

# The diversity of inflectional periphrasis in Persian

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<http://hpsg.fu-berlin.de/Projects/PerGram/>

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# Introduction

- General project: **PER-GRAM**  
An implemented HPSG grammar and lexicon for Persian  
DFG (Germany) / ANR (France)  
<http://hpsg.fu-berlin.de/Projects/PerGram/>
- **Inflectional periphrasis**: the use of multiple words to fill (what can be conceived as) cells in an inflectional paradigm
- The Persian situation is interesting because very different periphrastic constructions are used within a single system
- ☞ Typologically different varieties of periphrasis can easily be compared
- In this talk we focus on descriptive issues and attempt to avoid controversial theoretical assumptions
- ☞ Exception: lexicalism
  - Morphology and syntax operate via different rule types

## Synthetic conjugation

TAM	POSITIVE	NEGATIVE
indicative present	mi-xar-i UBD-buy.S1-2SG	ne-mi-xar-i NEG-UBD-buy.S1-2SG
indicative bounded past	xarid-i buy.S2-2SG	na-xarid-i NEG-buy.S2-2SG
indicative unbounded past	mi-xarid-i UBD-buy.S2-2SG	ne-mi-xarid-i NEG-UBD-buy.S2-2SG
subjunctive present	be-xar-i IRR-buy.S1-2SG	na-xar-i NEG-buy.S1-2SG
imperative	be-xar IRR-buy.S1	na-xar NEG-buy.S1
infinitive	xarid-an buy.S2-INF	na-xarid-an NEG-buy.S2-INF
present participle	xar-ande buy.S1-PRS.PTCP	—
past participle	xarid-e buy.S2-PRF.PTCP	na-xarid-e NEG-buy.S2-PRF.PTCP

## Five periphrastic constructions

- (1) **Passive: perfect participle + *šodan* 'become'**

In tâblo foruxte mi-šav-ad.

this painting sold UNBD-become.S1-3SG

'This painting is sold.'

- (2) **'Perfect': perfect participle + *budan* 'be'**

a. Maryam in tâblo=râ foruxte bud.

Maryam this painting=DDO sold be.S2.3SG

'Maryam had sold this painting.'

b. Maryam in tâblo=râ foruxte=ast.

Maryam this painting=DDO sold=be.PRS.3SG

'Maryam has sold this painting.'

- (3) **Future: *xâstan* 'want' + bare past stem**

Maryam in tâblo=râ xâh-ad foruxt.

Maryam this painting=DDO want.S1-3SG sell.S2

'Maryam will sell the painting'

- (4) **Progressive: *dâštan* 'have' + finite clause**

Maryam dâr-ad in tâblo=râ mi-foruš-ad.

Maryam have.PRS-3SG this painting=DDO UNBD-sell.S1-3SG

'Maryam is selling the painting.'

## The passive is quasi-analytic

- Inflectional **prefixes** are carried by the auxiliary.

(5) In *tâblo foruxte ne-mi-šav-ad*.  
this painting sold NEG-UNBD-become.S1-3SG  
'This painting is not sold.'

- The relative order is flexible.

(6) In *tâblo šod robude va foruxte*.  
this painting become.S2 stolen and sold  
'It is this painting which was stolen and sold'

- **Adverbials** can intervene between *šodan* and the participle.

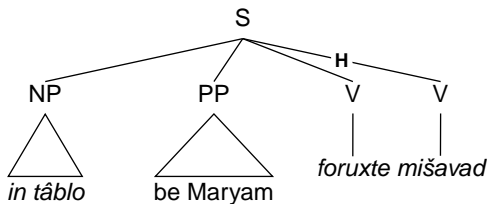
(7) In *tâblo foruxte hatman šode ast*.  
this painting sold **certainly** become be.S1.3SG  
'This painting has certainly been sold.'

- The **participle** can be fronted.

(8) **Foruxte** fekr mi-kon-am [ *tâblo \_\_\_ šod* ].  
sold thought UNBD-do.S1-1SG painting become.S2  
'I think that if the painting is sold (...).'

## The passive is quasi-analytic

- The syntactic flexibility found in the passive suggests a monoclausal ('clause union') analysis
- In our terms: flat structure with argument composition
  - The auxiliary combines directly with a participle rather than with a phrase
  - The auxiliary inherits the arguments of the participle and rearranges the syntactic functions
  - Thus arguments of the participle are realized as arguments of the auxiliary ('argument composition')



## Complex (so called ‘perfect’) forms

- Five series of forms based on the copula *budan*
- Only three of the series have a clear synthetic counterpart
- The copula can be a full word or a clitic

<p>simple present</p> <p><i>mi-xar-ad</i></p> <p>UNBD-buy.S1-3SG</p>	<p>complex present</p> <p><i>xarid-e=ast</i></p> <p>buy.S2-PRF.PTCP=be.PRS.3SG</p>
<p>simple bounded past</p> <p><i>xarid</i></p> <p>buy-S2</p>	<p>complex bounded past</p> <p><i>xarid-e bud</i></p> <p>buy.S2-PRF.PTCP be.S2</p>
<p>simple subjunctive</p> <p><i>be-xar-ad</i></p> <p>IRR-buy.S1-3SG</p>	<p>complex subjunctive</p> <p><i>xarid-e bāš-ad</i></p> <p>buy.S2-PRF.PTCP be.SBJV-3SG</p>
<p>—</p> <p>—</p> <p>—</p>	<p>complex unbd. past</p> <p><i>mi-xarid-e=ast</i></p> <p>UNBD-buy.S2-PRF.PTCP=be.PRS.3SG</p>
<p>—</p> <p>—</p> <p>—</p>	<p>complex perfect</p> <p><i>xarid-e bud-e=ast</i></p> <p>buy.S2-PRF.PTCP be.S2-PRF.PTCP=be.PRST.3SG</p>

## Recently morphologized forms

- The complex present and unbounded past, historically based on a clitic copula, are no more periphrastic:

- All prefixes precede the participle.

- (9) Sâlhâ Maryam be madrase **ne-mi**-rafte=ast.  
years Maryam to school NEG-UNBD-gone=be.PRST.3SG  
'For years, Maryam went to school'

- The participle-auxiliary sequence can not be interrupted.

- (10) \*Rafte **hatman**=ast.  
left certainly=be.PRST.3SG  
'(S)he has certainly left.'

- The participle can not be extracted

- (11) \*Mi-rafte sâlhâ Maryam be madrase=ast.  
UNBD-gone years Maryam to school=be.S1.3SG

- Morphophonological idiosyncrasies specific to these forms

- (12) a. **predicative construction** mord'e=ast → mord'ast  
corpse=be.PRST.3SG  
'It is a corpse.'
- b. **complex present** mord'e=ast → mord'e:  
died=be.PRST.3SG  
'(S)he has died.'



## Truly periphrastic complex forms

- When the auxiliary is a full word, negation attaches to the participle. . .

(13) a. **Na**-rafte bud.                      b. \*Rafte **na**-bud.  
NEG-gone be.PST                      gone NEG-be.PST  
'(S)he hadn't left.'

- . . . the sequence is rigidly ordered and can not be interrupted. . .

(14) \* Maryam Omid=râ bud dide.  
Maryam Omid=DDO be.S2 seen  
(intended) 'Maryam had seen Omid.'

(15) \* Maryam Omid dide hatman bud  
Maryam Omid seen certainly be.S2  
(intended) 'Maryam had certainly seen Omid.'

- . . . but participle extraction is possible

(16) **Foruxte** fekr ne-mikonam [ \_\_\_ **bâš-ad** tâblo=râ ].  
sold thought NEG-do be.SBJV-3SG painting=DDO  
'I don't think that s/he has sold the painting.'

## True periphrases are [PERFECT +]

- The complex bounded past is the perfect form of the past

(17) Qabl az inke Omid be-res-ad, Maryam birun  
before from that Omid SBJV-arrive.S1-3SG Maryam out  
rafte bud.  
gone be.S2  
'Maryam had left (before Omid arrived).'

- The complex subjunctive is the perfect subjunctive

(18) a. Fekr mi-kon-am Maryam mariz bâšad.  
thought UNBD-do.S1-1SG Maryam sick be.SBJV  
'I think Maryam is sick.'

b. Fekr mi-kon-am Maryam mariz bude bašad.  
thought UNBD-do.S1-1SG Maryam sick been be.SBJV  
'I think Maryam has been sick.'

## Indirect evidential forms

- The complex unbounded past has an evidential value (Windfuhr, 1982; Lazard, 1985; Jahani, 2000)
  - Refers to an unbounded past event
  - Signals that the speaker only has indirect evidence for what he or she is asserting

- (19) a. (Banâ bar gofte-ye Omid) Maryam dar sâl-e 1950 in  
According to-EZ Omid Maryam in year-EZ 1950 this  
xâne-râ mi-sâxte=ast.  
house-DDO UNBD-built=be.S1.3SG  
'According to Omid, Maryam would have been building  
this house in 1950.'
- b. Maryam dar sâl-e 1950 in xâne-râ mi-sâxt.  
Maryam in year-EZ 1950 this house-DDO UNBD-built  
Maryam was building this house in 1950.'

## Special cases

- The complex perfect is **both** perfect **and** evidential

(20) (Az qarâr), qabl az inke Omid be-res-ad,  
apparently before from that Omid SBJV-arrive.s1-3SG,  
Maryam birun rafte bude ast  
Maryam out gone been be.s1.3SG  
'Apparently, Maryam had left before Omid arrived.'

- The complex present is **either** (present) perfect **or** (bounded past) evidential.

(21) Maryam tâze reside=ast.  
Maryam new arrived=be.s1.3SG  
'Maryam has just arrived.'

(22) (Banâ bar gofte-ye Omid) Maryam in xâne-râ dar  
According to-EZ Omid) Maryam this house-DDO in  
sâl-e 1950 xaride=ast.  
year-EZ 1950 bought=be.s1.3SG  
'According to Omid, Maryam bought this house in 1950.'

## A paradigm-based analysis

	PRESENT	PAST		SUBJUNCTIVE
		DIR. EV.	IND. EV.	
BOUNDED	***	bounded past	complex present	simple subjunctive
UNBOUNDED	simple present	unbounded past	cpl. unbd. past	
PERFECT	complex present	complex bnd. past	complex perfect	complex subjunctive

- Since PERFECT is sometimes expressed synthetically, the last row must be part of the inflectional system.
- ☞ We are dealing with **true periphrasis**: a multi-word construction filling cells in the inflectional paradigm

## The future: a single word?

- The two parts look like word parts, not true words
  - The auxiliary is is a present without *mi-*, an otherwise unattested form in contemporary Persian
  - The other form is a bare (past) stem, otherwise occurring only in impersonal constructions
- Negation occurs before the auxiliary

(23) Maryam Omid=râ na-xâh-ad did.  
Maryam Omid=DDO NEG-can.S1-3SG see.S2  
'Maryam will not see Omid.'

- The verb sequence be interrupted only by pronominal affixes

(24) \*Maryam Omid=râ xâh-ad hatman did.  
Maryam Omid=DDO can.S1-3.SG certainly see.S2

(25) Maryam xâh-ad-aš did.  
Maryam want.S1-3.SG-PAF.3.SG see.S2  
'Maryam will see her/him.'

## The future: a single word?

- The order is rigid.

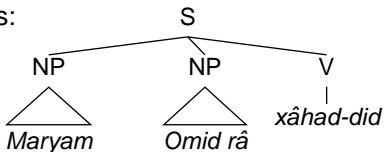
(26) a. \*Maryam Omid=râ did xâh-ad  
Maryam Omid=DDO see.S2 can.S1-3.SG

- Neither verb can be fronted.

(27) a. \*Xâh-ad Maryam Omid=râ did.  
can.S1-3.SG Maryam Omid=DDO see.S2

b. \*Did Maryam Omid=râ xâh-ad.  
see.S2 Maryam Omid=DDO can.S1-3.SG

- The analysis fitting the data most closely is a compounding analysis:



## The progressive: verb + finite clause

- Combines a finite form of the verb *dâšťan* 'have' with a second finite verb.

(28) Maryam *dâr-ad* in *tâblo=râ* *mi-foruř-ad*.  
Maryam have.PRS-3SG this painting=DDO UNBD-sell.S1-3SG  
'Maryam is selling the painting.'

- Closely resembles a head-finite complement construction.

(29) Maryam *mi-dân-ad* (ke) Omid in *ketâb=râ* *be*  
Maryam IPF-know.S1-3.SG that Omid this book=DDO to  
*Sârâ dâd*.  
Sara give.S2  
'Maryam knows that Omid gave this book to Sara.'

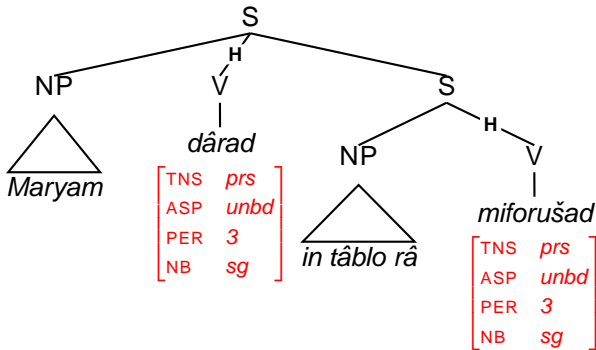
- NB: subjects of finite clauses can be controlled in Persian.

(30) Maryam *mi-xâh-ad* (ke) *be sinemâ* *be-rav-ad*.  
Maryam IPF-want.S1-3.SG (that) to theatre IRR-go.S1-3.SG  
'Maryam wants to go to the movies.'



# The progressive: verb + finite clause

- Analysis: the progressive auxiliary
  - takes a subjectless and completizerless finite clause as complement
  - is defective: only has unbounded aspect forms
  - identifies its morphosyntactic features with those of its complement



'Maryam is selling this painting.'

# Comparing periphrastic constructions

- Degrees of analyticity

Quasi-analytic	head-complement structure, some distributional idiosyncrasies	passive, progressive
True periphrasis	limited syntactic flexibility, paradigm integration	complex forms (nonclitic copula)
Quasi-synthetic	no syntactic flexibility two lexemes involved	future
Synthetic combination	ordinary synthetic morphology	complex forms (clitic copula)

# Comparing periphrastic constructions

- Criteria from (Haspelmath, 2000; Ackerman and Stump, 2004; Spencer, 2006)
  - **Intersectivity**: If a construction expresses grammatical properties that are expressed elsewhere in the synthetic paradigm, then it is periphrastic.
  - **Noncompositionality**: If some features of elements of the construction are in contradiction with features of the construction as a whole, then the construction is periphrastic.
  - **Distributed exponence**: If exponence of features of the construction is distributed on the elements of the construction, then the construction is periphrastic.
  - **Underexhaustivity**: If the head of the construction lacks certain forms that other lexemes in the same category have, then the construction is periphrastic.

construction	intersect.	noncomp.	dist. exp.	underexh.
perfect	+	-	+	+
passive	-	+	-	-
progressive	-	-	+/-	+

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