PersPred : A Syntactic and Semantic Database for Persian Complex Predicates

First delivery : *PersPred 1.0*

Documentation
Work in progress - version 1.0.0

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Introduction

This document provides a description of *PersPred* for users.

PersPred is a manually elaborated multilingual syntactic and semantic Lexicon for Persian Complex Predicates (CPs), referred to also as "Light Verb Constructions" (LVCs) or "Compound Verbs". Its first delivery, *PersPred 1.*, contains more than 600 combinations of the verb *zadan* 'hit' with a noun, presented in a spreadsheet.

Each line of the database corresponds to the predicative combination of a verb and a non-verbal element, for which various types of information are stored in each column, namely the English and French translation of the verb, of the non-verbal element and the meaning of the complex predicate, its sub-categorization frame and alternations. At least one example extracted from the literature, newspapers or the Internet, illustrates each entry.

A particularly innovative feature of *PersPred* is that it proposes semantic groupings of predicates. This accounts for the productivity of these combinations and thus allows for the integration of the newly coined predicates.

The underlying methodology of *PersPred* combines Maurice Gross's Lexicon Grammar (1) approach and the semantic classification of English verbs by (2). For a thorough presentation of the theoretical underpinning of *PersPred* please refer to (3) and (5).

PersPred 1.0 was developed within ANR-DFG PERGRAM (2008-2012) project and is related to the work-package LR4.1 "Developing morphological and syntactic resources for Western Iranian languages" of the Labex Empirical Foundations of Linguistics (financed by the ANR/CGI).

PersPred is distributed under the LGPL-LR license and available per request. In publication research that makes use of *PersPred* database, a citation should be given of:

Samvelian, P. and Faghiri, P. (2013). Introducing PersPred, a syntactic and semantic database for Persian complex predicates. In *Proceedings of the 9th Workshop on Multiword Expressions*, Atlanta, Georgia, USA. Association for Computational Linguistics, pages 11-20.

Please note that *PersPred* and this documentation are a constant work in progress for which the status is indicated by the index of the version.

1 Encoded information

PersPred 1.0 contains 22 different fields which are conceived to capture different types of lexical, syntactic and semantic information. Tables 1, 3 and 7 below illustrate these fields via the example of the CP *āb zadan* 'to wet'.

1.1 Lemma information

9 fields provide information on the lemma of the CP and its combining parts, including French and English translations of the Noun, the Verb and the CP (cf. Table 1)

Field	Explanation	Example
Verb	the lemma of the verb (in Persian script)	زدن
Noun	the lemma of the noun (in Persian script)	آب
N-transcription	the phonetic transcription of the noun	āb
V-transcription	the phonetic transcription of the verb	zadan
CP-lemma	the lemma of the CP	āb-zadan0
N-FR-translation	the French translation of the noun	eau
N-EN-translation	the English translation of the noun	water
CP-FR-translation	the French translation of the CP	mouiller
CP-EN-translation	the English translation of the CP	to wet

Table 1: Fields related to lexical information for the CP *āb zadan*

`CP-Lemma` indicates the "lexical identity" of the CP. Consequently there are as many different lemmas associated to the same combination as its meanings. Thus `CP-Lemma` allows for distinguishing homonymous CPs on the one hand and regrouping polysemous and syntactically alternating CPs on the other hand. The notation used is as follows: the CP-lemma is encoded by the concatenation of the nominal and the verbal element, linked by a hyphen and followed by a number, beginning from 0 (cf. Table 2).

Homonymous CPs. Homonymous CPs are formed with the same components but refer to clearly different events or situations. For instance, *suzan zadan* (Lit. 'needle hit') means either 'to sew' or 'to give an injection'. A different lemma is associated to each meaning in this case, `suzan-zadan0` and `suzan-zadan1` (cf. example (4) and (5) in Table 2).

Polysemous CPs. We have adopted an approach favoring grouping of polysemous CPs. In other words, polysemous CPs are assigned the same lemma. For instance, *ātaš zadan* (lit. 'fire hit'), has several related meanings corresponding to the same lemma (cf. examples (1)-(3) in Table 2). Polysemy is accounted for by creating different lexical entries.

CPs with syntactic alternations. In some cases, the arguments of the same CP may have different syntactic realizations (e.g. NP vs. PP). Each sub-categorization frame corresponds to a lexical entry, cf. examples (5) and (6) or (7) and (8) in Table 2.

N°	Verb	Noun	CP-Lemma	N-EN-Tr	Contruction-EN-Tr	Synt-Construction
1)	زدن	آتش	ātaš-zadan0	fire	N0 puts fire on N1	N0 N1 N2 Verb
2)	زدن	آتش	ātaš-zadan0	fire	N0 lights N1	N0 N1 N2 Verb
3)	زدن	آتش	ātaš-zadan0	fire	N0 enflames N1	N0 Prep N1 N2 Verb
4)	زدن	سوزن	suzan-zadan0	needle	N0 sews	N0 N1 Verb
5)	زدن	سوزن	suzan-zadan1	needle	N0 gives an injection to N1	N0 N1 N2 Verb
6)	زدن	سوزن	suzan-zadan1	needle	N0 gives an injection to N1	N0 Prep N1 N2 Verb
7)	زدن	زنگ	zang-zadan0	bell	N0 rings N2	N0 N1-EZ N2 Verb
8)	زدن	زنگ	zang-zadan0	bell	N0 rings	N0 N1 Verb
9)	زدن	زنگ	zang-zadan1	bell	N0 calls N1	N0 Prep N1 N2 Verb
10)	زدن	زنگ	zang-zadan2	rust	N0 rusts	N0 N1 Verb

Table 2: Examples of different values of `CP-Lemma`

1.2   Argument structure and syntactic construction

5 fields represent the syntactic construction of the CP and its English equivalent through an abstract syntactic template inspired as mentioned above by (1). Valency alternations and synonymy are also represented through 3 fields: Intransitive, Transitive and Synonymous Variants (cf. Table 3 below).

Field	Explanation	Example
Synt-Construction	the subcategorization frame of the CP	N0 Prep N1 N2 Verb
PRED-N	the nominal element of the CP	N2
Prep-N1	the preposition introducing N1	be
Prep-N2	the preposition introducing N2	NONE
Construction-EN-Tr	the English equivalent of the construction	N0 wets N2
Intrans-Var	the intransitive variant if available	xordan
Trans-Var	the transitive variant if available	NONE
Syn-Var	variant if available	NONE

Table 3: Fields related to syntactic information for the CP *āb zadan*

The sub-categorization frame   is provided by `Synt-Construction` combined with `PRED-N`, `Prep-N1`, `Prep-N2`. In `Synt-Construction`, N stands for a bare noun or a nominal projection (i.e. NP) and the number following N indicates the obliqueness hierarchy among nominal elements:

- N0 is the 1st argument (subject),

- N1 the direct object,

- Prep N1 the prepositional object and so on.

Note that, the nominal element of the CP is also assigned a number. Even though, semantically, this element does not display typical properties of an argument, from a syntactic point of view it can undergo different operations, which means that it has a syntactic function and must thus be taken into account in the obliqueness hierarchy.

CP-Lemma	Construction-EN-Tr	Synt-Construction	Pred-N	Prep-N1	Prep-N2
namak-zadan0	N0 salts N1	N0 Prep N1 N2 V	N2	be	NONE
namak-zadan0	N0 salts N1	N0 N1 N2 V	N2	NONE	NONE
labxand-zadan0	N0 smiles	N0 N1 V	N1	NONE	NONE
XOD-be-marizi-zadan	N0 feigns sickness	N0 xod-rā Prep N1 V	Prep N1	be	NONE
zir-xande-zadan0	N0 starts to laugh	N0 Prep N1 V	Prep N1	zir	NONE
be-ham-zadan0	N0 perturbs N1	N0 N1 Prep N2 V	Prep N2	NONE	be
xat-zadan0	N1 strikes off N1 from N2	N0 N1 Prep N2 N3 V	N3	NONE	az
zamin-zadan0	N0 throws N1 on the ground	N0 N1 [Prep] N2 V	[Prep] N2	NONE	be
časb-zadan0	N0 put glue on N1	N0 Prep N1 N2 V	N2	LOC	NONE
dād-zadan0	N0 shouts (that Clause)	N0 N1 V (Clause)	N1	NONE	NONE
paše-zadan0	A mosquito bites N1	N0 N1 V	N0	NONE	NONE
qeyb-CL-zadan0	TOP disappears	(TOP) N0-CLP V	N0-CLP	NONE	NONE

Table 4: Examples of values for fields providing the sub-categorization frame

PRED-N specifies which constituent in Synt-Construction is the nominal element of the CP (i.e. forms a CP with the verb), and thus takes as its value either N0, N1, N2 or N3 or Prep Nx, in case nominal of the CP is introduced by a preposition. Prep-N1 and Prep-N2 indicate either the lemma of the preposition which introduces N1 and N2, in case the preposition is lexically fixed, or otherwise its semantic value.

Construction-EN-Tr simultaneously provides the English translation of the CP and the way the arguments of the Persian CP (as encoded in Synt-Construction) are mapped with the grammatical functions in the English translation. Table 4 above gives some examples of different values for these fields.

Note that alternations in the argument realization (i.e. direct *vs* prepositional) give rise to several entries. For instance, the second argument of *āb zadan* 'wet', can either be realized as an NP or a PP (i.e. Dative shift alternation). Consequently, *āb zadan* has two entries which differ with respect to their Synt-Construction feature value: N0 Prep N1 N2 V vs N0 N1 N2 V. Note that these two entries are considered to be two different realizations of the same lemma (i.e. they have the same value for CP-Lemma). Table 5 illustrates different possible values for Synt-Construction.

Valency alternations and synonymy are provided by Intrans-Variant, Trans-Variant and Syn-Variant. The value of these three features is either a verbal lemma or NONE in the case where no attested variant is available. Table 6 gives some examples of values of these fields for different CPs.

Intrans-Variant provides the lemma of one or several verbs that can be used to produce a CP where the Patient (N1 or N2) argument is assigned the subject function, i.e. becomes N0. This alternation is somehow comparable to the passive alternation. Trans-Variant gives the lemma of the verb(s) used to add an extra argument (or participant) to the CP. This external participant generally has a Cause interpretation and is realized as the subject of the "transitive/Causative" CP. The first argument of the initial CP is mapped in this case into the Object function. Syn-Variant provides the lemma of the set of verbs forming a synonymous predicate with the same noun.

Synt-Construction	CP-Lemma	Example
N0 Prep N1 N2 V	namak-zadan0	Maryam be sālād namak zad.
		'Maryam salted the salad.'
N0 N1 N2 V	namak-zadan0	Maryam sālād=rā namak zad.
		'Maryam salted the salad.'
N0 N1 V	labxand-zadan0	Maryam labxand zad.
		'Maryam smiled.'
N0 xod-rā Prep N1 V	XOD-be-marizi-zadan	'Maryam xod=rā be marizi zad.
		'Maryam feigned sickness.'
N0 N1 V (Clause)	dād-zadan0	Maryam dād zad ke barf gereft.
		'Maryam shouted that it began to snow.'
N0 Prep N1 V	zir-xande-zadan0	Maryam zir=e xande zad.
		'Maryam began laughing.'
N0 Prep N1 N2 V (Clause)	imeyl-zadan0	Maryam be Omid imeyl zad ke Sārā bezudi miresad.
		'Maryam emailed Omid that Sara would arrive soon.'
N0 N1-EZ N2 V	jib-zadan0	Maryam jib=e Omid=rā zad.
		'Maryam robbed Omid.'
N0 N1 Prep N2 N3 V	xat-zadan0	Maryam esm=e Omid=rā az list xat zad.
		'Maryam crossed Omid's name off the list.'
N0 Prep N1 N2-EZ N3 V	ettehām-zadan0	Maryam be Omid ettehām=e dozdi zad.
		'Maryam accused Omid of robbery.'
N0 N1 [Prep] N2 V	zamin-zadan0	Maryam Omid=rā [be] zamin zad.
		'Maryam threw Omid on the ground.'
N0 N1 Prep N2 V	be-ham-zadan0	Maryam jalase=rā be ham zad.
		'Maryam interrupted the meeting.'
(TOP) N0-CLP V	qeyb-CL-zadan0	(Maryam) qeyb=eš zad.
		'Maryam disappeared.'
N0 Prep N1-CLP V	zir-qowl-zadan	Maryam zir=e qowl=eš zad.
		'Maryam went back on her promise.'
N0 N1 N2 N3 V	sedā-zadan0	Omid Maryam=rā Mimi sedā mizad.
		'Omid used to call Maryam Mimi.'

Table 5: Different possible values of `Synt-Construction`

CP-Lemma	Synt-Construction	Intrans-Variant	Trans-Variant	Syn-Variant
jāru-zadan0	N0 N1 N2 V	xordan	NONE	kešidan; kardan
jelo-zadan0	N0 N1 N2 V	raftan	NONE	bordan
tarak-zadan0	N0 N1 V	NONE	andāxtan	xordan; bar dāštan
labxand-zadan0	N0 N1 V	NONE	NONE	NONE

Table 6: Examples of values for valency alternation and synonymy fields

1.3 Semantic information

The semantic information is encoded via 3 fields (cf. Table 7 below).

Field	Explanation	Example
Pred-Sem-Cl	the semantic class of the CP	Spreading
Pred-Sem-SuperCl	the semantic superclass of the CP	Locatum
Meaning-Exension	the type of the meaning extension if applicable	NONE

Table 7: Fields related to semantic information for the CP *āb zadan*

`pred-sem-cl` and `pred-sem-supercl` give the semantic classification of each CP, i.e. the semantic class and the semantic superclass of which the CP is a member (cf. Section 2 for a detailed presentation of these classes). The `meaning-extension` feature indicates if a CPs has undergone semantic drift, mainly metaphor and metonymy. In the case of a metaphoric extension, the concerned CP is linked to the CP from which it is metaphorically driven.

2 Semantic Classes

CPs with *zadan* are grouped into 45 classes. Each class and its syntactic and semantic properties are presented bellow.

2.1 Aggression

2.1.1 Attacking

(1) **Attacking-*zadan* Construction**

N0　　　　(*be*) N1 *zadan*
Agent/Cause　Patient

'N0 attacks/damages N1'

Nouns: *dozd* 'thief', *malax* 'locust', *sarmā* 'cold'...

In the CPs of this class, the non-verbal element is the N0 (the subject of the CP). The action denoted by the CP can be considered as an "attack" in more or less metaphoric sense: N0 attacks N1 and causes damages.

The productive compound adjective construction pattern [N-*zade*] can be related to this construction: *seyl-zade* 'flooded' (Lit. 'flood beaten'), *sarmā-zade* 'damaged by cold, frozen'.

2.1.2 Beating

(2) **Beating-*zadan* Construction**

N0　　(*be*) N1　N2　　*zadan*
Agent　Patient　Strike

'N0 hits N1 by accomplishing the type of the stroke denoted by N2'

Nouns: *čak* 'slap', *kešide* 'slap', *kotak* 'beating', *lagad* 'kick', *ordangi* 'kick'...

CPs: *čak zadan* 'to slap', *kešide zadan* 'to slap', *kotak zadan* 'to beat', *lagad zadan* 'to kick', *ordangi zadan* 'to kick'...

(3) Maryam Omid=rā　**kotak　zad**
Maryam Omid=ddo beating hit.r2
'Maryam beat Omid.'

The nominal element of the CP is generally a predicative noun denoting stroke given by a body part or the name of a body part which by extension denotes a stroke. The noun *kotak* 'beating' can be considered as the generic representative of the class. It is the only noun denoting the beating action by itself.

The most common value for Intrans-Var in the CPs of this class is *xordan* 'to collide'. In some cases, *didan* 'to see' can also be the verb used to form the intransitive variant.

2.1.3 Biting

(4) **Biting-*zadan* Construction**

N0   N1   *zadan*
Agent   Patient

'N0 bites N1'

Nouns: *aqrab* 'scorpion', *mār* 'snake', *paše* 'mosquito'...

(5) Mār   Omid=rā   **zad**
Snake Omid=ddo hit.r2
'A snake bit Omid.'

In the CPs of this class, the non-verbal element is the N0 (the subject of the CP). *zadan* can be translated as 'to bite' in all the CPs of this class.

2.1.4 Harming

(6) **Harming-*zadan* Construction**

N0   (*be*) N1   N2   *zadan*
Agent   Patient   Harm

'N0 provokes harm/damage/loss on/to N1'

Nouns: *āsib* 'damage', *latme* 'harm', *sadame* 'damage', *zarar* 'loss'...

(7) Tufān be mazra'e=ye mā xesārat zad
Storm to farm=ez   we harm   hit
'The storm damaged our farm.'

The most common value for `Intrans-Var` in the CPs of this class is *xordan* 'to collide' or *didan* 'to see'.

2.1.5 Instr-Beating

(8) **Instr-Beating-*zadan* Construction**

N0   (*be*) N1   N2   *zadan*
Agent   Patient   Instrument

'N0 hits N1 with N2'

Nouns: *čāqu* 'knife', *čomāq* 'stick', *šallāq* 'whip'...

(9) Maryam Omid=rā   **čāqu   zad**
Maryam Omid=ddo beating hit.r2
'Maryam beat Omid.'

The CP denotes the action of beating or hitting somebody, carried out by means of an instrument, the nominal element of the predicate. These CPs are in fact instrumental CPs, but the have nevertheless been separated from other instrumental CPs such as *jāru zadan* 'to broom', since the verb *zadan* here keeps its meaning 'to hit', so that the whole CP can be paraphrased by 'to beat with'.

The most common value for `Intrans-Var` in the CPs of this class is *xordan* 'to collide'.

2.1.6 Projectile

(10) **Projectile-*zadan* Construction**

N0   (*be*) N1   N2   *zadan*
Agent   Patient   Projectile

'N0 launches/shoots N2 on/to N1'

Nouns: *bomb* 'bomb', *golule* 'bullet', *mušak* 'rocket', *tir* 'bullet'...

(11)   Došman in   mantaqe=rā **bomb zad**
       Enemy   this area=ddo   bomb hit.r2
       'The enemy bombed this area.'

The most common value for `Intrans-Var` in the CPs of this class is *xordan* 'to collide'.

2.1.7 Verbal-Attack

(12) **Verbal-Attack-*zadan* Construction**

N0   (*be*) N1   N2   *zadan* (Clause)
Agent   Patient/Addressee   (Cutting/sarcastic) remarks

'N0 launches/shoots N2 on/to N1'

Nouns: *kenāye* 'sarcastic remark', *niš* 'cutting remarks', *sarkuft* 'bullying'...

(13)   Maryam be Omid   **sarkuft zad**
       Maryam to Omid=ddo bullying hit.r2
       'Maryam demeaned Omid.'

Apart from the Agent and the Addressee, the CPs of this class can take a clausal complement, denoting the content of the remarks addressed by the Agent to the Addressee.

The most common value for `Intrans-Var` in the CPs of this class is *xordan* 'to collide'.

2.2 Emission

2.2.1 Animal-Cry-Emission

(14) **Animal-Cry-Emission-*zadan* Construction**

N0 N1 *zadan*
Sound Source Animal Cry

'N0 emits N1'

Nouns: *ar* 'braying', *čahčahe* 'birdsong', *jik* 'chirp', *zuze* 'cry'...

(15) Parande čahčahe mi-zad
bird bird song -ipfv-hit.r2
'The bird was singing.'

2.2.2 Scream-Emission

(16) **Cry-Emission-*zadan* Construction**

N0 N1 *zadan* (Clause)
Sound Source Scream/Cry

'N0 emits N1'

Nouns: *dād* 'scream', *faryād* 'scream', *jiq* 'scream', *nāle* 'moan', *zuze* 'cry'...

2.2.3 Verbal-Emission

The CPs grouped in this class denote an act of utterance or speaking. They display various syntactic patterns, depending on the semantic participants (i.e. the existence or not of an interlocutor or addressee).

(17) **Verbal-Emission-*zadan* Construction**

N0 N1 *zadan* (Clause)
Source Speech

'N0 emits N1 (that Clause)'

Nouns: *lāf* 'boasting', *neq* 'grumble', *qor* 'grumble'...

(18) **Verbal-Emission-*zadan* Construction**

N0 Prep N1 N2 *zadan* (Clause)
Sound Source Addressee Speech

'N0 addresses N2 to N1'

Nouns: *harf* 'speech', *gap* 'chat'...

2.2.4 Sound-Emission

(19) **Sound-Emission-*zadan* Construction**

N0   N1   *zadan*
Sound Source   Sound

'N0 emits N1'

Nouns: *buq* 'horn', *sut* 'whistle', *zang* 'bell'...

2.2.5 Substance-Emission

(20) **Substance-Emission-*zadan* Construction**

N0   N1   *zadan*
Source   Substance

'N0 emits N1'/'N1 comes out of N0'

Nouns: *dud* 'smoke'...

2.2.6 Body-Emission

(21) **Body-Emission-*zadan* Construction**

N0   N1   *zadan*
Source   Substance

'N0 emits N1'

Nouns: *atse* 'sneeze', *āroq* 'burp'...

2.2.7 Signal-Emission

(22) **Signal-Emission-*zadan* Construction**

N0   Prep N1   N2   *zadan*
Source   Addressee   Signal

'N0 addresses N2 to N1'

Nouns: *čerāq* 'light', *češmak* 'wink'...

2.2.8 Light-Emission

(23) **Light-Emission-*zadan* Construction**

N0   N1   *zadan*
Source   Light

'N0 emits N1'

Nouns: *barq* 'brightness', *jaraqqe* 'spark'...

2.2.9   Manner-of-Emission

(24)   **Manner-of-Emission-*zadan* Construction**

N0   (Prep N1)   N2 *zadan*
Emitted   (Source)   Manner

'N0 is emitted in the manner of N2 (from N1)'

Nouns: *favvāre* 'water-jet', *favarān* 'irruption'...

2.3   Locative

2.3.1   Movement-to-Location

(25)   **Movement-to-Location-*zadan* Construction**

N0   Prep N1   *zadan*
Figure   Destination

'N0 goes/throws herself to N1'

Nouns: *āb* 'water', *dašt* 'plain'...

2.3.2   Orientation

(26)   **Orientation-*zadan* Construction**

N0   N1   (Prep N2) N3   *zadan*
Figure Theme   (Origin)   Orientation

'N0 moves N1 (from N2) to N3 '

Nouns: *aqab* 'back', *bālā* 'top'...

(27)   **Orientation-*zadan* Construction**

N0   (Prep N1) N2   *zadan*
Figure (Origin)   Orientation

'N0 moves (from N1) in direction of N2'

Nouns: *aqab* 'back', *birun* 'outside, out'...

2.3.3   Ground

(28)   **Ground-*zadan* Construction**

    N0   N1   Prep N2   *zadan*
    Agent Figure/Theme Destination/Ground Orientation

    'N0 moves N1 to N2 '

Nouns: *dār* 'scaffold', *baqal* 'bosom'...

2.4   Movement-Form

2.4.1   Dangling

(29)   **Dangling-*zadan* Construction**

    N0   N1   *zadan*
    Theme Dangling

    'N0 dangles'

Nouns: *lang* 'lame', *laq* 'unsteady'...

2.4.2   Body-Performing

(30)   **Body-Performing-*zadan* Construction**

    N0   N1   *zadan*
    Agent/Theme Body Performance

    'N0 performs N1'

Nouns: *poštak* 'sommersault', *beškan* 'click of the fingers'...

2.4.3   Motion-Mode

(31)   **Motion-Mode-*zadan* Construction**

    N0   N1   *zadan*
    Agent/Theme Motion type

    'N0 moves in the manner/shape of N1'

Nouns: *čarx* 'rotation', *mowj* 'wave'...

2.4.4   Walking

(32)   **Walking-*zadan* Construction**

N0   (Prep N1)   N2   *zadan*
Agent/Theme   Location   Walk

'N0 takes a walk (in N1)'

Nouns: *qadam* 'step', *dowr* 'turn'...

2.4.5   Posture

(33)   **Posture-*zadan* Construction**

N0   (Prep N1)   N2   *zadan*
Agent/Theme   Location   Posture

'N0 takes the posture of N2'

Nouns: *čambare* 'circle', *čombātme* 'squatting'...

2.5   Construction

2.5.1   Building

(34)   **Building-*zadan* Construction**

N0   (Prep N1)   N2   *zadan*
Agent   Location   Construction

'N0 builds N2 (in N1)'

Nouns: *jādde* 'road', *pol* 'bridge'...

2.5.2   Digging

(35)   **Digging-*zadan* Construction**

N0   (Prep N1)   N2   *zadan*
Agent   (Location)   Construction

'N0 digs N2 (in N1)'

Nouns: *čāh* 'well', *tunel* 'tunnel'...

2.5.3 Founding

(36) **Founding-*zadan* Construction**

N0	(Prep N1)	N2	*zadan*
Agent	(Location)	Construction	

'N0 founds/opens/launches N2 (in N1)'

Nouns: *maqāze* 'shop', *matab* 'surgery'...

2.5.4 Installing

(37) **Installing-*zadan* Construction**

N0	(Prep N1)	N2	*zadan*
Agent	(Location)	Construction	

'N0 installs N2 (in N1)'

Nouns: *čādor* 'tent', *āftābgir* 'sunshade'...

2.6 Depriving

2.6.1 Cutting

(38) **Cutting-*zadan* Construction**

N0	N1	N2	*zadan*
Agent	Patient	Theme	

'N0 deprives N1 (from N2)'

Nouns: *gardan* 'neck', *sar* 'head'...

(39) **Cutting-*zadan* Construction**

N0	N1-EZ	N2	*zadan*
Agent	Theme	Patient	

'N0 deprives N2 (from N1)'

Nouns: *gardan* 'neck', *sar* 'head'...

2.6.2 Stealing

(40) **Stealing-*zadan* Construction**

N0	N1-EZ	N2	*zadan*
Agent	Theme	Patient	

'N0 deprives N2 (from N1)'

Nouns: *jib* 'pocket', *kif* 'bag'...

2.7   Locatum

2.7.1   Incorporating

(41)   **Incorporating-*zadan* Construction**

N0	(Prep) N1	N2	*zadan*
Agent	Ground	Figure	

'N0 incorporates/adds N2 (in)to N1'

Nouns: *adviye* 'spice', *namak* 'salt'...

2.7.2   Marking

(42)   **Marking-*zadan* Construction**

N0	(Prep) N1	N2	*zadan*
Agent	Ground	Figure	

'N0 puts N2 on N1' or 'N0 marks N2 with N1'

Nouns: *barčasb* 'label', *mohr* 'stamp'...

2.7.3   Putting

(43)   **Putting-*zadan* Construction**

N0	(Prep) N1	N2	*zadan*
Agent	Ground	Figure	

'N0 puts/installs/hangs N2 on N1'

Nouns: *ānten* 'aerial', *dastband* 'handcuff'...

2.7.4   Spreading

(44)   **Spreading-*zadan* Construction**

N0	(Prep) N1	N2	*zadan*
Agent	Ground	Figure	

'N0 spreads/applies N2 on N1'

Nouns: *sābun* 'soap', *vāks* 'polish'...

2.7.5 Wearing

(45) **Wearing-*zadan* Construction**

N0   (Prep N1)   N2   *zadan*
Agent (Body part) Accessory

'N0 wears N2' or 'N0 puts N2 on N1 (= body part)'

Nouns: *eynak* 'glasses', *māsk* 'mask'...

2.7.6 Slandering

N.B. This CPs are this class are considered as Locatum constructions by extension.

(46) **Slandering-*zadan* Construction**

N0   Prep N1 N2   *zadan* (Clause)
Accuser Accused Accusation   Content of accusation

'N0 accuses N1 [of Clause]'

(47) **Slandering-*zadan* Construction**

N0   Prep N1 N2=EZ   N3   *zadan*
Accuser Accused Accusation Content of accusation

'N0 accuses N1 of N3'

Nouns: *tohmat* 'slander', *ang* 'slander'...

2.8 BP-Action

(48) **BP-Action-*zadan* Construction**

N0   N1   *zadan*
Agent Body part

'N0 accomplishes an action implying a contact (often repetitive) between two body parts'

Nouns: *dast* 'hand', *pelk* 'eyelid'...

2.9 Communicating

(49) **Communicating-*zadan* Construction**

N0   Prep N1 N2   *zadan* (Clause)
Agent Addressee Communication   (Content of communication)

'N0 communicates [Clause] to N1 by means of N2'

(50) **Communicating-*zadan* Construction**

N0	N1	N2	N3	*zadan*
Agent	Addressee	Content of communication	Communication	

'N0 communicates N2 to N1'

Nouns: *telefon* 'phone', *faks* 'fax'...

2.10 Consumming

(51) **Consumming-*zadan* Construction**

N0	N1	*zadan*
Agent	Theme	

'N0 consumes/drinks/eat N1'

Nouns: *nušābe* 'drink', *ābjo* 'beer'...

2.11 Fissure

(52) **Fissure-*zadan* Construction**

N0	N1	N2	*zadan*
Agent	Theme	Cut	

'N0 cuts/tears/cracks N1'

Nouns: *čāk* 'slit', *boreš* 'cut'...

2.12 Deal-Breaking

(53) **Deal-Breaking-*zadan* Construction**

N0	Prep N1(-CLP)	*zadan*
Agent	Agreement	

'N0 breaks/violates (her) N1'

Nouns: *qānun* 'law', *qowl* 'promise'...

2.13   Deceiving

(54)   **Deceiving-*zadan* Construction**

N0   Prep N1   N2   *zadan*
Agent   Patient   Trick

'N0 deceives N1'

Nouns: *kalak* 'trick', *bolof* 'bluff'...

2.14   Emotion-Stroke

(55)   **Emotion-Stroke-*zadan* Construction**

(TOP)   N0=CLP   *zadan*
(Patient)   Emotion=Patient

'TOP is stroke/overwhelmed by the feeling or state denoted by N0'

Nouns: *boht* 'astonishment', *xošk* 'dry'...

2.15   Estimating

(56)   **Estimating-*zadan* Construction**

N0   N1   N2   *zadan*
Agent   Theme   Measure

'N0 measures/assumes/estimates N1'

Nouns: *andāze* 'measure', *hads* 'guess'...

2.16   Feigning

(57)   **Feigning-*zadan* Construction**

N0   xod=rā   Prep N1   *zadan*
Agent   State

'N0 feigns N1'

Nouns: *bimāri* 'sickness', *čolāqi* 'lame'...

2.17   Forming

(58)   **Forming-*zadan* Construction**

N0   N1   *zadan*
Agent   Theme

'N0 develops N1' or 'N0 transforms into N1'

Nouns: *javāne* 'bud', *juš* 'spot', *yax* 'ice'...

2.18   Incohative

(59)   **Incohative-*zadan* Construction**

N0   Prep N1   *zadan*
Agent   Activity

'N0 starts accomplishing the action denoted by N1'

Nouns: *gerye* 'cry', *āvāz* 'song'...

2.19   Instrumental

(60)   **Instrumental-*zadan* Construction**

N0   ((Prep) N1)   N2   *zadan*
Agent   (Theme?)   Instrument

'N0 accomplishes the conventional action N2 is used for (on N1)'

Nouns: *jāru* 'broom', *mesvāk* 'touth brush'...

2.20   Looking

(61)   **Looking-*zadan* Construction**

N0   (Prep) N1   N2   *zadan*
Agent   Theme   Look

'N0 stares at N1'

Nouns: *zol* 'NA', *did* 'view'...

2.21   Music

(62)   **Music-*zadan* Construction**

N0   N1   *zadan*
Agent   (Instrument of) music

'N0 plays N1'

Nouns: *āhang* 'music', *ney* '(Iranian) recorder'...

2.22   Playing

(63)   **Playing-*zadan* Construction**

N0   (Prep N1)   N2   *zadan*
Agent   (Partner?)   Game

'N0 plays N2 (with N1)'

Nouns: *taxte* 'backgammon', *tenis* 'tennis'...

2.23   Printing

(64)   **Printing-*zadan* Construction**

N0   N1   *zadan*   (Clause)
Agent   Print   (Content of print)

'N0 publishes (Clause)'

Nouns: *titr* 'title', *e'lāmie* 'tract'...

(65)   **Printing-*zadan* Construction**

N0   N1   N2   *zadan*
Agent   Theme   Print

'N0 publishes N1'

Nouns: *titr* 'title', *čāp* 'printing'...

2.24   Sense-Striking

(66)   **Sense-Striking-*zadan* Construction**

N0   Prep N1   (=EZ N2)   *zadan*
Theme   Sense   Patient

'N0 occurs to N2' or 'N2 senses N0'

Nouns: *mašām* 'sense of mell', *češm* 'eye'...

2.25   Sport-Stroke

(67)   **Sport-Stroke-*zadan* Construction**

N0   N1   *zadan*
Agent   Stroke

'N0 shoots/does a N1'

Nouns: *gol* 'goal', *korner* 'corner'...

2.26 Touching

(68) **Touching-*zadan* Construction**

N0   (Prep)N1 N2   *zadan*
Agent Theme   Body part

'N0 accomplishes an action that involves a contact between N2 (body part) and N1'

Nouns: *lab* 'lip', *nāxon* 'nail'...

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