

Gerunds, Infinitives & Cleft Sentences As Noun - Phrase Substitutes in Persian

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Abstract

The noun is one of the nine parts of speech; however, it is by far the largest group of words in any language, including Persian. The noun phrase can have more than a dozen of syntactic functions in the sentence structure, and thus can occupy all different positions of the sentence other than the verb position. This justifies its highly active use in the sentence structure and its participation in generating the new sentences.

The formation of noun phrases in Persian can still be more amazing and fascinating than their usage. The phrases that admit nominal functions may be constructed from the items which may be from the smallest size, a "pronoun", to the largest unit, a "sentence".

The simple sentence obligatorily undergoes a set of transformational rules of **gerundivalization, infinitivization or cleft sentence** to a nominal construction.

The main purpose of this article is to formally and explicitly, that is gerundivalization, infinitivization, and cleft sentences, which generate the nominal constructions that can be substituted for a noun in the Persian sentences and assume its function.

Key Words: Speech, Persian, noun phrase, gerundivalization, infinitivization, Cleft sentence.

1. Introduction

A noun phrase (NP) generally consists of one or more words and functions as



the subject, object or adverb of a sentence (S). In Persian, a noun phrase (NP) can take the form of one of the following variations:

1. Pronoun
2. (Det)¹ N
3. NP + NP...
- NP → { 4. NP + S
5. (Det) N + S
6. S

The form of NP with which we are more concerned in this paper is number 6(NP→S) in the diagram. It is actually a sentence which replaces an NP in a given sentence and performs the same function as that of the original NP.

A sentence, from the viewpoint of transformational grammar, is a string of forms or units which communicates one or more messages, i.e. propositions. If a sentence conveys only one message, it is considered to be a kind of basic sentence or "a single - based sentence" [10], as the following example:

I have never been in California.

But if the sentence carries more than one message, it is then called a "multiple - based sentence" [10].

There are two types of multiple - based sentences: compound sentences and complex sentences. The compound sentence is made up of two or more singlebased sentences combined by means of co - ordinating conjunctions, as the example below:

I lost my wallet in Culver City and my brother found it in our mial box.

The complex sentence is composed of a matrix (embedding) sentence (MS)

1. Det: determiner



and one or more constituent (embedded) sentences (CS). Since our discussion concerns the complex sentence, it is significant to pinpoint three major elements of complex sentences.

a) A matrix sentence which includes one or more embedded sentences as structural elements.

b) A constituent sentence which is a sentence that embeds in a matrix sentence and acts as one of its grammatical categories such as a nominal, an adverbial or an adjectival.

c) Embedding one is a process by which a constituent sentence enters the matrix sentence in two ways. The first one is when a CS is directly substituted for a noun phrase, and the process is called a substitution transformation as in number 6 of the diagram. The second one is when a CS immediately enters either after a noun phrase (number 4 of the diagram) or after the head noun of the noun phrase (number 5 of the diagram) (Jacobs & Rosen baun, 1968). The former process is called a relativization transformation and the latter is called a complementation transformation. In this paper we will only deal with the substitution transformation of the embedded sentences.

2. The purpose of the Reseach

Whenever a CS is substituted for one of the NPS in the matrix sentence, according to the contextual restriction rules (chomky, 1965), it undergoes a series of transformational operations in its structure in order to colocate with the other elements of the matrix sentence. Research indicates that the constituent sentence obligatorily bears one of the following three types of transformations: gerundival transformation, infinitival transformation or cleft-sentence transformation (Akmojion et al . 1997).

Each of these transformations is discussed below in the light of Persian sentences.

I. Gerundival Transformation

In the following comlex sentences of persian, agerundival sentence has been



substituted for the subject NP.

1. a) raftan -e¹ ?u² be xārej ta?ajobāvar bud.
going of him to abroad surprising was
 subject

(His going abroad was surprising.)

b) jodā - šodan -e to ?az hamsar -at nārāhat-konande ?ast.
separating of you from wife your sorrowful is
 subject

(your separation from your wife is sorrowful.)

c) ?āyā ?āmadan -e man dardi rā davā-mikonad?
 SQM³ coming of me any pain OM⁴ cures
 subject

(Does my coming settle the matter?)

In the following strategy, the underlying matrix and constituent sentences are written separately, one below another, and the gerundival transformation of the embedded sentence is shown. The embedding transformation is also illustrated in the last string.

MS:	?ān	ta?ajobāvar	bud				
	It	surprising	was				
CS:	?u	be	xārej	raft.			
	He	to	abroad	went			
T-Gerundival ⁵ :	be	xārej	raftan -e	?u			
	to	abroad	going of	him			
T-Substitution:	be	xārej	raftan -e	?u	ta?ajobāvar	bud	
	to	abroad	going of	him	surprising	was	
							or (His going abroad was surprising.)

The transformation operations applied to the underlying constituent sentence (ie ?u be xārej raft) which transform it into the gerundival sentence (ie. be xārej raftan -e ?u) are called "gerundival transformation rules". They are roughly ordered as follows:



a) Deletion transformation of the Aux-features of the verb. This transformation deletes the tense, person-indication and number-marker from the verb and changes it into a gerund, as follows:

$$\begin{array}{cccc} \text{?u} & \text{be xārej} & \text{raftant} & \text{(+ past+3rd person + sing.)} \\ \underline{1} & \underline{2} & \underline{3} & \underline{4} \\ \text{He} & \text{to abraod} & \text{going} & \\ & & & \Rightarrow 1\ 2\ 3\ \emptyset \end{array}$$

b) Addition transformation of genitive -e (of). This transformation inserts the genitive marker immediately after the gerund, as follows:

$$\begin{array}{cccc} \text{?u} & \text{be xārej} & \text{raftan} & \\ \underline{1} & \underline{2} & \underline{3} & \\ \text{?u} & \text{be xārej} & \text{raftan} & \text{-e} \\ \underline{1} & \underline{2} & \underline{3} & \underline{+4} \end{array} \Rightarrow$$

c) Object attraction transformation. This transformation postpones the subject of the sentence into the position immediately after the genitive preposition of -e (of) to act as its object, as shown below:

$$\begin{array}{cccc} \text{?u} & \text{be xārej} & \text{raftan} & \text{-e} \\ \underline{1} & \underline{2} & \underline{3} & \underline{4} \end{array} \Rightarrow \begin{array}{cccc} \emptyset & \underline{2} & \underline{3} & \underline{4} \quad \underline{+1} \\ . & \text{be xārej} & \text{raftan} & \text{-e ?u} \end{array}$$

?u in Persian is a single form for both subject and object case. It can be substituted for -aš when it is in object position, as:

raftan -e ?u = raftaneš or raftanaš (one of the vowels, ie. a/e, may usually be dropped according to the phonetic environment.)

II. Infinitival Transformation

This transformation accounts for the infinitivization of the underlying constituent sentence which is embedded in a matrix (embedding) sentence to form a complex sentence. In this regard, the following complex sentences of Persian are given as examples. Note that an infinitival constituent sentence is substituted for the subject of the nounphrase in each one:

2. a) *zud bidār-sodan barāye ?u mahāl ?ast.*
 early to wake-up for him impossible is



(To wake up early is impossible for him.)

or (It is impossible for him to wake up early.)

- b) gerye-kardan barāye nōzād mofid ?ast.
to cry for infant useful is

(To cry is useful for the infant.)

or (It is useful for the infant to cry.)

- c) kār-kardan barāye peḡar -am mozer ?ast.
to work for father my harmful is

(To work is harmful for my father.)

or (It is harmful for my father to work.)

The transformational operations which transform the underlying sentence to the infinitive constituent sentence are, to a large extent, similar to those of the gerundival transformations, except in one case. The second operation of transformation inserts the preposition *barāye* (for) in lieu of *-e* (the genitive "of"). The order of the application of transformations, are: a) **aux-deletion transformation** which transforms the conjugated verb into an infinitive, b) ***barāye* (for) insertion transformation**, and c) **object attraction transformation** which attracts the original subject to the indirect object position.

It is also possible to apply an optional deletion transformation to the newly generated prepositional phrase. If the prepositional phrase is dropped, the constituent sentence (and specially the infinitive) will semantically assume a broader meaning; i.e. a general sense. For instance, compare the meanings of the pair of sentences below:

- a) varzeš-kardan barāye ?ali xeyli mofid ?ast. (specific sense)
to exercise for Ali very healthy is

(To exercise for Ali is very healthy.)

or (It is very healthy for Ali to exercise.)

- b) varzeš-kardan xeyli mofid ?ast. (general sense)
to exercise very healthy is

(to exercise is very healthy.)

or (It is very healthy to exercise.)



In the following section, the history of the substitution transformations (transformation path) is illustrated for the complex sentence 2 (a):

MS: ?ān mahāl ?ast.
it impossible is

CS: ?u zud bidār-mišavad.
he early wakes up

T- Infinitival: zud bidār-šodan -e ?u
early to wake up of him

T- Pre⁶. Insertion: zud bidār-šodan barāye ?u
early to wake up for him

T- substitution: zud bidār-šodan barāye ?u mahāl ?ast.
early to wake up for him impossible is

(To wake up early for him is impossible.)

or (It is impossible for him to wake up early.)

It is worthwhile mentioning that the order of the application of the of the three foregoing transformational rules cannot be changed; otherwise, the generation of the surface structure of the complex sentence will be blocked.

III. Cleft-Sentence Transformation

The third type of constituent sentence is the one which undergoes the cleft-sentence transformation. This transformation also places constraint upon the embedded sentence which is to be substituted for a noun phrase in the matrix (embedding) sentence. This makes it possible for a cleft construction to co-locate with the other structural elements of the matrix sentence. Some examples of the complex-type sentences which comprise this kind of constituent sentence are given below:

3. a) harče ?u goft be salāh -e mā bud.

whatever he said to benefit of us was
Subject



(Whatever he said was to our benefit.)

- b) **harke nān ?az ?amal -e xiš xorad mennat ?az hātam-etā?**⁷
 whoever bread of working of himself eats donation from HatamTa'i
 (Whoever earns his living by working would not be obliged to accept
nabarad.
 not take
 donation from Hatam Ta'i.)

- c) **harānkas ke dandān dehad nān dehad.**
 whoever who tooth gives bread gives

(Whoever creates man supplies him with food.)

The hierarchy of the transformation operations for these types of complex sentences is shown below as they are applied to the sentence 3. (a):

MS: ?ān be salāh -e mā bud.
 it to benefit of us was

CS: ?u matālebi gōft.
 he something said

T. Cleft⁸: ?ānče ?u gōft
 whatever he said

T. Sub⁹: ?ānče ?u gōft be salāh -e mā bud.

whatever he said to benefit of us was
 Subject

(Whatever he said was to our benefit.)

In the cleft-sentence transformation, one of the noun phrases of the embedded sentence is usually replaced by one of the proforms such as: a) **harče, ?ānče, harānče** (whatever); b) **harkas, harānkas** (whoever); c) **harja, harkoja** (wherever); d) **harvaqī, harmōqe?** (whenever) etc. The proform is separated from the whole sentence and moves to the initial position of the sentence by a **preposing transformational rule**. Then in the sentence initial



position, it takes a primary stress on its first syllable. The proform in a sentence initial position is uttered as if it is separated (broken or clefted) from the other part of the sentence; namely, a cleft or a gap is felt between the proform item and the other part of the sentence. The proform, however, conveys a general sense to whatever it refers, i.e. **person, object, place, time etc.**, and does not have any hint to a specified reference.

The above mentioned transformations can roughly be illustrated by the following sentences.

1. **Proform replacement transformation.** (j.e. substituting a proper proform for one of the nun phrases of the embedded tence.)

?u matālebi gōft

(he some things said)

x a · y ⇒ x b y

?u ?ānce gōft

(he whatever said)

2. **proform-preposing transformation.**

?u matālebi gōft

(he whatever said)

1 2 3 ⇒ 2 1 3

?ānce ?u gōft

(whatever he said)

The basic form of "He some things said " will thus be transformed to a cleft sentence as "whaterer he said...", and the resulting comlets sentence willbe "whatever he said was to our benefit."

I have so far discussed the complex sentence of Persian which contains an embedded sentence (gerundival, infinitival or cleft) in its subject position. Let us now deal with those sentences which enclose a constituent sentence in



some position in the verb phrase, i.e. the position of object, adverb of time, adverb of place, object of preposition etc. The sentences number 4 (a,b,c) exemplify some of these **Persian sentences** with gerundival and infinitival constituent sentences.

4. a) **man raftan -e ?u rā midānestam**

I going of him OM knew
object

(I knew his departure.)

or (I knew that he went.)

b) **mā zemne xāndan tarbiat mišavim.**

we during reading trained became
Adverb of time

(We are trained while we are reading.)

c) **barāye xāndan -e še?r sedā -ye xubi dārad**

for singing of song voice of good has+he
Object of Preposition

(He has a good voice for singing songs.)

The order of the embedding transformation is shown below as it is applied to the sentence 4 (a).

MS: **man ?ān rā midānestam**

I it OM knew
object

CS: **?u raft.**

he went

T- gerundival: **raftan -e ?u**

going of him



T- Substitution: man raftan -e ?u rā midānestam

I going of him OM knew
object

(I knew his departure/going.)

or

and in this way a gerundival sentence is substituted for the direct object.

Cleft sentences can also be substituted for noun phrases in the predicate of the sentence as the sentences 5 (a,b,c,d) below would reveal:

5. a) ?ali harče mixāst ?az foruŝgāh -e bozorg xarid.

Ali whatever wanted+he from store of big bought
Object

or (Ali bought whatever he wanted from the department store.)

b) harče koni be xod konie!

whatever do [you] to yourself do [you]
Object

(Whatever [good or evil] one does it reflects to himself!)

c) harkojē mixāhi boro.

wherever want [you] go [you]
Adverb of Place
or (Go to wherever you want.)

d) harvaqt tavānesti sari be mā bezan!

whenever can [you] a head call on us to us hit
Adverb of Time

or (Whenever you can call on us.)

In the above sentences, an embedded cleft sentence has occupied the position of object, adverb of place or adverb of time. The hierarchy of transformations involved in the constituent sentence is shown below:



MS: ?ali ?ānhā ra ?az forušgāh -e bozorg xarid
 Ali them OM from store of big bought
 object

CS: /?ali mixāst čizhāi/
 Ali wanted some things

T-Cleft: ?ānče ?ali mixāst
 whatever Ali wanted

T-Subs: ?ali / ?ānče ?ali mixāst / rā ? az forušgāh -e bozorg xarid.
 Ali / whatever Ali wanted / OM from store of big bought.

Equi.N-Del¹⁰: ?ali / ?anče mixāst / Ørā ?az forušgāh -e bozorg xarid
 Ali / whatever wanted / OM from store of big bought

OM-Del¹¹: ?ali / ?anče mixāst ?Øaz forušgāh -e bozorg xarid
 Ali / from store of big bought
 What ever wanted
 object

Surface S¹²: ?ali ?ānče mixāst ?az forušgāh -e bozorg xarid
 Ali whatever wanted from store of big bought

or (Ali bought whatever he wanted from the department store.)

The object marker (OM) which also plays the role of the definite marker of the noun phrase, is obligatorily dropped because the new object is not a noun phrase any more to require a definite concept or a case marker.

3. Extraposition of the embedded (constituent) sentence

Extraposition of the embedded sentence may take place by an optional transformation rule which is applied exclusively to the constituent sentences of the complex sentence. This extraposition transformation rule postpones the embedded sentence to the end of the matrix sentence. The extraposition transformation is usually applied before the gerundivalization and / or infinitivization transformations, but it can be applied either before or after cleft sentence transformation. In other words, If the embedded sentences occur at the end of the complex sentence, they do not undergo the gerundival

or infinitival transformation anymore, but for cleft-sentence transformation, the case is optional.

If the embedded sentence undergoes the extraposition transformation, first a subordinator "ke" (that) addition transformation will be obligatorily applied. The subordinator "ke" usually conjoins the embedded sentence to the end of the verb phrase in the matrix sentence. Subsequently, each complex sentence, according to the position of the embedded sentence, may have at least two surface structures: a) a structure with the embedded sentence in the original position of the noun phrase for which it has been replaced, b) a structure with the postposed embedded sentence. The following pairs of sentences illustrate these two types of surface structures in all these cases of embedded sentences, i.e. gerundival, infinitival and cleft:

1. a) CS in the original (i.e. subject) position

raftan -e ?u be xārej ta?ajobāvar bud.
going of him to abroad surprising was
subject

b) CS after the extraposition transformation

ta?ajobāvar bud ke ?u be xārej raft.
surprising was that he to abroad went
post posed

2.a) CS in the original position of the subject

?anče ?u gōft be salāh -e mā bud.
whatever he said to benefit of us was
subject

b) CS is postposed by extraposition transformation

be salāh -e mā bud ? anče ?u gōft.
to benefit of us was Whatever he said
postposed

3. a) CS in the original position of object

am raftan -e ?u ra midānestam.



I going of him OM knew
Object

b) CS is postposed by the extraposition transformation

man midānestam ke ?u raft.
I knew that he went
postposed

4. a) CS in the original position of the adverb of purpose

?u berāye xāndan -e še?r sedā -ye xub -1 dārad.

he for singing of song voice of good a has
Adverb of Purpose

b) CS is postposed by the extraposition transformation

?u sedā -ye xubi dārad ke še?r be xānad.
he voice of good has that song sing
postposed

or (His voice is so good that he can sing songs.)

4. Conclusion

The noun is one of the nine parts of speech; however, it is by far the largest group of words in any given language, including Persian. The noun phrase can assume more than a dozen of syntactic functions in the sentence structure such as the subject, direct object, indirect object, retained object, object of preposition, appositive, noun of direct address, subject complement, object complement, modifier of another noun and modifier of verb as an adverb.

The multifunctional characteristic of a noun makes it possible to occupy all different positions of the sentence other than the verb position and justifies its highly active use in the sentence structure and its participation in generating the new sentences. I will not be exaggerating to maintain that the noun is the most frequently used part of speech in sentences and that it has the most important role in the communicative interaction among the members of a linguistic society.



With a quick look at the diagram of noun-substitutes, one can see the formations of noun phrases in Persian which can still be more amazing and fascinating than their usage. The phrases that admit nominal functions in sentences may be constructed from the items which may be from the smallest size, a pronoun (man, mā, tu, ?u etc.), to the largest unit, a sentence or a noun phrase plus a sentence as depicted in numbers 4, 5 and 6 in the diagram.

As we could clearly observe from the applications of the three sets of transformation rules of infinitivization, gerundivalization and cleft sentence, the sentences of the Persian language are flexible enough to undergo one of the sets of rules and to be transformed to a nominal construction that can finally be substituted for a noun phrase in the sentence and assume the related function. This is in accordance with the general linguistic rules described in transformational generative theory.

2. -e is a genitive marker, if it follows a word with final vowel **a/u**, it is pronounced as -ye. Because it is a bound morpheme, it is transcribed with a link (-): -e/-ye.

3. In Persian, if the onset of a syllable is not occupied by any consonant, a **glottal stop /ʔ/** would occur there automatically. This is a **prosodic feature** in Persian.

4. SQM: simple question marker or "ʔāyā". It is usually optional.

5. OM: object-case marker.

6. The rule of gerudival transformation has not been applied individually here to simplify the illustration.

7. preposition insertion transformation.

8. The name of a famous rich and generous person.

9. cleft transformation or cleft-sentence transformation.

10. substitution transformation

11. equivalent-noun deletion transformation

12. object marker deletion transformation

13. surface structure



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