

Aspect in Complex Predicates

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1 Introduction

Background

- evaluation of predicate decomposition:

(i) Vendler classes

- VP aspect no lexical (Compositionality (NP type/Quant., PP))
- Decomposing event (causation, boundedness, change of state - causer/initiator and affected/undergoer)
- outer and inner (various approaches in sem. and syntax - CAUSE, DO, ...)

- CONCL: More fine grained analysis of subevents

(i) Persian CPs

- LVs need to decompose further. ex kardan=CAUSE+BECOME/DO
- PVs need to decompose -j relevance/contrib. of PVs
- Argue for Result-Process-Cause (a la Ramchand)

- CONCL: Aspect derived at the interface of syntax and semantics

Syntactic significance of Aspect

This talk

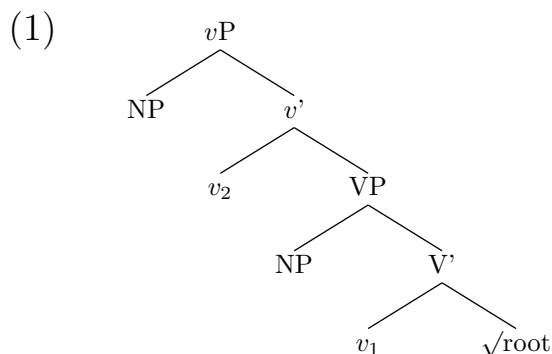
1. Case and semantic interpretation:

evidence: Properties of arguments in Eastern Armenian and relation to structure

- relation between case and specificity

- two positions for direct objects
 - relation between VP aspect and cardinality of argument
- all derived from syntactic positions / no pre-encoding

2. Tree structure configuration



- verb is decomposed into primitive components (root, categorial and functional features)
- decompose nominal element \simeq verbal predicate → project each feature in distinct projections
- correspondence between nominal and verbal features, ex. boundedness
- two parallel domains

2 What are Light Verb Constructions?

(2) Noun + LV

| | | | |
|---------|----------|------------------|----------------------|
| telefon | kærdæn | (telephone do) | ‘to telephone’ |
| šane | zædæn | (comb hit) | ‘to comb’ |
| ney | zædæn | (flute hit) | ‘to play the flute’ |
| dærd | kešidæn | (pain pull) | ‘to hurt (intrans.)’ |
| hæmam | kærdæn | (bathing do) | ‘to bathe’ |
| šekæst | dadæn | (defeat give) | ‘to defeat’ |
| duš | gereftæn | (shower take) | ‘to shower’ |
| vojud | daštæn | (existence have) | ‘to exist’ |
| zendegi | kærdæn | (life do) | ‘to live’ |

(3) Adjective/Past Participle + LV

| | | | |
|--------|--------|------------------|------------------|
| delxor | kærdæn | (annoyed make) | ‘to annoy’ |
| delxor | šodæn | (annoyed become) | ‘to be annoyed’ |
| tælx | kærdæn | (bitter make) | ‘to make bitter’ |

| | | | |
|-----|----------------------------------|---------|--|
| (4) | <u>Prepositional phrase + LV</u> | | |
| | be donya | amædæn | (to world come) 'to be born' |
| | æz beyn | ræftæn | (from between go) 'to vanish' |
| | æz beyn | bordæn | (from between take) 'to destroy' |
| | be xun | kešidæn | (to blood pull) 'to kill, to massacre' |
| | be yad | daštæn | (to remembrance have) 'to remember' |

Khanlari (1986, p.395-8) provides a list of all Persian simple verbs currently in usage in the dialect of Persian spoken in Iran. The list contains 279 verbs, yet Mohammad and Karimi (1992) have reported that only 115 verbs are used as simple verbs in modern colloquial and standard Persian. In fact, the majority of simple verbs in Persian have been replaced by light verb constructions as shown in (5).

| | | | |
|-----|--------------------|-------------------|--|
| (5) | <u>Old Persian</u> | | <u>Modern Persian</u> |
| | agahanidæn | 'inform' | ⇒ agah kærdæn (informed make) |
| | piruzinidæn | 'make victorious' | ⇒ piruz gærdandæn (victorious turn-Caus) |
| | peydaginidæn | 'show' | ⇒ nešan dadæn (sign give) |
| | aqazidæn | 'begin' | ⇒ aqaz kærdæn (beginning do) |
| | rowšaninidæn | 'turn on, light' | ⇒ rowšæn kærdæn (bright make) |
| | ayasidæn | 'remember' | ⇒ be yad aværdæn (to remembrance bring) |

Furthermore, some of the existing simple verbs also have complex counterparts as illustrated in (6), which are often preferred in colloquial speech.

| | | | |
|-----|-----------|------------------|------------------------------------|
| (6) | zistæn | 'live' | ⇒ zendegi kærdæn (life do) |
| | geristæn | 'cry' | ⇒ gerye kærdæn (cry do) |
| | pærdaxtæn | 'pay' | ⇒ pærdaxt kærdæn (payment do/make) |
| | kušidæn | 'try' | ⇒ kušeš kærdæn (try do/make) |
| | qæltidæn | 'roll (intrans)' | ⇒ qælt xordæn (roll eat) |
| | færiftæn | 'trick, fool' | ⇒ færib dadæn (trick give) |

In fact, the formation of complex verb forms in Persian is highly productive. Dabir-Moghaddam (1997) points out that the number of simple verbs formed on the basis of Arabic borrowings into Persian is very small and most verbs based on an Arabic noun, adjective or participle are complex predicates. This suggests that complex verb formation was the dominant tendency in Early Modern Persian (i.e., around the time of the Arabic invasion of Persia, 7th to 11th century A.D.). Moreover, all new loan words are used as verbs through combination with a light verb:

| | | | | |
|-----|----------|---------|-----------------------|-------------------------|
| (7) | telefon | kærdæn | (telephone do) | 'to telephone' |
| | fæks | kærdæn | (fax do) | 'to fax' |
| | telegraf | zædæn | (telegraph hit) | 'to telegraph' |
| | imeyl | zædæn | (email hit) | 'to email' |
| | klik | kærdæn | (click do) | 'to click (on a mouse)' |
| | masaǰ | dadæn | (massage give) | 'to massage' |
| | montaǰ | kærdæn | (editing/assembly do) | 'to edit' |
| | sigar | kešidæn | (cigarette pull) | 'to smoke' |

In addition, multilingual speakers often codeswitch by using a preverbal element from a foreign language combined with a Persian light verb. The data in (8) illustrate a few of these cases and confirm the very productive nature of these light verb constructions, in particular with the light verb *kærdæn* ‘do, make’. The example in (9), overheard on Persian radio in Los Angeles, demonstrates that the preverbal element itself could be a complex verbal predicate.

- (8) *cancel*=*kærdæn* ‘to cancel’
announce=*kærdæn* ‘to announce’
introduce=*kærdæn* ‘to introduce’

- (9) *mæn take-a-chance*=*kærdæm*
 I take-a-chance=did
 ‘I took a chance.’

- Choice of light verb affects argument structure

Consider the Persian transitivity alternation verbs shown in (10). The intransitive predicate in (10a) consists of a prepositional phrase *be=juš* ‘to boil’ and the light verb *amædæn* ‘come’. The transitive variant of this sentence is formed by changing the light verb element to *aværdæn* ‘bring’ as illustrated in (10b). The resulting sentence has a causative interpretation in which *Nima* has caused the water to boil. It has often been noted in crosslinguistic studies that ‘bring’ is the causative variant of the simple verb ‘come’. Thus, to form the transitive of the complex verb *be=juš=amædæn* ‘boil - Intrans.’, it seems that Persian chooses to replace the light verb by its causative form.

- (10) a. *Ab be=juš=amæd*
 water to=boil=come.PAST.3SG
 ‘The water boiled.’
- b. *Nima ab-ro be=juš=aværd.*
 Nima water-OM to=boil=bring.PAST.3SG
 ‘Nima boiled the water.’

Similar behavior is attested in the following transitivity alternation pair where the light verb *oftadæn* ‘fall’ in the intransitive construction in (11a) is replaced by its causative equivalent, the light verb *ændaxtæn* ‘throw’, resulting in the causative-transitive predicate in (11b).

- (11) a. *Homa be=gerye=oftad.*
 Homa to=crying=fall.PAST.3SG
 ‘Homa started to cry.’
- b. *Nima homa-ro be=gerye=ændaxt.*
 Nima Homa-OM to=crying=throw.PAST.3SG
 ‘Nima made Homa (start to) cry.’

3 Karimi-Doostan’s Classification

Table 1: Classification of Persian Light Verbs

| Stative LV | Dynamic LV | |
|---------------|------------------------|---------------------------|
| | Transition LV | Initiatory LV |
| daštæn ‘have’ | xordæn ‘eat, collide’ | zædæn ‘hit, strike’ |
| | yaftæn ‘find’ | dadæn ‘give’ |
| | šodæn ‘become’ | dadæn ‘give’ |
| | amædæn ‘come’ | bæxšidæn ‘offer, forgive’ |
| | gereftæn ‘catch, take’ | aværdæn ‘bring’ |
| | ræftæn ‘go’ | kešidæn ‘pull’ |
| | didæn ‘see’ | bordæn ‘take, carry’ |
| | kærdæn ‘do’ | gozaštæn ‘put’ |
| | | kærdæn ‘do, make’ |

As an example, consider the sentences below contrasting the constructions formed with the Initiatory verb *zædæn* ‘hit, strike’ and the corresponding examples formed with the Transition light verb *xordæn* ‘eat, collide’ (from Karimi-Doostan 1997, p.111). Karimi-Doostan points out that Initiatory verbs can form verb phrases with unbounded reading and appear with external arguments while Transition light verbs uniformly cannot have an unbounded reading and their subject corresponds to an internal argument.

- (12) a. Ali bemodæte / (*dær) yek sa’æt deræxt peyvænd zæd
 Ali for / (*in) an hour tree graft strike-PAST.3SG
 ‘Ali grafted trees for / (*in) an hour.’
- b. deræxt-ha dær / (*bemodæte) yek sa’æt peyvænd xord-ænd
 tree-PL in / (*for) an hour graft collide-PAST-3PL
 ‘The trees were grafted in / (*for) an hour.’

To capture the different aspectual properties of light verbs in Persian, Karimi-Doostan (1997) claims that the light verb should be treated as an underspecified lexical entry. A light verb does not contain any information about the argument structure of the verbal predicate but it carries an aspectual role which is later combined (or *fused*) in the lexicon with the argument structure provided by the preverbal element. Hence, a light verb belonging to the Transition class is listed in the lexicon with an aspectual role ‘Transition’ as shown in (13), while an Initiatory light verb carries an ‘Initiatory’ role in its Aspect Tier as illustrated in (14). Karimi-Doostan (1997) suggests that the Transition role is mapped to the internal argument in the

Furthermore, Karimi-Doostan (1997) notes that the ungrammaticality of the aspectualizer *edame dad* ‘continued’ with the Transition light verb *gereftæn* ‘catch, take’ indicates that the event depicted by the verb contains a culmination point, in clear contrast with the Initiatory light verbs that mark the duration of the event. This contrast is illustrated below:

- (19) a. * jængæl edame=dad be ateš=gereftæn.
 forest continue=give-PAST.3SG to fire=catch.INF
 ‘*The forest continued catching fire.’
- b. mehman edame=dad be færyad=kešidæn.
 guest continue=give-PAST.3SG to
 scream=pull.INF
 ‘The guest continued screaming.’

4 Constraints on VP Aspect

- (20) a. mærdom sal-ha az dowlæt færib=**xord-ænd** (unbounded)
 people year-PL from government fool=eat.PAST-3PL
 ‘People have been fooled by the government for years.’
- b. u sal-ha dær zendan šekænje=**did** (unbounded)
 He/she year-PL in prison torture=see.PAST-3SG
 ‘He/she was tortured for years in prison.’

Similarly, certain light verbs categorized as Initiatory verbs can only form bounded predicates, contrary to Karimi-Doostan’s suggestion. This is illustrated with the light verb *aværdæn* ‘bring’ in the following examples:.

- (21) behzad ?*saæt-ha / dær čænd dæqiqe mahmonir-ra
 Behzad hour-PL / in several minute Mahmonir-OM
 be=yad=aværd (bounded)
 to=memory=bring.PAST.3SG
 ‘Behzad recalled Mahmonir *for hours / in a few minutes.’

Karimi-Doostan (1997, p.117) provides the following example to demonstrate the unbounded VP aspect with the Initiatory verb *aværdæn* ‘bring’.

- (22) doktor bemodæte / (*dær) yek saæt mæriz be=huš=aværd
 doctor for / (*in) one hour patient recovery=brought
 ‘The doctor caused patients to recover for / (*in) an hour.’

Karimi-Doostan (1997) claims that the sentence is felicitous with the durative adverbial and therefore he argues that this Initiatory light verb forms an unbounded predicate. However, the reading obtained in this sentence is a repetitive event whereby for a whole hour, the doctor kept bringing back to consciousness patients who had passed out. This repetitive reading is marked by the # sign in (23a). In addition, the sentence is compatible with the frame adverbial if a specific direct object is used as illustrated in (23b).¹

- (23) a. doktor #bemodæte yek saæt mæriz be=huš=aværd
 doctor for one hour patient recovery=bring.PAST.3SG
 ‘#The doctor made patients regain consciousness for an hour.’
- b. doktor dær yek saæt mæriz-ra be=huš=aværd
 doctor in one hour patient-OM recovery=bring.PAST.3SG
 ‘The doctor made the patient regain consciousness in one hour.’

All these examples clearly show that the complex predicates formed with the light verb *aværdæn* ‘bring’ are aspectually bounded constructions, contrary to what has been claimed in Karimi-Doostan (1997). This could be due to the fact that these verbal constructions contain an allusion to a final state in their structure, indicating that the direct object has been “brought” to a final state. Similar references to a final state can be seen in the following examples:

- (24) a. be=dæst=aværdæn
 to=hand=bring
 ‘to obtain’
- b. be=juš=aværdæn
 to=boil=bring
 ‘to bring to a boil’

¹For the relation between specific noun phrases and aspectual interpretation, see Chapter ??.

5 Bibliography

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