Inchoative-causative alternation in Persian

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ABSTRACT The present study mainly aims to describe the mechanics of causative-inchoative alternation in modern Persian as well as the causative structure of its verbal system. In this scope, we provide a brief description of the phrase structure of the modern Persian and discuss its main causative-inchoative codification strategies: morphological, lexical and analytic causatives. When giving Persian examples, we use the Transcription procedure for Iranian toponymic items implemented by the Iranian National Committee on the Standardization of Geographic names and subsequently adopted and approved by the United Nations in 2012.

INDEX TERMS change of state, causative, transitive, inchoative, Persian

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See UNGEGN (2013).

See UN (2012).

Introduction

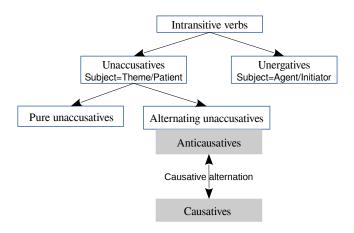
Change of state verbs Cross-linguistically, a causative is a verb form that indicates that a subject causes another agent to do or to be something, or causes a change of state (COS) event that is non-volitional. Certain verbs that express such a change of state are used transitively or intransitively. When used transitively, such verbs are said to be causative, while when used intransitively, thay are referred to as inchoative or anticausative. This phenomenon of double-facedness is then called "causative-inchoative alternation".

The first thorough analysis of the causative-inchoative alternation and that of the behaviour of the COS verbs is attributed to Jespersen (1927). In a chapter discussing transitivity, he asserts that many verbs participate in both intransitive and transitive constructions making it impossible to sharply divide English verbs into two categories.

Jespersen, O. (1927). A Modern English Grammar: On Historical Principles (Part III Syntax. Second Volume). Copenhagen: Heidelberg.

Smith, C. S. (1970). Jespersen's 'move and change' class and causative verbs in English. In M. J. al., Linguistic and Literary Studies in Honor of Archibald A. Hill: Descriptive Linguistics (Vol. 2, pp. 101-109). Mouton.

Many linguists (Lakoff 1965; Hall 1965; Halliday 1967; Anderson 1968; Chomsky 1970; Fillmore 1970) followed Jespersen studying transitive and intransitive constructions with COS verbs, but it was Smith (1970) who proposed to account for their syntactic properties using the semantic features of "external control" and "independent activity". He argued that while intransitive verbs denote activities that happen independently and refuse an external agent, transitive verbs need external agents controlling the activity and cannot denote an event happening independently.



INCHOATIVES IN PERSIAN Ways to to express causation differ across languages spanning from morphological ones to periphrasis and lexical causatives. Persian, for instance, may recur to the inflectional pattern:

xordan 'to eat' → xorāndan 'to feed' while conserving the general lexical mechanism:

oftādan 'to fall' \rightarrow andāxtan 'to make fall, to cast'.

One defines an inchoative/causative verb pair semantically: they express the same COS situation and only present differences in the layout of the participants: causative verb's agent participants cause the situation, while inchoative verbs exclude those so as to present the situation as occurring spontaneously (Haspelmath, 1993, p. 90).

Researchers (Shibatani, 2001) theoretize on possible causation encoding schemes providing several criteria, such as: *COS enforcement, assymetric temporal relation* or *dependency presumption for a counterfactual inference* (1976a, pp. 1-2). On the other hand, many analysts like Comrie (1981), Dixon (2000) and others documented the patterns that occur cross-linguistically. Following Comrie's program classifying causative constructions, we present a general classification of causative construction in modern Persian.

SIGNIFICANCE OF THE STUDY This paper aims to describe the causative structure in Persian as well as its causative-inchoative alternation. This will be



افتادن ← انداختن

Shibatani, M. (ed.) (2001). «The grammar of causation and interpersonal manipulation». Amsterdam and Philadelphia: John Benjamins.

achieved by providing a brief description of the Persian phrase structure and by explaining the behaviour of the language with respect to its causative-inchoative alternations, further classifying causative constructions in modern Persian: morphological, lexical and analytic causatives.

Formal types of alternation in Persian

BRIEF TYPOLOGY OF PERSIAN Persian grammar follows standard nominative-accusative strategy of verbal actant marking and has an SOV type of alignment: only the object of a transitive sentence is marked (1) and the verb tends to agree with the subject through inflections in number and person (Mahootian 1997; Lambton 1967):

تو گلدان را شكستي.

Huge proportion of Persian verbs are complex predicates formed by a light verb (LV) and a preverbal element. The latter can be a noun, an adjective, an adverb or a preposition phrase (Follia et al. 2005). In the causative alternation, the inchoative verb is basic and the causative verb is derived and marked (Haspelmath, 1993). We will further describe three mechanisms the causative construction uses: morphological, lexical and analytic. They follow the formal causative-inchoative types proposed by Haspelmath (1993), the only alternation type out of use being "anticausative".

MORPHOLOGICAL OR SYNTHETIC CAUSATIVES The inchoative form is basic and the causative form is derived. Persian achieves this by adding the infix ān- to the inchoative form, i.e. to its present stem, engaging the verb in the ending interchange -(i)dan/-āndan. Morphophonologically, such a form is indivisible:

Base (inchoative)			Derived (ca	ausative)		
jušidan	'to boil'	\rightarrow	jušāndan	'to boil'	•	جوشيدن ← جوشاندن
xordan	'to eat'	\rightarrow	xorāndan	'to feed'		خوردن ← خوراندن
xābidan	'to sleep'	\rightarrow	xābāndan	'put to sleep'		خابیدن ← خاباندن
tarsidan	'to scare'	\rightarrow	tarsāndan	'to scare (frighten)'		ترسيدن ← ترساندن
pusidan	'to corrode'	\rightarrow	pusāndan	'make rot'		پوسيدن ← پوساندن
xoškidan	'to dry'	\rightarrow	xoškāndan	'to sear'		خوشكيدن ← خوشكاندن
xandidan	'to laugh'	\rightarrow	xandāndan	'make laugh'		خندیدن ← خنداندن

پسر توسید.	Pesar tarsid. boy scare Past 3sg 'The boy was frightened'
سگ پسر را ترساند.	Sag pesar-rā tarsānd. Ex. 2b, causative dog boy Acc scare Past 3sg 'The dog scared the child'
	Lexical causatives Another device is to only use lexical mechanisms to produce the causative term. Inchoative/causative pairs exhibit morphology attached to a common root. This root form is then garnished: either suppletively, or by means of special operator verbs.
	Lexical causatives 1: Equative or labile Equative causatives use the same verb to denote both inchoative and causative meanings, thought this format is relatively rare in Persian.
	Inchoative Causative
شكستن	šekastan 'to break' → šekastan 'to break'
بريدن پيختن	boridan 'to cut' → boridan 'to cut'
يختن	
- •	poxtan 'to cook' → poxtan 'to cook'
ریختن	poxtan 'to cook' → poxtan 'to cook' rixtan 'to pour' → rixtan 'to pour'
ریختن شراب ریخت.	

'The woman spilled the wine'

LEXICAL CAUSATIVES 2: NON-EQUATIVE OR SUPPLETIVE This alternations use different verb roots. Two verbal elements are thus lexically unrelated and their complimentarity only manifests semantically.

Inchoat	ive		Causativ	e
raftan	'to go'	\rightarrow	bordan	'to take'
āmadan	'to come'	\rightarrow	āvardan	'to bring'
oftādan	'to fall'	\rightarrow	andāxtan	'to drop'

Saratān Hasan-rā košt. Ex. 4a, causative cancer Hasan Acckill Past 3sg 'Cancer killed Hassan'

سرطان حسن را کشت.

Hasan mord. Ex. 4b, inchoative Hasan die Past 3sg 'Hassan died'

حسن مرد.

Lexical causatives 3: compound or equipollent This form is the most productive and frequent alternating form in Persian. Typologically, equipollent verbs derive both forms from the same stem but with different affixes. In Persian, the role of affixes is played by the light verb operators applied to a preverbal element forming structures according to the patterns N+Lv, A+Lv, ADV+LV or PP+LV. General scheme uses the verbs KARDAN 'to do' and SODAN 'to become' to produce causative and inchoative forms respectively. Nevertheless, other pairs of light verbs are also used. Not pretending to be exhaustive, we give several examples:

Causative Lv I	nchoative L v	
KARDAN 'to do' → Š	ODAN 'to become'	کردن ← شدن
ZADAN 'to hit' $\rightarrow x$	ORDAN 'to receive a hit'*	.زدن ← خوردن
$D\bar{A}DAN$ 'to give' $\rightarrow Y$	ĀFTAN 'to get, to find'	دادن ← يافتن
ZADAN 'to hit' \rightarrow G	ereftan 'to take'	زدن ← گرفتن
$D\bar{A}DAN$ 'to give' $\rightarrow G$	ereftan 'to take'	دادن ← گرفتن
itorial committee of the MELaLT, editors G.	Lang, B.Simons, 2015.	*Xordan (دن literally, 'to eat

Pair relations between light verbs and their semantics is a rich topic and will be addressed in a separate article. Examples of equipollent causative-inchoative alternation pairs are given below:

سوار کردن	←	سوار شدن
گرم کردن	\leftarrow	1 -
بیدار کردن	\leftarrow	بيدار شدن
یاد دادن	\leftarrow	یاد گرفتن
نشان دادن	\leftarrow	دی <i>د</i> ن
آتش زدن	\leftarrow	آتش گرفتن
زمین زدن	\leftarrow	زمين خوردن
گول زدن	\leftarrow	گول خوردن

Inchoative			Causative	
savār šodan	'to get on'	\rightarrow	savār kardan	'to pick up'
garm šodan	'to warm up'	\rightarrow	garm KARDAN	'to heat'
bidār šodan	'to wake up'	\rightarrow	bidār kardan	'to awaken'
yād gereftan	'to learn'	\rightarrow	yād dādan	'to instruct'
didan	'to see'	\rightarrow	nešān dādan	'to show'
ātaš gereftan	'to catch fire'	\rightarrow	ātaš zadan	'to set on fire'
zamin xordan	'to fall'	\rightarrow	zamin zadan	'to down on the ground'
gul xordan	'to be cheated'	\rightarrow	gul zadan	'to deceive'

حسن کار را تمام کرد.

Ex. 5a, causative

Hasan kār-rā tamām kard.

Hasan work Acc complete do Past 3sg

'Hassan finished the work'

کار تمام شد.

Ex. 5b, inchoative

Kār tamām šod. work complete become Past 3sg 'The work finished'

Syntactic structures Modern Persian can also use causative structures different from those mentioned earlier. Some verbs can be causativised syntactically. In this method, a complement clause is formed containing the verb to be causativised and is preceded by the compound verb operator $B\overline{A}ES\ SODAN$ 'to cause'. This transformation is a valency-increasing operation, it adds one argument to a verb. The originally intransitive verb produces a transitive causative construction ('to fall' \rightarrow 'to make $SB\ fall$ ', i.e. 'to topple'), the originally transitive verb produce a ditransitive causative construction ('to eat' \rightarrow 'to make $SB\ eat\ STH$ ', i.e. 'to feed $STH\ to\ SB$ '). Another causativizing possibility is to use the causative voice. Its action consists in promoting the oblique argument of a transitive verb to an agent argument. This transformation increases the valency of the verb by one as well. Should there be two agent arguments after the procedure, one of them shall become oblique.

Conclusion

Persian makes extensive use of causative-inchoative constructions and compound verbs. This makes this area of linguistic research a vast domain in its own right. This paper looks at the different recipes that Persian language uses to express alternation between inchoative and causative verbs. We show a general classification of causative constructions in modern Persian: morphological and syntactic. We have not discussed the implications of causative-inchoative alternations in Persian, especially the application of the causative Light Verb operator in inchoative forms, for the general argument structure of alternating and non-alternating verbs. Some other questions will be considered in separate articles as well. For example, the preceding analysis only concerns causative / inchoative alternation that takes place in active clauses. The question of conjugated causativization and passivization in Persian goes beyond the subject of this article. Different morphological and syntactic strategies to causativize the passive construction will be addressed in a separate article.

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