes it is aspect. Thelin (1999) reports that it is neither tense nor aspect. He calls perfect as a systematically independent category of temporal meanings correlated hierarchically with tense and aspect, namely *taxis*, taken the term from Roman jakobson. It goes without saying that typologists are looking for universal tendencies, grammatical changes, etc. Furthermore, we have to respect the "right" of any language to organize itself in an arbitrary manner, or better, we have to recognize the emergence of spontaneous and to some degree contingent usage norms within different language communities. It is these norms which eventually develop in categorial and grammatical rules (Jacob, 2016).

VI. CONSISTENCY OF PRESENT PERFECT WITH PRETERIT ADVERBS

The relationship between tense forms and adverbial expressions seems to be plausible while we contrast at least two of them. Here the closest form, semantically and pragmatically, to present perfect is the simple past form. Some of these adverbials fall accompany both, certain going only with the past form and others with Persian perfect only. It is agreed upon the characteristic of the present perfect that it locates the events somewhere before the moment of speaking, but the particular occasion is not focused on. Hence, the time expressions accompany this form is usually indefinite. On the other hand, since the simple past tense is used to describe events that happens in a particular time in the past, its time expressions are definite. By definiteness, We mean something that is clear to the audience and lacks ambiguity. By comparing "He came" with "the book", on the one hand and "He has come" with "a book", McCoard (1978) claims that the former is definite and the latter is considered indefinite. He emphasizes that the focus of the "indefinite past theory" of present perfect lies in the relationship between the tense forms and adverbials accompanying them. He calls the adverbs accompanying simple past "definite" and those with present perfect "indefinite" adverbs. For example, the adverb "yesterday" is considered definite since it refers to relatively particular time in the past but "up to now" is taken indefinite because it refers to an indefinite time in the past:

34) He came yesterday.

35. He has written ten letters up to now.

Some adverbs such as "this morning" may accompany both forms; however, it is worth saying that from a typological point of view, this adverb has some usage limitations in English that is not grammatical to use it after twelve a.m., whereas this limitation is not observed in Persian. We can use the same time expression any time of the day, whether in the morning or in the afternoon. A question arises here that what adverbs must be taken definite and which ones should be considered indefinite. Generally adverbs such as "last night", "at two o'clock", "yesterday" and the like are considered definite and time expressions such as " in 2008", "in October", "since December" and so on, are taken indefinite adverbs. McCoard claims that if two adverbials are definite, the time during those two must be definite as well, so the past tense can be used for such occasion. This claim works in English but not in Persian. It is an obvious distinction between these two languages:

36) He worked on this project from last Monday until 10 in the morning.

We may use either present perfect or present perfect continuous on such occasions in Persian; however, when this duration is included the moment of speech, the present perfect must be used:

37) From last Friday up until now, I have had nothing but problems.

⁵Personal communication

Unlike English and maybe some other languages, Persian perfects are consistent with preterit adverbs and make grammatical sentenses:

38) difæb opsāla bærf ūmæde. Last night Uppsala snow come-3SG.PP
*It has snowed in Uppsala last night.
39) Elmirā sāæjek nāhārefo xorde Elmira clock one her lunch eat-3rd.PP.
*Elmira has eaten her lunch at one o'clock.

VII. TOWARDS THE TYPOLOGY OF PERFECT IN PERSIAN

Our investigation of the illustrative material analyzed so far has shown that not all the semantic properties attributed to the perfect in Persian are assignable to English equivalents. The similarities between Persian and Swedish in terms of Perfect results in similar analysis. This study showed that Persian perfect behaves in several respects like the English perfect: it always links the present moment to a specific time in the past, however, unlike English the present perfect in Persian does accompany with adverbials such as "yesterday" or "last week". It can also be reduced in form and can be replaced by present verb form.

VIII. HIERARCHICAL MODEL OF PRESENT PERFECT

Based on the Persian perfect functions, and with regard to what Kyparsky has presented for perfect readings, we propose current relevance as the main function for Persian perfect and some other functions which seem to be entailed from it. The following diagram is developed claiming that the functions of perfect structure a hierarchical one in which one main function stands on the top of the hierarchy and others are entailments of it as follows:

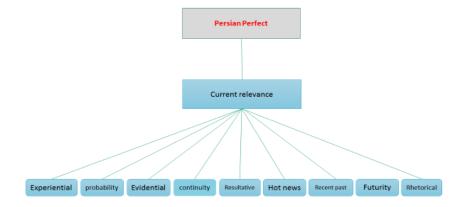


Fig 2: Hierarchical structure of Persian perfect structure

IX. CONCLUSION

We proposed four arguments along with a modified Kyparsky's theory on English perfect readings to present an explanation for the syntactic and semantic function of perfect in Persian. The function and semantic properties of the Persian present perfect is associated with the anterior or perfect aspect. This category typically expresses features both associated with tense and aspect. It is however difficult to assign Persian present perfect as a tense or as an aspect since it shows both the features of tense on the one hand and the characteristics of an aspect on the other. The data yielded by this study provides convincing evidence that perfect in Persian, as a category for stating the prior event, and in case of stative, depicting a present state usually of the subject, resulting from a change of state, has the tendency towards the amalgamation of preterite and the present perfect with a differenciation of stress shift in some cases but with the same function that perfect provides. It is not limitted to perfect forms, but it is manifested by indicative forms especifically when the degree of remoteness of the event is not too much.

The second argument is that the Persian perfect, with two crutial time points of the situation located in the past and the present moment with equal importance, enjoys a hierarchical structure rather than a horizontal pattern adopted by other scholars. We have modified theory of *time event and the perfect* in order to adapt it to Persian perfect with two main features of actual state of relevance to the present time on the one hand, and having reference to a prior event on the other hand, and consider its current relevance, as the main function of on the top of a hierarchical model and resultative, experiential, evidential functions and perfect of recent past as the entailment from the main function which are arranged horizontally. Concerning perfect in Persian, with a common element of participle, we have a principal

function which stands on the top of a hierarchy and there are other subfunctions that fall under this principal. The principal function is "*current relevance*" since without it we cannot logically have resultative, experiential, hot news functions and so on. We can assume the concept of *entaiment* for this situation. Current relevance entails resultative and other functions.

The third argument is that Persian admits using past adverbials such as "yesterday" or "last week" with present perfect forms whereas they do not include the present moment. To some extent, the feature of admission of past adverbials, refers to the behavior of the verb and partly to the orientation of the event structure and its relevance to the present.

The fourth argument is that in Persian perfect bear the feature of evidentiality. Indirect information, usually described under the label of evidentiality in many contexts, is depicted in present perfect.

REFERENCES

- [1] Aikhenvald A. Y. (2004). Evidentiality, Research Centre for Linguistic Typology, La Trobe University, Oxford University Press.
- [2] Ale Ahmad, J. (2010). The principal. Khorram Publication: Tehran.
- [3] Anvari, H. & Givi, H. (1991). Persian Grammar. Fatemi Publication: Tehran.
- [4] Bagheri, M. (2013). The history of Persian language. Tehran: Ghatreh publication.
- [5] Bhatt, R. & Pancheva, R. (2005). ASPECT: AN OVERVIEW. The Syntax and Semantics of Aspect. LSA 130. (Uppala University Library.)
- [6] Bybee, J., Perkins, R. & Pagliuca, W. (1994). The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World. Chicago IL: University of Chicago Press.
- [7] Comrie, B. (1976). Aspect, An introduction to the study of verbal aspect and related. Cambridge: Cambridge University Press.
- [8] Comrie, B. (1985). Tense. Cambridge: Cambridge University Press.
- [9] Dahl, Ö. (1985). Tense and aspect system, Blackwell, UK.
- [10] Dahl, E. (2011). Tense and aspect in Indo-Iranian part 2. Language and Linguistics Compass, 5, 282-296.
- [11] Farshidvard, K. (2004). Detailed contemporary grammar. Sokhan publications: Tehran.
- [12] Friden, G. (1948). Studies on tenses of the English verb from Chaucer to the sixteenth century. Uppsala University, English Institute.
- [13] Friedrich, P. (1974). On aspect theory and Homeric aspect. International journal of American linguistics, 44, S1-S44.
- [14] Genetti, C. (1986). The grammaticalization of the Newari verb tool. Linguistics of the Tibeto-Burman Area, 9, 53-70.
- [15] Givon, T. (1979). On understanding grammar, New York: Academic Press.
- [16] Givon, T. (2001). Syntax: An introduction. John Benjamins. The Netherlands.
- [17] Halliday, M.A.K. (1973). Explorations in the Functions of Language. Elsevier North-Holland.
- [18] Hopper, P. J. (1985). Language typology and syntactic description, University of Cambridge: UK.
- [19] Jahani, C. (2000). Expressions of indirectivity in spoken modern Persian. In L. Johanson & B. Utas (Eds.), *Evidentials: Turkic, Iranian and neighboring languages* (185-207). Berlin and New York: Mouton de Gruyter.
- [20] Johanson, L., &Utas, B. (2000). Evidentials: Turkic, Iranian and neighbouring languages. Berlin and New York: Mouton de Gruyter.
- [21] Lazard, G. (2001). On the grammaticalization of evidentiality, Journal of Pragmatics, 33, 358-68.
- [22] Jacob D. (2016). Latin to Ibero-Romance. In the symposium on the function and semantics of the Perfect in Indo-European languages. Uppsalla University.
- [23] Khan, G. (2016). The function of perfect in North-Eastern Neo-Aramaic. International conference of Perfect. Uppsalla University.
- [24] Khanlari, N. (1976). Persian grammar. Toos Publication: Tehran.
- [25] Khanlari, N. (1982). Persian literature. Farhang Publication. Tehran.
- [26] Klein, W. (1994). Time in Language. Routledge, London.
- [27] Koenig J.P., & Nishiyama A. (2010). What is a perfect state? Language, 86, 611-646.
- [28] Kotin, M. L. (2016). The Gothic perfective constructions in contrast to Western Germanic. In the symposium on the function and semantics of the Perfect in Indo-European languages. Uppsalla University.
- [29] Kyparsky, P. (2002). Event structure and the perfect. www.web.Stanford.edu
- [30] Molsing, K. V. (2006). The tense and aspect of the present perfect in English and Portuguese, Revista, Curitiba, 69,133-156.
- [31] Rezai, V. (2013). Evidentiality in contemporary Persian. Journal of Linguistic Researches, 1, 21-40.
- [32] Rothstein, B. H. (2006). The perfect time span. On the present perfect in German, Swedish and English. Unpublished PhD dissertation. Universit ä, Stuttgart. Germany.
- [33] Rooryck, J. & Lau, M. L. (2017). Aspect, evidentiality, and mirativity. Lingua: 186-187. (110-119).
- [34] Shafai. A. (2010). The scientific bases of Persian grammar. Novin publication: Tehran.
- [35] Shariat, M. J. (1988). Persian grammar. Asatir Publication: Tehran.
- [36] Swart, H. (2005). A cross-linguistic analysis of the perfect. Journal of pragmatics 39. 2273-2307.
- [37] Taleghani A. H. (2008). Modality, Aspect and Negation in Persian, University of Toronto, John Benjamins Publishing Company, Amsterdam / Philadelphia.
- [38] Thelin, N. B. (1991). Aspect, tense or taxis? The perfect meaning reconsidered. In M. Grochowski & D. Weiss (eds), *Words are physicians for an ailing mind* (421-431). Munich: Otto Sagner.
- [39] Utas, B. (2000). Traces of evidentiality in classical new Persian. In L. Johanson & B. Utas (Eds.), *Evidentials: Turkic, Iranian and neighboring languages* (59-273). Berlin and New York: Mouton de Gruyter.
- [40] Vendler, Z. (1957). Verbs and Times. *Philosophical Review*, 66, 143-160.

- [41] Windfuhr, G. (1987). Persian. In B. Comrie (Ed.). The world's major languages (523-546). London: Routledge.
- [42] Willett, T. (1988). A cross-linguistic survey of the grammaticalization of evidentiality. Studies in Language 12, 51-97.
- [43] Windfuhr, G. (1987). Persian. In B. Comrie (ed.). *The world's major languages (523-546)*. London: Routledge.

Mansour Rahimifar is a PhD student in general linguistics at Isfahan University, Isfahan, Iran. He received his MA in general linguistics from Isfahan University, Isfahan, Iran, and MA in Educational Management from State Management Center of Isfahan, Isfahan, Iran, and BA in English Literature from Tehran University, Tehran, Iran, and BA in Curriculum Planning from TTC in Tehran, Iran. He has been teaching English language in schools and colleges in BA and MA levels. His research interests are syntax and comparative studies. He has published a few articles and books including English Workbooks for school students.

Vali Rezai is an associate professor in Linguistics at University of Isfahan, Isfahan, Iran. He got his Ph.D from University of Isfahan in 2003. His research interests include syntax and typology. He has published many articles in Iranian and international journals. He is the primary author of *Fundamentals of Linguistic Typology*(in Persian)published by Shahid Beheshti University press, Tehran2016

Rezvan Motavallian is an assistant professor in Linguistics at University of Isfahan, Isfahan, Iran. She received her B.A. in Linguistics from Tehran University, Tehran, Iran and PhD in Linguistics from Tehran University, Tehran, Iran. She has been teaching all courses related to Syntax in B.A., M.A. and Ph.D. Levels at University of Isfahan, including advanced syntax, computational syntax, generative syntax.... Her Research interest includes Syntax and Applied Linguistics. She has different articles on Linguistics in different journals: (https://www.researchgate.net/profile/Rezvan_Motavallian/publications?pubType=article)