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#### Институт стран Азии и Африки МГУ имени М. В. Ломоносова

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The conference programme is available online at: http://ossetic-studies.org/icil7/index.php?id=programme.

Седьмая Международная конференция по иранскому языкознанию (ICIL7), совместно организованная МГУ имени М. В. Ломоносова и Институтом языкознания РАН, прошла 28–30 августа 2017 г. в Институте стран Азии и Африке МГУ имени М. В. Ломоносова. В программу конференции вошло 30 устных докладов и 32 постера. Настоящий сборник включает все тезисы докладов, принятых программным комитетом к представлению на конференции.

Программа конференции доступна в сети Интернет по адресу: http://ossetic-studies.org/icil7/index.php?id=programme.

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# **Keynote lectures**

#### Семантическая типология в истории иранской лексики

Д. И. Эдельман (Институт языкознания РАН)

Известно, что в работе над историей лексики, в частности, над этимологией слов, необходим анализ истории не только их материальной оболочки (соответствий правилам исторической фонетики, грамматики и словообразования), но и содержательной сути. При этом изменения в материальной стороне слов обычно относительно наглядны и поддаются определенной формализации, а с изменениями в семантике дело обстоит не так просто.

Вместе с тем, при анализе большого этимологического корпуса слов иранских языков некоторые историко-семантические закономерности все же выявляются. В частности, мы можем установить некоторые системные смысловые связи между определенными категориями слов и тем самым выявить в лексике некий набор правил или тенденций семантической типологии в ее диахроническом и ареальном аспектах.

В докладе рассматриваются примеры диахронической семантической типологии, выявляемые в этимологиях ряда слов разных иранских языков. Примеры иллюстрируются материалом, представленным словарными статьями.

Группа примеров демонстрирует типологически общее правило — называния (в разные эпохи) животных и птиц по их окраске, начиная с наиболее прозрачных случаев (типа "голубой" — "голубь"), затем более сложные, с перекрещивающимися значениями производящих слов и производных. Группа примеров представляет типологически сходные (но не тождественные) построения из одних и тех же корней и основ, возникшие в древнюю эпоху, но не восходящие к праязыку.

Интересны явления ареальной семантической типологии в производстве слов в разные периоды истории разных иранских языков. Иногда этимология таких слов дает возможность реконструировать элементы ареальной материальной и духовной культуры, а в ряде случаев — возможность выявить фрагменты ареальной этнопсихологии, включая элементы видения мира, как собственно иранские, так и усвоенные из доиранского субстрата. В этом плане большой интерес представляют ареалы Средней и Центральной Азии, особенно Памира и смежных с

ним регионов (об ареалах Кавказа и Юга России следует сказать отдельно).

Одним из "орудий" такой реконструкции является система табуизмови описательных оборотов, живых и исторических, прослеживаемых этимологически. При этом в выборе лексики для выработки слов-табу наблюдаются интересные закономерности, в том числе ареально обусловленные. Так, в ареале Центральной Азии для обозначения большинства животных используются новые слова, характеризующие внешний облик или повадки животного, то есть, его материальные признаки, однако слова-табу со значением "волк", различные этимологически, типологически едины по глубинному смыслу: "дэвовский, проклятый".

Примерами однотипных частных слов в разных иранских языках могут служить числительные, перестроенные (полностью или частично) по вигезимальному принципу (вытесняющие древние децимальные), "сбои" в обозначении числительного "девять" (различные этимологически, но общие по содержанию и внутренней структуре: "сверх восьми, перешедшее через восемь") под влиянием восьмиричного счета в субстратных системах и др.

Примеры элементов видения мира можно проследить по типологически общему смысловому принципу: вытеснения рефлексов праиранского названия "солнца" рефлексами имен божеств Митры и Ахурамазды. В отношении Митры это отмечено в иранских языках разных ареалов, а Ахурамазды — в нескольких языках Центральноазиатского ареала, которые ныне оказались на периферии ираноязычного мира. Такая замена — результат ассоциации у носителей древнеиранских диалектов образа древнейшего солярного божества с образами вначале праарийского божества Митры, а позднее, в более ограниченном ареале — верховного зороастрийского божества Ахурамазды. Как итог: имена этих божеств в данных языках переосмыслились как «Бог-солнце» — «Солнце-бог» — «солнце (светило)».

В предлагаемом докладе рассматривался в основном материал языков ареала Средней и Центральной Азии, который еще нуждается в дополнении и осмыслении.

Вместе стем следует оговориться, что семантическая типология в применении к лексике, к выявлению смысловых параллелей в истории слов, активно исследуется для огромного скифо-славянского ареала. Многое сделано классиком иранистики В.И. Абаевым, а в последние годы — этимологом А.Ф. Журавлевым.

Вывод: семантическая типология (в ее диахроническом и ареальном аспектах) в применении к истории иранской лексики имеет богатые и очень интересные перспективы.

#### Post-predicate arguments in Iranian languages

Geoffrey Haig (University of Bamberg)

All contemporary Iranian languages exhibit OV word-order in pragmatically neutral clauses, and this generalization seems to hold for their attested historical ancestors. However, despite the stability of the object/verb order, Iranian languages (particularly West Iranian languages) are not necessarily head-final. Dabir-Moghaddam (2001), based on the traditional parameters of word-order typology, points to the overall dominance of head-inital structures in modern Persian (prepositions, ezafe-constructions etc.), while a long line of research in the Minimalist tradition has attempted to reconcile the postverbal position of CP's with the assumed OV structure (e.g. Taleghani 2008).

In this talk I focus on a set of structures that has been only marginally discussed in the literature, namely oblique arguments (i.e. non-direct objects) that occur post-predicatively. For Persian, the structure is routinely attested in the spoken language (1):

#### (1) Persian

bad sib-hā=rā mi-dah-ad dast-e dust-ān=aš then apple-PL=ACC INDIC-give.PRS-3SG hand=EZ friend-PL=POSS.3SG 'then (she) handed over the apples to her friends' (Adibifar 2016: 020 g1-f-05)

Constructions such as (1) are generally interpreted as pragmatically-driven, and stylistically sub-standard, scrambling, rather than reflecting an underlying structural position in Persian syntax. However, the pioneering (and largely ignored) study of Frommer (1981) documents both the frequency, and certain structural regularities among post-predicate arguments in colloquial Persian, suggesting that the scrambling account is not entirely adequate.

Even if the scrambling explanation can be made to work for Persian, it is evidently incorrect for some Iranian languages. In Northern Kurdish, post-predicate position is mandatory for certain arguments. Furthermore, this position can host focal arguments, is retained in subordinate clauses, and can also host WH-words. There is thus no doubt that Kurdish at least must be classified as OVX, where X refers to the following argument types: (i) local GOALs of verbs of motion, and verbs of caused motion; (ii) RECIPIENTS of dan 'give'; (iii) ADDRESSEEs of gotin 'say' (some dialects only; cf. Haig

2014, 2017, in prep., Gündoğdu 2017). In addition, complements of intransitive inchoatives expressing a change of state ('become, turn into') are also post-predicate. Kurdish also exhibits interesting interactions of word order with argument flagging, with a general constraint against postpositional phrases in post-predicate position, while prepositional and case-marked phrases are readily tolerated. Overall, Kurdish exhibits a word-order comparable to the S-(AUX)-O-V-X type characterizing a number of languages of Northern sub-Saharan Africa (Güldemann 2008: 162).

For other Iranian languages, no systematic survey exists to date. However, in West Iranian languages there is abundant evidence for local GOALs and RECIPIENTs in post-predicate positions. Examples (2-5) are illustrative:

#### (2) Vafsi

bæ-væsd man aw-e
punct-jumped(3sG) middle water-obl

'he jumped into the water'

(Stilo 2005: 231, transcription and gloss slightly modified)

#### (3) Dialect of Sivand

čāder-et-ābe-deba meveil-2sg.clc-obj.mark(?)subj-give.prs(2sg) to me'give me your veil!'(Le Coq 1979: 89, Sentence 16)

#### (4) Delvari, southwest Iran

sova va-mi-gard-om delvar tomorrow PRET-IMPRF-return-1sg Delvar 'Tomorrow I will return to Dalvar.' (Bušehr, Haig and Nemati 2013)

#### (5) Māzanderani

pārsāl zemestān biy-ārd-bim zirxāne=mān last.year winter INDIC-bring.PST-COP.PST.1PL basement=POSS.1PL 'last year in winter we took (them) to our basement'

(Shokri et al. 2013: 45)

To date there has been very little theoretical and empirical research on this topic, but I hope this talk will stimulate further interest, especially with regard to the following:

- To what extent has areal influence shaped the OVX profile of Kurdish (Haig 2014), and to what extent can parallels be found with the better-researched African type?
- Is the pragmatically-driven Persian type diachronically related to the grammaticalized OVX order of Kurdish, and if so, what is the directionality of change?

• Is the evident preference for GOAL arguments in post-predicate position a signature trait of Iranian, or does it reflect a universal trend?

#### References

- Adibifar, Shirin. 2016. Persian. In Haig, G. and S. Schnell (eds.) *Multi-CAST* [online at https://lac.uni-koeln.de/en/multicast-persian/].
- Dabir-Moghaddam, Mohammad. 2001. Word order typology of Iranian languages. *International Journal of Humanities* 8(2): 17–23.
- Frommer, Paul. 1981. *Post-verbal phenomena in colloquial Persian syntax*. PhD thesis, University of Southern California.
- Güldemann, Tom. 2008. The Macro-Sudan belt. In Heine, Bernd and Derek Nurse (eds.). *A Linguistic Geography of Africa*, 151–185. Cambridge: CUP.
- Gündoğdu, Songül. 2017. Goal arguments across Kurmanji dialects. Presentation at *NACIL 1*, Stony Brook.
- Haig, Geoffrey. 2014. Verb-Goal (VG) word order in Kurdish and Neo-Aramaic: typological and areal considerations. In Khan, Geoffrey and L. Napiorkowska (eds.), *Neo-Aramaic and its linguistic context*, 407-425. Piscataway, NJ: Gorgias.
- Haig, Geoffrey. 2017. The interaction of OV/VO with adpositional type in the Mesopotamian transition zone. Paper at the *Workshop OV to VO, VO to OV: Word order change from an areal perspective*, Bielefeld, 23.06.2017.
- Haig, Geoffrey and F. Nemati. 2013. "Clitics at the Syntax-pragmatics Interface: The Case of Delvari Pronominal Enclitics." Paper held at ICIL5. [online] http://bamling-research.de/data/2013-icil5/ presentations/
- Lecoq, Pierre. 1979. Le Dialect de Sivand. Reichert: Wiesbaden.
- Stilo, Donald. L. 2005. "Iranian as Buffer Zone between the Universal Typologies of Turkic and Semitic." In Éva Ágnes Csató, Bo Isaksson and Carina Jahani (eds.), *Linguistic Convergence and Areal Diffusion: Case studies from Iranian, Semitic and Turkic*, 35–63. London: Routledge.
- Shokri, Guiti, Carina Jahani and Hossein Barani. 2013. When tradition meets modernity. Five life stories from the Galesh community in Ziarat, Golestan, Iran. Uppsala: Uppsala Universitet.
- Taleghani, Azita. 2008. *Modality, aspect and negation in Persian*. Amsterdam: Benjamins.

#### Iranian studies and speech research: Achievements and problems

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Speech research presumes: speech production and perception; speech analysis and synthesis; speech recognition; speech pathology; speech processing; laboratory phonetics and phonology. This kind of knowledge can be applied to every language. Relatively good level of speech science in Russia caused investigations in Iranian languages. In last decades this kind of study became very popular in Iran too. 95% of works are dedicated to Persian, but there are some remarkable achievements in other languages as well.

The instrumental study of Pashto speech has begun in 1969. At that time most of the Soviet speech scientists were under the influence of the Leningrad Phonological School. They developed a theory that all Indo-European languages have dynamic stress, i.e. the stressed syllable is marked by higher intensity. In the West phoneticians were influenced by the works of D. Bolinger who in early 50s found the pitch accent in English. In other words, the stressed syllable in English is marked by higher tone (pitch). After that Western phoneticians found pitch accent in other languages, while in the Soviet Union the linguists were discovering dynamic stress. Pashto was no exception in that respect. Mrs. Sharifa Asmati studied Pashto stress at our Institute and after some experiments came to the conclusion that the word stress was dynamic.

In 2000–2001 I have led a set of experiments and saw no proof of dynamic stress in Pashto. My study showed that the word stress in Pashto is quantative, i.e. the stressed syllable is marked by duration. In 2009-2012 Ms. Tarbeeva N. made her experimental studies of Pashto stress and rhythmics. She also found the importance of duration for Pashto stress, but intensity was important too. So in her opinion Pashto stress was quantative-dynamic. She also modelled the rhythmics of Pashto speech by synthesis by rule.

In 2006 18 researchers from USC Viterbi School of Engineering (LA) made a multilingual Speech to Speech Translation System. Persian and Pashto Automatic speech recognition engine was a part of that project. Another Text-to-Speech project that included Dari and Pashto, was fulfilled in 2014 by Michael H. Lee.

The first linguist to study Ossetic experimentally in 1948–1950 was Dr. Sokolova V. Her book was published in 1953. She came to the conclusion that in the more archaic Digor vocalism there is an opposition of  $long \leftrightarrow short$ 

vowels, while in younger Iron system **strong** vowels are opposed to the **weak** ones. She also showed a collection of kymograms of Ossetic consonants.

Another problem is characteristic for the Soviet-Russian Iranian studies and is not observed in Western phonetic research. It is the question of so called double-focused fricatives. P. Ladefoged and I. Maddieson called them "multiply-articulated fricatives" and consider them to be unlikely to exist. But V. Sokolova was one the first iranianists to introduce the double-focused fricatives into the speech research. Every Iranian language, she describes, contains at least 2 double-focused fricatives –  $[\S]$ ,  $[\S]$ . She uses her description of Iron double-focused fricatives to show the difference in the articulation regarding their previous state described by A. Sjögren and Vs. Miller 70 years before. In our opinion there are no double-focused fricatives in Iranian languages at all (in Ossetic as well). That was proved by radiography at least for Persian and Tajik. Speech researcn in Ossetia continued and in 2009-2016 Dzakhova V., Parsieva L., Gatsalova L. and Andieva M. published a series of articles on Ossetic vowels, consonants and intonation.

Tradition of describing Pamirian languages has started about a century ago. Many books have been written by Pamirian native speakers like M. Fayzov and Sh. Yusufbekov. Still most phonetical references are made to (Sokolova V. Essays on phonetics of Iranian languages, v. II, Ossetic, Yaghnobi, Pamirian languages, 1953), where she began to study the vowels' duration. She found that word stress influenced the vowels' length.

Our studies of Sarikoli word stress showed that it is quantative (p=0,033). It caused the lengthening of the vowel by 20%. First instrumental analysis was done on Ishkashimi vowels and consonants by T. Pakhalina in 1959. She published some palatograms of the Ishkashimi consonants. But the most important experimental study in this field was the dissertation of S. Sheshenin "Ishkashimi consonants" (2011). He made a very thorough investigation of spectral properties of the consonants and described their acoustic features. In 1953 Sokolova V. studied vowels' duration in Shughni. She proved that long vowels opposed the short ones. Short vowels were approximately 2 times shorter than the long ones in identical phonetic positions.

In the same book V. Sokolova shows us the duration of Vakhi vowels in various phonetic positions. She also demonstrates the palatograms of Vakhi consonants. In 1975 T. Pakhalina continued her study on vowels' duration. She used another classification of vowels and their phonetical positions. But the main result was very similar: long vowels are opposed by the short ones. Our studies of Vakhi (including Pamirian, Pakistani and Chinese variants) in 2012 showed that its word stress is multicomponent: duration, pitch and intensity turned out to be very significant to mark the stressed syllable. In 2017 3 Iraqi authors A. Al-Talabani, Z. Abdul, A. Ameen have developed an automatic Kurdish dialect recognition system using one-dimensional Local Binary Pat-

terns (LBP) feature. The acquired data involved in this study were 3 Kurdish dialects (Sorani, Badini and Hawrami) with 3 neighboring languages (Arabic, Persian, Turkish). They proposed a new method to interpret the closeness of the Kurdish dialects and their neighboring languages using confusion matrix and a non-metric multi-dimensional visualization technique. Now they can cluster the Kurdish dialects and separate them from the neighboring languages.

In 2008 a Russian forensic system that can identify Talysh accent in Russian speech has been built. In 1997 V. Yefimov published Parachi vowels' formants.

In 1974 Pierre Lecoq stated that the word stress in Ābyānei language was dynamic (marked by intensity; accent d'intensité). In 2009 V. Ivanov and L. Dodykhudoeva came to the conclusion that it is quantative and intensity seems to play no significant role in marking the stressed syllable. Our research on Gavruni allowed to correct the vowel system chart. In Kerman vernacular word stress is quantative (marked by duration). In Yazd word stress is multicomponential (quantative-dynamic-tonal). In Mazandarani word stress was described as dynamic, while we found that it is tonal. In Gilaki previously word stress was described as purely dynamic. My analysis showed that it is 2-componential: tonal-dynamic. In Tajik and Persian word stress is quantative, in Tajik – tonal.

Speech research on different Iranian languages is quite uneven: most of the studies were done in the field of Persian (ca 100 authors). Some of the works include other 19 languages: Abyanei, Baluchi, Dari, Gavruni, Gilaki, Ishkashimi, Kurdish, Mazandarani, Ossetic, Parachi, Pashto, Rushani, Sarikoli, Shughni, Tajik, Talysh, Tat, Tati, Vakhi. But most of the Iranian languages and dialects are still to be studied. Primarily we must verify their vocalism, consonantism, word stress and main types of intonation (narrative, interrogative, imperative).

# **Oral presentations**

#### Deriving split ergativity in Iranian languages

#### Faruk Akkus (University of Pennsylvania)

**Introduction.** This paper investigates the double-oblique phenomenon in Iranian languages focusing on Kurdish and unstudied Zazaki varieties, thus it makes typological and theoretical contributions. I argue that the case-split and the double-oblique pattern are triggered by the added structure in past transitive clauses, extending Laka's (2006) account of bi-absolutive constructions (also Coon and Preminger 2012) to the opposite end of the case spectrum. The paper also shows that the term 'oblique' is non-uniform, and it covers cases ranging from structural accusative case to both inert and lexical inherent cases.

**Previous Studies.** Baker and Atlamaz (B&A, 2014) and Karimi (2013) claim that there is something defective about the past stems in Kurdish. For Karimi (2013), this accounts for the agreement asymmetries between present and past clauses via defective intervention. For B&A (2014), it gives rise to the passive-like nature of past stems, which they use to motivate a phase account:  $v_{\text{PAST}}$  is not a phase head, whereas  $v_{\text{PRES}}$  is. Moreover, on the basis of participles, nominalizations, quasi-passives, B&A suggest that the passive nature in the past stem allow only the theme argument to be expressed. Thus, in the past tense, they posit AuxP, between agreement bearing head F and vP, to make the clause active. Consider the structures in (1).

(1) a. 
$$\left[ _{TP} T \left[ _{AuxP} Subj \oslash_{have} \left[ _{FP} F \left[ _{vP} v_{PAST} \left[ _{vP} Obj Verb \right] \right] \right] \right] \right]$$
 (Past)

b.  $[_{TP} T [_{FP} F [_{\nu P} Subj \nu_{_{PRES}} (+phase) [_{VP} Obj Verb ]]]$  (Present) B&A (2014) also invoke Marantz's (1991) case hierarchy and incorporate Chomsky's agreement-assigned case, located on the hierarchy after the dependent case and before the unmarked case.

- (2) Lexical case » Dependent case » Agreement-assigned case » Unmarked case » Default case
- (2) is used to argue that in the past tense of a canonical ergative language, e.g. Adıyaman Kurdish, the object gets agreement-assigned case from  $F^0$ , and the subject receives the unmarked oblique case (3a). In a double-oblique language like Muş Kurdish, the subject receives the dependent case and the object gets the unmarked case (3b). Intransitive subjects get agreement-assigned direct

case in both dialects (3c). After introducing novel data from Zazaki dialects of Mutki (MZ) and Goraf (GZ), I argue that this mechanism is problematic on both theoretical and empirical grounds.

- (3) a. mi ti di-yi
  I.OBL you.DIR saw.2sG
  'I saw you (sg).'
  - b. min te dit I.OBL you.OBL saw.3sG 'I saw you (sg).'
  - c. I.DIR fell-1sG// ez ket-im 'I fell down.'

**Data and Analysis.** Data from MZ (first documented by Öpengin and Anuk (Ö&A, 2015, 2016)) and Goraf dialect show that there are remarkable changes also in the alignment system of Zazaki if one considers the full range of its dialects, unlike the common assumption in the literature (e.g. Todd 2002, Paul 1998, 2009, Haig 2008, Selcan 1998, Aygen 2010). (4) illustrates the case and agreement alignment in past clauses of these two dialects. I leave out the alignment paradigm in present tense since it is like other dialects.

		Case marking		
		DIR	OBL	Agreement
(4)	Unaccusative	$S_1$	$S_2$	$S_1$
	Unergative	_	S, A, O	_
	Transitive			
	2nd person (Mutki)	S, A	O	S
	2nd person (Goraf)	S, A	O	S,A

- (4) updates the empirical generalizations in  $\bullet\&A$  (2015, 2016), whose description contains only the  $S_2$  for MZ, as in (5a). I show that in fact  $S_1$  is also possible with a crucial bearing for the verbal agreement (5b) (The same alternation is observed in past nonverbal clauses, e.g. mi neveş bi versus e neveş bie 'I was sick').
- (5) a. mi ginê-y er 1sg.obl fall.past-3sg ground 'I fell down.' (Ö&A, 2016: 6a)
  - b. e gin-a erd 1SG.DIR fall.PAST-1SG ground 'I fell down.'

The paper also introduces data from Goraf which is identical to MZ in relevant aspects, but differs in 2nd person. The Goraf dialect can be characterized as having acquired a nominative-accusative pattern as the dominant contact-language Turkish. MZ, on the other hand, still maintains the ergative alignment.

The data also raise issues for B&A's (2014) case-competition approach. The dependent case approach could explain the oblique case on the subjects of unergatives and transitives, but the issue persists for unaccusative subjects. Given that there is only one NP in the unaccusative structure, the case-competition for *dependent* oblique would not apply. The unusual behavior of 2nd person in MZ is also not expected by the same approach. Without further qualifications, the case-hierarchy in (2) expects the direct case on an argument NP to be the result of F agreeing with that NP. As such, the verb should display agreement with the sole NP in question, which holds for intransitive subjects (6a). However, it fails to capture the mismatch between the morphological form of the case on an argumental NP and the agreement on the verb, as in (6b). Such sentences show that not every direct-case bearing NP derives from the Agree operation.

- (6) a. ti şiy kêye? 2SG.DIR go.PAST.2SG house 'Did you go home?'
  - b. *ti mi çarsu-ye di nî-dî*2sg.dir İ.obl market-at in saw-3sg
    'I saw you at the market.'

Due to these considerations (among others to be discussed), I will interpret the passive-nature towards a restriction on the number of arguments allowed in a domain given the bifurcated clause, not necessarily as a requirement for the realization of the theme argument. As such a boundary for the calculus of arguments gets to be in effect (7a), in line with crosslinguistic approach to bi-absolutive constructions. The other component I use is the inherent case approach.

(7) a. 
$$[_{TP} T [_{AuxP} Subj \emptyset_{have} (([_{vP} v_{PAST} [_{VP} Obj Verb ]]]])$$
 (Past)

b. 
$$[_{TP} T [_{VP} Subj v_{PRES} [_{VP} Obj Verb ]]]$$
 (Present)

Given these tools, the alignment patterns and the observed variations fall through: In the past transitive clause of Adıyaman Kurdish, O receives direct case through agreement with T, whereas the subject is assigned inert inherent case (McGinnis 1998) in Spec, AuxP. Note that since inert case-marked, the subject is not an intervener for the agreement between T and a lower DP. Moving on to Muş Kurdish, which exhibits the double-oblique pattern, the subject again receives the inert case. For the object, the passivization test shows that

it is the structural accusative case since the promoted object receives direct case (8b) (Woolford 2006), thus it will be assigned accusative case from the v.

- (8) a. te min kuşt 2sg.obl 1sg.obl killed-3sg 'You killed me.'
  - b. *ez hat-im kuşt-in*1sg.DIR came-1sg killed-NMLZ
    'I was killed.'

In the case of Mutki Zazaki transitive clauses, the subjects also get inert case. Crucially, although it also manifests the double-oblique pattern, the object behaves differently in passivization. The promoted object retains its case (9b), unlike its counterpart in Muş Kurdish, which indicates that it is assigned lexical inherent case, not structural accusative case.

- (9) a. ti mı güe
  2SG.DIR 1SG.OBL like.3SG
  'You liked me a lot.'
  - b. mı güe 1sg.obl like.3sg 'I was liked.'

**Conclusion.** I have argued that a clausal bifurcation due to the added structure in the past transitive clauses (with an inherent case approach) explains the split ergativity and the double-oblique pattern in Iranian languages. I also argue for a split of the term 'oblique' similar to the absolutive (Legate 2006).

# Linguistic diversity and language contact in Chahar Mahal va Bakhtiari Province, Iran

Erik Anonby (Carleton University, University of Bamberg) Mortaza Taheri-Ardali (Shahrekord University)

Chahar Mahal va Bakhtiari Province (hereafter CB) is nestled in the heights of the Zagros Range in western Iran, with the mountains opening down onto the Iranian Plateau. The topography is reflected in the linguistic situation: Bakhtiari dominates the mountainous areas that cover most of the province, and three other main linguistic groups are intermingled in the lower areas of the north-east: Rural Chārmahāli and Urban Chārmahāli (both Southwestern Iranic but distinct from one another), and Turkic.

Until 1973, CB was part of Esfahan Province and (perhaps because of this) the languages of this area were overlooked in the great surveys of the early 20th century (e.g., Mann 1910, Zhukovsky 1923, Christensen 1930/1935). Existing language maps of the area (TAVO 1988, Irancarto 2012, Izady 2013, etc.) have been general and incomplete, and contradict one another.

In this paper, we address this gap in the literature through a first geographically representative overview of linguistic diversity in CB, and look at recurrent themes in the patterning of contact among the languages spoken there. Our study is based on fieldwork conducted across CB by a multi-university research team, in the context of the Atlas of the Languages of Iran programme (ALI 2016), between May 2015 and the present.

The first step in our research was to conduct initial assessments of language and dialect distribution for each of the province's some 800 cities and villages. In addition to gaining a geographically detailed picture of the language situation, we collected notes regarding internal diversity among the province's dialects. We also observed that Persian, which is spoken by immigrants to the province, is emerging as a mother tongue among in all of the other language communities (see Taheri-Ardali 2015 for a detailed case study). Coupling this data with demographic and geographic information from publically available sources (ISC 2011, NCC 2015), we then completed a point-based language distribution map for the entire province (http://iranatlas.net/index.html?module=module.landistribution.chahar\_mahal\_va\_bakhtiari).

Guided by this initial distribution map and notes on communities and districts with higher levels of linguistic diversity, we were able to choose 30 research sites for language data collection from across the nine *shahrestān* (provincial sub-districts). Sites were selected to highlight situations of three types: 1) homogeneous rural dialects in communities with a single dominant language; 2) bi- or multilingual communities with a balanced proportion of speakers, in order to explore patterns of language contact and change; and 3) district centres, which we projected would show the greatest impact of Persian on speaker proportions and linguistic structures. We have then undertaken language data collection across the research sites using questionnaires (available from http://carleton.ca/iran/questionnaires/) with lexicon, phonology and morpho-syntax components. Audio- and video-recorded texts are integral to the research process.

A thorough analysis of all materials, and especially processing of the texts, will take several months to finalize. However, based on a global examination of the questionnaires, we have already observed several major patterns in the data:

- First, as might be expected, many isoglosses follow purported boundaries between languages. Lexicon and morphosyntax (with some important exceptions; see below) are for the most part determined by language, and there are a few language-defined phonological features as well. The clearest example of this is the distribution of the softened "Zagros d" [ð] (see Windfuhr 1998 and Anonby 2014:48), which is found in all 12 Bakhtiari varieties where we collected data but consistently absent in neighbouring Rural and Urban Chārmahāli dialects and Turkic.
- However, there are many cases of language-internal divergence: both with other dialects of same or similar languages in neighbouring provinces, and for the languages as spoken within CB. As a case in point, some of the stable phonemic distinctions in Bakhtiari of Khuzestan for example, contrast between voiceless and voiced alveolar obstruents  $\dot{g}$  [G] ~ [B] and q [q], and long high vowels  $\bar{\iota}$   $\bar{u}$  vs long mid-high ("majhul") vowels  $\bar{e}$   $\bar{o}$  (Anonby 2014) is limited to the first members of the respective sets in Bakhtiari of CB. In this way, Bakhtiari of CB shows similarity with New Persian and typical Southwestern dialects of the Iranian Plateau (Borjian 2015) rather than Bakhtiari elsewhere. As we explore in a separate paper (Anonby, Taheri-Ardali, Haig and Schreiber, submitted), the Turkic dialects of CB are similarly distinctive when compared to Qashqai of Fars Province and Turkic varieties of Esfahan Province.
- Significant language-internal diversity is also attested within the province. Although none of the Persian and Chārmahāli varieties stud-

ied exhibit front rounded vowels ö and ü, there are some Turkic and Bakhtiari dialects that display this feature. Variability among the Turkic languages can be attributed to contact-induced "delabialisation" (see Bulut 2014 for Turkic elsewhere in Iran); but for Bakhtiari, the question arises: is this phenomenon related to a generalized process of vowel fronting in Iranic (Okati et al. 2010,), or has proximity to Turkic facilitated the change, as in Kurmanji Kurdish (Haig and Öpengin, in press)?

- Among other examples in morphosyntax, there is an unusual grammatical construction shared by several varieties of Bakhtiari and nearby Turkic of Boldaji, but not reported in other dialects of the two languages

   a reduplicated progressive verbal form: B. *irahdom berom* (Ardal, Lordegān) / *iram berom* (Dastenā) 'I was going'; T. *gedirdem gedem* 'I was going'.
- Areal diffusion of vocabulary is also evident, with characteristic items of all languages in the province including galb 'heart', jigar/jiyar 'liver', dumād/dumā 'bridegroom', māhi 'fish', rubā/ruvah 'fox' šāxa 'branch'. Languages other than Persian include the further items sobā 'tomorrow' and passobā 'day after tomorrow', and often the doublet pahr~barg 'leaf' as well.

After providing further examples of language contact effects in the languages of CB, our paper concludes with a reflection of the field research methods employed. Specifically, we provide suggestions to improve the language data questionnaire, and emphasize the indispensability of texts as a complement to elicited data. Finally, we open discussion on how the data will be disseminated in the open-access forum supplied by the Atlas of the Languages of Iran.

#### References

- ALI 2016 = Anonby, E. et al. (eds.). 2016. *Atlas of the languages of Iran*. Ottawa (http://iranatlas.net).
- Anonby, E. and A. Asadi. 2014. *Bakhtiari studies: Phonology, text, lexicon.* Uppsala.
- Anonby, E., M. Taheri-Ardali, L. Schreiber and G. Haig. (submitted). Turkic-Iranic contact in Chahar Mahal va Bakhtiari Province of Iran.
- Borjian, H. 2015. *Ganijeh-ye guyeshhā-ye Irāni: Ostān-e Esfahān* [A treasury of Iranian dialects: Esfahan Province]. Tehran.
- Bulut, C. 2014. Turkic varieties in west Iran and Iraq: Representatives of a South Oghuz dialect group? In: H. Stein (ed.), *Turkic in Iran: Past and present*, 15–99. Wiesbaden.

- Bulut, C. 2016. Convergence and variation in the Turkic varieties of Iran: Examples from Qashqâ'î. In: É. Á. Csató, L. Johanson, A. Róna-Tas and B. Utas (eds.), *Turks and Iranians: Interactions in language and history*, 235–282. Wiesbaden.
- Christensen, A. 1930/1935. *Contributions à la dialectologie iranienne*. Copenhagen.
- Haig, G. and E. Öpengin. In press. Kurmanji Kurdish in Turkey: Structure, varieties and status. In: C. Bulut (ed.), *The minority languages of Turkey*. Wiesbaden.
- Irancarto 2012 = Hourcade, B. et al. 2012. *Irancarto*. Paris and Tehran (http://www.irancarto.cnrs.fr).
- ISC 2011 = Iranian Statistics Centre. 2011. *Sālnāmeh-ye Āmār-e Irān* [Iran Statistical Annals]. Tehran (http://www.amar.org.ir).
- Izady, M. 2013. Linguistic composition of Iran. http://gulf2000.columbia. edu/images/maps/Iran\_Languages\_lg.png.
- Mann, O. 1910. Die Mundarten der Lur Stämme im südwestlichen Persien.
  Berlin.
- NCC 2015 = National Cartographic Center. 2015. *Pāygāh-e melli-ye nāmhā-ye joghrāfiāi-ye Irān* [National database of geographic names of Iran]. Tehran (http://gndb.ncc.org.ir).
- Okati, F., E. Anonby, A. A. Ahangar and C. Jahani. 2010. Natural processes in Sistani Persian of Iran. *Iranian Journal of Applied Language Studies* 2 (1), 93–120.
- Taheri-Ardali, M. 2015. Guyesh-e Bakhtiāri: Zavāl ya baghā? (Negāhi digar be "Kārbord-e guyesh-e Bakhtiāri: Guneh-ye Ardal") [Bakhtiari dialect: Decline or survival? (A re-examination of "Usage of Bakhtiari dialect: Variant of Ardal")]. *Proceedings the International Conference on Linguistic Heritage*. Tehran.
- TAVO 1988 = Orywal, E. (ed.). 1988. Tübinger Atlas des Vorderen Orients, A XIII. Wiesbaden.
- Windfuhr, G. 1988. Baktīārī tribe: The Baktīārī dialect. *Encyclopædia Iranica* 3.5, 553-560. New York (http://www.iranicaonline.org/articles/baktiari-tribe#pt2).

Zhukovskij, V. A. (ed. S. F. Ol'denburg). 1923. *Materialy dlja izučenija persidskix narečij*, pt. 3: *Narečie baxtijarov chexar- leng i xeftleng* [Materials for the study of Persian dialects, part 3: The dialect of the Čahārlang and Haftlang Bakhtiari]. Petrograd.

#### The emergence of pharyngeal sounds in Kurmanji Kurdish

Daniel Barry (City University of New York)

A noteworthy feature of a small number of Western Iranian languages, including Kurmanji Kurdish, is the presence of contrastive pharyngeal sounds in inherited vocabulary. These pharyngeals are considered by most linguists to be the result of contact with Arabic, coming into the language through Arabic loan vocabulary (Haig and Matras 2002). However, as I demonstrate here, the distribution of the majority of contrastive pharyngeals in inherited Iranian vocabulary in Kurmanji Kurdish strongly suggests a phonetic explanation for their distribution modulated by familiarity with the phonetics of Arabic pharyngeals. A newly-discovered sound pattern is the association of what are arguably pharyngealized vowels in Kurmanji with pre-existing labial consonants and constraints determined by Kurmanji Kurdish phonotactics. Following Blevins (2017), this effect is modeled in terms of Arabic pharyngeals as external "perceptual magnets" for native speakers of Kurdish who have had extensive exposure to Arabic sound patterns.

#### The numerative in Ossetic

Oleg Belyaev (Lomonosov Moscow State University)

Like several other Middle and New Iranian languages, including Sogdian (Sims-Williams 1979), Pashto (ibid.: 341), Khwarezmian (Humbach 1989: 197), and Parachi (Morgenstierne 1929: 51), Ossetic possesses the typologically unusual feature of having specialized forms — numerative forms — used with numerals higher than 1. In Iron, this is morphologically expressed by using the genitive singular instead of the nominative; in other cases, standard singular endings are used. In Digor, the situation is more complex: the numerative nominative is still homonymous with the genitive singular, but the other cases employ specialized endings of pronominal origin, with the element -e(m)- between the stem and the case affix. The Iron and Digor paradigms are shown below for the noun  $b3\gamma$  'horse', alone and modified by the numeral avd 'seven':

	Iron		Digor	
	sg.	num.	sg.	num.
NOM	Ьзχ	avd bзҳ-ә	Ьзχ	avd bɜχ-i
GEN	ьзх-э	avd bзҳ-ә	Ьзχ-і	avd bзҳ-е-j
DAT	bзҳ-зn	avd bзҳ-зп	bзχ-зп	avd bзҳ-em-зn
ALL	Ьзχ-тз	avd bзх-тз	Ьзχ-тз	avd bзҳ-е-mз
ABL	Ьзχ-зј	avd bзҳ-зј	Ьзχ-зј	avd bзҳ-em-зj
IN	Ьзχ-ә	avd bзҳ-ә	Ьзχ-і	avd bзҳ-em-i
SUPER	bзҳ-əl	avd bзх-əl	bзх-bзl	avd bзх-е-bзl
EQU	bзχ-aw	avd bзҳ-aw	bзχ-aw	avd b3χ-e-jaw

Even though the numerative is a very typologically unusual feature, it has never been given a separate treatment in the literature on Ossetic. In this paper, I will discuss several synchronic properties of the numerative.

**1. Items triggering the numerative.** Apart from all numerals higher than one, there are other elements, all occupying the determiner slot of the noun phrase, that trigger the use of the numerative on the noun. These are the distributive quantifier *f3jn3* and, in Digor, *k'war* 'few; a group', e.g.: D. *f3jn3 B3W-e-m3* (DISTR village-NUM-ALL) 'to each village', D. *k'war anz-e-m3* (few year-NUM-ALL) 'in a few years'. Importantly, these occupy a different slot than numerals, as both elements can co-occur in one NP:

#### (1) Digor

```
3ma =wi alked3r f3jn3 fong l3g-i 3rba-rvet-3d
D. and you.ABL everyone DISTR five man-NUM.NOM
galawun-m3
PV-send-IMP.3SG
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'and may each of you send five persons to the castle...' (ODC)

2. Independent numerative inflection. In Digor, several words can also have numerative endings without having an accompanying noun. All numerals inflect in the numerative when they are nominalized, i.e. have no accompanying nouns, e.g.: fon3-em-3n 'to the five (people)'. The same concerns k'war 'few': k'w3r-em-3j 'from a few'. The quantifier f3jn3 is never used without a modifying noun and thus does not attach case endings, except for the directive and recessive forms f3jne-rd3m3 'towards all sides', f3jne-rdig3j 'from all sides', but these are not real case endings (Belyaev 2015). Other elements that inflect in the numerative in Digor are: inn3 'other', ber3 'many', 3gas 'all, whole', jewgur 'all', 3nk:3t 'all', 3nχw3c 'all'. Since the latter term is quite infrequent, this does not seem to be a fixed list, but rather a tendency for words of a single semantic field. The demonstrative manner adverbs at3 'in this way' and wot3 'thus', which do not generally inflect for case, have numerative ablative forms: at-em-3j 'in this way', wot-em-3j 'in that way'.

There is a curious correlation between the use of the numerative in the singular and plural formation. While consonant-final nouns inflecting in the numerative take the regular ending -t3 (e.g. 3g3s-t3 'whole (pl.)'), nouns ending in -3 take the ending -et3 instead of the expected -it3 or simply -t3 (e.g. inn-e-t3 'others', ber-e-t3 'many', also f3jn-e-t3 'all', although the latter does not have sg. oblique forms; see also at-e-t3 'in these ways' and wot-e-t3 'in those ways', from the abovementioned adverbs). While it has been suggested to link the -e- in the pl. of inn3 and ber3 to the pronominal nom. pl. m. ending \*-ai (Cheung 2002: 64–66), it seems that this may be a purely morphophonological correlation, as all nouns that have -et3 in the plural use numerative endings in the singular.

Since Iron has no full numerative paradigm, there are no words with regular numerative inflection, but vestiges remain, such as abl. *aft3-m-3j* 'in this way' from *aft3* 'thus'.

**3. The numerative and plural.** The numerative does not generally combine with the plural, as numerals and quantifiers are never used with plural nouns in Ossetic. However, there is one exception: *pluralia tantum* nouns. These behave differently in the two main dialects. In Iron, the expression of the numerative is blocked altogether, with plain plural forms used throughout: *binon-t3* 'family', *fonz binon-t3* 'five families'. In Digor, the numerative affix follows the plural affix: *fonz bijnon-t-i* 

'five families', *fonz bijnon-t-em-3n* 'to five families'. However, in Digor the plural case endings are identical with the case endings of nouns ending in *-3*. Therefore, we may be dealing with the reanalysis of *binont3* 'family' as a singular noun. Since there are few true *pluralia tantum* in Ossetic, no other reliable examples have been found.

**4. Syntactic features of the numerative.** There are no restrictions on the relative position of the head noun and the modifier that triggers the numerative. In particular, if one is separated from the other by an adjective, the noun still requires the numerative: I.  $fonz \check{s}aw b 3\chi - \vartheta$  'five black horses', D.  $fonz \check{s}aw b 3\chi - \vartheta$  'for the black horses'.

It has sometimes been suggested that the -i / -a in the nom. of the numerative is the same element as the genitive (Kim 2003). However, this contradicts the evidence of coordination. Both in Iron and Digor, if two or more nouns accompanied by a numeral are coordinated, and the case affix on the nonfinal conjuncts is suspended, the numerative resurfaces (Belyaev 2014):

#### (2) Iron

[3rt3 q3w-a 3m3 daww3 gorst]-m3 f3št-at3 a-rvašt-oj three village-NUM and two town-ALL letter-PL PV-send-PST.3PL "They sent letters to three villages and two towns."

#### (3) Digor

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[3rt3 B3W-i 3ma duww3 gorst]-e-m3 finst-it3
three village-NUM and two town-NUM-ALL letter-PL
a-rvist-onc3
PV-send-PST.3PL
(id.)
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These examples demonstrate that the numerative marker -ə / -i cannot be regarded as a case ending, neither nominative nor genitive. Rather, it should be viewed as a marker of its own separate inflectional category.

#### References

- Belyaev, O. 2014. Osetinskij kak jazyk s dvuxpadežnoj sistemoj: gruppovaja fleksija i drugie paradoksy padežnogo markirovanija [Ossetic as a two-case language: Group affixation and other paradoxes of case marking]. *Voprosy jazykoznanija* 6, 31–65.
- Belyaev, O. 2015. Decomposing word status: Words vs. affixes, heads vs. features. Presentation at *LFG 2015*, Tokyo.
- Cheung, J. 2002. Studies in the historical development of the Ossetic vocalism. Wiesbaden.

- Humbach, H. 1989. Choresmian. In: R. Schmitt (ed.), Compendium Linguarum Iranicarum, 193–203. Wiesbaden.
- Kim, R. 2003. On the historical phonology of Ossetic: the origin of the oblique case suffix. *Journal of the American Oriental Society* 123 (1), 43–72.
- Morgenstierne, G. 1929. Indo-Iranian Frontier Languages, I: Parachi and Ormuri. Oslo.
- Sims-Williams, N. 1979. On the plural and dual in Sogdian. *Bulletin of the School of Oriental, Asian and African Studies* 42 (2), 337–346.

# Gavruni modal verbs, impersonal constructions and locative prepositions

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Gavruni (also called Gabri or Zoroastrian Dari) is the language spoken by the Zoroastrians of Yazd; it was also the language of the Zoroastrians of Kerman until it gradually fell out of use among them during the second part of the twentieth century. It has been studied since 1853 (Berésine 1853) classified as a Central (Western) dialect by Windfuhr 1989. Recent work on this language includes a book by Gholami and Farahmand (2016) on the Kermāni dialect.

Apart from very peculiar lexical features, and a rich dialectalisation (around 30 dialects and subdialects, cf Gholami 2016), the grammar of the Gavruni language is of particular interest for Iranian studies, especially its verb system. In the present study I will focus on showing how Gavruni modals work and compare them with modals in other Western Iranian languages. The corpora used will be the Niknam corpus (recorded in Yazd in the 1990s) and my own corpus recorded in Yazd in 2015, refered to as Bernard, along with the paradigms presented in Mazdapour 1995.

**Modal verbs in Gavruni.** Instead of using conjugated verbs to express obligation (I should), wishes, (I want), ability (I can) and possibility (I may) Gavruni uses frozen 3rd person preterite forms of modal verbs, for example:

- (1)  $m\varepsilon$  me='o(t) unig-e

  I 1sG=want sit-1sG

  'I want to sit.' (Mazdapour 1995 p. 128)
- (2) mɔ mo='ɔ(t) unig-im we 1PL=want sit-1PL 'We want to sit.' (Mazdapour 1995 p. 128)
- (3) yɔra om=ve'ɔ vɔ(te)
  INTERR 1sG=shall say.PRET
  'Should I say (that)?' (Mazdapour 1995 p. 135)

(4) agεr kotak de=āo piš or-ε
if hitting 2sG=want near=2sG.CL bring.PRs-1sG
 'If you want a blow, I'll bring (you) near (me)'
 (BERNARD)

Malchukov and Ogawa 2011 (p.50) write "[...] different varieties of impersonal constructions reflect the loss of functional subject properties (such as definiteness, topicality and agentivity)". I will try to see how this applies to Gavruni modals, especially by comparing this modal marking with that of surrounding languages, for instance the "Kermani dialects" as described by Lecoq 2002.

I will present sentences with different modals, then discuss their origin: they are impersonal constructions, originating from a dative or other case-marked construction, something similar to "to you there is a want", with "you" being a non-canonical subject (cf Siwierska 2011). After the loss of case marking in Gavruni, the "non-canonality" is only reflected by the fact that the formal subject is represented by a pro-clitic (originally an oblique case form) in modal constructions.

Other impersonal constructions in Gavruni. Other impersonal constructions in Gavruni include (5) and (6), lit. 'it was my good', meaning 'I liked it', 'you liked it', with an original sense of 'it was good (to me)'. This is comparable to the New Persian use of the (originally) 3rd singular  $s\bar{a}yad$  and  $b\bar{a}yad$ :  $s\bar{a}yad$  means 'perhaps' and is diachronically the 3rd sg. of the present stem of the verb  $s\bar{a}yestan$  "to be able, to be worthy", and  $b\bar{a}yad$  means "must" as in  $b\bar{a}yad$  beravam "I must go", and is the 3rd pers. sg. of the present stem of  $b\bar{a}yestan$  "shall, must".

Another example of impersonal construction in Gavrouni is represented by the sentence (7) where "to remember" can be expressed by the phrase "Subj. + *vir* + "to be" conjugated". The verb *viroðvun* (or *viroðvun*) is a defective verb (see (8)), only conjugated in the past, even with a present meaning, which might explain why the impersonal construction can be used as an alternative.

- (5) xaš mε bowell 1sg be.pret.3sg'I liked it.'(Bernard)
- (6) xaš tā bo
  well 2sg be.pret.3sg
  'You liked it.' (Bernard)
- (7) mε vir na-ha1sg memory Neg-be.3sg'I don't remember.' (ΝΙΚΝΑΜ, ΒΕRNARD)

(8)  $m\varepsilon$  me=vira1sg 1sg=remember.pst "I remember (literally "I remembered")" (Bernard)

In conclusion I will analyse the rise of these constructions, and open up research possibilities in the comparison of these types of constructions in different related languages.

#### References

Berésine, I. N. 1853. Recherches sur les Dialectes persans. Casan.

- Gholami, S. 2016. Zoroastrians of Iran vi. linguistic documentation. In: *Encyclopædia Iranica*, online edition (http://www.iranicaonline.org/articles/Zoroastrians-in-Iran-06).
- Gholami, S. and A. Farahmand. 2016. Zoroastrian Dari (Behdini). In: G. Kerman. Estudios Iranios y Turanios.
- Lecoq, P. 2002. Recherches sur les dialectes kermaniens (Iran Central).

  Louvain/Paris.
- Malchukov, A. and A. Ogawa. 2011. Towards a typology of impersonal constructions. In: A. Malchukov and A. Siwierska (eds.). *Impersonal Constructions, a Cross-linguistic Perspective*. Amsterdam.
- Mazdapour, K. 1995. Vāženāmeye guyeše Behdināne šahre Yazd. Vol. 1. Tehran.
- Siewierska, A. 2011. Overlap and complementarity in reference impersonals: *Man* constructions vs. third person plural impersonals in the languages of Europe. In: A. Malchukov and A. Siewierska (eds.). *Impersonal Constructions, a Cross-linguistic Perspective*. Amsterdam.
- Windfuhr, G. 1989. Behdinān Dialect. In: *Encyclopædia Iranica*, Vol. 4, Fasc.1, 105–108. New York.

### Peculiar Alignments in Modern Iranian Languages

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This paper deals with the alignment peculiarities of a number of Modern Iranian Languages. For instance, as a unique peculiarity of Birjandi (of two generations ago), Khaniki, and Ferdowsi (called Tun in historical Persian texts) which are three varieties of the Southwestern Iranian languages spoken in Khorasan, the S and A of verbs formed with present stems are encoded as verbal agreement suffixes whereas the S and A of verbs formed with past stems are encoded via pronominal clitics. Therefore, we observe agreement systems which are merely tense-sensitive contrary to the majority of Iranian languages whose split agreement systems are sensitive to tense and transitivity. As an illustration, we may compare examples (1) and (2) from Ferdowsi dialect/ the dialect of Ferdows. In examples (1), S is realized as the verbal agreement suffix, but in examples (2), S is encoded as a pronominal enclitic.

- (1) a. mæ-r-æINCOMPL-go-2PL
  'You go.'
  - b. mæ-r-ænINCOMPL-go-3PL
    'They go.'
- (2) a. be-ræf=tæ
  compl-went=2pl.obl
  'You went.'
  - b. be-ræf=šæ

    COMPL-went=3PL.OBL

    'They went.'

To these patterns, I can add the pattern which is exemplified in (3) in which S is expressed as a full personal pronoun and the verb takes no agreement marking.

- (3) a. *šoma be-ræf* you compl-went 'You went.'
  - b. *uno be-ræf* they compl-went 'They went.'

These observations are part of a number of other alignment peculiarities (including peculiar case and agreement markings) in NW and SW Iranian languages of Iran. The data will be reported from my own corpus and from a number of published studies (books and articles) in Iran. Furthermore, the implications of the findings for typology as well as language change and language shift will be discussed.

### Noun phrase vs. compound: Morphosyntactic process in the Shughnani language

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This paper examines a morphosyntactic phenomenon in Shughnani: transition of specific noun phrase constructions into the category of compounds.

We study one particular structure — C+C (syntactic units of the type: N + N, N / ADJ + N / ADJ, N + N / V / PTCP) — where syntactic relations are expressed by positional contiguity.

We examine the morphosyntactic status of this construction in Shughnani. We also focus on particularity in the order of words in the noun phrase, in the case where one noun is functioning as a pre-modifier or as a noun adjunct, and precedes the main element of the noun phrase. We further examine the status of each element of this construction separately.

Such constructions were documented in the Shughnani language as early as 1915, when the influence of literary Tajik was not as strong as today (Zarubin 1960; Karamshoev 1988). These constructions are usually represented by an optional noun that modifies another noun without any additional modifiers (Alekseev 1973: 132, 134). A similar construction has been found in the Tajik language, especially in its South-Eastern dialects. Moreover, in literary Tajik language, such noun phrases generally correspond to <code>ezāfe</code> constructions, in which the key word is marked by <code>ezāfe</code>.

The data for this paper were a number of examples taken from Shughnani written sources and from our own recordings. One such example of particular interest and importance, where both Shughnani and Tajik terms were juxtaposed, was found in a Tajik newspaper. In this example, a noun phrase is presented in the Tajik text as an  $ez\bar{a}fe$  construction: doirazani-izanon (where the latter -i is  $ez\bar{a}fe$ ) 'performance on the tambourine made by women; women's performance on the tambourine'. In Shughnani, this is represented by a semantic equivalent -a phraseological unit - expressed by a noun phrase with positional contiguity:  $kaxoy d\bar{a}f$ . (This closely resembles a type of kenning, a kind of paraphrase, in the form of a compound employed through rhetorical language). It can be argued that in contemporary Shughnani, a certain transitional situation can be observed, in which this particular noun phrase shifts into the category of a compound, i.e.  $kaxoyd\bar{a}f$ .

With this process in mind, we focus on several issues:

- 1. In one of our texts, the above-mentioned Shughnani term is associated directly with Tajik by the author. In this case, the reader is encouraged to perceive the term as a noun phrase, primarily as a noun phrase with appositive relationship. In addition, the relationship between the juxtaposed elements of this kind of phrase is determined by the semantics of the elements themselves. The relationship is also determined by the lack of auxiliary words or markers of any kind, which is the source of homonymy.
- 2. In addition, in a number of contemporary Shughnani texts, this construct is often used as a compound. Consequently, it shifts from the category of noun phrases into that of compound words consisting of two nominal forms, where the determinative *kaxoy* which can function as a noun ('woman') or adjective ('feminine') precedes the base-word. However, it should be remembered that for the adjective 'feminine', Shughnani has a special form: *kaxoi*.

This kind of usage is supported by a number of similar examples. One more instance is the composite:  $zibod\bar{a}f$  (lit.: 'subsequent-daf') 'the name of the melody, rhythm', where the first part zibo can function as a noun and as an adjective, as well as an adverb: 'back, rear'. Based on these forms of usage, the basic meaning of the term  $d\bar{a}f$  'percussion instrument, tambourine' in Shughnani is complemented by an additional sense, i.e. 'melody, rhythm, played on  $d\bar{a}f$ '.

A similar juxtaposition of twofold and even threefold composites may be observed in Tajik. In this language, examples consist in a combination of nominal stems, but mostly a combination of nouns with adjectives and verbs or verbal derivatives (N / ADJ + N and N + V), and are complicated additionally by affixes. See for example, Tajik doiraxabar 'invitation to a festivity (by the means of playing tambourine)'.

In addition, we discuss some particular types of noun phrases with auxiliary elements and/or  $ez\bar{a}fe$  construction in different Pamiri languages, as well as in Tajik and its dialects in Tajikistan.

We also observe morphosyntactic differences in the distribution of noun phrase usage (appositive and the ezāfe construction), observed in the speech of Pamiri language speakers of different generations, in particular speakers of Shughnani and Tajik of Badakhshan. We examine how such constructs were formed, based on the interaction of Pamiri languages with Western Iranian Tajik, as well as their mutual influence.

#### References

Alekseyev, M. E. 1973. Noun phrase in the Shughnani language // *The peoples of Asia and Africa* 6 (in Russian).

- Zarubin, I. I. 1960. *Shughnani texts and vocabulary*. Moscow, Leningrad (in Russian).
- Ivanov, V. B. 2014. The classification of forms registered in South-Western Iranian languages. *Voprosy jazykoznanija* 2 (in Russian).
- Karamshoev, D. K. 1988–1999: *Shughnani-Russian dictionary*. Moscow (in Russian).
- Tajik-Russian Dictionary. 2006: Comp. V.P. Kapranov, A. Otakhonova, H. Raufov, M. Rakhimov, A. Khalilov, S.D. Holmatova, N. Holmuhammadov, R. Holmuminova, V. Sharifov / Ed. D. Saymiddinov, S.D. Holmatova, S. Karimov. Dushanbe (in Russian).

### Grammatical peculiarities of the participles in contemporary Ossetic

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The participle is a specific verb form which represents the process, not pure but complicated by the adjectival semantics.

There are five types of participles in Modern Ossetic: forms in  $-\alpha g$ , forms in -t / -d, forms in -inag, forms in  $-g\alpha$ , forms in -on. Among the most striking features of the Ossetic participles in the system of the Ossetian language one can highlight the existence of the future participles, unmarked voice and tense in the Ossetic participles (for example, voice and tense of the Russian participles are expressed by suffixes), and absence of adjectival grammar categories (gender, which the Ossetian language lacks completely, and case and number as well).

The presence or absence of a prefix defines whether the Ossetic participle belongs to a perfective or imperfective aspect but this rule does not apply to the forms in -d -t, which are always perfective, regardless of the prefix. On this ground one can state that the meaning of the perfective aspect and the past tense form is expressed by their suffix.

The tense category of the Ossetian participles is rather peculiar, for example, in comparison with the Russian participles, in which tense is expressed by suffixes, and where the imperfective form exists both in the present and in the past (e.g., igrayuschiy - igravshiy 'playing'). Affixation in the Ossetic language converts the participle into perfective and it takes the past tense form, so imperfective participles are always marked by the present tense while the perfective participles take the past tense form (except for participles in -d/-t). This feature makes the Ossetian participles similar to the Russian converbs in which the categories of aspect and tense coincide, owing to the subordination of the tense category to aspect.

The voice meaning of the Ossetic participles is defined by transitivity or intransitivity of the verb rather than affixation. Unlike Russian participles the Ossetic participles have no distinct formal voice markers. At this point some participles are characterized by voice ambiguity to a greater extent (e.g future participles in -inag and forms in -gw), others to a lesser extent (e.g. participles in -wg, active participles as a rule and participles in -d/-t, more often characterized by the passive voice meaning).

The range of the expressed aspect meanings of the Ossetian participles differs from that of Russian. The Ossetian imperfective participles have no generalized actual meaning, which is the result of the tense and aspect categories coincidence in them. The specific potential meaning is emphasized in the future participles expressing the semantics of the future action advisability.

The participles in Ossetian are much less regular than in Russian. Obviously therefore the Aktionsart meanings are rather limited, they express principally resultative Aktionsart (since Aktionsart range of the Ossetic verb is rather extensive, though not so varied as the Russian one).

Ossetic participles fall into the periphery of the dependent taxis, but to the far distant periphery than in Russian due to their irregularity and alien to them attributive function. The peculiarity of the dependent taxis constructions with participles in Ossetic is a lesser range of the expressed taxis meanings as well as the absence of causative-consecutive relations between basic and subordinate predication.

Participles in Ossetic often lexicalize to create adjectives, nouns and even converbs as well as words of stative category. They can act in the imperative function while forming compound verbal form but meanwhile they express much more categorical command opposed to imperative itself. Participles in  $-\alpha g$ , -inag, -d/-t tend to nominalization and adjectivization to a greater extent. Participles in  $-g\alpha$  tend to homonymy with converbs. The future participles in -inag come into ambiguity with stative words.

The Ossetic participles have no full forms, but short forms may function both as predicate and attribute as well, though attributive function is less typical for them. Participles in  $-g\alpha$  are the least grammatically defined (they are often called "participle-converbs") alongside with participles in -inag and rarely occurring form in -on. Participles in -d/-t and  $-\alpha g$  are more grammatically defined.

# Impersonal constructions in language-biographical conversations and related text types in Kurmanji

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This study approaches the interface phenomenon of impersonality in three types of Kurmanji data: (1) a growing corpus of conversations recorded in a multilingual diasporic context, (2) a small corpus of thematically related literary prose, (3) a small corpus of thematically related academic publications. The conversations thematically range between language-biographical narratives and sociolinguistic expert interviews. The literary texts cover issues of a multilingual historical heritage; the academic texts discuss historical and sociolinguistic topics.

The theoretical framework comprises discussions of functional concepts such as subject- and agenthood (Siewierska 2008a, b), actant representation (Johanson 1990), agent demotion (Blevins 2003), and specificity (Johanson 2006), cross-linguistic models of impersonality (Malchukov and Siewierska 2011, Malchukov and Ogawa 2011), inventories of constructions in Iranian (Jahani and Viberg 2010, Jahani, Axenov, Delforooz and Nourzaei 2010, Jahani, Delforooz and Nourzaei 2012), as well as discourse- and text-based approaches (Akar 2011, Berman 2011, Hohenstein 2012, Kameyama 2012).

Communicatively, impersonal constructions can fulfill functions of emotional mitigation, as in autobiographic narratives, or objectivisation and abstraction, as in academic registers. The present paper investigates the continuum between the two. While bordering on phenomena of 'generalisation' or 'vagueness', which also feature nonspecific agents, 'impersonalisation' is characterised by the specificity of the surrounding situation. At the morphosyntactic level, construction types are often shared, resulting in interesting overlap in the data. This is the point at which the discourse-empirical perspective becomes crucial: which forms are used in connection with which specific communicative purpose, text/discourse constellation and register?

Methodologically, the study proceeds along two routes, linking two theoretical approaches: (1) it draws on the typological and Iranianist literature on impersonality in identifying morphosyntactic constructions for a closer contextual look. (2) It uses discourse-analytical criteria to identify larger passages of text or conversation for a closer morphosyntactic investigation.

A preliminary inventory of forms can be given as follows: (1) lexical nouns, auch as *mirov* or *însan* 'man, human' (example 1), (2) impersonal passives, (3) second-person impersonals (example 2), (4) third-person-plural impersonals, (5) abstract nominals in subject position.

- (1) Mirov dikare îdîa bike ku bêhtirî man ASP-be.able.prs-3sg claim sBJ-make.prs-3sg comp more-ezf milyonek Kurdî li welatên Yekîtiya Ewrûpayê million-one Kurd prp country-ezf.pl Union-ezf.f Europe-obl.f dimînin.
  - ASP-stay.PRS-PL
  - 'One can claim that more than a million Kurds live in the countries of the European Union.' (Weqfa Navnetewî ya Jinên Azad 2007: 66)
- (2) Tubi Kurdî biaxivî. şerm e, ayib e. Tu 2sg.rct prp Kurdish sbj-speak.prs-2sg shame is disgrace is 2sg.rct Tirkî biaxivî. bas bibûvî. tuPRP Turkish sbj-speak.prs-2sg 2sg.rct good sbj-be.pst-2sg 'If you speak Kurdish, it's a shame, it's a disgrace. If you speak Turkish, you might be fine.' (MEMO 001 Ser).

#### References

- Akar, D. 2011. Impersonalization and agency: The linguistic strategies of distancing the self from traumas. In: E. Erguvanlı Taylan and B. Rona (eds.). *Puzzles of Language. Essays in Honour of Karl Zimmer*, 187–200. Wiesbaden.
- Berman, R. A. 2011. Revisiting impersonal constructions in Modern Hebrew: Discourse- based perspectives. In: A. Siewierska and A. Malchukov (eds.) *Impersonal constructions: A cross-linguistic perspective*, 232–357. Amsterdam.
- Blevins, J. P. 2003. Passives and impersonals. *Journal of Linguistics* 39, 473–520.
- Hohenstein, C. 2012. 'Vergegenständlichung im Wissen': Ein Typ unpersönlicher Konstruktionen im Japanischen. In: A. Redder, A. Ogawa and S. Kameyama (eds.) "Unpersönliche Konstruktionen": Prädikatsformen funktional und sprachübergreifend betrachtet, 11–31. München.
- Jahani, C., S. Axenov, B. B. Delforooz and M. Nourzaei. 2010. Impersonal Constructions in Balochi. In: C. Jahani and Å. Viberg (eds.). *Impersonal constructions*. Special Issue, *Orientalia Suecana* 59, 168–182.
- Jahani, C. and Å. Viberg (eds.). 2010. Impersonal constructions. Special Issue, Orientalia Suecana 59.

- Jahani, C., B. B. Delforooz and M. Nourzaei. 2012. Non-canonical subjects in Balochi. In: B. Aghaei and M. R. Ghanoonparvar (eds.) Iranian Languages and Culture. Essays in Honor of Gernot Ludwig Windfuhr, 196–218. Costa Mesa.
- Johanson, L. 1990. Subjektlose Sätze im Türkischen. In: B. Brendemoen (ed.). *Altaica Olsoensica*, 199–218. Oslo.
- Johanson, L. 2006. Two approaches to specificity. In: L. Kulikov, A. Malchukov and P. de Swart (eds.). Case, valency and transitivity, 225–247. Amsterdam.
- Kameyama, S. 2012. "Unpersönliche Konstruktionen" in deutschen und japanischen populärwissenschaftlichen Zeitungstexten. In: A. Redder, A. Ogawa and S. Kameyama (eds.). "Unpersönliche Konstruktionen": Prädikatsformen funktional und sprachübergreifend betrachtet, 64–78. München.
- Malchukov, A. L. and A. Ogawa. 2011. Towards a typology of impersonal constructions: A semantic approach. In: A. Siewierska and A. Malchukov (eds.). *Impersonal constructions: A cross-linguistic perspective*, 19–56. Amsterdam.
- Malchukov, A. L. and A. Siewierska. 2011. Introduction. In: A. Siewierska and A. Malchukov (eds.) *Impersonal constructions: A cross-linguistic perspective*, 1–18. Amsterdam.
- Siewierska, Anna. 2008a. Introduction: Impersonalization from a subject-centred vs. agent- centred perspective. *Transactions of the Philological Society* 106 (2), 1–23.
- Siewierska, Anna. 2008b. Ways of impersonalizing: Pronominal vs. verbal strategies. In: M. De Los Ángeles Gómez Gonzáles, J. L. Mackenzie and E. M. Gonzáles Álvarez (eds.). *Current trends in contrastive linguistics: Functional and cognitive perspectives*, 3–26. Amsterdam.

### Clitic position(s) in Shughni: Beyond Wackernagel

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At first sight the position of enclitics in Shughni (Southeast Iranian, Pamiri, Tajikistan) is very straightforward. This follows from examples like the following one where the verbal enclitic agreement past tense marker *-yat* cliticizes to the first stressed word in the clause:

### (1) Shughni

ča=yat na sut? how=2sg.subj.agr.pst neg go.pst 'How could you not go?'

(Barie 2009: 13)

Such examples demonstrate a prototypical Wackernagel placement of enclitics, see, e.g. (Spencer, Luís 2012) for an overview. This accords well with a recent overview of Shugni syntax: "Copula and verbal markers tend to occur after the first stressed word of the clause" (Dodykhudoyeva 2005: 444), similarly (Barie 2009: 13-5), or after the first constituent (Edelman, Dodykhudoyeva 2009: 806). But already in the following example we see that Shughni attests a clause internal position of clitics inclause, which cannot be reduced to the Wackernagel one after the first stressed word:

## (2) Shughni

γāc či=yi rimod? girl who=3sg.subj.agr.pst send.pst 'Who did the girl send?'

(Barie 2009: 13)

In this example the enclitic -yi is placed not after the first stressed word, but after the wh-word, even though the wh-word is not the first stressed word in the clause: Shughni is a wh-in-situ language (Barie 2009).

Cases like this could be interpreted as clitics cliticizing to the narrow focus and not to the first stressed word as is attested in many genetically unrelated languages of the Caucasus, which is illustrated by Talyshi, an Iranian language spoken in the Caucasus:

## (3) Talyshi

 $m \cancel{x} + s  

'Will you be <u>home</u> tomorrow?' (or somewhere else?)

(Stilo 2008: 383)

### (4) Talyshi

 $m \cancel{x} + i \cancel{x} = i \cancel{x}$   $k \cancel{x} = d \cancel{x}$  k

'Will you be home tomorrow?' (instead of today?) (Stilo 2008: 383)

Here the enclitic agreement marker -š cliticizes not to the first word, but to narrow focus, which may be first in the clause as in (4), but not necessarily, as (3) shows. Hock (2013) proposed to account for Shughni data along these lines.

However Shughni distribution cannot be readily equated with the Caucasian one as is shown by the following example where the wh-word does not host the enclitic:

### (5) Shughni

Zebo=yi  $\check{ciz}$   $x\bar{u}d?$  Zebo=2sg.subj.agr.pst what eat.pst

'What did Zebo eat?' (Barie 2009: 13)

Questions like this are not described as echo-questions or D-linked. Besides, Erschler (2009, 2010) reports that enclitics can occur lower than the second position not only on narrow focus, even though he does not provide information structure analysis of his data. Cf. the following pair of examples (6)–(7) where enclitic =ta as in the regular second position after the first stressed word in (6) and follows the second constituent of the clause in (7):

## (6) Shughni

Mādīna=ta ar ruz garðā pīz Madina=нAв every day bread cook.psт.f 'Madina bakes bread every day.' (Ег

(Erschler 2009: ex. 3a)

## (7) Shughni

Mādīna ar ruz=ta garða pīz Madina every day=HAB bread cook.PST.F

'Madina bakes bread every day.' (Erschler 2009: ex. 3b)

In this light I am aware of no comprehensive up-to-date account of the distribution of clitics in Shughni. Neither Barie (2009) nor Erschler (2009, 2010) offer complete descriptive data, including corpus counts (most crucially estimating frequency of exx. (2), (5) and (7)) and elicitation, not to mention comprehensive explanation of all the data. The talk proposes to fill in these gaps and to lay out the system of cliticization in Shughni, as well as to discuss its cross-linguistic significance, particularly against the background of better-studied related Iranian languages which attest an apparently similar clitic system, such as Pashto (Tegey 1977; Roberts 2000) or Wakhi (Hughes 2011).

#### References

- Barie, A. 2009. Exploring Cleft Sentences and Other Aspects of Shughni Syntax. MA Thesis, University of Kentucky.
- Dodychudoyeva, L. 2005. The Shughni language. In: *Languages of the Russian Federation and Adjacent Countries*, 435–446. Moscow: Nauka, 2005. In Russian.
- Edelman, D. (Joy) and L. Dodykhudoyeva. 2009. Shughni. In: G. Windfuhr (ed.). *The Iranian Languages*, 787–824. London: Routledge.
- Erschler, D. 2009. Modularity and 2P Clitics: Arguments from Digor Ossetic. In: *Proceedings of IATL 25*, http://linguistics.huji.ac.il/IATL/25/Erschler.pdf.
- Erschler, D. 2010. On optionality in grammar: The case of East Iranian almost Wackernagel clitics. Paper presented at the *Syntax of the World's Languages* IV, Lyon, France.
- Hock, H. 2013. Backernagel is Wackernagel Lite. On the "P-minus 2" clitics of Santali. *Lingua Posnaniensis* LV (2), 67–74.
- Hughes, T. 2011. Wakhi Agreement Clitics. MA thesis, University of Florida.
- Roberts, T. 2000. *Clitics and Agreement*. Ph.D. thesis, Massachusetts Institute of Technology.
- Spencer, A. and A. Luís. 2012. *Clitics: An introduction*. Cambridge: Cambridge University Press.
- Stilo, D. 2008. Two sets of mobile verbal person agreement markers in the Northern Talyshi language. In: S. Karimi, D. Stylo, V. Samiian (eds.). Aspects of Iranian Linguistics, 363–390. Newcastle: Cambridge Scholars Publishing.
- Tegey, H. 1997. *The grammar of clitics: Evidence from Pashto and other languages.* Ph.D. thesis, University of Illinois at Urbana-Champaign.

### Conditions on object agreement in Karini dialect of Tati

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Languages that have object agreement often place complex conditions on what sorts of objects can trigger agreement. These conditions involve a wide range of factors including specificity, animacy, person, and number (Comrie 1981, Croft 1990, Woolford 2001)). It is known from the typological literature that the features associated with object agreement cross-linguistically are those at the high end of one or more of the following hierarchies, often referred to collectively as the animacy or topicality hierarchy (Givon 1976, Comrie 1981, Croft 1988, 1990):

Hierarchies relevant to object agreement:

Specificity Hierarchy specific > nonspecific

Animacy Hierarchy human > animate > inanimate

Number Hierarchy singular > plural

Person Hierarchy first person > second person > third person

Object agreement takes place in some dialects of the Tati language group. The factors involved in object agreement are straightforward in some of these dialects and include only a few criteria. However, it is much more complicated in some other dialects. Karini dialect of Tâti is one of the dialects in the second group. This dialect is spoken in Khalkhâl area in Ardebil province in Iran and is one of the most conservative dialects of Tâti. It follows tense sensitive alignment in that the verb agrees with the agent in present transitive clauses and with the object in past transitive ones. The focus of this study is past transitive clauses and the conditions in which the verb agrees with the object in these clauses.

There is a split in the animacy hierarchy in that the verb agrees with all human objects in person, number, and gender. For example:

(1) hasan=em bâva.
PN.M=1SG bring.PST.3SG.M
'I brought Hasan.'

- (2) PN.F=1sG-F.DIR bring.PST-3sG.F// maryam=em-a bâvard-â. 'I brought Maryam.'
- (3) *a kelley-a jeGl-ân=em hoštan nan bâvard-ende.* that little-F girl-PL=1SG own POST:with bring.PST-3PL 'I brought those little girls with me.'

However, there are some rules regarding non-human nouns. There is a split in the number hierarchy in that non-human objects which are singular and refer to a particular entity are considered feminine and in past transitive clauses, the verb happens in singular feminine third person form to agree with the object. For example:

- (4) hasan-e čeman bez-a bebard-â.
  PN.M-OBL 1SG.POSS goat-F take.PST-3SG.F
  'Hasan took my goat.'
- (5) karg-emân zer em pill-a xâ-ya bekard-â. hen-1PL yesterday this big-OBL egg-F.DIR lay.PST-3SG.F 'Our hen laid this big egg yesterday.'

There is a split in the specificity hierarchy in that non-human objects which refer to a general or uncountable entity or are modified by the numeral two or above, are considered masculine and in past transitive clauses, the verb occurs in masculine form to agree with them.

- (6) karg=emân zer so gela xâ bek-a. hen=1pl yesterday 3 cl egg lay.pst-3sg.m 'Our hen laid three eggs yesterday.'
- (7) ave huštan do gela guv-e čâresane râ beb-a.

  3SG.OBL OWN 2 CL COW-PL.DIR grazing POST:to take.PST.3SG.M

  'He took his two cows to grazing.'
- (8) ahmad-e zera šav sur, nân box-a.

  PN.M-OBL yesterday night dinner bread eat.PST-3SG.M

  'Ahmad ate bread as dinner last night.'
- (9) em šet=em sard âkak-e. this milk=1sg cold make.pst-3sg.m 'I cooled this milk'

There is a split in the number and specificity hierarchies in that with plural and definite objects, the verb occurs in plural form to agree with it in number but no distinction in gender is made here. For example:

- (10) ahmad-e zera šav nân=eš boxard-ende.
  PN.M-OBL yesterday night bread=3sG eat.PST-3PL
  'Ahmad ate the bread (Pl) last night.'
- (11) hasan-e zer taynâi gaw=eš čâresane râ
  PN.M-OBL yesterday alone cow.PL=3SG grazing POST:to
  bard-ende.
  take.PST-3PL

'Hasan took his cows to grazing by himself.'

Exceptions to the above rules are few. For example bar 'door' and ka 'house' are treated as masculine even when a single one is meant (Yar-Shater 2009: 556).

To conclude, all objects in Karini trigger verb agreement in past transitive clauses. However, the rules concerning gender of the noun govern verbobject agreement.

#### References

Comrie, B. 1981. Language universals and linguistic typology. Oxford.

- Croft, W. 1988. Agreement vs case marking and direct objects. In: M. Barlow and C. Ferguson (eds.). Agreement in Natural Language: Approaches, Theories, Descriptions. Chicago.
- Croft, W. 1990. Typology and universals. Cambridge.
- Givon, T. 1976. Topic, pronoun and grammatical agreement. In: C. Li (ed.). *Subject and Topic.* New York.
- Woolford, E. 2001. Conditions on Object Agreement in Ruwund (Bantu). In: E. Benedicto (ed.) The UMass Volume on Indigenous Languages. Amherst, MA.
- Yar-Shater, E. 2009. Four Tati Sub-Dialects. In: W. Sunderman, A. Hintze and F. de Blois (eds.). *Exegisti monumenta. Festschrift in Hounour of Nicholas Sims-Williams*, 551–570. Wiesbaden.

# A morphological outlier? The verb paradigm in the Northern Talyshi of Azerbaijan

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One of the well-known hallmarks of the Iranian morphological system is the division of the verb paradigm into two formal zones, each employing its own inflectional stem to which further prefixes and suffixes may be added. This phenomenon, attributable to developments dating back to the early Middle Iranian period, is 'a remarkably stable characteristic, one of the deepest traces of genetic unity across the family' (Haig 2008: 9f.), and as seen in Modern Persian (e.g. *mikonam* 'I am doing' vs. *mikardam* 'I was doing'), in a given paradigm the choice of one stem or the other may be the only difference between two existing verb forms.

In view of this, it is striking to observe that recent treatments of Northern Talyshi (NT), an Iranian language of the south-eastern Caucasus, generally describe it as having more or less abandoned this two-stem system. Stilo (2008: 372) claims that the so-called *present* and *past* stems have fallen together 'in all but about eight rather common verbs' in the NT varieties of the Republic of Azerbaijan, and he is followed in this by Paul (2011: 104), who treats it as a distinguishing feature of NT in opposition to the other Talyshi varieties of Iran, where verbs retain both of their inherited stems. Meanwhile, NT is the only modern West Iranian language in the index to Cheung (2007) whose verbs are listed by one stem only.

According to Schulze (2000: 45), this development in NT, so unusual for an Iranian variety, is associated with a more general trend towards agglutination seen in the language, whereby 'the lexical domain becomes structurally (and formally) separated from the inflectional domain'. It is natural to link such a move in the direction of agglutinative morphological structure with the external circumstances of NT: a geographical outlier in Iranian, its speakers are practically all bilingual in Azerbaijani, which like Turkish can be taken as a canonical example of an agglutinative language. Stilo (1981) and Windfuhr (1987) have both argued that the Talyshi varieties in general are taking on Turkic features as a result of Azerbaijani influence; indeed, Paul (2011: 328) proposes that the counterbalancing superstrate influence of Persian should be recognized as a factor in the *survival* of the conservative two-stem system

in Central and Southern Talyshi, implicitly supposing that otherwise they too might have followed the same trajectory as has been described for NT.

However, in this paper I want to suggest that in NT itself the Iranian twostem system is by no means as moribund as has been claimed - and that the assumption that NT verb forms can generally be analysed as sequences of invariant morphemes, in accordance with the agglutinative ideal, is liable to lead to mistaken interpretations of their internal structure. Several of the glosses provided by Schulze for the sample text which accompanies his grammatical description of NT illustrate this point. To give one instance, his analysis of the preterite form nəznaše 'he could not' identifies the -a- as an isolable unit signalling perfect tense (rather it is part of zna-, one of the two stem allomorphs employed in the paradigm of zone 'know, be able', which thus remains a two-stem verb, cf. Kave 2013: 203-7); and apparently as a result of examples such as this, his p. 24 gives a general morphological template for the negative of the perfect which is never in fact instantiated in NT. This paper will thus aim to show how a more representative profile of NT verb morphology must involve features which are unfavourable for a concatenative approach: concretely, I will illustrate some of the points at issue by considering the difficulties which arise in the process of glossing the published text collection which is currently the focus of my own research (Əboszodə et al. 2004). It emerges that most verbs in NT retain two stems, whose distribution over the paradigm is fundamentally an 'arbitrary', morphology-internal question and which can interact in unpredictable ways with adjacent material - typological characteristics which are far from exotic in the context of Indo-European inflectional morphology.

#### References

Əboszodə, F. F. et al. (eds.). 2004. Nəğılon [Tales]. Baku.

Cheung, J. 2007. Etymological Dictionary of the Iranian Verb. Leiden.

Haig, G. L. J. 2008. Alignment Change in Iranian Languages. Berlin.

Kaye, S. J. 2013. Morphomic stems in the Northern Talyshi verb: synchrony and diachrony. In: S. Cruschina, M. Maiden and J. C. Smith (eds.). The Boundaries of Pure Morphology: Diachronic and Synchronic Perspectives, 181–208. Oxford.

Paul, D. 2011. A Comparative Dialectal Description of Iranian Taleshi. PhD thesis, University of Manchester.

Schulze, W. 2000. Northern Talysh. Munich.

Stilo, D. L. 1981. The Tati language group in the sociolinguistic context of northwestern Iran and Transcaucasia. *Iranian Studies* 14, 137–87.

- Stilo, D. L. 2008. Two sets of mobile verbal person agreement markers in the Northern Talyshi language. In: S. Karimi, D. L. Stilo and V. Samiian (eds.). *Aspects of Iranian Linguistics*, 363–390. Newcastle.
- Windfuhr, G. L. 1987. Convergence: Iranian Talyshi and Turkic Azeri. In: E. Bashir, M. M. Deshpande and P. E. Hook (eds.). *Select Papers from SALA-7*, 385–406. Bloomington, IN.

# The Khuzistan dialect of Early Judaeo-Persian and modern dialects of the region

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Some of the texts of Early Judaeo-Persian (EJP), i.e. Early New Persian in Hebrew script, are attributed to Khuzistan (cf. Lazard 1968, Shaked 2009). They show several features less found in other EJP dialects. As far as verbal forms are concerned, these features include a synthetic passive (e.g. <code>kw'nyhd'[it]</code> was called', cf. Salemann 1900: 272), and a particular periphrastic perfect tense form, which is not attested in Middle Persian or other varieties of Persian (cf. Paul 2008 for a discussion of this and its role in the transition of past tense forms from Middle Persian to New Persian).

It seems to consist of the past stem, i.e. the earlier past participle, with past endings and third person singular forms of the verb 'to be', e.g. *r'cy bwdwm hyst* and *s'lt'n kyrdwm bwd* ('I have been content', present perfect, and 'I had asked you', past perfect, cf. Paul 2013: 132 and 134). However, less frequently a form with the younger past participle in -*a* is likewise to be found, e.g. in the Ahwaz Law Report: 'yst'd' hyst (Paul 2013: 132). This state is in contrast with the predominant or exclusive use of this latter pattern in other New Persian varieties (cf. Modern New Persian *gofte-am* etc.), but it appears in several Southwest and Northwest Iranian varieties.

Perhaps not too surprisingly, modern dialects of Khuzistan and adjacent regions, especially the Luri dialects and Dezfuli-Shushtari, show most similarities with this variety of EJP: a suffix related to the synthetic passive mentioned above (Mackinnon 2015: "Dezfūlī  $\bar{o}$  rēzehes zemì 'water spilled on the ground."), and similar present and past perfect formations (goft-om a (Dezfuli),  $a\bar{s}n\bar{\iota}d$ -om  $b\bar{\iota}$  (Bakhtiari), cf. MacKinnon 2011).

Focusing on the verbal system, this paper will examine the relationship of the EJP of Khuzistan and modern Southwest Iranian varieties of this region in comparison to data from other EJP dialects.

#### References

Lazard, G. 1968. La Dialectologie du Judéo-Persan. In: *Studies in Bibliography and Booklore* 8 (2–4), 77–98.

- MacKinnon, C. 2011. Lori language i. Lori dialects. In: *Encyclopædia Iranica*, online edition (http://www.iranicaonline.org/articles/lori-dialects).
- MacKinnon, C. 2015. DezfūLī AND Šūštarī dialects. In: *Encyclopædia Iranica*, online edition (http://www.iranicaonline.org/articles/dezful-03-dialect.
- Paul, L. 2008. Remarks on the evolution of the New Persian system of past tenses. In: Sh. Shaked and A. Netzer (eds.). *Irano-Judaica: studies relating to Jewish contacts with Persian culture throughout the ages.* Vol. 6, 185–195. Jerusalem.
- Paul, L. 2013. A Grammar of Early Judaeo-Persian. Wiesbaden.
- Salemann, C. 1900. Zum mittelpersischen Passiv. *Izvěstija imperatorskoj akademii nauk''*, 13 (3), 269–276.
- Shaked, Sh. 2009. Classification of linguistic features in Early Judeo-Persian texts. In: W. Sundermann, A. Hintze and F. de Blois (eds.). *Exegisti monumenta: Festschrift in Honour of Nicholas Sims-Williams*, 449–461. Wiesbaden.

### Issues of microvariation: Crossdialectal differences in modal marking

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**I.** Besides noteworthy instances of inherited verbal inflexion such as the optative in  $-\bar{a}$ - in Balochi and Judaeo-Tat, marking of TAM categories in New Western Iranian is mostly achieved by way of particles / verbal prefixes. Of central importance is the prefix bi- / be-, which is grammaticalised in New Persian as a marker of the subjunctive and the imperative. These forms differ from the indicative in that the latter is marked with  $m\bar{\imath}$ -, but the inflexion is essentially identical.

A prefix bi- is also employed in many other Ir. languages, though to very different degrees. Building on the works by Jügel (2013a, 2013b), who studies the distribution of the particle / prefix "BE" in Ir. languages – its macro-variation, as it were –, this presentation looks at some instances of "micro-variation". We will discuss how the (non-)uses of TAM prefixes are subject to important differences among varieties of some Ir. minority languages, viz. Balochi, Bashkardi and Caucasian Tat. We will argue that this micro-variation may be due to external influence which has manifested itself in different ways on individual dialects.

II. Grammaticalised verbal prefixes (and auxiliaries) are clearly an innovation in Iranian, compensating for the loss of (or replacing) inherited verbal morphology indicating TAM categories by way of suffixes and endings. In Middle Persian and Parthian, the use of the (unprefixed) indicative present in future and modal nuances is well established. The addition of a particle  $h\bar{e}b$  yields an imperative. At the same time, the inherited subjunctive can also be used in future function.

Most varieties of Tat have zero preverbation to mark modality, the only exceptions common to all dialects being the verbs meaning 'to go', 'to come' and 'to bring', where the preverb bə- adds a nuance of 'out of' that historically existed in Persian (cf. Lenepveu-Hotz 2014:210). One variety where modal marking stands out is Muslim Tat of the Upper Şirvan region, where the preverb in question, in addition to the three verbs above, can attach to several

telic verbs: 'to cut', 'to obtain', 'to squeeze', 'to fit' (intr.), 'to beat', 'to sit', 'to fall asleep', 'to fall', 'to pass (intr.)', 'to put'.

Similarly, the morpheme be-/bi-in Bashkardi and Balochi is applied to the historically zero-marked imperatives and subjunctives. However, this marking is subject to dialectal variation, and bi-seems to have become used more systematically only during the 20th century. Recalling the Middle Persian system, marking with bi- is most systematic for the imperative. The early grammars of Balochi do not note a subjunctive present as a separate category (thus Mockler 1877:53 for Coastal Balochi and Grierson 1921:354-356 for Balochi in general); for Eastern Balochi (spoken in comparatively remote areas of Pakistan), Dames (1881:25f.) states that the present has "indefinite", present, future and subjunctive values, and is also found with bi-, without making a categorical distinction between forms with and without bi-. Still today, Eastern Balochi employs bi-much less systematically than other dialects, and bi-is particularly rarely used in conditional sentences (Bashir 2008:75-77). This agrees with the observation by Mockler (1877:60f.) that the subjunctive past without bi-(past stem +  $-\bar{e}n$ -) is used for the irrealis (1) while bi-PST- $\bar{e}n$ has modal values.

(1) Eastern Balochi

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ar{q}hīar{a} kar{a}r ku	heta-ar{e} DEM.OBL work do.pst -sbj2 'If he had worked' (Bashir 2008: 76, adapted)
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- III. In all three languages, a preverb bə- / be- also marks (systematically or sporadically) non- modal categories, notably the imperfective in Tat (Gr-junberg 1963:68–69), and the progressive in Southern Bashkardi (Skjærvø 1989:846–848) (2).
- (2) Southern Bashkardi be-kerd-'en=īn

IPFV-do.PST-INF=COP.1SG

'I am doing.' (Skjærvø 1989:846-848)

- **IV.** A closer look can further indicate that the homomorphy of the preverbs is coincidental. In Upper Şirvan Tat, while some of the verbs that take the prefix in the subjunctive have the same form of the prefix as in the progressive, others show an assimilation (only) in the former, which is all the more remarkable as the prefix is stressed (marked by 'in (3)–(4)).
- (3) Upper Şirvan Tat
  - a. bä-kɨst-'an=um IPFV-kill.PST-INF=1SG 'I kill / am killing'

- b. 'bi-kiš=um sbjv-kill.prs=1sg '(that) I kill'
- (4) Upper Şirvan Tat
  - a. ba-burr-'an=umIPFV-cut.PST-INF=1SG'I cut / am cutting'
  - b. 'bu-bur=um SBJV-cut.PRS=1SG '(that) I cut'

The imperative/subjunctive prefix in Tat is probably an influence of past contact with the continuum of Talyshi and related Northwestern Iranian languages, spoken nowadays between the Jalilabad District of Azerbaijan and the Markazi Province of Iran, which themselves must have acquired them due to contact with Persian. The progressive prefix, on the other hand, is likely to be the result of a grammaticalisation of the preposition  $b\ddot{a}$  (variants ba, ba) 'to', also used in for marking objects. In the progressive, the construction ceased to be perceived as an inessive prepositional group and acquired regular verbal negation, preceding the prefix (5a) while the negation still is on the copula in Bashkardi (5b). The seeming identity with the subjunctive prefix could then be due to Persian influence, where be- is the only comparable element.

- (5) a. Upper Şirvan Tat

  na-bi-xost-an=um

  NEG-IPFV-want.PST-INF=1SG

  'I don't want (that).'
  - b. Southern Bashkardi

    be-vuot ne=hen

    PROG-come.PST NEG=COP3PL

    'They don't come.'

#### References

Bashir, E. 2008. Some transitional features of Eastern Balochi: An areal and diachronic perspective. In: C. Jahani, A. Korn and P. Titus (eds.). *The Baloch and Others. Linguistic, historical and socio-political perspectives on pluralism in Balochistan*, 45–82. Wiesbaden.

Dames, M. L. 1881. A sketch of the Northern Balochi language. Extra number of the *Journal of the Asiatic Society of Bengal*.

- Geiger, W. 1901. Die Sprache der Balütschen. In: W. Geiger and E. Kuhn (eds.). *Grundriss der iranischen Philologie* 1 (2), 231–248, 417–423. Straßburg.
- Grierson, G. A. 1921. Balochī. Linguistic Survey of India 10, 327-451.
- Grjunberg, A. 1963. Jazyk severoazerbajdžanskix tatov. Moscow and Leningrad.
- Lenepveu-Hotz, A. 2014. L'évolution du système verbal persan (Xe-XVIe siècles). Leuven.
- Jügel, T. 2013a. Die Verbalpartikel BE im Neuiranischen. *Indogermanische Forschungen* 118, 299–319.
- Jügel, T. 2013b. The Verbal Particle BE in Middle Persian. *Münchener Studien zur Sprachwissenschaft* 67, 29–56.
- Mockler, E. 1877. A Grammar of the Baloochee Language, as it is spoken in Makrān (ancient Gedrosia) in the Persi-Arabic and Roman characters. London.
- Skjærvø, P. O. 1989. Baškardi. Encyclopædia Iranica, Vol. 3, pp. 846–850.

# The Iranian words for 'witness' and the morphophonology of roots in \*oa(y)-

## Martin Joachim Kümmel (University of Jena)

While Avestan  $v\bar{\imath}kaiia$ - and Middle Persian (MP) Pahlavi gwk'y, Manichaean gwg'y 'witness' apparently continue Common Iranian \*wi-kāya-(cf. also Armenian vkay), the New Persian (NP) word  $\mathcal{L}$   $guw\bar{a}h$  as well as MP Pahlavi wyk's and Parthian wyg'h presuppose early Middle West Iranian \*wikāh with h instead of y. That this h goes back to \* $\theta$  is now proven by \*wi-kā $\theta(a)$ wan- in Bactrian οιγαλφο, and we thus arrive at a peculiar variation between \*-kāya- and \*-kā $\theta$ a- as the second member of these synonymous and obviously related compounds.

Nyberg (1974: 12f., 53f., 85f., 139) had already reconstructed \*- $k\bar{a}$ - $\theta a$ - and derived this stem from the root of Sanskrit  $c\bar{a}ya$ - 'to be aware', assuming variation with a derivative \* $k\bar{a}y$ -a-. However, this root was reconstructed as Proto-Indo-European (PIE) \*kwei- by Mayrhofer (1992: 531 and in LIV2 (p. 377f.) and it would then be difficult to explain the Iranian root shape \* $k\bar{a}$ -. Now Weiss 2016 has shown that there is good evidence for a root shape PIE \*kweh1i-, Proto-Indo-Iranian \*kaHi-, and so we are apparently dealing with a "long diphthong" root showing variants with or without a final \*i/y. The behav- iour of such roots in (Indo-)Iranian will be investigated more closely, and it is shown that the distribution \* $k\bar{a}y$ -a-\* $k\bar{a}$ - $\theta a$ - is probably regular.

#### References

LIV<sup>2</sup> = Lexikon der indogermanischen Verben. Die Wurzeln und ihre Primärstamm- bildungen. Unter der Leitung von H. Rix und der Mitarbeit vieler anderer bearbeitet von M. Kümmel, T. Zehnder, R. Lipp,

- B. Schirmer. Zwei- te, erweiterte und verbesserte Auflage bearbeitet von M. Kümmel und H. Rix. Wiesbaden, 2001.
- Mayrhofer, M. 1992. Etymologisches Wörterbuch des Altindoarischen. Vol. 1. Heidelberg.
- Nyberg, H. S. 1974. A Manual of Pahlavi. Part II: Ideograms, glossary, abbreviations, index, grammatical survey, corrigenda to part I. Wiesbaden.
- Weiss, M. 2016. Gk. τίω 'I honor' and τιμή 'honor'. In: I. Hajnal, D. Kölligan and K. Zipser (eds.). *Miscellanea Indogermanica. Festschrift für José Luis García Ramón zum 65. Geburtstag*, 875–886. Innsbruck.

### From Middle to New Iranian: Some effects of 'double adstrate'?

# Pavel Lurje (The State Hermitage Museum)

In the transformation of Middle Iranian languages into the New Iranian in the last centuries of the first millennium CE, many innovations can be dictated by the internal logic of linguistic development. In other cases, however, we can ascribe these changes to the external factors.

New Iranian languages, unlike their Middle Iranian precursors, were and are in deep contact with Arabic language on one side and Turkic vernaculars on the other. The influence of these languages is first of all visible in the lexicon of virtually all New Iranian languages; but is also finds its way into deeper strata of language structure: phonetics, morphology, syntax.

In the present paper (which is based on Late Middle and early New Persian data as well as late Sogdian, Yaghnobi, Chorasmian, Khotanese and modern West Iranian vernaculars) we argue that these borrowed innovations were more easily accepted if they followed the structures of both contact sides: Arabic and Turkic. We see it on phonetic level with emergence of uvular /q/; on morphological level we attest the development of possessive function of enclitic personal pronouns; on syntactic level we encounter the loss of ergativity in past tenses in number of languages in favour of nominative structure similar to that of Arabic and Turkic languages. Further we propose interaction of influences of speech of religious and military élites as socio-linguistic ground for spread of these innovations.

### Structure and semantics of Ossetic preverbs

Julia Mazurova (Institute of Linguistics RAS)

Ossetic is one of the few Indo-European languages which during nearly two thousand years have developed in close contact with the Caucasian languages. During this period a lot of new features emerged in the Ossetic language as a result of the areal contact with languages possessing quite different grammatical structure. As other researchers pointed out (Abaev 1949, Axvlediani ed. 1963, Isaev 1987, 1966, Thordarson 2009, Belyaev 2010, Vydrin 2014), one can find many features in Ossetic, unusual for an Iranian language, but every time the question arises: which contact language or language family those phenomena come from.

The Ossetic system of preverbs is unique among the Eastern Iranian languages where lexicalized old Iranian preverbs prevail whereas deictic and locative preverbs are very common in the neighboring Caucasian languages. Thus, modern Ossetic features a completely new and highly productive system that plays an important role in expressing locative, deictic and aspectual meanings. This system is interesting from the typological standpoint as it represents the result of interaction between internal trends of language development and areal influence: there are no borrowed prefixes in Ossetic, the system is the result of PAT structural replication in terms of (Matras and Sakel 2007). The aim of the study is to compare the Ossetic preverb system with those of the languages of other families indigenous to the Caucasus — Kartvelian (Georgian), Nakh-Daghestanian (Ingush) and Abkhaz-Adyghe (Adyghe). General structure of the preverb systems, grammatical characteristics of the preverbs and their semantics are compared.

The study of the meaning of Ossetic preverbs is based on the data elicited from informants with the help of spatial questionnaires and on the data from the Ossetic National Corpus.

The comparative study of the structure of the Ossetic preverb system reveals that it differs from that of Adyghe both in structure and in semantics. (The study of the Adyghe preverb system is based on the fieldwork data, see Mazurova 2009). The Ingush system (Nichols 2011) seems quite different structurally from the Ossetic but shows some similarity of the meaning expressed by preverbs. The Georgian system (Aronson 1990, Rostovcev-Popel 2012, Tomelleri 2009) shows most similarities with the Ossetic: the structure

and the semantics of the two sets are quite close, although not identical. However, further analysis of the spatial and aspectual meaning of the preverbs shows considerable differences (see Tomelleri 2010 for in-depth analysis of the aspectual features of Ossetic and Georgian). I claim that the Ossetic preverb system has emerged under the strong influence of the South Caucasian (Kartvelian) languages, but have developed according to its own inner tendencies not copying the pattern but developing new concepts.

In Ossetic preverbs, the deictic component is crucial for the metaphorical transfer and development of meaning. It determines spatial and aspectual extensions of the meaning of preverbs as well as a few of their grammatical properties (possibility/impossibility to use a conative particle). The spatial component, in turn, is important for combinability with verbs of certain semantics (Levitskaja 2004, 2007).

As Ossetic preverbs have retained definite spatial meaning, the Ossetic language data is important for the grammar of space because it provides interesting typological material regarding extension of deictic and orientational meanings to aspectuality. The Ossetic language data may contribute a lot to the aspectual typology as an example of a productive preverb system based upon the spatial concepts that differ from those of the Slavic languages.

### References

Abaev, V. I. 1959. Grammatičeskij očerk osetinskogo jazyka. Ordžonikidze.

Abaev, V. I. 1949. Osetinskij jazyk i fol'klor. Moscow.

Axvlediani, G. S. (ed.). 1963. *Grammatika osetinskogo jazyka*. Vol. 1. *Fonetika i morfologija*. Ordžonikidze.

Aronson, H. I. 1990. Georgian: A reading grammar. Bloomington, IN.

Belyaev, O. 2010. Evolution of Case in Ossetic. *Iran and the Caucasus* 14 (2), 287–322.

Isaev, M. I. 1987. Osetinskij jazyk. In: Osnovy iranskogo jazykoznanija. Novoiranskie jazyki: Vostochnaja gruppa. Moscow.

Isaev, M. I. 1966. Digorskij dialekt osetinskogo jazyka. Moscow.

Levitskaja, A. A. 2004. Aspektual'nost' v osetinskom jazyke: Geneticheskie predposylki, areal'nye svjazi, tipologicheskoe sxodstvo. *Voprosy jazykoznanija* 1, 29–41.

Levitskaja, A. A. 2007. O vidovoj nesootnositel'nosti v sovremennom osetinskom jazyke (vlijanie universal'nyx i idioètničeskix faktorov). *Voprosy jazykoznanija* 5, 89–107.

- Mazurova, Ju. V. 2009. Semantika lokativnyx preverbov pə- i şwe- In: Ja. G. Testelec (ed.). Aspekty polisintetizma: očerki po grammatike adygejskogo jazyka. Moscow.
- Matras, Y. and J. Sakel (eds.). 2007. *Grammatical borrowing in cross-linguistic perspective*. Berlin.
- Nichols, J. 2011. Ingush Grammar. Berkeley.
- Ossetic National Corpus, electronic resource (corpus.ossetic-studies. org).
- Rostovcev-Popel', A. 2012. Stanovlenie kategorii aspekta v gruzinskom jazyke. Acta linguistica Petropolitana. Trudy Instituta lingvisticheskih issledovanij RAN 8 (2).
- Thordarson, F. 2009. Ossetic grammatical studies. Vienna.
- Tomelleri, V. 2009. The Category of Aspect in Georgian, Ossetic and Russian. Some Areal and Typological Observations. *Faits de langues* 1.
- Vydrin, A. P. 2014. Glagol v osetinskom jazyke. In: *Vostokovedenie. Istoriko-filologicheskie issledovanija. Mezhvuzovskij sbornik statej.* Vol. 30. Pamjati akad. M. N. Bogoljubova. Saint Petersburg.

### Аргументная структура в зороастрийском дари

## Е. К. Молчанова (Институт языкознания РАН)

Доклад посвящен синтаксису одного из бесписьменных иранских языков, а именно языка зороастрийского дари (или йезди). Конкретно речь идет об эргативной конструкции у переходных глаголов в прошедшем времени. Эта конструкция представлена несколькими моделями. Мы покажем здесь специфическую модель с предикатом и его актантами: агенсом и (не пациенсом, но) адресатом.

Приведем для примера одну фразу:

(1) тєти nun-e brešta še tu kōsi-y čōy-xōri e xord e kart o čōyi še ri kart o ri nun di šakɛr še ret o hado prin še dōd-im 'Мама крошила поджаренный хлеб в чайную миску, наливала сверху чай, сыпала на хлеб (сахарный) песок и давала нам (есть) с сыром'.

В приведенной фразе представлены четыре переходных глагола в прошедшем времени. Выделим их с актантами:

(Mazdapour 1995: 349)

- тєти (S) nun-e brešta (O) še (S) ... e xord e kart (V) 'мама крошила поджаренный хлеб'
- 2. *čōyi* (O) *še* (S) *ri kart* (V) "и наливала сверху чай"
- 3. ... šakɛr (O) še (S) ret (V) 'и сыпала ... (сахарный) песок'
- 4. *hado prin še* (S) *dōd-im* (V + Addressee) 'и давала нам (есть) с сыром'

В № 1 субъект/агенс выражен существительным (на первом месте), объект – атрибутивным сочетанием (на втором месте), субъект / агенс повторяется в виде местоименной проклитики (на третьем месте), глагольное сказуемое (аналитический глагол) занимает позицию в конце синтагмы.

В  $\mathbb{N}$  2 объект выражен существительным (на первом месте), субъект / агенс выражен местоименной проклитикой (на втором месте), глагольное сказуемое занимает позицию в конце синтагмы.

В  $\mathbb{N}_2$  3 объект выражен существительным (на первом месте), субъект / агенс выражен местоименной проклитикой (на втором месте), глагольное сказуемое занимает позицию в конце синтагмы.

В N  $_2$  субъект/агенс выражен местоименной проклитикой (на втором месте), глагольное сказуемое занимает позицию в конце синтагмы и имеет личное окончание, означающее адресат.

В «Словаре диалекта зороастрийцев г. Йезда» его автор проф. К. Маздапур привела парадигмы спряжения трех глаголов зороастрийского дари: 1)  $dav\bar{o}dvun$  'бежать', 2)  $na\check{s}tvun$  'садиться' и 3)  $v\bar{o}tvun$  'говорить' [2, 117- 136]. Последний, переходный, глагол особенно важен: его словоформы демонстрируют особенности эргативной конструкции в зороастрийском дари. Перед парадигмами глаголов К. Маздапур специально оговаривает важный момент: «Нижеследующие местоименные энклитики, относящиеся к дополнению ( $zam\bar{a}'er-e$  mottasel-e maf'uli), присоединяются к грамматическим формам глагола и становятся реальными дополнениями; 1л. ед.ч. -e, 2 л. ед.ч. -i, 1 л.мн.ч. -im, 2 л. мн.ч. -it, 3 л. мн.ч. -en. В (приводимых) примерах эти энклитики присоединяются к глаголам с помощью дефиса» (Mazdapour 1995: 117).

На самом деле, эти энклитики совпадают с личными окончаниями (Е. М.). Они выделены дефисами лишь в переходном глаголе прошедшего времени. Но выражают не субъект действия (как в непереходном глаголе:  $dav\bar{o}d$ -i 'ты побежал'), а объект, притом непрямой, а косвенный, а именно, адресат действия: ta-d  $v\bar{o}t$ -e 'ты мне сказал', где субъект передан двумя личными местоимениями 2 л. ед.ч.: тоническим ta и энклитическим -d, а адресат  $_-$  морфемой -e (1 л.ед.ч.).

Другие образцы с глаголом 'говорить' и проклитическими место-имениями, означающими субъект действия:  $od\ v\bar{o}t$ -e'ты мне сказал',  $om\ nav\bar{o}t$ -i' я тебе не сказал'.

Приведем для сравнения идентичные личные окончания (без 3 л. ед. ч.) в формах презенса того же глагола:  $(m\varepsilon)$  (e)  $va\check{j}$ -e '( $\mathfrak{n}$ ) говорю', (ta) (e)  $va\check{j}$ -i '(ты) говоришь',  $(m\bar{o})$  (e)  $va\check{j}$ -im' (мы) говорим',  $(\check{s}m\bar{o})$  (e)  $va\check{j}$ -i(t) '(вы) говорите', (iye) (e)  $va\check{j}$ - $\varepsilon$ n' (они) говорят'.

Приведем личные (тонические и клитические) местоимения в функциях то субъекта, то адресата в формах императива того же глагола: ta šo mava 'ты не говори им', ta-m veva 'ты скажи мне', om veva 'скажи мне', os vevajit 'скажите emy', šo vevajit 'скажите emy', empty emy 'so emy 's emy 'so emy 's emy 's emy 's emy 's emy 's emy 's e

В формах *претерита*, если не требуется адресат, употребляется проклитика, означающая субъект, и основа прошедшего времени. Это наиболее простая модель эргативной конструкции. См. тот же глагол: *от* 

 $v\bar{o}(t)$  'я сказал',  $od\ v\bar{o}(t)$  'ты сказал',  $os\ v\bar{o}(t)$  'он сказал',  $mo\ v\bar{o}(t)$  'мы сказали',  $do\ v\bar{o}(t)$  'вы сказали',  $so\ v\bar{o}(t)$  'они сказали'.

Возможна также модель с двумя личными местоимениями (тоническим и энклитическим), означающими субъект:  $m\varepsilon$ -m  $v\bar{o}(t)$  'я сказал' и  $m\varepsilon$ -m  $nav\bar{o}(t)$  'я не сказал', ta-d  $v\bar{o}(t)$  'ты сказал', in-oš  $v\bar{o}(t)$  'он сказал',  $m\bar{o}$  mo  $v\bar{o}(t)$  'мы сказали',  $sm\bar{o}$  do  $v\bar{o}(t)$  'вы сказали', iye so  $v\bar{o}(t)$  'они сказали'.

Но ср. энклитические морфемы (идентичные личным окончаниям) при наличии адресата:  $m\varepsilon$ -m  $v\bar{o}t$ -i 'я сказал тебе' и  $m\varepsilon$ -m  $nav\bar{o}t$ -i 'я не сказал тебе',  $m\varepsilon$ -m  $v\bar{o}t$ -i 'я сказал вам',  $m\varepsilon$ -m  $v\bar{o}t$ - $\varepsilon$ n 'я сказал им' и  $m\varepsilon$ -m  $nav\bar{o}t$ - $\varepsilon$ n 'я не сказал им'; ta-d  $v\bar{o}t$ - $\varepsilon$ n 'ты сказал им', ta-d  $v\bar{o}t$ -e 'ты сказал мне', ta-d  $nav\bar{o}t$ -im 'ты не сказал нам'; un-os  $v\bar{o}t$ -e 'он сказал мне', un-os  $v\bar{o}t$ -im 'он сказал нам' и un-os  $nav\bar{o}t$ -im 'он не сказал нам';  $sm\bar{o}$  do  $v\bar{o}t$ -e 'вы сказали мне',  $sm\bar{o}$ -d  $v\bar{o}t$ -e 'ты сказал мне' (в последнем примере субъект выражен тоническим местоимением 2 л.мн. ч. и проклитическим 2 л. ед.ч.); iye so  $v\bar{o}t$ -e 'они сказали мне'.

В одном случае среди образцов, приведенных проф. К.Маздапур, встречаем тоническое местоимение 3 л. ед. ч. un для обозначения adpecama:  $m\varepsilon me$  un  $v\bar{o}t$  'я сказал ему'.

Парадигма глагола vōtvun 'говорить' у К.Маздапур очень велика. Мы ограничились наиболее ясными образцами.

Возникает вопрос: только ли в случае глагола *vōtvun* 'говорить' употребляется экзотичная модель эргативной конструкции с энклитическими морфемами (идентичными личным окончаниям), означающими *адресат* действия?

В докладе рассматриваются модели эргативной конструкции с другими (кроме  $v\bar{o}tvun$ ) переходными глаголами зороастрийского дари и прослеживаются аналогии с другими бесписьменными и малыми западноиранскими языками и диалектами.

Приведем здесь тезис известной иранской исследовательницы, типолога и диалектолога г-жи Иран Калбасси: «...так же, как употребление местоимений вместо личных окончаний в функции субъекта может служить основанием для классификации иранских диалектов на эргативные и не-эргативные, возможно, и употребление личных окончаний вместо местоимений в некоторых эргативных диалектах, могло бы послужить неоспоримым критерием для классификации эргативных диалектов» (Kalbassi 1381/2002: 102).

#### Список литературы

Kalbassi, I. 1381/2002. Naghsh-o ja-ye shenase-ye fe'ili va zamir-e peyvaste dar guyeshha-ye irani. *Majalle-ye zabanshenasi*, 17 (1), 77–102 (in Persian).

Mazdapour, K. 1995. Farhang-e behdinan-e šahr-e Yazd, j. 1. Tehran (in Persian).

## Evidentiality and epistemic authority in spoken Tajik

Alexander Nilsson (Uppsala University)

In the months of May and June of 2016, I conducted interviews in Dushanbe, Tajikistan, with mostly university students. Most of the interviews were in the form of group conversations, but some of them were done individually. The purpose of these interviews was to see to what extent the Non-Witnessed forms are used in the retelling of past events where the speaker was not a witness. I would ask questions like: "How was it in Tajikistan during Soviet times?" and "What happened during the civil war?" Since the students were not born at these times, it is safe to say that they were not a witness to them.

As a counterweight to these questions I would also ask questions regarding contemporary musicians in order to see how the Tajik speakers express themselves as regards suppositions and rumours. All in all, I recorded six sessions. Most of them with university students in the age range of 19–23. In these sessions, the number of the participants would range from 3–5 persons and be both male and female.

**Evidentiality in Tajik.** According to Perry (2005), the non-witnessed forms are mainly used in three different instances a) second-hand information b) logical inference and c) mirativity (sudden realization). These closely mirror the uses of the non-witnessed forms in the neighbouring Turkic languages, and also in a broader sense the languages of South-Eastern Europe and Western Asia. Lazard (1999) has therefore argued that these forms could all be subsumed under the term "mediative" since there is not always a clearcut delineation between these three categories. This is something DeLancey (1997) discusses, stating that the three uses of the non-witnessed form, as seen in Tajik and Turkish "is not an idiosyncratic peculiarity of one language, but a pattern motivated by cross-linguistically relevant considerations".

In my talk, however, I will use the model of *territory of information* (Kamio 1985) and Akatsuka's model of information incorporation, a model that was originally devised to explain conditionals. According to this model, new information first enters the mind in the realm of Irrealis, a domain which information is still uncertain and has not become true knowledge. Only after information processing can the piece of information move to the realm of Realis, and be seen as "knowledge". (Akatsuka 1985). Similar to this theory, is that of the "unprepared mind" as proposed by Slobin and Aksu Koç (1982).

The use of the "witnessed" form for unwitnessed events. The most striking characteristic of these interview was the strong tendency to use the direct forms of the past tense, even when retelling events of the past that the speaker did not witness, and this begs us to re-evaluate the meaning and usage of the Non-Witnessed forms.

(1) (Retelling what happened during the civil war.)

banditho meomad, zuri mekard

bandits come:3sg.IMF violence do:3SG.IMF

"Bandits came, they forced (people)."

(20160525)

Based on numerous examples from my recordings, I will in my presentation propose that these forms are not merely evidential in the sense of indicating the *source of information*, but that another factor informs the choice of TAMform in the narration, namely *epistemic authority* or *territory of information*.

Using a model which takes epistemic authority / territory of information into account can explain the somewhat "unconventional" uses of the direct and indirect verb forms. Generally, the direct forms are described as being used for events that have been witnessed, but this is not always the case. In my data, I have youths retelling Soviet times and incidents during the warthings they clearly did not witness.

Akatsuka's model of information processing and the concept of epistemic authority may serve us in explaining this. First of all, even if they did not witness these events themselves, the fact that everyone around them talks about them as "real" has moved this piece of information from the Irrealis realm that of the Realis. Second, since I am an outsider, maybe they feel that they have the epistemic authority to speak about these matters in an assertive way. What would happen if someone who actually was involved in the civil war asked them what they knew? Would they still use the direct form or would they feel compelled to use the indirect because they no longer have the epistemic authority.

I also asked about rumors about famous pop singers and I did not get verbs in the indirect form, as would be expected. However, I did get the direct grammatical form, but with a lot of lexical evidentials signaling doubt and supposition.

In only one instance do I have a story told in the indirect form, and it is a joke. This closely mirrors the use of -miş in Turkish, which is also used as the default form when the story is of a certain character, like Nasrettin Hoca stories, typically humorous. This is also the case with Ecuadorian Siona (Bruil 2015: 408) and the use of this "non-witnessed" form in traditional stories has been attested in other languages around the world, being a token of certain speech genres (Aikhenvald 2004: 137).

Also, the so called reported form, just like in Turkish, is used for mira-

tives and hearsay. This would further corroborate Akatsuko's theory of the two-stage model of information processing - sudden realizations, jokes, and hearsay occupy a specific space in the mind of the speaker- all of them being in some sense "untethered" and they therefore share the same form. My own findings are therefore very similar to the findings of Martine Bruil (2015) on Ecuadorian Sinoa.

Even though Ecuadorian Siona has a marker for reportative utterances, thereby clearly distinguishing witnessed and non-witnessed information, Bruil gives us examples where the assertive (or so called witnessed) form of the verb is used, even in cases where the plot of the story or other factors clearly negate the fact they had witnessed the information. Bruil here argues that the use of the assertive verb form signalizes the speaker can vouch for the truth of the information, even if access to the information is only inferential. This is also, I would assert, the case for Tajik, even though Perry, as noted above, does not mention it as one of the functions of the "non-witnessed" forms. This phenomenon has, however, been witnessed in spoken Persian (Jahani 2000).

#### References

Aikhenvald, A. Y. 2004. Evidentiality. Oxford.

- Akatsuka, N. 1985. Conditionals and epistemic scale. *Language* 61 (3), 625–639.
- Bruil, M. 2015. When evidentials are not evidentials: The case of the Ecuadorian Siona reportative. *Linguistic Typology* 19 (3), 385–423.
- DeLancey, S. 1997. Mirativity: The grammatical marking of unexpected information. *Linguistic Typology* 1, 33–52.
- Jahani, C. 2000. Expressions of indirectivity in spoken Modern Persian.
  In: L. Johanson and B. Utas (eds.). Evidentials: Turkic, Iranian and neighbouring languages. Berlin.
- Kamio, A. 1997. Territory of information. Amsterdam.
- Lazard, G. 1999. Mirativity, evidentiality, mediativity, or other? *Linguistic Typology* 3, 91–109.
- Perry, J. R. 2000. Epistemic verb forms in Persian of Iran, Afghanistan and Tajikistan. In: L. Johanson and B. Utas (eds.). *Evidentials: Turkic, Iranian and neighbouring languages*. Berlin.
- Perry, J. R. 2005. A Tajik Persian Reference Grammar. Boston.
- Slobin, D. I. and A. A. Aksu-Koç. 1982. Tense, aspect, and modality in the use of the Turkish evidential. In: P. J. Hopper (ed.). *Tense-Aspect: Between Semantics and Pragmatics*. Amsterdam, 185–200.

# An applicative analysis of the absolute prepositions in (Central) Kurdish

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Northern and Central Kurdish languages are known to possess a particular set of adpositions commonly referred to as "absolute" prepositions (MacKenzie 1961; Samvelian 2007; Haig 2008). These forms are discernibly based on their corresponding simple preposition counterparts, as it can be understood by comparing the two sets in Table 1.

Northern Kurdish				Central Kurdish		
simple	absolute		simple	absolutive		
li	lē	'from, at'	le	lē	'from', 'at'	
bi	рē	'with'	be	рē	'to', 'with'	
di	$tar{e}$	'in', 'into'	de	$tar{e}$	'in', 'into'	
ji	jē	'from'	we	$war{e}$	'to'	

However, the differences between simple and absolute prepositions in Northern and Central Kurdish are not the same. In Northern Kurdish (NK), the absolute adpositions are literally "absolute" in the sense that they contain their objects as third person singular referents, thus being pronominal prepositions, cf. (1a) and (1b). In Central Kurdish (CK), however, the absolute prepositions do require their objects separately but only in the form of dependent person markers, pronominal clitics or verb agreement suffixes, and with no restriction as to the referent of the prepositional object, cf. (2a) and (2b) and (2c).

- (1) a. *li wē di-pirs-im* from 3sg IND-ask.PRS-1sg 'I am asking HER.'
  - b. *lē di-pirs-im* from.3sg IND-ask.PRS-1sG 'I am asking her.'
  - c. le to de-pirs-im from 2sg IND-ask.prs-1sg 'I am asking YOU.'

- d.  $l\bar{e}$ =t de-pirs-im from=2sg IND-ask.prs-1sg 'I am asking you.'
- e.  $l\bar{e}=m$  pirs $\bar{i}$ -y from=1sG ask.pst-2sG 'I asked you'

Leaving aside the complicated outlook of their workings, especially in CK, the set of absolute adpositions can most probably be reconstructed as the combination of a simple preposition with a third person (oblique) pronoun ( $w\bar{e}/w\bar{i}$ ). This does not raise any doubts in NK, as the forms are analyzable as such in their current usage, but in CK, probably in parallel to the loss of oblique case marking and case distinction in pronouns, the forms must have been reanalyzed as zero bases of dependent pronominal complementation.

Behaving in strikingly similar ways to these adpositions are two other prepositions, a simplex *bo* 'for' and *ligel* (NK) / *legel* (CK) 'with' which do not have "non-absolute" counterparts, as well as a verbal enclitic  $=\bar{e}$ .

Building upon my corpora of naturalistic data of both NK and CK varieties, collected in the field between 2008 and 2014, I will propose an applicative analysis for these three subsets of forms as absolute prepositions and "directional verbal clitic". I will show that all these forms function in a common manner such that they add or introduce a participant to the verb complex as a core argument that represents one of the major semantic roles as benefactive, recipient, malefactive, source, addressee. That is, the use of absolute prepositions and directional clitic is a syntactic alternative whereby an otherwise oblique NP is enabled in the clause as a core argument (cf. Mithun 2001). Differing from many applicative constructions (cf. Comrie 1985: 312–319), but similar to, for instance, the applicatives in Abaza (O'Herin 2001), the use of these forms does not entail the argument structure to demote the underlying object to an oblique argument. The analysis will be supported by evidence from (i) morphosyntax, by showing how the applied arguments co-opt the verbal inflectional categories otherwise used for indexing core arguments as direct objects and by the ongoing reanalysis of the absolute prepositions as verbal particles ("preposition incorporation" in the sense of Baker 1988) (ii) semantic roles, showing the text frequency of a number of core semantic roles introduced in this manner. The applicative constructions in Kurdish are not obligatory but syntactic alternatives for packaging information according to discourse, thus they are not valency-increasing devices but rather elements of rearranging the argument structure.

- ${\it Haig, G.\,2008.\,Alignment\,change\,in\,Iranian\,languages:\,a\,construction\,grammar\,approach.\,Berlin.}$
- MacKenzie, D. N. 1961. Kurdish Dialect Studies I. London.
- Samvelian, P. 2007. What Sorani Kurdish absolute prepositions tell us about cliticization. In: F. Hoyt, N. Seifert, A. Teodorescu and J. White (eds.). *The Morphosyntax of Understudied Languages*, 263–263. Stanford.
- Mithun, M. 2001. Understanding and explaining applicatives. *Proceedings of CLS* 37 (1), 73–79.
- Comrie, B. 1985. Causative verb formation and other verb-deriving morphology. In: T. Shopen (ed.). *Language Typology and Syntactic Description*. Vol. 3. *Grammatical categories and the lexicon*, 309–348. Cambridge.
- O'Herin, B. 2001. Abaza applicatives. *Language* 77 (3), 477–493.

# The case system of modern West Iranian languages in typological and historical persepective (with special reference to $*r\bar{a}d\bar{\iota}$ )

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The Old Iranian nominal system of 8 cases started disintegrating already in Old Persian. In Middle Persian, only remnants of a 2-case system were left. Various modern West Iranian languages display a more or less stable system of 2 cases, usually called "rectus" and "obliquus". As a result of the breakdown of the case system, most case relations in modern West Iranian languages are expressed by pre- or postpositions. In some languages, a small number of "more prominent" case relations are expressed by a set of "primary" postpositions. Together with the oblique ending (where it exists), this constitutes the nucleus of a new case system, being the result of a grammaticalisation process that these postpositions underwent. See, e.g., Zazaki and Northern Kurdish (Kurmanci):

Zazaki (Čermūg dialect):		Northern Kurdish:		
RCT OBL	-∅ -ī	-∅ -ī	(< -ahya)	
DAT LOC INSTR ABL	-ī- <b>rē</b> -ī-di -yā -ī-rā	(ži)ī-re (di)ī-de (bi)ī-ve ži	(re, rē < *radī) (di < *[an]dar) (rā < *rādī)	

The presentation tries to give a overview of a select number of W-Iranian languages that display such a system of case relations, and to show at the example of a certain "more prominent" case relations like "indirect object, directive, ablative, instrumental", how these systems evolved historically. A clue to the understanding of the case systems of many West Iranian languages are the various outcomes of Old Iranian  ${}^*r\bar{a}d\bar{\imath}$  in some of these languages, see the following overview:

	OBL	ABL	DAT/BEN
Gilaki	a		re
Balochi	ā		rā (+ OBJ)
Zazaki		rā	rē
N-Kurdish			re
Āzarī/Harz.		rī	
S-Tātī		u, ā, a	rā
Tālešī/ʿAnb.		O	ro
ENP			rā

## References

Bossong, G. 1985. Empirische Universalienforschung. Differentielle Objektmarkierung in den neuiranischen Sprachen. Tübingen.

Paul, L. 1998. Zazaki. Grammatik und Versuch einer Dialektologie. Wiesbaden.

Paul, L. 2005. Kurdish Languages. History. *Encyclopaedia Iranica*, online edition (www.iranicaonline.org/articles/kurdish-languages-i).

Windfuhr, G. L. 1992. Cases. Encyclopaedia Iranica. Vol. 5, 25-37.

#### Eastern Iranian and Tocharian

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The Easternmost attested Iranian language is Khotanese, which was the language of the kingdom of Khotan in the south of the Tarim Basin in Northwest China. Closely related to Khotanese is Tumšugese, found in the north of the Tarim Basin. It is usually assumed that the language of the region of Kašgar, to the west of Khotanese and Tumšuqese, termed Kanjakī by Kāšģarī, contains traces of a language that was part of the same subgroup of Iranian languages. Although only Khotanese is well attested, the conclusion that languages of the Khotanese group occupied the entire west of the Tarim Basin seems justified. In the north of the Tarim Basin, the non-Iranian languages Tocharian A and B are found immediately to the east of Tumšugese. The relevance of Tocharian for Iranian studies is that it preserves traces of contact with a number of Eastern Iranian languages: Khotanese, Sogdian, Bactrian (Isebaert 1980; Tremblay 2005a). However, even more important is the fact that Tocharian contains loanwords from an Old Iranian dialect that has such an archaic appearance that one is tempted to date it in the early 1st millennium BCE at the latest. It has been argued that this oldest layer is to be identified as the common ancestor of Khotanese and Tumšugese, a so-called "Proto-Sakan" (Tremblay 2005a: 422). However, this assumption leads to insuperable problems in matters of details (cf. also Tremblay 2005b: 678). In this paper, it is therefore argued that the Old Iranian dialect attested by Tocharian is not of the Khotanese-Tumšugese group. Instead, we have to assume that still more Iranian peoples were found in the east. This is likely in any case in view of evidence from archaeology (Kuz'mina 2008: 98-107). It has also been suggested on the basis of traces of a non-Bactrian Iranian dialect that are preserved in Bactrian (Sims-Williams 2002). The main topic of this paper will be to outline how arguments drawn from Tocharian can be used, and to identify possible affinities of the Old Iranian stratum with other Iranian dialects.

#### References

Isebaert, L. 1980. *De Indo-Iraanse bestanddelen in de Tocharische woordenschat.* Doctoral dissertation, University of Leuven.

Kuz'mina, E. E. 2008. The prehistory of the Silk Road. Philadelphia.

- Sims-Williams, N. 2002. Ancient Afghanistan and its invaders: Linguistic evidence from the Bactrian documents and inscriptions. In: N. Sims-Williams (ed.), *Indo-Iranian languages and peoples*. Oxford, 225–242.
- Tremblay, X. 2005a. Irano-Tocharica et Tocharo-Iranica. *Bulletin of the School of Oriental and African Studies* 68, 421–449.
- Tremblay, X. 2005b. Bildeten die iranischen Sprachen ursprünglich eine genetische Familie oder einen Sprachbund innerhalb des indoiranischen Zweiges? In: G. Meiser and O. Hackstein (eds.). *Sprachkontakt und Sprachwandel*. Wiesbaden, 673–688.

# Wearing the inside out: Word order variations in Persian

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In spoken and informal written Persian, instances of two verbs occurring in the same clause sharing the same subject are found frequently:

- (1) a. begir bešin be-bin-am či mi-g-i. take.2sg sit.2sg sBJv-know-1sg what prog-say-2sg Lit: 'Take a sit, let me know what you say.'
  - b. gereft xābid ruye taxt. take.3sg sleep.3sg on bed Lit: 'S/He took a sleep on the bed.'
- (2) a. nãme rā gereft pāre kard. letter овј took.3sg tear do.3sg Lit: 'S/He took the letter and tore it up.'
  - b. begir qazā-t ro bo-хог. take.2sg food-your овј імр-еаt-2sg Lit: 'Take and eat your food.'
- (3) a. 'omram tamum šod raft my.life finish become went Lit: 'My life finished.'
  - b. ali mord raft
    Ali died went
    Lit: 'Ali died.'

This study examines the emergence of this construction, which is called "double verb construction". In the double verb construction, two verbs appear beside each other, acting as a single predicate (Hopper 2008). The paper tries to answer these questions: Are these multiple verbs in Persian *serial verb construction* (SVC) (Aikhenvald 1999, 2006, Bisang 2009)? If not, what are their functions? Are they auxiliary + verb constructions? What are the functional-typological explanations for their emergence? These co-occurring verbs are treated as serial verb construction by some researchers (Taleghani 2008) and as the consequence of auxiliary and main verb by others (Jahani 2008). "SVC is a monoclausal construction consisting of multiple independent verbs with

no element linking them and with no predicate-argument relation between the verbs" (Haspelmath 2016:292). I have shown that these verbs are different from prototypical serial verb constructions and Persian is not a serializing language. These constructions are different from prototypical serial verb constructions in different ways: they do not denote a single event, they do not share common grammatical features, they are not necessarily in a single clause, they are limited to a closed set of verbs, and they belong to a specific register (Aikhenvald 2006). Meanwhile, they are not prototypical auxiliary verbs. They are different from auxiliary + main verb: unlike auxiliary verbs, they could be deleted, they could be separated by conjunction, and there are strict collocational restrictions in using these verbs. I have concluded that, regarding these observations, in grammatacalization continuum, the double verb construction is between lexical verbs and auxiliary verbs, being different from both. These verbs are in the path of grammaticalization and I have found two main reasons for this process: high frequency of these verbs (Bybee 2003, 2007, 2010; Bybee and Hopper 2001; Bybee and Thompson 1997) and being in the subclass of motion or posture verbs. This paper supports the functionalist claim that language use is the main reason for language change.

- Aikhenvald, A. Y. 1999. Serial verb constructions and verb compounding: Evidence from Tariana (North Arawak). *Studies in Language* 23, 469–508.
- Aikhenvald, A. 2006. Serial verb constructions in typological perspective. In: A. Y. Aikhennvald and R. M. W. Dixon (eds.). *Serial verb constructions:* A cross-linguistic typology, 1–68. Oxford.
- Bisang, W. 2009. Serial verb construction. *Language and Linguistics Compass* 3 (3), 792–814.
- Bybee, J. 2003. Mechanisms of change in grammaticization: The role of frequency. In: R. Janda and B. Joseph (eds.). *Handbook of historical linguistics*, 602–623. Oxford.
- Bybee, J. 2007. Frequency and the organization of language. Oxford.
- Bybee, J. 2010. Language, usage, and cognition. Cambridge.
- Bybee, J. and P. Hopper (eds.). 2001. Frequency and the Emergence of Linguistic Structure. Amsterdam.
- Bybee, J. and S. Thompson. 1997. Three frequency effects in syntax. *Berkeley Linguistics Society* 23, 378–388.
- Jahani, C. 2008. Expressions of future in Classical and Modern New Persian. In: S. Karimi et al. (eds.). *Aspects of Iranian linguistics*, 153–175. Newcastle.

- Haspelmath, M. 2016. The serial verb construction: Comparative concept and cross-linguistic generalization. *Language and Linguistics* 17 (3): 291–319.
- Hopper, P. J. 2008. Emergent serialization in English: Pragmatics and typology. In: J. Good (ed.). Linguistic universals and language change, 253–284. Oxford.
- Taleghani, A. H. 2008. *Modality, Aspect and Negation in Persian*. Amsterdam: John Benjamins.

# The case clitic -o in Northern Talyshi: Morphology, semantics and origin

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Northern Talyshi is one of the dialectal groups of the Talyshi language, probably, the largest one, whose speakers are divided by the border between Iran and Azerbaijan.

Northern Talyshi has two cases, direct and oblique, although vowel-final words do not regularly show the oblique case ending, as well as plural nouns have one for both cases.<sup>1</sup>

	Direct	Oblique	
Singular	Ø	-i/-ə	
Plural	-on/-un/-ün/-ân		

The functions of the direct case are mostly restricted to the subject and indefinite direct object marking in nominative-accusative clauses and the object marking in ergative clauses. The oblique case ending marks definite direct objects in nominative constructions, subjects in ergative constructions and possessors in nominal groups. Other syntactic relations are served by adpositions, the category which in Northern Talyshi includes prepositions and postpositions.

Even though the adpositional category and the case system of Northern Talyshi were investigated in detail by the previous researchers (see D.Paul 2011 and Budalalu 2005 for Anbarani; Pireiko 1976 and Miller 1953 for Azerbaijani Talyshi), the origin, the morphological peculiarities and the semantics of some of the markers are still unclear. My talk is devoted to the marker -o (Azerbaijani Talyshi)/-u (Anbarani, Iranian Talyshi). The data was collected during my fieldwork in Ardabil province of Iran (for Anbarani Talyshi) in 2016 and Saint Petersburg for Azerbaijani Talyshi in 2015 and 2016.

Miller considers -o to be a single polysemous suffix, derived from the Old Iranian ablative  $*\bar{a}t$ . However, his grounds do not sound convincing. In the

<sup>&</sup>lt;sup>1</sup>Although functions and origin of the oblique case endings are absolutely the same in all the Northern Talyshi dialects, there is a slight phonetic variation among them. The same is right for the plural ending.

talk, I will show that the case clitic -o/-u in Northern Talyshi is better analyzed as two different markers, both distinct in origin and semantics: one is the dialectal variant of the postposition -ro, while the other one is probably the reduced form of the postposition -ku.

One of the arguments for suggestion that the latter has a postpositional origin, is the fact that it apparently used to be attached after possessive clitics (even though there seems to be only a few examples of possessive clitics in modern Talyshi, mostly in poetic texts, severely influenced by Persian, and in the idiomatic expression  $mo\partial-m-o$   $bi\partial$  'to be born (lit. 'to come from my mother', where -o is an ablative marker, and -m is a possessive clitic). There is a strong tendency of the marker -o/-u to be attached to direct forms of nouns, if it has the spatial semantics (mostly ablative) (1), whereas the oblique case is needed to combine with the -o in the non-spatial (mostly benefactive) meaning (2).

- (1) Təvə kum-o bi-yə axe barn-POST IMP-bring 'Bring an axe from the barn.'
- (2) Az bo ıştə dust-i-o həmmə ba-kə-m.
  I for RFL friend-OBL-POST all FUT-do-1sG
  'I will do everything for my friend.'

Of course, -o is not the only ablative and benefactive marker; there are also postpositions -ku and -ro, that I have mentioned above. The general meaning expressed by the postposition -ro, is benefactive, while -ku is mostly an ablative postposition. I see a strong relation between -o as a non-spatial marker and a postposition -ro, on the one hand, and -o/-u as an ablative marker, and -ku on the other hand, due to some syntactic and semantic features.

The benefactive -o is fully identical to -ro, except for the fact that speakers often consider postpositional groups with -o and -ro to be dialectal variants, but sharing the same meaning (3). Both non-spatial -o and -ro agree with the oblique form of nouns. Moreover, both of the postpositions can be used to form a supine verbal forms and are used in the same circumpositional constructions (2).

(3) Az bo hovə-jo kukla-m sa. / Az bo hovə-ro kukla-m sa. I for sister-post doll-encl.erg.1sg buy 'I bought a doll for my sister.'

The ablative -o seems to be completely interchangeable with -ku, at least, in the aspect of semantics, , but there is still a significant syntactic difference between them: -o/-u agrees with the direct form of nouns and also tends to be used with consonant-final nouns (although there are many examples of the -o being attached to vowel-final words), whereas the postposition -ku agrees

with the oblique case of nouns and does not seem to have phonological restrictions, by contrast with the ablative -o/-u. Even though speakers often claim -o/-u to be a reduced form of -ku, one might consider otherwise given the fact that -ku and -o show different case agreement. In Anbarani, which belongs to the Northern Talyshi dialectal group, as well as Azerbaijani Talyshi, D. Paul and Budalalu consider the ablative -u in Anbarani to be the reduced form of the postposition -ku, used mostly after consonant-final words (there is no evidence of the benefactive -o in Iranian Northern Talyshi). So there seems to be a common tendency in Northern Talyshi for the postposition -ku to develop into -o/-u, especially after consonant-final nouns. I would consider the ablative -o to be a new case affix derived from the postposition -ku, despite the fact that it does not regularly receive word stress like the oblique case affix. This phenomenon seems to be a part of the common tendency in North-Western Iranian languages, which are reported to develop new case systems from postpositions (see Rastorgueva, Edelman 1975). The benefactive -o seems to preserve its postpositional status, at least regarding its oblique case agreement. With all the data considered, I conclude that the benefactive -o and the ablative -o are different markers with distinct origin and morphology; the former is a regular enclitic, whereas the latter seems to present a new case suffix.

# Correlative pronouns in Ossetic complement clauses

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In Ossetic<sup>1</sup>, subordinators mostly occur with correlative pronouns/adverbs in the matrix clause (1)–(2). Correlatives are obligatory in adverbial and relative clauses (except for purpose clauses), while in complementation they can be dropped (2), see Abaev (1950), Bagaev (1982), Belyaev (2015) for details.

Abaev (1950) proposes the following rule for the omission of correlative pronouns in complementation: the pronoun is obligatory if the matrix clause is postposed, and optional if the matrix clause is preposed (Abaev 1950: 719). Hence, there are three possible constructions with respect to the order of the matrix and the complement clause:

# (A) MatrCl DepCl wəj (B) MatrCl DepCl (C) DepCl wəj MatrCl

It remains unclear what triggers the omission of correlative pronouns if the matrix clause is preposed, i.e. in cases (A) and (B). I claim that the correlative marks the pragmatic presupposition. In other words, it is present if the complement is topical or refers to presupposed/old/expected information. This claim is supported by corpus data (Ossetic National Corpus, http://corpus.ossetic-studies.org/search/index.php?interface\_language=ru) and elicitation. I provide the following evidence in support of my claim:

- 1. With the subordinator *k3j* and in asyndetic construction the correlative pronoun is required in the context of the factive (presupposition inducing) verbs, and it is dropped with semi-factive 'know' exactly in presupposition-opaque contexts (Karttunen 1973).
- 2. With semi-factive and non-factive verbs (in terms of Kiparsky and Kiparsky 1971) the correlative pronoun distinguishes between factive and non-factive propositions (see Asher 1993, Peterson 1997,), e.g. between complement clauses belonging to the presupposition and to the assertion. It is most often absent in contexts where the dependent clause presents new information, or in irrealis contexts.

<sup>&</sup>lt;sup>1</sup>The work is supported by the RFBR grant No 16-06-00226.

- 3. The correlative pronoun is unacceptable in contexts of falsity of the complement (3) and in (quasi-)performative contexts (4), which are incompatible with the factive reading (and thus, presupposition of the truth of the complement) according to Benveniste (1966).
- 4. The subordinator *səma*, which introduces propositions but cannot introduce facts, does not take correlatives in complementation.

With irrealis and eventive complements, correlatives encode aforementionedness, topicality and expectedness:

- 5. In the case of aforementionedness, non-factive irrealis clauses take the correlative pronouns.
- 6. Eventive complements with perception and emotive verbs take the correlatives in case of topicality or direct aforementionedness (5).
- 7. Complements of the verb 'wait' take the correlative in case of expectedness of the situation in the complement clause, consider the contrast between (6) and (7).

Therefore, I claim that correlative pronouns/adverbs are used if the complement clause is presupposed, constitutes the topic, or encodes old/expected information. All these types of contexts can be generalized in terms of pragmatic presupposition.

# **Examples**

- (1) [salənm3 =dən m3= səšt ərt:iv-a], walənm3 d3= as.long.as thee.dat my eye shine-sbjv.3sG to.that.time thy  $\chi$ is-ən binont-ə koj ba-kən self-dat family-gen care pv-do[IMP.2sG]

  'As long as I'm alive, take care of your family.' (Gagkaev 1956: 227)
- (2) 3ž žon-ən, [žawər čəžg k3j 3r-ҳašt-a], (wəj)
  I know-prs.1sg Zaur girl Comp pv-take-pst.3sg that.dem
  'I know that Zaur has married.'
- (3) \*də žon-əš, [žawər čəžg k3j 3r-ҳašt-a], wəj, you know-prs.2sg Zaur girl comp pv-take-pst.3sg that.dem f3l3 wəj 3s3g n3-w but that.dem true neg-be.prs.3sg

Intended meaning: 'You know that Zaur has married, but this is not true.'

- (4) quš-ən =dən kən-ən, [nər-əj fəštə-mə am nal listen-inf thee.dat do-prs.1sg now-abl later-all here no.more kuš-əš] (\*wəj) work-prs.2sg that.dem
  - 'I declare that you're fired.' (pronounced by an authorized person)
- (5) 3ž n3 fe-qwəšt-on, [χəl k3j kot:-oj], wəj, 3m3
  I NEG PV-hear-PST.1SG quarrel COMP do-PST.3PL that.DEM and
  =m3 n3 wərn-ə
  me.GEN NEG believe-PRS.3SG
  (Zaur quarreled with his wife!) '- I haven't heard that they quarreled, and I don't believe it.'
- (6) 3nq3lm3 kašt-əšt3m, [war-ən k3d ba-nsaj-z3n], wə-m3 (wait) look-pst.1pl rain-inf if pv-stop-fut[3sg] that-all 'We were waiting until the rain stops.' (ONC)
- (7) 3nq3lm3 k3š, [salənm3 =dən wərəš-ə pac:ax j3= (wait) look[IMP.2sG] until thee.DAT Russia-GEN emperor his 3fštaw a-v3r-a] throne on.credit
  - 'Wait for the Russian emperor to lend you his throne.' (ONC)

- Abaev, V. I. 1950. *Grammatičeskij očerk osetinskogo jazyka* [Grammar sketch of Ossetic]. Ordžonikidze.
- Asher, N. 1993. Reference to abstract objects in discourse. Dordrecht.
- Bagaev, N. K. 1982. *Sovremennyj osetinskij jazyk* [Modern Ossetic]. Part 2: *Sintaksis* [Syntax]. Ordžonikidze.
- Belyaev, O. 2015. Systematic mismatches: Coordination and subordination at three levels of grammar. *Journal of Linguistics* 51, 267–326.
- Benveniste, É. 1966. *Problèmes de linguistique générale*. Vol. 1. Paris: Gallimard.
- Karttunen, L. 1973. Presuppositions of compound sentences. *Linguistic Inquiry* 4, 168–193.
- Kiparsky, P. and C. Kiparsky. 1971. Fact. In: L. Jakobovits and D. Steinberg (eds.). *Semantics: An Interdisciplinary Reader*, 345–369. Cambridge.
- Peterson, Philip L. 1997. Fact, Proposition, Event. Dordrecht.

# The verb 'to do' in Upper Şirvan Tat: Towards the genesis of a new inflectional paradigm through suppletion

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Suppletion is a morphological process in which word-forms of the same lexeme have phonologically distinct stems, as in Russian reb'on(o)k 'child' vs. det'-i 'children' or French je vais 'I go' vs. nous allons 'we go' (Hippisley et al. 2004). This presentation aims at presenting the composition of the paradigm of the verb which means 'to do' in Tat, developed as a result of suppletion between the verbs soxtan 'to make, to produce' and nohran 'to put, to place, to set'. All data consist of extracts from a corpus of spontaneous speech collected during fieldwork conducted by the author as well as from elicitations.

Caucasian Tat is a group of related SW Iranian dialects or even languages, closely related to Classical Persian and spoken mainly in the Republic of Azerbaijan. They are not to be confused with Tati, a cluster of NW Iranian languages spoken in Iranian Azerbaijan. Tat is divided into two main dialect groups with little to no mutual intelligibility: the written and relatively well-studied Judaeo-Tat (JT) and the non-written and understudied Muslim Tat (MT). For centuries, Tat has been in contact with Azeri and East Caucasian languages.

In all Tat varieties, the verb  $k\ddot{a}rd\ddot{a}n$  (cf. Persian kardan), which historically meant 'to do', possesses only the obscene sense of 'to penetrate sexually', and its use is heavily restricted (Authier 2012: 27).¹ Instead, JT and most MT dialects use the verb  $saxt\ddot{a}n$  or soxtan (cf. Persian  $s\ddot{a}xtan$ ) whose original sense was 'to make, to produce'. This verb conveys meaning of 'to do', including in complex predicates. MT of Xızı has adapted the verb  $nar\ddot{a}n$  with the original meaning of 'to put, to place, to set' (cf. Persian  $neh\ddot{a}dan$ , of the Proto-IE root  $^*dheh_1$  which has also given the Latin facio and the English do) for the same purpose.

In MT of the region of Upper Şirvan, the verb *soxtan* 'to do' complements its paradigm with that of the verb *nohran* 'to put' (cognate of the abovementioned *narān*) for some modal categories, namely the negative subjunctive (1), the prohibitive (2) and the eventual (3). Moreover, the historical

<sup>&</sup>lt;sup>1</sup>However, its derivatives (*däkärdän* 'to pour', *väkärdän* 'to build') are not regarded as taboo due to the fusion of the historical particles with the verbal stem, leading to them being interpreted as separate lexemes.

'present stem' of nohran in Upper Şirvan MT, n-, is only used today in the sense 'do':

- (1) *na-dun-ustum či soz-um*, *či nä-n-um* NEG-know-PST1 what (SBJV)do-1 what NEG-(SBJV)put-1 'I did not know what to do and what not to do.'
- (2) šö rɨšni=rä färäqät mä-n-ind (cf. ≠ färäqät soz-ind) night light=obl quiet proh-put-2pl
   'Do not turn off the light at night.'
- (3) äyär ü=rä bär-und, män či **mi-n-um**? if s/he=obl (sbJv)carry\_away-3pl I what evt-put-1 'If they take him away, what will I do?'

The use of the stem *n*- in the subjunctive (1) and the imperative (2) is restricted to negative forms. For the eventual (3), both affirmative and negative forms with *n*- exist. Furthermore, all three contexts are compatible with the corresponding negative forms of soxtan (*na-soz-um*, *mä-soz-ind* and *mi-soz-um* respectively), accepted during elicitations, though less common in spontaneous speech.

As for the verb *nohran* 'to put', the semantic domain of its 'present stem' has been overtaken by the semantically related non-defective verb *hištän* 'to leave, to release' (4–5). Meanwhile the 'past stem' paradigms for *nohran* and *hištän* remain distinct, and the two verbs are used interchangeably without any semantic difference (6), as their meanings for the sense of 'to put' have converged under the influence of Azeri (where both meanings are expressed by *qoy*-):

- (4) *mi-hil-i* (\**mi-n-i*) *mun-i bä kinor* EVT-leave-2 (SBJV)stay-3 LOC edge 'You will put/leave it to stay on the side.'
- (5) bi-hil (\*bi-n) bä zir nolinčä

  IMP-put(2) LOC bottom cushion

  'Put/leave it under the cushion.'
- (6) kitob=ä hiš-tum / noh-rum bə sär ustol book=obl put-pst1 put-pst1 loc head table 'I left/put the book on the table.'

The presentation will thus describe the distribution of these three verbs and show how they have combined to form their inflectional paradigms. The desemantization of *nohran* ('to put' > 'to do') and the replacement of *soxtan* by

nohran in some moods provide evidence for the reorganization of the inflectional paradigm of the verb meaning 'to do' by suppletion. This pattern follows the basic features that characterize suppletion cross-linguistically: frequent item, inherent inflection (i.e. not conditioned by syntactic relations between constituents, see Booij 1996) and relative coherence regarding the general morphological system of the language (Hippisley et al. 2004). On the other hand, the main specificity is that in Upper Şirvan MT, the suppletion seems optional. The coexistence of two stems in some uses testifies to the process not having completed yet. While the use of *narän* 'to put' in the sense of 'to do' has been attested for Tat (e.g. in Xizi MT), the situation of Upper Şirvan MT is unique in that the current system constitutes a transitional step which provides precious clues for the reconstitution of this phenomenon in Tat in general.

- Authier, G. 2012. Grammaire juhuri, ou judéo-tat, langue iranienne des Juifs du Caucase de l'est. Wiesbaden.
- Booij, G. 1996. Inherent versus contextual inflection and the split morphology hypothesis. In: G. Booij and J. van Marle (eds.). *Yearbook of Morphology* 1995, 1–15. Dordrecht.
- Hippesley, A., D. P. Brown, M. Chumakina and G. Corbett. 2004. Suppletion: Frequency, categories and distribution of stems. *Studies in Language* 28 (2), 387–418.

# Persian comparative correlatives are not conditionals

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The relationship between conditionals and correlatives, discussed in various works on ordinary correlatives (Andrews 1985, Geis 1985, Izvorski 1996, Cheng and Huang 1996, Dayal 1996, Bhatt and Pancheva 2006) as well as on comparative correlatives (CCs) (Michaelis 1994, Beck 1997, Culicover and Jackendoff 1999) is an important field of study as there exist several interpretive and formal parallels between correlative and conditional constructions. There are morphological, syntactic and semantic similarities.

Concerning morphological marking, in languages where correlativization is a productive strategy, correlatives and conditionals often use the same marker of subordination.

Parallels between conditionals and correlatives extend beyond the use of the same morphological markings or the selection of pronouns. In their syntax, the two kinds of construction also show many similarities. To start with a basic one, they both involve a bi- clausal structure with a subordinate clause adjoined to the main clause. As Bhatt and Pancheva (2006) show, sentence initial conditionals adjoin to CP/IP, just like correlatives. Furthermore, conditionals, just like correlatives, can be coindexed with a proform – this form in English is then – whose placement observes conditions also found with correlate phrases (Bhatt and Pancheva (2006)). (1) exemplifies Persian CCs:

- (1) a. hærče hæva særdtær beše, ehtemal-e bareš-e how much weather lower become.3rd.sg.suвј probability-еz bærf bištær miše. falling-еz snow more
  - 'The lower the temperature, the higher probability of snow.'
    b. færzænd-e kæmtær, zendegi-e behtær.

life-EZ

'The fewer the children, the better the life.'

fewer.

child-EZ

Each CC under consideration here has two primary phrases separated by a comma; these can be clearly clausal, as in, e.g. (1a)–(1b), or appear without verbs, as in (1c). In case of clausal structure, the first clause begins with  $h \approx r \approx (q \approx dr)$  (how much) and the second one with  $h \approx m \approx q \approx dr$  (that much).

A typical conditional sentence in Persian looks like (2), in which the element xgxr (if) occurs in the antecedent clause and the element xgxr optionally occurs in the consequent clause:

(2) ægær mi-ræfti unja (angah) un-o mi-didi. if ASP-go.2SG.PST there then s/he-ACC ASP-see.2SG.PST 'If you had gone there, you would have seen her/him.'

Andrews (1985) suggested that the correlative has the same type of quantificational structure as a conditional. Replacing the relative phrases with an indefinite, we can recast the relative clause as a conditional and get the same universal meaning:

(3)  $\forall x,y [girl'(x) \land boy'(y) \land played-with'(x,y)][defeated'(x,y)]$ 

With respect to some diagnostics as the presence of comparative morpheme (or a comparative meaning), the scope of quantification, semantic matching, proportional interpretations, and adverbs of quantification, I argue that the similarities observed between Persian CCs and conditionals are the result of the conservativity of generalized quantification and not the identity of the quantifiers involved in conditionals and CCs (Smith, 2011).

(4) **Conservativity** is the property of being a predicate (OP) on two properties such that OP(A,B) is equivalent to OP(A, A & B).

I review the similarities, noted by Thiersch (1982), Fillmore (1987) and Beck (1997), inter alia, before presenting new data showing differences in the kind of quantification (universal/generic v. proportional) are found with each and how they affect interpretation. Moreover, I show that while paraphrase relations between conditionals and correlatives might be suggestive of full equivalence, there are semantic differences between the two types of construction. An obvious one is that not all correlatives can receive a conditional-type free choice interpretation, but rather a definite interpretation denoting a single unique individual. A second difference concerns symmetric versus asymmetric readings in relation to the proportion problem of donkey sentences (Kadmon 1987). The problem concerns the anchoring possibilities of an adverb of quantification – whether it is anchored to one or all of the indefinites in a given sentence:

(5) If a farmer owns a donkey, he is usually rich.

The symmetric reading of (5) is one in which the adverb usually is anchored to both a farmer and a donkey. In this reading the sentence says that in most cases involving a farmer- donkey pair, the farmer is rich. In an asymmetric reading, the adverb is anchored either to a farmer only or to a donkey only, and not to farmer-donkey pairs. Now, Hindi correlative clauses (Cheng and Huang 1996, referring to Utpal Lahiri p.c.), can only have asymmetric readings. Conditionals on the other hand allow for a symmetric reading. This distinction argues for keeping the two types of constructions separate.

I follow Dayal (1996) in positing that firstly, while correlatives need to match up with correlate phrases in a one-to-one manner, conditionals do not have such a matching requirement. Second, an analysis of correlatives as conditionals would entail that we predict that singular correlatives are always interpreted as universals, contrary to fact.

The paper concludes that Persian CCs are not merely a subclass of conditionals as previously theorized for their English counterpart (cf. Beck 1997, Lin 2007 and Brasoveanu 2008). I follow Smith (2011) in positing an alternative theory in which a proportional quantificational force is part of the lexical meaning of the first  $h \approx r \approx (q \approx dr)$  (how much) in the CC.

- Barwise, J. and R. Cooper. 1981. Generalized quantifiers and natural language. *Linguistics and Philosophy* 4, 159–219.
- Beck, S. 1997. On the semantics of comparative conditionals. *Linguistics and Philosophy* 20, 229–271.
- Bhatt, R. and R. Pancheva. 2006. Conditionals. In: M. Everaert and H. van Riemsdijk (eds.). *The Blackwell companion to syntax*. Vol. 1. 638–687. Oxford.
- Smith, E. A. 2011. English comparative correlatives, conditionals, and adverbs of quantification. In: I. Reich et al. (eds.). *Proceedings of Sinn & Bedeutung* 15, 547–563. Saarbrücken.

#### Free Relatives: Evidence from Persian

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Free relative clauses (henceforth, FRs) are embedded clauses with either a gap or a resumptive pronoun (RP) in an argument or adjunct position and a clause initial wh-element. The structure has the syntactic behavior and interpretation of sub-clausal phrases - DPs, or AdvPs and can be replaced and paraphrased respectively with DPs and Headed Relative Clauses (HRs) as exemplified in (1).

- (1) a. Sara [hærči Tina xærideh.bud] ra bærdašt.

  Sara whatever Tina bought.be.3sg RA.ACC took.3sg

  'Sara took whatever Tina had bought.' (Free relative)
  - b. Sara [ketabæm] ra bærdašt.
    Sara book.my RA.ACC took.3sg
    'Sara took the book.' (DP)
  - c. Sara [ketab.i ke Tina xærideh.bud] ra bærdašt.
    Sara book.Indef KE Tina bought.be.3sg RA.ACC took.3sg
    'Sara took the book which Tina had bought.' (Headed relative)

Based on the distributional and semantic similarities, most scholars have assumed that FRs are just a particular kind of HRs (e.g. Bresnan and Grimshaw 1978, Groos and van Riemsdijk 1981, Larson 1987, Grosu 1994, among the others). Relying on the diagnostics such as pattern of distribution of RPs, the matching effect, pied piping, and the presence of the complementizer ke, it is shown that the two constructions pattern differently and should be assigned separate syntactic structures.

Vogel (2000) observes that the only exceptional property of FRs is that the FR *wh*- phrase is sensitive to the requirements of both matrix verb and FR's internal verb. It has to be of the appropriate category (and case, if case is marked overtly on wh-pronouns) for the position where the free relative appears. This phenomenon, first discussed in Grimshaw (1977), is known as the Matching Effect and is summarized in (2):

# (2) The Matching Effect:

- a. Case Matching: [FR wh-CASE; ... ]-CASE;
- b. Categorial Matching: [FR [wh]<sub>XPi</sub> ...]<sub>XPi</sub>

Although it is assumed that FRs in Persian are subject to categorial matching effects (Taghvaipour 2005), we provide some examples and show that this requirement is not so strong in Persian.

As for the internal syntax of free relatives, there have been two competing hypotheses in the literature. In what is called the Head Hypothesis, the *wh*-phrase is the head of the free relative and the matching effect follows under the X'-theory, because the head of a phrase must be of the same category as the phrase itself (Bresnan and Grimshaw (1978)). The alternative proposal, known as the Comp Hypothesis, considers the *wh*-phrase to be located in the Comp position, and the head of the clause to be either phonologically null or altogether absent (Groos and van Riemsdijk (1981), Harbert (1983) among others).

Testing the viability of both the Head and the Comp analyses of free relatives we argue for a Comp account and suggest that in Persian FRs are DPs with a covert D head that takes the *wh*-CP as its complement. The proposed structure is illustrated in (3).

# (3) $\left[ DP \text{ wh}_i \text{ e} \left[ CP \text{ t}_i \left[ IP \text{ t}_i \right] \right] \right]$

For the ultimate landing site of wh-phrase, we draw on Koopman (2000) in positing that languages disallow projections to be headed by silent covert heads and Specs. Projections must be activated to be semantically interpretable and activation happens by associating overt lexical material to either Spec or head at some point in the derivation. We, thus, assume that the wh-phrase of FRs further moves from the specifier of CP to the specifier of DP in order to license the covert head D. This brings the wh-phrase in the domain of a c-commanding head, which would allow the wh-phrase to subsequently satisfy the lexical properties of some predicate, say, matrix verb. Moreover, this configuration supports the striking similarity of FRs and wh- interrogative complements both in form and behavior with respect to constraints on RP distribution in some positions and the possibility of multiple wh-words; since prior to the movement of wh-phrase into the Spec, DP, the structure of FRs resembles that of an interrogative clause.

Assuming a paradigm of quantificational force realized through suffixes to a *wh*-word in Persian, we posit that *wh*-words in Persian FRs are QPs with a suffix/quantifier that indicates universal quantification. Besides, the Null D head has an uninterpretable max-feature which requires the entire QP containing the requisite features to move to spec, DP in order to satisfy features on null D. The structure then reflects features necessary for an agreement relationship between the *wh*-phrase and the null D head of the FR and supports the

- 'maximalizing' or quantificational nature of these FRs noted by Grosu (2003). Concerning the cases in which a FR seems to behave like an AdvP, as in (4), we assume these expressions can act as both DPs and AdvPs, depending on the context. Following Larson's (1985, 1998) proposal that FRs can only be nominal, we argue that these expressions are DPs that also allow an adverbial interpretation. That is, syntactically, they are DPs; semantically, they can be interpreted as either DPs or AdvPs.
- (4) [hærkoða mixaj] boro! wherever DUR.want.2sg go.IMP.2sg 'go where you want!'

- Bresnan, J. and J. Grimshaw. 1978. The syntax of free relatives in English. *Linguistics Inquiry* 9, 331–391.
- Groos, A. and H. van Riemsdijk. 1981. Matching Effects in Free Relatives: a Parameter of Core Grammar. In: A. Belletti et al. (eds.) *Theory of Markedness in Generative Grammar*, 171–216. Pisa.
- Grosu, A. 2003. A unified theory of standard and transparent free relatives. *Natural Language & Linguistic Theory* 21 (2), 247–331.
- Koopman, H. 2000. The Spec Head Configuration. In: H. Koopman. *The Syntax of Specifiers and Heads: Collected Essays of Hilda J. Koopman*. London.
- Larson, R. 1987. "Missing Prepositions" and the Analysis of English Free Relatives. *Linguistic Inquiry* 18, 239–266.
- Larson, R. 1998. Events and modification in nominals. In: D. Strolovitch and A. Lawson (eds.). *Proceedings from Semantics and Linguistic Theory (SALT) VIII.* Ithaca, NY.
- Taghvaipour, M. 2005. Persian Relative Clauses in Head-driven Phrase Structure Grammar. Ph.D. thesis, University of Essex.

# Two DP layers within the Central Kurdish noun phrase

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This study proposes that the Central Kurdish noun phrase contains two DP layers projecting above NP. We show that two markers of definiteness are morphologically realized within the noun phrase, *-eke* and *-e*. Based on the distribution of these definite markers and the feature(s) they spell out, we argue that two structurally distinct functional D categories are realized in the noun phrase, with one containing — and the other being contained by — the projection of Number (NumP).

We first argue that the enclitic element -e co-occurring with demonstratives is the syntactic realization of definiteness (1a), serving a similar function to the primary definite marker -eke (1b). The morpheme -e attaching to the noun dar 'tree' in (1b), which agrees in definiteness with the definite marker, is an Izafe linking element, and is not addressed in this paper.

- (1) a. em dar-e
  this tree-DEF
  'this tree'
  - b. *dar-e zil-eke* tree-IZ big-DEF 'the big tree'

We then propose that the two definite markers realize different D categories such that *-eke* realizes a different D, lower than the D spelled out by *-e*.

Syntactic as well as semantic evidence substantiates the two-DP-layer analysis. The clearest syntactic evidence is that the two Ds occur on different sides of Number. As shown below, the plural enclitic -an directly attaches to the noun esp 'horse' and precedes -e (2a), whereas this enclitic follows -eke which, in turn, attaches directly to the noun (2b).

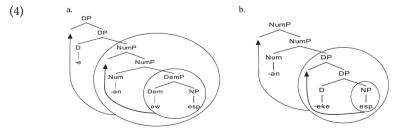
- (2) a. ew esp-an-e that horse-PL-DEF 'those horses'
  - b. *esp-ek(e)-an* horse-DEF-PL 'the horses'

In terms of the sematic evidence, we claim that the feature make-up of the two D categories is different in that one D position is the locus of some feature not shared by the other. Note that here, definiteness is defined as the grammaticalization of specificity and uniqueness (Enç 1991; Lyons 1999). While *-e* is arguably the spell-out of a category D that merely bears specificity, *-eke* realizes a D head that carries definiteness proper, comprising both specificity and uniqueness. Consider the examples below.

- (3) a. kur-eke-m naw-i saman-e son-DEF-1SG name-3SG saman-AUX.3SG.PRS 'My son's name is Saman.'
  - b. ew kur-e-m naw-i saman-e that son-DEF-1sg name-3sg saman-AUX.3sg.prs 'That son of mine's name is Saman.'

In (3a) the possessive construction *kur-eke-m* 'my son' entails that the speaker has only one son, who is Saman. So, the DP is interpreted as both unique and specific. However, *ew kur-e-m* 'that son of mine' in (3b) encodes the reading that the speaker has other son(s) than Saman, where the definite marker *-e* renders the DP specific but not unique (see Anderson's (2007) definition of uniqueness).

The current study adopts the non-lexicalist approach to morphology (Marantz 2001) and Chomsky's (1995) Minimalist bottom-up derivational theory. In light of these approaches, the nominal projection (NP) in (2) is assumed to move in a roll-up fashion, picking up both markers of definiteness and number. Below (4a, b) shows the derivation of (2a) and (2b), respectively.



Given the representations in (4), while the noun phrase in (2a) projects a DP containing NumP (4a), that in (2b) projects a DP which is contained by the projection of Number (4b).

Further, the deictic part of the demonstrative is assumed to merge with NP low in the structure, falling within the scope of D (4a). This accords with Guardiano (2010) and Roberts (2011), among others, that in languages with discontinuous demonstratives, such as Hungarian and Welsh, the proximity-marking part of the demonstrative merges somewhere lower than the co-occurring definite marker.

Concluding, the study claims that not only does Central Kurdish exhibit two markers of definiteness in its noun phrase (*-eke*, *-e*), it also has two structurally different categorial D positions hosting the two definite markers. On the one hand, the functional category of Number intermediate between the two Ds is used as empirical evidence for the structural difference between the two categories in the hierarchy (4a, b). On the other hand, the reading rendered by the two D categories based on the feature(s) they encode offers additional evidence in setting the two Ds and the two definite markers apart. In other words, the structural difference between the two D categories reflects a difference in their feature make-up, hence a difference in their semantics.

## References

Anderssen, M. 2007. The acquisition of compositional definiteness in Norwegian. *Nordlyd* 34, 252–275.

Chomsky, N. 1995. The Minimalist Program. Cambridge, MA.

Enç, M. 1991. The semantics of specificity. *Linguistic Inquiry* 22, 1–25.

Guardiano, C. 2010. Demonstratives and the structure of the DP: Crosslinguistic remarks. In: *Workshop on Disharmony in Nominals, Linguistics Association of Great Britain Annual Meeting*, Leeds University.

Lyons, C. 1999. Definiteness. Cambridge.

Marantz, A. 2001. Words. Paper Presented at the *20th West Coast Conference on Formal Linguistics*, University of Southern California, 23–25.

Roberts, I. 2011. FOFC in DP: Universal 20 and the nature of demonstratives. Unpublished manuscript, University of Cambridge.

# Upward agreement within the Central Kurdish noun phrase

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This paper proposes that the noun phrase in Central Kurdish (CK, henceforth) exhibits agreement in definiteness, which is established upward. I argue that the functional category of Izafe (Iz), which links a noun to a post-nominal modifying adjective, establishes Agree with the definite marker *-eke*. Contra Chomsky (2000, 2001) but following Baker (2008) and Zeijlstra (2012), I show that the agreement occurs upward; Izafe is thus a probe with an unvalued DEF feature, c-commanded by a goal (a D category) bearing the same feature valued. I further argue when there are two Izafe probes with an unvalued DEF feature, and a single goal with a matching valued feature, the two features form a link before probing upward as a single instance of an unvalued feature and getting their feature valued by D.

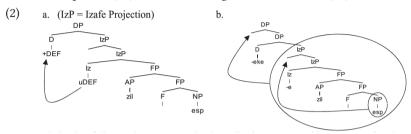
I first propose the existence of two kinds of Izafe in CK: AP Izafe and NP Izafe. The former links a noun to a following adjective, whereas the latter introduces a nominal modifier. I then show that only AP Izafe agrees in DEF. For reasons of space, I do not include NP Izafe in the study. As shown below, Izafe is realized as *-e* in a definite DP (1b, c), but as *-i* in an indefinite DP (1a).

- (1) a. *esp-(êk)-i zil* horse-(INDEF)-IZ big '(a) big horse'
  - b. *esp-e zil-eke* horse-IZ big-DEF 'the big horse'
  - c. esp-e zil-e bor-eke horse-iz big-iz grey-def 'the big grey horse'

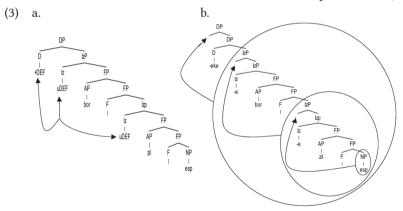
I then propose that AP Izafe establishes an upward Agree relation in definiteness with the definite marker *-eke*, with syntactic evidence which substantiates the agreement.

The study adopts the non-lexicalist approach to morphology (Halle and Marantz 1993, Marantz 2001) and Chomsky's (1995) Minimalist bottom-up derivational theory. Following such approaches, the nominal projection (NP)

in (1b) is assumed to move in a roll-up fashion, pied-piping all the material en route to Spec DP (2b), after the Izafe agrees with -eke at D (2a).



The derivation follows Cinque (2010) in that adjectives merge with an empty functional category (F) in its Spec, above NP. Subsequently, the two functional categories Iz and D merge successively above the null functional projection (FP), where Iz enters the derivation with an uninterpretable and unvalued DEF feature, and D carries an interpretable DEF feature that has a value. As shown in (2a), Iz probes up for a goal and finds D with a valued matching feature which c-commands it. At this stage Agree is established after the DEF feature on Iz is valued by D. The noun *esp* 'horse' then moves to Spec Iz (2b), piedpiping the projection IzP and raising finally to Spec DP. This results in the realization of a definite form of Izafe and the derivation of the noun phrase in (1b), which reverses the order of the elements on the structural representation (2b).



Concluding, the study claims that the functional Izafe category (Iz) in CK bears an unvalued DEF feature and establishes an upward agreement relation in indefiniteness with a D which has a valued matching feature. It is also argued that a feature-sharing process occurs between two Izafe heads when they co-occur, where both behave as a single instance of an unvalued DEF feature which probes upward and finally establishes Agree with a D carrying the valued matching feature in its c-command domain.

- Baker, M. 2008. The syntax of agreement and concord. Cambridge.
- Chomsky, N. 2000. Minimalist inquiries: The framework. In: R. Martin, D. Michaels, and J. Uriagereka (eds.). *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, 89–155. Cambridge.
- Chomsky, N. 2001. Derivation by phase. In: M. J. Kenstowicz and K. L. Hale (eds.). *A Life in Language*, 1–50. Cambridge, MA.
- Pesetsky, D. and E. Torrego. 2007. The syntax of valuation and the interpretability of features. In: S. Karimi, V. Samiian and W. K. Wilkins (eds.). *Phrasal and clausal architecture: Syntactic derivation and interpretation. In honor of Joseph E. Emonds*, 262–294. Amsterdam.
- Zeijlstra, H. 2012. *There is only one way to agree.* Unpublished Master's thesis, University of Amsterdam.

#### Foreign Accent Syndrome in a Persian-speaking woman

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FAS is a rare speech disorder caused by the damage sustained to left hemisphere of the brain, in which a combination of segmental and suprasegmental deviations in speech production creates foreign accent. Despite segmental pronunciation problems, prosodic errors are mainly considered as the main characteristics of FAS. The present paper offers a report on a 53-year Persian-speaking woman who is pronouncing the words and sentences with foreign accent after a stroke and central semiovale focal infarctions of left hemisphere. According to researchers' information and follow-up done, this patient is considered as the first case of FAS in Iran. By using Praat (version 4.1.9) software, prosodic characteristics of the patient's speech have been compared with speech features of ordinary speakers of Persian language. Being in direction of previously reported research findings, the obtained results show that there are main deviations in prosodic characteristics of the patient's speech which are related to the speech rate, stress, and juncture.

#### References

- Vahidian-Kamyar, T. 2001. *Næva-ye goftar dær farsi* [Melody of speech in Persian], 205. Mashhad.
- Carbary, T. J, J. P Patterson and P. J. Snyder. 2000. Foreign accent syndrome following a catastrophic second injury: MTI correlates, linguistic and voice pattern analyses. *Brain and Cognition* 43, 78–85.
- Graff-Radford, N. R, W. E. Cooper and P. L.Colsher. 1986. An unlearned foreign "accent" in a patient with aphasia. *Brain and Language* 28, 86–94.
- Moen, I. 1990. A case of foreign accent syndrome. *Clinical Linguistics and Phonetics* 4, 295–302.

- Nielsen, J. M and M. McKeown. 1961. Dysprosody. Report of two cases. Bulletin of The Los Angeles Neuropsychological Societies 26, 230–241.
- Dankovicova, J., J. M. Gurd, J. C. Marshall, M. K. C. MacMahon, J. Stuart-Smith, J. S. Coleman et al. 2001. Aspects of non-native pronunciation in a case of altered accent following stroke (foreign accent syndrome). *Clinical Linguistics and Phonetics* 15, 195–218.
- Reeves, R. R and J. W. Norton. 2001. Foreign accent-like syndrome during psychotic exacerbations. *Neuropsychiatry* 14, 135–138.
- Ardila, A., M. Rosselli, O. Ardila. 1988. Foreign accent: An aphasic epiphenomenon? *Aphasiology* 2, 493–499.

## Areal typological study on the progressive in northern Iran perspective

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The study deals with the progressive in the varieties spoken along the Caspian Sea starting in the province of Mazandaran in northern Iran and moving up towards south-eastern Azerbaijan, focusing primarily on the Iranian varieties Mazandarani, Gilaki, Tati and Taleshi. The data has mainly been collected through grammatical descriptions, in a couple of cases informants have also been consulted. Due to various detailed descriptions of the tense and aspect pattern in the area, 50 neighboring villages and cities are included in the study. It will be shown that when it comes to the progressive, detailed data on geographically close varieties is highly fruitful since varieties that are described as the same (language or dialect) may have completely or slightly different progressive constructions. Some data on non-Iranian varieties, such as Turkic varieties, Neo-Aramaic and Nakh-Daghestanian varieties, and their progressive and/or present tense patterns will also be presented for comparison since it may well be that the origin of the progressive patterns under discussion is non-Iranian.

In the area mainly two patterns are used for the marking of the progressive function, what will be referred to as the DAR gram family and the KAR gram family. The definition of gram and gram family is adopted from Dahl and Bybee (1989: 52) and Dahl (2000: 7–8). It is then assumed that all the constructional patterns presented as DAR constructions are either inherited or borrowed from one another. The same is assumed for all the constructional patterns presented as KAR patterns. However, this assumption is not based on diachronic data, which is sparse or nonexistent, but is hypothesized due to structural and phonological similarities as well as geographic closeness. In examples 1 and 2, present and past tenses of DAR and KAR constructions are given for Babolsari and Rashti respectively.

- (1) Babolsari, Mazandarani (Stilo to appear, glossing mine)
  - a. dar-ε šúmmεDAR.PRS-3SG go.PRS.1SG'I am going'

- b. dayy- $\varepsilon$  si(i) DAR.PST-3SG go.PST.2SG 'You were going.'
- (2) Rashti, Gilaki (Stilo 2001:665 mg)
  - a. *kára gir-ám*KAR take.PRS-1SG

    'I am taking.'
  - b. *kára gift-i-m*KAR take.PST-IPFV-1SG
    'I was taking.'

The DAR gram family includes a locative element which is phonologically close to dar/dar/da. The data will show that the DAR constructions can be divided into 4 main types depending on structural and functional features as presented in Table 1. As can be seen, Type 1 and 2 constructions have the same function span, while Type 2 and 3 share the main structural pattern of using a postposed DAR element in varying degrees of inflectionality together with a non-finite element. Thus, as we follow the Caspian Sea from Mazandaran up to the southern parts of Azerbaijan, the constructions within the DAR gram family change from periphrastic to inflectional, from preposed to postposed and from functioning as progressives to marking the present or past imperfective. Structurally, the Type 1 pattern differs radically from the rest as it is periphrastic, has a preposed DAR element and involves a finite form of the main verb. Functionally, the Type 3 pattern is most often a marker of the general present in the present tense and of the past progressive in the past tense. In Type 4, the pattern is used for the present and past imperfective and is thus not a progressive gram.

TYPE	FUNCTION	STRUCTURAL FEATURE	LANGUAGE GROUP
Type 1	DAR: PROG	DAR [] V <sub>FIN</sub> periphrastic, preposed, finite main verb	Mazandarani
Type 2	DAR: PROG	V <sub>INF</sub> -DAR or V <sub>INF</sub> DAR (semi-)inflectional, postposed, non-finite man verb	Gilaki, Tati
Type 3	DAR: PRS DAR: PST.PROG	V <sub>RE</sub> =DAR clitical, postposed, non-finite main verb	Taleshi
Type 4	DAR: IPFV	L V <sub>INF</sub> -DAR inflectional, postposed, non-finite main verb	l Taleshi of Shuvi

Table 1. Function and structure of DAR constructions. 1

<sup>&</sup>lt;sup>1</sup>In Table 1, dar:prog refers to a dar construction with the progressive function, fin refers to finite and INF to infinitive.

The kar gram family involve an element which is realized as kar/kar/kar or similar. This element originates from  $k\tilde{a}r$  'work, doing' (Windfuhr 1989:256). Structurally and functionally, the kar gram family is more homogenous than the dar gram family although we do see the same change from the progressive to the imperfective. The kar gram family is also in most cases, at least according to the data available, limited to the meeting point between the Iranian provinces Gilan, Ardabil, East-Azerbaijan and Zanjan. The majority of varieties including in the kar gram family are Tati.

The study illustrates that the progressive is a gram type which is often borrowed or calqued and which often undergoes structural change and fusion. This is assumed to be both due to the structural nature of the progressive, i.e. it being periphrastic, and the functional nature, i.e. it having a somewhat pragmatic function. The data illustrated that as the structural pattern of the progressive becomes more grammaticalized, the functional span of the pattern become more mature. It is also shown that it is language contact rather than ancestry which has created this areal cline as constructions adjust or copy both their structural and functional spans to/from neighboring varieties. The study concludes that the patterns found cannot be accounted for if we do not assume pattern or material borrowing as part of the process.

#### References

- Dahl, Ö. 2000. The tense-aspect systems of European languages in a typological perspective. In: Ö. Dahl (ed.). *Tense and aspect in the languages of Europe*, 3–25. Berlin.
- Dahl, Ö. and J. Bybee. 1989. The creation of tense and aspect systems in the languages of the world. *Studies in Language* 13, 51–103.
- Stilo, D. 2001. Gilan x. Languages. In: Encyclopaedia Iranica. New York.
- Stilo, D. L. To appear. Mazandarani. In: *Encyclopaedia Iranica*. New York.
- Windfuhr, G. 1989. New West Iranian. In: R. Schmitt (ed.). Compendium linguarum Iranicarum, 251–262. Wiesbaden.

#### **Peculiarities of Optative in Ossetic**

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1. By Optative I mean the verbal category which expresses the speaker's wish. The recent studies of Optative divide it into Desiderative Optative and Performative Optative. The latter expresses blessings and curses (which can be analyzed as the wish of the speaker 'to change the world by an appeal to supernatural powers' (Dobrushina 2011: 127)). The former conveys the 'powerless wish of the speaker' or 'wish as an utterance about a hypothetical or counterfactual situation which is favourable or desirable for the speaker' (ibid.).

It is believed that morphological Optative (especially, Desiderative Optative) is a typologically rare grammatical category, however, it is typical of the Caucasus and Nepal (Dobrushina et al. 2005: 299).

In the talk, I will discuss the historical and semantic peculiarities of Optative in Ossetic language (East Iranian), one of few modern Iranian languages which preserved morphological Optative.

**2.** Ossetic has Desiderative Optative which is formed by special flexion attached to a present stem of a verb (sg: -in, -iš, -id; PL: -ikkam, -ikkat, -ikkoj). The origin of the Ossetic Optative flexion is well-known. It comes from the Old Iranian thematic flexion (sg: -a-mi, -a-hi, -a-ti; PL: -ā-mahi, -a-ta, -a-nti). The Ossetic optative vowel -i- goes back to the Indo-European optative suffix \*-i-ye / \*-oi (Benveniste 1951). The origin of -ikk- in the plural is unknown.

Optative is attested in many extinct Iranian languages of old and middle Iranian period. However, most of the modern Iranian languages have lost morphological Optative. Besides Ossetic, it retained only in a few languages, e.g. Northern Talyshi spoken in Azerbaijan (Northwestern Iranian) and some Balochi dialects (Northwestern Iranian).

The main reason for the preservation of morphological Optative in Ossetic is the Caucasian language area rich in volitional moods. Due to its history Ossetic language was isolated from all other Iranian languages and existed in a close contact with all Caucasian language families (North-West Caucasian, North-East Caucasian and South Caucasian) as well as with at least one Turkic language (Karachay-Balkar). Morphological Desiderative Optative is widespread in the Caucasus (North-West Caucasian, some East Caucasian (Ingush and Chechen)) and is attested even in the Turkic languages of

the Caucasus — Karachay-Balkar and Kumyk (Dobrushina 2009; 2011). Optatives are on the whole atypical of Turkic languages. Apparently, Ossetic preserved Optative because of the areal influence, though morphologically it has a pure Iranian origin.

**3.** Semantically, Ossetic Optative also follows old Iranian Optative. Besides the wish of the speaker, it can be used in counterfactive situations (both independently and in subordinate clauses). Counterfactive use of Optative (especially in conditional clauses) is attested in Avestian (Martínez, de Vaan 2014). In general, counterfactive semantics and desiderative optative semantics are close to each other. The wish or dream of the speaker are within the irreal semantic domain and can be counterfactive (*If only I had wings!*). It is rational for a language to use one grammatical mean for both meanings.

Optative in Digor dialect also has some non-volitional uses, namely, aspectual (habitual-iterative in the past (1)) and discourse (narrative (2)) uses.

(1) 'Ma 3 пзтид ku 3r-iyz3l-id3, wзdta in and poss.3sg grain when pref-fall-opt.3sg then 3sg.encl.dat k3n-iwonc3. 'ma till3g үзтр-з ra-ndз and harvest POSS.3SG straw-NOM PREF-outside do-OPT.3PL ha he-wзdta woi irdgз-тз CONTR so-after that be.prs.3sg 3sg.gen wind-ALL is-dar-iwoncз. veter PREF-stretch-OPT.3PL wind

'And when the grain started to fall, they removed the straw, and the grain was cleaned by the wind' (Oral text. Ilas Khadaev. 11.1).

(2) Ma bab3j f3st3m3 f3-kk3s-in3 udta bab3j m3m3 udta and again back PREF-look-OPT.1sG then again 1sg.encl.all then jet3 d3r 3r-l3w-ionc3 3ma ni-kk3s-ionc3 they FOC PREF-stand-OPT.3PL and PREF-look-OPT.3PL

[I'm going and two wolves are going after me] 'Again, I'm looking back, they're also stopping and looking at me' (Oral text, Two wolves, 16.2).

The narrative use of Optative in Digor Ossetic is fairly frequent in oral texts. However, it is not attested neither in Iron Ossetic, nor in other Iranian languages having morphological Optative. Apparently, narrative semantics is an innovation of Digor Ossetic.

**4.** The aspectual (habitual) uses of Ossetic Optative are vague. However, it has historical explanation. In many extinct Iranian languages Optative, besides its volitional semantics, had durative-habitual uses. Durative-habitual semantics expressed by morphological Optative is attested in Avestian, Old

<sup>&</sup>lt;sup>1</sup> It was first noted by Paul Tedesco in 'a-Stämme und aya-Stämme in Iranischen' (1923).

Persian, Saka, Khwarezmian and Sogdian. Cf. the following example from Avestian where Optative conveys habitual-iterative events in the past:

(3) kuua tā dāθra paiti haṇjasəṇti maṣiiō astuuaiṇti where this.pl gift.pl towards prev.go.3pl.prim.ACT mortal bony aŋhuuō hauuāi urune para.daiδiiāt life.loc.sg one's.own.dat soul.dat prev.give.3sg.prs.opt.ACT 'where do the donations go, which the mortal has been offering for his own spirit throughout his bony life?' (Martínez, de Vaan 2014: 102) (Vd 19, 27)

Some scholars consider that habitual-iterative semantics of Iranian Optative could go back to Proto-Iranian (Martínez, de Vaan 2014: 102).

In the talk, I will briefly consider non-volitional uses of Desiderative Optative in other Caucasian languages geographically close to Ossetic. The preliminary study argues that though the combination of durative-habitual meanings and optative semantics is typical of extinct Iranian languages, it is not common in the languages of the Caucasus.

Apparently, Ossetic Optative inherited habitual semantics from Iranian language(s) of old and middle Iranian period.

The past habitual-iterative semantics of Ossetic (as well as other Iranian) Optative could develop from counterfactive uses of Optative. In the languages of the world, habitual in the past markers often have some irreal uses (Lander et al. 2004; Plungian 2005). One can assume that the habitual semantics could develop from counterfactuality. Counterfactuality itself is close to the general optative meaning 'the wish of the speaker', which is usually irreal (*I wish I was rich*) or counterfactive (*If only I could fly*).

The puzzling combination of volitional and aspectual meanings in Ossetic Optative is explained historically. Narrative uses of Optative in modern Digor is an innovation.

#### References

- Benveniste, É. 1951. Prétérit et optative en indo-européen. *Bulletin de la Société de Linguistique de Paris* 47, 11–20.
- Dobrushina, N., J. van der Auwera and V. Goussev. 2005. Optative. In: M. Dryer, M. Haspelmath, D. Gil and B. Comrie (eds.). *World Atlas of Language Structures*, 298–301. Oxford.
- Dobrushina, N. R. 2009. Semantičeskaja zona optativa v naxsko-dagestanskix jazykax [The optative semantic domain in Nakh-Daghestanian languages]. *Voprosy jazykoznanija* 5, 48–75.

- Dobrushina, N. R. 2011. Optative domain in Dagestanian. In: G. Authier and T. Maisak (eds.). *Tense, Aspect, Modality and Finiteness in East Caucasian Languages*, 95–130. Bochum.
- Isxakov, M. M. 1977. Glagol v sogdijskom jazyke (dokumenty s gory Mug). Tashkent.
- Lander, Ju. A., V. A. Plungian and A. Ju. Urmanchieva (eds.). 2004. *Issledovanija* po teorii grammatiki. Vol. 3. *Irrealis i irreal'nost'*. Moscow.
- Plungian, V. A. 2005. Irrealis and modality in Russian and in typological perspective. In: B. Hansen, P. Karlík (eds.). *Modality in Slavonic languages: New perspectives*, 135–147. Munich.
- Lacroix, R. 2009. Description du dialecte laze d'Arhavi (caucasique du sud, Turquie). Grammaire et textes. Thèse de doctorat en Sciences du Langage. Université Lumière Lyon.
- Martínez, J. and M. de Vaan. 2014. Introduction to Avestan. Leiden.
- Tedesco, P. 1923. *a*-Stämme und *aya*-Stämme in Iranischen. *Zeitschrift für Indologie und Iranistik* 2, 281–315.

#### West Iranian ezafe as a contact-induced feature

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The study of structural interference between Iranian and Elamite has thus far been largely focused on the restructuring of Achaemenid Elamite (see e.g. Gershevitch 1979). The purpose of this presentation is to demonstrate that grammatical restructuring also likely went in the opposite direction.

One of the better-known typological correlations concerning word-order is the overwhelming presence for GenN order among OV languages (Dryer 1992: 98). Persian and a number of other West Iranian languages represent exceptions from this generalization, in that they combine the verb-final word order with the postposition of possessors in the so-called ezafe construction, as in (1):

(1) bāzār-i butān šikast gīrad market-LNK idol.PL defeat receive.3sg.prs 'The fair of idols suffers defeat.'

The same noun phrase structure is traceable back to Middle Persian, e.g.  $pahrag \ \bar{\imath} \ ku \bar{s} \bar{a} n$  'watch-post of the Kushan' alongside the less frequent left-branching construction, e.g.  $hwar\bar{a} s \bar{a} n \ wimand$  'frontier of Khorasan'. Old Persian counterpart of the ezafe construction is the morphologically marked noun phrase where the postposed possessor is linked to the possessum by means of a relative pronoun, which agrees with the head-noun in gender, number, and case, as in (2). At the same time, Old Persian also features the unmarked GenN construction, e.g.  $Vi\bar{s} taspahya \ puça$  'Vishtaspa's son'.

(2) kāra: haya: manā: avam: kāram: host.nom.sg rel.nom.sg.m I.gen that.acc.sg.m host.acc.sg tayam: hamiçiyam: aja rel.acc.sg.m rebellious.acc.sg.m smite.3sg.prt

'My army smote the rebellious army'

The left-branching noun phrase syntax is thought to reflect the Indo-Iranian state of affairs and finds counterparts in the bulk of Middle Iranian languages, e.g. Parthian  $man\ b\bar{o}\delta est\bar{a}n$  'my garden', Sogdian  $xmyr\ xws'nty'kH$  'emir's satysfaction', or Khotanese noun phrase (3). At the same time, the ezafe construction is found in modern Iranian languages that are territorially adjacent to the Persian core area, for example in Kurdish.

(3) ttye uysnori käḍägānīnei haṃbīsä that.gen.sg.m being.gen.sg.m karma-related.nom.sg.m heap.nom.sg.m 'karma-heap of that being'

Thus the ancestor of the Persian ezafe construction was probably a regional innovation, which combined morphological complexity with typological markedness. Therefore, it seems worthwhile to enquire whether its rise and spread represented a contact- induced development. Given that syntactic restructuring frequently correlates with language shift, substrate influence emerges as a likely source of the transformation  $man\bar{a} \, k\bar{a}ra \to k\bar{a}ra \, haya \, man\bar{a}$  'my army'.

Now, the Elamite language, which was spoken in southwestern Iran before the arrival of the Iranian tribes to this area, also displays the unusual combination of the OV word order and the postposition of the possessor. Furthermore, it features nominal class agreement between the possessum and the possessor, which is typologically reminiscent e.g. of the situation in the Bantu languages. The Middle Elamite examples below feature the following agreement markers: animate -r(4), inanimate -m(5), and "locutive" -k(6).

- (4) <sup>d</sup>Inšušinak nap-ir u-ri Inshushinkak god.ANIM I.ANIM 'Inshushinak, my god'
- (5) siyan <sup>d</sup>Inšušinak-me husa-me temple Inshushinak.INAN wood.INAN 'wooden temple of Inshushinak'
- (6) u <sup>m</sup>Untaš-DINGIR.GAL šak <sup>d</sup>Humbanummena-ki sunki-k I Untash-Napirisha son Humbanumena.LOCUT king.LOCUT Anzan Susun-k-a Anshan Susa-LOCUT-REL

'I, Untash-Napirisha, son of Humbanumena, king of Anshan and Susa'

I submit that the Old Persian construction  $k\bar{a}ra$  haya  $man\bar{a}$  represents a likely calque of the Elamite noun phrase morphosyntax, which arose as a result of imperfect learning of Persian by Elamite native speakers. Since Iranian nouns are not declined for gender, the use of relative pronouns as likers in right-branching possessive constructions was the best available equivalent of Elamite class agreement in right-branching possessive constructions. Since there are good reasons to believe that Elamite survived till the Sasanian period as a spoken language, it is possible that the ongoing Elamite and Persian bilingualism continued to influence the proliferation of the ezafe construction in Middle Persian. Interference with Arabic may have naturally contributed to its complete triumph in Classical Persian.

In conclusion, I intend to address a number of potential objections to the proposed scenario. One of them is the presence of the relative pronoun *ya*-in a function resembling the ezafe marker in certain Young Avestan texts. In my opinion, the respective constructions arose in the course of the liturgical transmission of the Avesta in West Iranian environment. My main argument is the analysis of metric fragments, where the addition of *ya*-appears to distort their original meter, as in the following passage (7 = Yasna 10.1).

[t] viša apąm iδa patəṇtu	wiš' apām ida patantu	8 syllables
vī daēuuåŋhō vī daēuuaiiō	wi daiwāhah wi daiwayah	8 syllables
vaŋhuš sraoṣ̄ō mitaiiatu	wahuš sraušah mitāyatu	8 syllables
ašiš vaŋvhi iδa miθnatu	artiš wahw' ida miθnātu	8 syllables
ašiš vaŋvhi rāmiiaţ iδa	artiš wahwī rāmyāt ida	8 syllables
upa imaţ nmānəm yaţ āhūiri	up' imat dmānam <yat> ahuri</yat>	8 syllables
yat haomahe ašauuazaŋhō	<yat> haumahya artawazahah</yat>	8 syllables
	vī daēuuānhō vī daēuuaiiō vaŋhuš sraoṣō mitaiiatu aṣiš vaŋvhi iδa miθnatu aṣiš vaŋvhi rāmiiaṭ iδa upa imaṭ nmānəm yaṭ āhūiri	vī daēuuānhō vī daēuuaiiō wi daiwāhah wi daiwayah vanhuš sraoṣō mitaiiatu aṣiš vanyhi iða miθnatu artiš wahwʾ ida miθnātu artiš wahwī rāmyāt ida upa imaṭ nmānəm yaṭ āhūiri wi daiwāhah wi daiwayah wahuš srauṣāh mitāyatu artiš wahwʾ ida miθnātu artiš wahwī rāmyāt ida upʾ imat dmānam <yat> ahuri</yat>

Another potential objection is the presence of the ezafe in Bactrian (e.g. Sims- Williams 2009: 261). There is indeed a particle  $\iota$  occurring in Bactrian noun phrases, but whether it continues the relative pronoun \*ya- or the demonstrative pronoun \*ayam is a matter of debate. The philological analysis of Bactrian texts leads me to the conclusion that the second hypothesis is preferable and the resemblance between Bactrian and Persian constructions is fortuitous, except for a few cases where secondary Middle Persian influence may be reckoned with.

#### References

Gerschevitch, I. 1979. The Alloglottography of Old Persian" *Transactions of Philological Society*, 114–190.

Dryer, M. S. 1992. The Greenbergian word order correlations. *Language* 68, 81–138

Sims-Williams, N. 2009. The Bactrian fragment in Manichaean script (M 1224). In: Desmond Durkin- Meisterernst et al. (eds.). *Literarische Stoffe und ihre Gestaltung in mitteliranischer Zeit*, 245–260. Wiesbaden.

#### The aspectual system of Luri of Doroud

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Aspects are different ways of viewing the internal temporal constituency of a situation (Comrie, 1976:4). Aspect is one of the characteristics of the verb which is discussed in many languages in relation to tense and mood. In this paper, we are going to analyze the aspectual system of one of the dialects of Luri, a west Iranian language which is spoken in south western Iran. The dialect which is discussed here is Luri of Doroud, one of the cities in Lorestan Province of Iran. Despite their similarities to standard Persian, the Luri dialects share features that set them apart as a group from the standard language (MacKinnon, 2011). In this dialect, we see some influences of Persian, the standard language of the country. The aspectual system in Luri of Doroud can be described by the ternary division between Perfective, Imperfective and Perfect aspect, like many other Indo European languages (see Hewson and Bubenik, 1997). Verbal constructions are based on two stems: past/ perfective stem (in the past tense, and perfect constructions), and present/ imperfective stem (in non-past tenses).

	Perfective	Imperfective	Perfect
Past	emæm	dašt-æm mi-m-æm	ema-m-æ ema-m bi
Non-past	bi-ya-m	y-æm dar-em y-æm	

The perfective aspect is made by the perfective stem plus the personal suffix:

(1) diruz de mædresæ emæ-m yesterday from school come:p.1sg 'I came from the school yesterday.'

The Imperfective aspect in this dialect is comparable to the innovative Imperfective aspect in Persian. The auxiliary verb daštæn 'to have' which is grammaticalized as the progressive marker is used in this dialect, the same as in Persian. It is worth mentioning that this is formed by the combination of the auxiliary and the Imperfect form which is used with mi- in Persian whereas the Imperfect form with mi- itself is not common in Luri:

(2) dašt-æm mi-m-æm di-m-eš have:P.1sG IMPF-come:P.1sG see:P.1sG-him/her 'I was coming and I saw him/her.'

Luri dialects have a perfect construction which is a "be Perfect" and made by perfective stem+ personal suffix+ Aux ( $\alpha$ ). This auxiliary is the conjugated form of the verb "to be" in 3rd SG, Present. Unlike Modern Persian the auxiliary (be) is grammaticalized and it isn't conjugated for all the persons:

(3) ema-m-æ honæ come:PP.1sG-be-PRES.3sG home 'Lhave come home.'

The past perfect is formed in the same way, the only difference is that the auxiliary here is the verb "to be" conjugated in Past 3rd SG:

(4) ema-m bi bein-em-et come:PP-1sG be:P.3sG see:SBJ-1sG-you 'I had come to see you.'

In the Imperfective present, we have the imperfective stem and the agreement marker with the subject. The difference with Persian is clear in that we don't have the *mi*-prefix as the imperfective marker.

(5) so yæ-m tomorrow go:PRES.1SG 'I come tomorrow.'

We see however the similar progressive form in this dialect which is formed by the auxiliary *daštæn* conjugated in Present:

(6) dar-em y-æm honæ have:PRES.1SG come:PRES.1SG home 'I am coming home.'

We can talk about the Subjunctive as the Perfective form in Present. Usually we talk about aspect in indicative mood, but if we want to generalize the theory of aspect in different tenses and moods, we can say that subjunctive present mood is perfective. Analyzing data from this dialect, as well as a lot of other dialects of Iranian languages, proves some of the changes in language; as a result of the language contact. The existence of the innovative progressive form both in Persian and Luri can be looked as one of its evidences.

#### References

Anonby, E. and A. Asadi. 2014. Baktiāri: Phonology, text, lexicon. Uppsala.

Comrie, B. 1976. Aspect. Cambridge.

Dabir-Moghaddam, M. 2013. The typology of Iranian Languages. Tehran.

- Drinka, B. 2017. Sources of the Perfect in Indo-European. In: *Language Contact in Europe: The Periphrastic Perfect through History*, 73–93. Cambridge.
- Hewson, J. and V. Bubenik. 1997. Tense and aspect in Indo-European Languages.

  Amsterdam.
- Lecoq, P. 1989. Les dialectes du sud-ouest de l'Iran. In: R. Schmitt (ed.). *Compendium Linguarum Iranicarum*, 341–349. Wiesbaden.
- MacKinnon, C. 2011. Lori dialects. *Encyclopædia Iranica*, Vol. 18. New York (http://www.iranicaonline.org/articles/lori-dialects).
- Taheri, E. 2006. The verb in Baktiāri. Name ye Farhangestan 2, 86-108.
- Windfuhr, G. 2009. Dialectology and topics. In: G. Windfuhr (ed.). *The Iranian languages*, 5–42. London.

## **Poster presentations**

## Close or open set? An account of morphosyntax of compound prepositions in Persian

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From among different primary categories of Nouns, Verbs, Adjectives and Prepositions, the last has attracted the least attention, morphologically, due to the apparently poor productivity. What can mainly be found in the literature of Persian prepositions in this regard is a short list of simple prepositions and rarely some additional doubtful compound ones without any analytic approach towards their production rules. In fact, most of traditional linguists maintain that this category is a close set and there is no sign of newborn items carrying the label "preposition" (e.g. Shafaii,1984) . However there are also some modern linguists (e.g., Samiian, 1991) who have some contributions towards preposition reanalysis.

In this paper we show that the category of prepositions is not only an open set but also a very productive one. We believe that although simple prepositions like /bar/ (on) are not infinite in number but there are explicit morphosyntactic rules to produce new lexemes (e.g, /bar  $as\bar{a}se/$  'on the basis') in this category like other categories and prepositions are not deprived ones, as some may believe, in morphology. All different patterns of preposition construction are presented in this paper. What we focus mainly in this paper would be as follows:

First, it is proved that prepositions are expanded through a particular morphosyntactic process of "Incorporation" to make new compound words. This process is neither a totally morphologic nor a pure syntactic process but to a degree of both. Incorporation, first introduced by Baker (1988) to account for some sort of compound words which showed two folded behavior, is proposed to account for interface of morphology and syntax. Second, in this paper, all prepositions are classified into four main groups of compound prepositions, composition of a simple preposition and a noun in 4 forms of: 1) preposition + noun, e.g, /bar asāse/ (on the basis of), 2) noun + preposition, e.g, /rāje be/ (about), 3) preposition + nouns showing place or time, e.g, /bar ruye/ (on), 4) nouns showing place or time + preposition, e.g, /pošt be/ (back to). Third, as a result, it is argued that in the process of preposition construction, there is always a simple Preposition and a Noun or a "neutralized Noun" involved.

What is meant by the latter phrase is that the non- prepositional part of compound prepositions is a newly born preposition involved; a noun that has lost the [+noun] feature of itself in the transition of time and is going to be an absolute preposition in near future. In this regard we resort to Chomsky's (1970) categorization of primary features of the basic categories, for simple prepositions as [-V, -N] and for neutralized noun and prepositions-to-be as [-V, 0N]. In this paper, following Riemsdijk (1983) and partially Samiian (1991) -00 as we disagree with her on which category is going to be neutralized — we consider them nouns neutralized in [+N] feature that together with prepositions have the [-V] feature in common. Adapting Emonds' generalization (1985), we put these elements together with conjunctions and classic prepositions in one category : "preposition" . Forth, and the last topic to be discussed in this paper is to maintain that as there are always nouns falling in the group of those tending to be neutralized in [+N] feature, there is always possibility of expansion of the category of preposition.

#### References

Shafaii, A. 1983 Mabani e elmie dastoore zabane farsi. Tehran.

Baker, M. C. 1988. *Incorporation: A theory of grammatical function changing*. Chicago.

Chomsky, N. 1970. Remarks on Nominalization. In: R. A. Jacobs and P. S. Rosenbaum (eds.). *English Transformational Grammar*, 184–221. Waltham, MA.

Emonds, J. E. 1985. A Unified Theory of Syntactic Categories. Dordrecht.

Samiian, V. 1991. Prepositions in Persian and the Neutralization Hypothesis. Fresno, CA.

#### Word order typology in two dialects of Gilaki: Lahijan dialect and Rasht dialect

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Gilaki is a north-western Iranian language, spoken mostly in Gilan province. It has two main different varieties, belonging to east and west of Gilan, separated by Sefid-rud river. The western variety which the natives call it "Biyepas" (over the river) is spoken in Anzali, Somesara, Fouman and Rasht and the eastern variety which is called "Biye-pish" (before the river) is spoken in Lahijan, Langerud and Rudsar. These two varieties are significantly different especially in verb structure, different tenses represented by verb, and stress pattern which may partially cause difficulties in mutual understanding.

This paper aims to study the differences and similarities between these two varieties from word order typology point of view. For this, word order typology in Rasht dialect as the western variety and Lahijan dialect as the eastern variety representative are chosen to be compared based on Greenberg's theoretical framework (1966), considering Dryer's word order criteria (1992) and Dabir-Moghaddam (2001, 2013).

The data are gathered through direct interview with native speakers via a compiled questionnaire and reviewing some written texts.

Below a few examples of these two varieties relating to some studied correlations are provided:

No.	Criteria	Rasht dialect	Lahijan dialect	English	order
1	adposition type	1. miz ?ʊtayə dərun næfiæ 2. mærjæm xo dæstæ tʃayu hæmræ væve	1. miz ?ʊtayə mijæn hænnæ 2. mærjæm xo dæstæ ba tʃayu bebe.	The table is in the room.     Maryam cut her hand with knife.	preposition/ postposition
2	noun and genitive	bayə dər	bayə dər	garden's door	GN
3	adjective and standard in comparative construction	?æz <b>?ʊʃʊn</b> pætʃtær	?æz <b>ʔʊʃʊn</b> kutatər	shorter than them	StdAdj
4	noun and adjective	pılə bay	pılə bay	big garden	AdjN

5	content verb and auxiliary verb	?æli jo hæsæn <b>?æmʊn dəbʊn</b>	?æli jo hæsæn <b>?æmæ dəbʊn</b>	Ali and Hasan were coming.	AuxV
6	question particle and sentence	tu γəza bʊxʊrdi	tu γəza bʊxʊrdi	Did you eat any food?	no question particle
7	tense-aspect affix and verb stem	ni∫tə bʊm	nəʃtə bʊm	I had sat.	suffix
8	possessive affix and noun	7æmi үәzа	?æmi үәza	our food	PossN

In the full paper all 24 criteria mentioned in Dabir-Moghaddam (2013) have been studied for the two varieties. Some findings are as follows:

In both varieties there exist preposition and postposition but the postposition is the basic form. The order of noun and relative clause is NRel in both dialects. The orders of noun/genitive; and noun/adjective are GN and AdjN respectively. The orders of demonstrative/noun, article/noun and numeral/noun are DemN, ArtN and NumN respectively. In respect of the orders of verb/adpositional phrase, verb/manner adverb, 'want'+verb, and verb/ subject the two varieties behave similarly and we have AdpPV, MannerAdvV, wantV, and SubV.

As it is obvious from above findings and the examples given in the chart, the two varieties have the same typological behavior in word order. As mentioned before, it seems that the difference between the two lies basically in morphology and choice of words and there is no significant difference in word order typology.

#### References

Dabir-Moghaddam, M. 2001. Word Order Typology Of Iranian Languages. *The International Journal of Humanities.* No 2. Pp. 17–23.

Dabir-Moghaddam, M. 2013. Typology of Iranian Languages. Vol. 1. Tehran.

Dryer, M. S. 1992. The Greenbergian word order correlations. *Language* 68, 81–138.

Dryer, M. S. 2005a. Order of subject, object, and verb. In: M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie (eds.). *The World Atlas of Language Structures*, 330–333. Oxford.

Dryer, M. S. 2005b. Order of subject and verb. In: M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie (eds.). The World Atlas of Language Structures, 334–337. Oxford.

- Dryer, M. S. 2005c. Order of object and verb. In: M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie (eds.). The World Atlas of Language Structures, 338–341. Oxford.
- Dryer, M. S. 2005d. Relationship between the order of object and verb and the order of Adjective and noun. In: M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie (eds.). *The World Atlas of Language Structures*, 394–397. Oxford.
- Dryer, M. S. 2005e. Relationship between the order of object and verb and the order of adposition and noun phrase. In: M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie (eds.). *The World Atlas of Language Structures*, 386–389. Oxford.
- Dryer, M. S. 2005f. Relationship between the order of object and verb and the order of Relative Clause and Noun. In: M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie (eds.). *The World Atlas of Language Structures*, 390–393. Oxford.
- Dryer, M. S. and O. D. Gensler. 2005g. Order of object, oblique and verb. In: M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie (eds.). *The World Atlas of Language Structures*, 342–345. Oxford.
- Dryer, M. S. 2007. Word Order. In: T. Shopen (ed.), *Language Typology and Syntactic Description* (2nd ed.) Vol. 1: *Clause Structure*, 61–130. Cambridge.
- Givòn, T. 2001. Syntax. Vol 1. Amsterdam.
- Greenberg, J. H. 1963. Some universals of grammar with particular reference to the order of meaningful elements. In: J. Greenberg (ed.). *Universals of Language*, 73–113. Cambridge, MA.
- Greenberg, J. H. 1974. *Language Typology: A Historical and Analytic Overview.* The Hague.
- Hawkins, J. A. 1983. Word Order Universals. New York.
- Hawkins, J. A. 1984. Modifier-head or function-argument relations in phrase structure? *Lingua* 63, 107–138.
- Rastorgueva, V. S. et al. 2012. *The Gilaki Language*. English translation editing and expanded content by Ronald M. Lockwood. Uppsala.
- Windfuhr, G. L. 1979. Persian Grammar: History and State of Study. The Hague.

### Pragmatic functions of Persian discourse markers in male-female casual conversations

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The present study is an attempt to investigate Persian men-women discourse in cross-gender interactions by focusing on the type, frequency of occurrence and function(s) of discourse markers (hereafter DM) in oral discourse. To achieve this goal, the audio-recorded data comprising 14 face to face casual conversations involving two-party and multi-party interactions among family members, acquaintances and close friends are used to shed light on these 'frequently used' but 'frequently unnoticed' linguistic elements. To document a list of the most common DMs typically used by male and female and to have a detailed description of their discoursal function(s) in talk, Brinton's (1996) binary classification of DMs functions (textual and interpersonal) was developed to provide an empirically-supported account of the functions and position of Persian DMs in interaction among Tehrani speakers. The findings are built upon a 3105-word corpus including 14 audio-recorded conversations among 50 participants. Altogether 34 tokens of Persian DMs with an overall 254 occurrences were identified among which na/na baba (no/no daddy) with the total of 33 (12.84%) occurrences were the most frequently used Persian DM in the data which are followed by dige (no English equivalent), aare / ba'ale (yep/yes), yani (I mean), yali (but), haalaa/alaan (now), bebin/nega kon (look) and aslan (by no means / never). Another reading of the data pertains to the number and proportion of DMs employed by Persian male-female speakers. As it is inferred, the ratio of discourse markers in the women's discourse is higher than the men's (138 vs. 116) which accounts for the female speakers' inclination to employ discourse markers as helpful devices in fulfilling their communicative needs. Although the disharmony is observed in the number of discourse markers in two gender groups, the results of the Chi-square test (p = 0.157 > 0.5) indicates that it is not statistically significant. In terms of discourse markers usage for the textual/interpersonal purposes, the qualitative and quantitative analyses yield significant gender differences. The results of the Chi-square test shows p = 0.02 < 0.5 which is statistically significant enough to be emphasized. It indicates that Persian women are mainly concerned with their interpersonal needs while men care for the textuality of their discourse. In sum, the difference between Persian men/women discourse in terms of DMs usage is of functional type rather than quantitative where the gender of the speaker does seem to be an influencing factor in DMs usage.

## Implementing complementary classification taxonomies in maps of Iran's languages

Erik Anonby (Carleton University and University of Bamberg)

Language atlases have been published for many nations, but for Iran, even a benchmark map of the country's languages has yet to be produced. The underlying issues are complex and varied: ongoing challenges relate to the complexity of the language situation, funding, access to language communities, incomplete documentation, and distribution of results (Anonby 2015).

An additional factor, often overlooked but equally important, is lack of consensus in the classification of the country's languages. In recent work within the *Atlas of the Languages of Iran* programme (ALI 2016), we examined patterns in the language classification taxonomies of people from five major groups: "Official" sources such as government and education; speakers of a Standard (Tehrani) type dialect of the majority language Persian; speakers of the country's many minority languages and dialects; Iranian linguists; and western linguists. While a great degree of variation naturally exists within each group, there are also unifying tendencies for each of the groups (Anonby, Sabethemmatabadi and Hayes 2016).

These taxonomies might seem abstract, but they have concrete implications for practical decisions in language mapping, like the list of language varieties, and the labels and symbols that are used to represent them. After reviewing methodology, factors and tendencies in language classification for each of the five groups, this paper builds on previous work by examining specific implications of the different classification taxonomies on language distribution maps for two provinces of Iran: Chahar Mahal va Bakhtiari (C&B), and Ilam.

The following chart summarizes our analysis of group taxonomies for C&B, completed as part of a larger field research initiative in the region (Taheri-Ardali et al. 2016). Here, we studied the five main group types mentioned above, except that each dialect group we encountered in the province was treated as a separate group. In the chart, language varieties perceived as distinct languages in a given taxonomy are given a unique colour, and taxonomy-specific language labels which differ from column headings are also shown.

b. views as language	Bakhtiari	Rural Charmahali	Urban Charmahali	Standard- type Persian	Turkic
a. group taxonomy		Chaimanan	Charmanan	type reisian	
Turkic		"Charmahali"			
Bakhtiari		"Charmahali"			
Rural Charmahali		"Charmahali"			
Urban Charmahali (older)		"Charmahali"			
Urban Charmahali (younger)		"Charmahali" "Persian"		sian"	
Standard Persian		"Persian"			
"Official"	"Persian"				
Iranian linguist	"Lori"	"Persian"			
Western linguist					

Figure 1. Analysis of group taxonomies for Chahar Mahal and Bakhtiari (C&B)
Province

This taxonomic analysis for the five dialect groups of C&B (listed in the top row of the table) shows 5 distinct combinations among the 9 group taxonomies. There is full agreement among all groups that Turkic is a distinct language, and (logically) that Standard-type Persian is a kind of Persian. Where the groups differ most significantly is in their classification of the other Iranic varieties (Urban Charmahali, Urban Charmahali and Bakhtiari) as dialects of Persian or as distinct languages. We will show in our presentation that in the literature on C&B, including maps of the province, linguists distinguish more languages than speakers of Standard Persian; but whereas Iranian linguists tend to distinguish fewer languages than speakers of minority languages, some western linguists might distinguish each of the five dialect groups as a separate entity based on considerations of structural distinctiveness and lack of mutual intelligibility.

Each of the 5 attested combinations produces a different language map for the province. Separate, detailed maps can be dynamically generated – as point or polygon maps – for each of the 5 combinations by linking each group's taxonomy for C&B to the specific dialect group labels already associated with all of the province's settlements (Taheri-Ardali et al. 2016). (The technology for this process is described in a separate paper (Anonby, submitted 2016)). The map to the right shows a point-based representation of a "Western linguist" classification of the province's languages, which distinguishes each of the five structurally distinctive dialect groups.

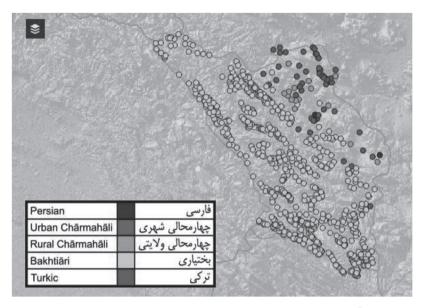


Figure 2. Map of language distribution in C&B Province built using a "Western linguist" taxonomy

Source: http://iranatlas.

net/index.html?module=module.language-distribution.chahar\_mahal\_va\_bakhtiari

For Ilam Province, the patterning the group taxonomies also varies in the number of languages that each group recognizes, but in other ways it is even more complex. First, there are more varieties to begin with. In their recent work on Ilam, Gheitasi et al. (forthcoming) distinguish 11 separate dialect groups. These groups are known by their own language communities, and others in the province, as follows: Ilami Kurdish; Kalhori Kurdish; Khezeli \*Kurdish; Kordali \*Kurdish; Laki; Standard-type Persian; Darrashahri Lori; Hendemini Lori; Showhani Lori; Khuzestani Arabic; and Mesopotamian (Baghdad-type) Arabic. But additionally, in the case of the dialect groups marked with \*, there is a multi-directional mismatch between the local language labels – which are based on ethnicity – and the structures of the language (Fattah 2000, Anonby 2004/5). Gheitasi et al. specify that Khezeli "Kurdish" is actually more like Laki than the Kurdish varieties; Kordali "Kurdish" like Lori; Hendemini "Lori" like Kurdish; and Showhani "Lori" like Laki. These points of taxonomic divergence affect not only the level of specificity in the taxonomy (how many "languages" are shown in the map), but more importantly, its fundamental shape: 4 of the 11 dialect groups differ in which language they are attached to, depending on which group taxonomy which is applied. As we will show in our presentation, this produces extremely differentlooking maps for, e.g., "Ilami Kurdish" vs. "Standard Persian" vs. "western linguist" taxonomies when applied to Ilam Province.

As shown by these case studies for C&B and Ilam Provinces, taxonomies of language classification have a determinative rather than incidental effect on language maps for a given language situation. When fundamental presuppositions – what constitutes language vs. dialect, and how dialects are connected – are made explicit for groups or individuals, language distribution maps can be viewed as complementary rather than competitive.

In the end, language distribution maps generated from any taxonomic framework can, and must, be reconciled with systematic language data of all kinds in an iterative process that brings clarity both to taxonomies and to our understanding and organization of the language data itself.

#### References

- ALI 2016 = Anonby, E. et al. (eds.). 2016. *Atlas of the languages of Iran*. Ottawa (http://iranatlas.net).
- Anonby, E. 2015. Mapping Iran's languages: Situation and prospects. *ICIL6* (6th International Conference of Iranian Linguistics), Ilia State University, Tbilisi, Georgia, June 23–26.
- Anonby, E. (submitted, 2016). A three-dimensional model for classification of Iran's languages.
- Anonby, E., P. Sabethemmatabadi and A. Hayes. 2016. Reconciling contradictory perspectives of language identity in the Atlas of the Languages of Iran. *CogSci Colloquium Series*, Carleton University, Ottawa, February 25, 2016.
- Gheitasi, M. et al. 2015, Ilam Province, In: ALI 2016.
- Taheri-Ardali, M. et al. 2015. Chahar Mahal and Bakhtiari Province. In: ALI 2016.

## On the adaptation of nominal loanwords borrowed from Ossetian into Georgian

Patman Antadze-Malashkhia (Ivane Javakhishvili Tbilisi State University)

The loans borrowed by Georgian from Ossetian language as a result of long-standing and symmetrical language contacts have been most thoroughly analyzed by M. Andronikashvili, whose research embraced the etymological aspect as well as phonetic correspondences (Andronikashvili 1966: 40–58). The morphosemantic aspect of adaptation of these loans is also worth attention. In this regard, the paper focuses on nominal loan-words that represent the majority of borrowings from Ossetian into Georgian.

Ossetian nominal loans in Georgian are mostly nouns, adjectives are comparatively rare. The borrowed nouns are chiefly represented by words with strong semantics and concrete substantive meaning.

In certain cases the semantic meaning of borrowed nouns remains unchanged: Ossetian  $xabiz\S{zyn} \to \text{Georgian } xabizgin-i$  'khachapuri, a kind of cheese-pie'; Ossetic  $abyrxg / abxxg \to \text{Georgian } abrag-i$  'robber, outlaw', in Georgian this loan-word is also represented by a phonetically altered anthroponym: ap'arek'-a 'male name in Khevsureti, a highland region of Eastern Georgia'. Thus, in this case the semantic differentiation of the etymon corresponds with the phonetic differentiation.

The alteration of a common noun into a proper one is considered as semantic restriction, an utmost form of its hyponymization. Another example of this, apart from the above- mentioned anthroponymization, is toponymization, e.g. the Ossetian noun denoting a river in general -t z z m became a proper noun denoting one of the small rivers of Eastern Georgia: t z z m-t z m.

The semantically altered nouns borrowed from Ossetian chiefly remain within the semantic field of the etymon. However, their meaning is never expanded i.e. they are never hyperonymized. Cases of hyponymization are frequent, for instance, Ossetic  $k \otimes sag / k \otimes salg \otimes \text{`fish'} \to \text{Georgian } ka \otimes aq'-i \text{`herring'}; \text{Ossetic } l \otimes ppyn \text{`baby bird'} \to \text{Georgian } lap'-i \text{`baby of certain bird species (pheasant, grouse, partridge)'}. The etymon <math>l \otimes ppyn$ , like the abovementioned  $abyr \otimes g / ab \otimes r \otimes g > abrag-i / ap'arek-a$ , has also acquired a different phonetic form and different semantic content in Georgian: ylap'-i 'a derogatory name for kid, immature person'.

The semantic alteration of borrowed nouns is sometimes of non-hierarchical, equonimic nature: Ossetic fx and 'panther, leopard'  $\rightarrow$  Georgian fx bear'; Ossetic fx 'herd of deer' fx Georgian fx 'herd of goats'.

Some borrowed adjectives do not change their morphological category in Georgian and completely coincide with the etymon in their meaning: Ossetic karz 'strong, bitter, severe'  $\rightarrow$  Georgian mk'acr-i "severe"; Ossetic  $saw \rightarrow$  Georgian šav-i 'black'.

Unlike the borrowed nouns that never change their morphological category, some Ossetic adjectives are transformed into nouns in Georgian: Ossetic  $\alpha \boxtimes \alpha (\alpha g)$  'deserted, uninhabited'  $\leftarrow \alpha - \alpha (\alpha g)$  'lifeless'  $\rightarrow$  Georgian  $\alpha (\alpha g)$  'barren gound'; Ossetic  $\alpha (\alpha g)$  'wild'  $\rightarrow$  Georgian  $\alpha (\alpha g)$  'wild sheep'. It is obvious that substantivization of these adjectives is due to the ellipsis of determinant structures (adjective + noun).

There is one case where Ossetian adjective <code>cawd/cyd/cud</code> 'bad, of low quality' is adapted in Georgian both as an adjective: <code>cud-i</code> 'bad', and as noun <code>codva/codo</code> 'sin'. Such morphosemantic difference, like the above-mentioned <code>abrag-i/ap'areka</code> and <code>lap'-i/ylap'-i-</code> where the difference is only semantic, is related to adaption in different phonetic form. Such relation once again proves that Ossetian nominal loan-words in Georgian show little tendency of polysemization. This layer of borrowings is chiefly represented by monosemantic words.

As for lexical stability and stylistic marking, a major portion of Ossetian loans is outdated in Georgian, whereas another part of these loans is still actively used. These loan-words are mostly stylistically neutral. They are found both in standard Georgian and dialects.

#### References

Andronikashvili, M. 1966. *Studies in Iranian-Georgian Linguistic Contacts*. Vol. I. Tbilisi (in Georgian).

#### On the semantics of the term Tual / Dval

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It is well known that geographical names identify the language of the people who give those names. As a rule they mean some particular place, hence it allows researchers to restore the ancient language on this or that territory as well as to outline the boarders of its spreading. For most languages geographical names are older than the existing written documents; they appear to be a historical source owing to which we can reconstruct the way people used to settle (Nikonov 1965: 12).

Ossetian-Georgian parallels we come across in the scientific literature are explained by the fact that the fortunes of the two nations have been closely interwoven from the very beginning. This fact allows the scholars to speak about the common cultural substratum, including the facts of the language which derive from the historical facts.

As far as the local term Ossetian *tual* / Georgian *dvali* is concerned, V.I. Abaev thinks that "the name of the Ossetians, inhabiting the upper reaches of the river Ardon on the Northern slopes of the Central Caucasus, the *tual* is derived from the Georgian *dvali* with the -*d*-being voiceless. In the Georgian geographical tradition the ethnonym dvali means the same territory as the Ossetic *tual*, namely the upper reaches of the river Ardon to the South of the ravine *K'asara...*. No doubt that *dval* (Georgian *dvali*, Armenian *dval-k*) used to be the name of the local Caucasian ethnic groups..." (Abaev 1979: 326).

A.Dz. Tsagaeva believes that the topographic name Tualgom (Tual ravine) "reflects the division of the Ossetians into the smaller groups based on the peculiarities of their dialects" (Tsagaeva 1971: 179).

Other scholars claim that initially t/dwal meant "a small group of people united owing to their consanguinity, a family, a kin". However, in the course of time this meaning was forgotten, and the word began to function as a kind of microethnonym (Paxalina 2002: 104–105).

The archeological data indicate that the culture, created on the Northern and Southern slopes of the Central Caucasus during the second half of the II-nd and the first half of the I-st millennium BC, belonged to the Indo-Iranian tribes which remained and settled in the Central Caucasus after the bulk of the

people had moved to Mid Asia. "The tribes of Alans having detached from the tribe union of the Sarmatians and having settled on the territory of the Central Caucasus, united with the tribes of other Indo-Iranians who had lived on this territory for many centuries and whose language and culture were cognate to theirs. This is the only reason why these two ethnic masses were able to merge so quickly and so naturally – they had a cognate language, their ethnic and cultural kinship favored their quick ethnic "adaptation", their becoming one ethnos" (Texov 1993: 15).

It is known that Indo-Iranian splitting into Indo-Arian and Iranian branches chronologically can be dated not later than the end of the IV-th the beginning of the III-rd millennium BC. The presence of the East-Iranian lexical material in the contiguous languages of the area proves the ethnogenetic process, mentioned by B.V. Tekhov. We share the opinion that the basis of  $Tual~(Duali, \Delta ov\acute{a}\lambda o\iota)$  is Proto-Sarmatian \*duv-al- which means "two rivers", with \*al- "a spring, a river, water" (Šapošnikov 2007: 264). It was G.A. Klimov who wrote about a real possibility of lexical penetration from some ancient Iranian source into the Common Kartvelian languages (Klimov 1994: 71).

#### References

Abaev, V. I. 1979. Istoriko-ètimologičeskij slovar' osetinskogo jazyka. Vol. 3. Leningrad.

Klimov, G. A. 1994. Drevnejšie indoevropeizmy kartvel'skix jazykov. Moscow.

Nikonov, V. A. 1965. Vvedenie v toponimiku. Moscow.

Paxalina, T. N. 2002. Skifo-osetinskie ètimologii // Nartamongæ: The Journal of Alano-Ossetic Studies: Epic, Mythology and Language 1 (1).

Texov, B. V. 1993. Osetiny — drevnij narod Kavkaza. Istoki, kul'tura, ètnos. Tskhinval: Iriston.

Cagaeva, A. Dz. 1971. Toponimija Severnoj Osetii. Pt. 1. Ordžonikidze.

Šapošnikov, A. K. 2007. Sarmatskie i turanskie relikty Severnogo Pričernomor'ja. In: Ž. Ž. Varbot (ed.). *Ètimologija 2003–2005*, 255–322. Moscow.

## Clitic climbing in Persian complex predicates: A Relevance Principle and grammaticalization account

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Among linguistic probings, overviews of the existing approaches to affix order are scarce and scarcer are the standardized theories on clitic ordering. Manova and Aronoff (2010) differentiate between grammatical and extragrammatical factors and define eight different approaches to affix order, that is, eight different ordering types: (1) phonological, (2) morphological, (3) syntactic, (4) semantic, (5) statistical, (6) psycholinguistic, (7) cognitive, and (8) templatic. A major hypothesis extended and tested in this contribution is Bybee's (1985) popular instance of semantic ordering postulated in "Relevance Principle" based on the idea that the degree of morpho-phonological fusion of an affix to a stem correlates with the degree of semantic relevance of the affix to the stem. The semantic relevance of an affix to a stem is the extent to which the meaning of the affix directly affects the meaning of the stem. This hypothesis can be used to arrange inflectional categories on a scale from which various predictions can be made. For instance, the categories of valence, voice, aspect, tense, mood and agreement are ranked for relevance to verbs in that order. In this paper, we revisit the "Relevance Principle" with focus on the problem of pronominal enclitic ordering in Persian complex predicates to predict the extent to which the stem and the pronominal enclitic, encoding the grammatical relations of direct or indirect objects, have a semantic or syntactic effect upon one another .We will specifically show Bybee's relevance principle extension in two different directions: according to enclitics (as her study was narrowed to affixes) and regarding objects (which were not the grammatical relation being included). To drive the ordering of pronominal enclitics in Persian complex predicates, we will draw on data from complex predicates being accompanied by the following light verbs: kardan, dâdan and zadan which are basically occurring with high frequency and of transitivity property to illustrate how this extended approach sheds light on some widely discussed issues around Persian complex predicates. Our specific aim in this research is to show that regarding enclitic ordering in Persian complex predicates, the issue of predication as the umbilical motif of all linguistic theories, and the introduction of 'verbs' as the only predicative constructions are dramatically problematic. Persian light verbs, the verbal parts of complex predicates, are periphrastic constructions with an idiosyncratic morpho-syntactic pattern concerning the position of pronominal enclitics. The situation seen is of significance and interest since unlike the heavy counterparts, which are the only hosts of pronominal enclitics in object positions, light verbs are not the commonly preferred and productively applied construction to which the enclitics are being attached. The hypothesis defended in this paper is that the tendency for preverbs to be chosen as the hosts of the pronominal enclitics is much higher than the light verbs. Based on Luraghi (2014:17) we call this phenomenon Clitic Climbing which canonically refers to the phenomenon of attaching clitics (mostly in Latin) not to the main verb but to the companions of the main verb. Following Bybee's (1985) line of thinking, to drive the phonological structure of the preverbs in Persian complex predicates, we will assume that the more closely related forms are semantically or functionally, the more similar they will be in phonological structure. This account, essentially, maintain the idea that the two meaning elements, namely the object and the preverb, are, by their relation, highly relevant to one another, then it is predicted that the object and the non-verbal element may have enclitical expression rather than the light verb and the object. In explaining the greater frequency of occurrence of the enclitical preverb construction, we provide piece of evidence coming from the semantic properties of the light verbs. We clarify that based on a cross-linguistically valid generalization arisen from the theory of grammaticalization, the failure of light verbs in portraying purely enclitcal verbs, comparing their heavy counterparts, is the result of grammaticalization processes underway in Persian, in which, to acquire the grammatical function, light verbs lose their referential meanings and get semantically bleached, they gradually become unable to function as predicates on their own and in a complex predicate construction only account for the event semantics and the aspectual properties. Instead, they combine with a non-verbal element which provides the lexical meaning of the predicate thus derived. This meaning- bearing element is responsible for determining the position of pronominal enclitic in complex predicate construction, concerning the basis of relevance which predicts the degree of relevance and hierarchical relations within two broad grammatical units and imparts that all morphological categories are high-flown in relevance. The experimental evidence (1-3) are present in the support of the hypothesis: 1) kardan 'to do': da?vâ kardan 'to oppugn': a) da?vâ=m kard. ? b)da?vâ kard=am (=am: 1SG pronominal enclitic), 2) dâdan 'to give': xejâlat dâdan 'put to shame': a) xejâlat=emân dâd,? b) xejâlat dâd=emân (=emân: 1PL pronominal enclitic) 3) zadan 'to hit': rang

zadan 'to brush', 'to paint': a) rang=eš zadam, ? b) rang zadam=eš (=eš: 3SG pronominal enclitic). Given the results ensuing from the synchronic investigation of Persian complex predicates, the inquiry regarding the quiddity of pronominal enclitic position in complex predicate construction captures an inwrought account. The present contribution also has as another perceptible symbolization, the declaration that the direct objects appear in enclitic forms with higher frequency than the indirect objects being encoded through periphrastic prepositional phrases. This strongly supports Bybee's (1985) idea that if two meaning elements are, by their content, highly relevant to one another, then it is predicted that they may have lexical or inflectional expression, but if they are irrelevant to one another, then their combination will be restricted to syntactic expression.

#### References

- Bybee, J. 1985. Morphology: A study of the relation between meaning and form.

  Amsterdam.
- Aronoff, M., and S. Manova. 2010. Affix combination (Part Two). *Morphology* 20 (2).
- Hopper, P., and E. C. Traugott. 2003. *Grammaticalization*. Cambridge.
- Luraghi, S. 2014. Clitics. In: Giannakis, G. K. Encyclopedia of Ancient Greek Language and Linguistics. Vol 1. Leiden.

# The oldest attested Pāzand in the Bundahišn text of the Munich manuscript M51. An orthographic and phonological analysis of a newly discovered type of Pāzand

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The interplay between Pāzand and Pahlavi is clearly an important feature of the early Pahlavi manuscript tradition. The early transmission of the Bundahišn text is, in this respect, emblematic. A preliminary analysis of the oldest manuscripts (K20, K20b, M51, TD1, DH, TD2) shows that a considerable amount of passages belonging to the Pahlavi text is transcribed with Avestan letters. Pazand transcriptions are to be found mostly in the manuscripts of the so-called "Indian" tradition (K20, M51 and K20b). However, a closer analysis shows that the "Iranian" manuscripts (TD1, DH, TD2) have also retained a significant number of Pāzand readings. Given that the oldest testimonies of the Bundahišn are also among the oldest Pahlavi manuscripts at disposal, the situation is quite striking and requires an explanation. Normally, Pazand or Pārsīg transcriptions of the expected portion of Pahlavi text were inserted later on the line to fill empty spaces left by the first copyist. Clear examples are to be found in K20, in which at least two later hands have filled empty lines of the Ardā Wirāz Nāmag text with a Pārsīg transcription. In the case of the Ardā Wirāz Nāmag, the occasional use of Pārsīg is limited to K20, with no further traces in the manuscript tradition. On the contrary, the Bundahišn Pāzand passages seem not to have been added by later users of the manuscripts. Since they recur in all the extant oldest testimonies, they must have been incorporated at an earlier date, before the formation of the two different manuscript lines.

This great amount of early material has never been analysed properly. Whereas its philological importance for the early transmission of the Bundahišn text is almost self-evident, a careful analysis has revealed its extraordinary precision and consistency in the notation of the Middle Persian phonological system, as it was pronounced in the 13th-14th c. (or even before). The results are in line with those already reconstructed for the early stages of New Persian, and could contribute largely to the still not so numerous materials for the reconstruction of the phonological history of New Persian.

The pioneering attempts of Spiegel 1851 and West 1871 have remained unfortunately till nowadays the only available systematic descriptions of a pāzandization technique<sup>1</sup> based on the direct observation of the manuscripts. The old and precise orthography of the Bundahišn Pāzand passages, of which Bd. 13 in the Munich Manuscript M51 constitutes the best example, could be the starting point towards a complete reassessment of the importance of Pāzand not only for Zoroastrian studies (as already remarked in de Jong 2004, 77) but for Iranian linguistics in general.

#### References

- Čunakova, O. M. 1997. Zoroastrijskie teksty. «Suždenija Duxa razuma», «Sotvorenie osnovy» i drugie teksty. Moscow.
- de Jong, A. 2003. Pāzand and 'retranscribed' Pahlavi. In: L. Paul (ed.) Persian origins: Early Judeo-Persian and the emergence of New Persian. Wiesbaden.
- Spiegel, F. 1851. *Grammatik der Pârsisprache, nebst Sprachproben*. Leipzig.
- West, E. W. 1871. The Book of the Mainyo-i-khard or the Spirit of Wisdom. The Pazand and Sanskrit Texts, as arranged in the fifteenth Century by Neriosengh Dhaval. Stuttgart.

 $<sup>^1</sup>$ The interesting description in Čunakova 1997, 143-146 (under язык рукописи), although very short, is an exception.

# L1 Farsi attrition, in contact with L2 Canadian English: A focus on rhotics and stress pattern

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This study addresses the First Language (L1) phonetic attrition, and second language (L2) phonetic acquisition of a 9 years old Farsi-English bilingual child. The research aimed to investigate how the manner of articulation (MOA) of the phoneme /r/, and the two correlates of stress; F0 peak and syllable duration may change in both L1 and L2 speech, of a Farsi-speaking newcomer to Anglophone Canada; within a period of one month. The research questions were:

- 1. Does attrition occur regarding the manner of articulation and stress pattern in the child's Farsi?
- 2. Does the child acquire the manner of articulation and stress pattern in English?

Language attrition is the loss of or change to different linguistic levels of the L1 of speakers who have changed their linguistic environment and language habits (Schmid, 2011). MOA of rhotics in Farsi is different in different positions (Rafat, 2008), while Canadian English rhotics, are mostly approximants (McMahon, 2002). On the other hand in English; stress in 2 syllabic nouns are often on the first syllable, whereas, in Farsi; stress in nouns are on the final syllable (Kreidler, 1987). It was predicted that child's L1 will be attrited. Specifically, MOA of the phoneme /r/ and the stress pattern in L1 Farsi will move towards L2 English norm after spending more time in English community. For example, [go.'raz] will be produced like ['go.iaz] (wild boar). So after attrition, the tap /r/ will be an approximant. Moreover, before attrition the F0 peak is on the nucleus of the second syllable and the second syllable is longer, whereas, after attrition the peak will be placed on the nucleus of the first syllable and the duration of the first syllable will be more than the second one. It was also predicted that; MOA of the phoneme /r/ and the Location of F0 and duration of the stressed syllable in L2 English would be produced according to Farsi norms, at the beginning. However, after being more in contact with English, the mentioned features would be produced in line with

English norms. For example, at first 'carrot' would be produced as [cæ.'rot] with a tap, while F0 peak is on the final syllable, and it is longer than the first syllable. But as the child would become spend more time in Canada, the /r/ would be produced more likely to a native speaker, alike ['cæ.rət].

The experimental procedure included a picture-naming task and was carried out in two sessions, including Farsi and English sections. The first session was recorded 2 months after the arrival of the participant to Anglophone Canada. The second session took place one month after. A total of 300 tokens were transferred to PRAAT for the acoustic analysis. The results revealed that in the second session the number of approximants in Farsi was increased, in most positions. In total 10duration of syllables in Farsi showed that the number of words produced with the shorter second syllable was doubled in the second session. So the stress was misplaced on the first syllable. However the F0 peak was not a consistent factor in determining the change in stress pattern in this study. The measurement of rhotics in English showed that in total 82were approximants in both sessions. Moreover the accuracy in producing the duration of syllables and location of F0 peak, according to English norms increased to 13respectively. So it can be concluded that the child is acquiring the English L2 phonology. The findings of this study are novel and contribute to our understanding of attrition and L2 acquisition in child phonology.

#### References

Kreidler, Ch. W. 1987. Stress Differentiation in sets of English words. *WORD* 38 (2), 990–125.

McMahon, A. 2002. An Introduction to English Phonology. Oxford.

Rafat, Y. 2008. A socio-phonetic investigation of rhotics in Farsi. 7th Biennial Conference on Iranian Studies. University of Toronto.

Schmid, M. S. 2008. Language Attrition. Cambridge.

# Phonological opacity in Southern Kurdish: A case study of counter-bleeding interaction of processes

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**Introduction.** The study aims to analyze a case of phonological opacity in Southern Kurdish (SK) verbal construction. Phonological Opacity was first introduced by Kiparsky (1973) to measure to what extent the context or the output of phonological processes might be determined only by examining the surface structure. He then put forward three cases in which a phonological rule P,  $A \rightarrow B/C$  D is considered as opaque, with the second case being as "instance of B created by P in an environment other than C\_D" (Kiparsky, 1973).

**Statement of the Problem.** In SK, which covers a range of different dialects and accents such as Kalhori, Kermanshahi, Ilami, etc., vowel hiatus is generally avoided and if two vowels meet as a result of morphological concatenation, different strategies are adopted to resolve the hiatus, depending on the context. One of the strategies is elision of the vowel belonging to an affix.<sup>1</sup>

(1) 
$$/\text{na} + \text{a} + \text{en}/\rightarrow [\text{nan}]$$
  
 $\text{neg} \quad come \quad 3P \quad \text{`(if) they don't come'}$ 

As it is evident in (1), the vowels of the affixes are elided to avoid hiatus, leading to a surface form with only one vowel rather than three.

Another strategy for resolving hiatus is to turn a high vowel into its glide counterpart.

(2) /na + 
$$\alpha$$
 + in/ $\rightarrow$  [najn]  
neg come 2P '(if) you don't come'

(3) 
$$/d\alpha + y + em/\rightarrow [d\alpha ym]$$
  
give-past perfect 1S 'They had given.'

Here in examples (2) and (3), the sequences "Ai" and "Ay" are avoided, this time through glide formation rather than elision.

It should be noted that if there is no good reason for deleting a vowel (e.g. vowel hiatus), affixes will maintain their vowels. This is true when a glide and vowel meet.

<sup>&</sup>lt;sup>1</sup>Symbols used in this abstract are those of IPA (revised to 2005).

(4) 
$$/\text{daw+ en/} \rightarrow [\text{da.wen}]$$
  
 $run \quad 3P \quad \text{`They run.'}$ 

Example (4) shows that the sequence of a glide and a vowel is acceptable in SK.

Despite all things said above, there are still surface forms like [najn] (*They didn't see*), in which [na] is a negative marker, [j] past verbal stem of the verb *see*, and [n] the verbal ending of third person plural. Another example is [nawn] (*if they are not*), with [na] being a prefix for negation, [w] being the subjunctive mood of the verb be, and [n] the third person singular suffix. Also, the form [naun] (They were not) is made up of [na] (negative marker), [u] (past form of the verb be), and [n] (third person plural).

- (5) [najn]
- (6) [nawn]
- (7) [nayn]

The question is why the vowel of the suffix is elided in spite of the fact that it is adjacent to a glide (and not a vowel).

**Discussion.** In the phonetic forms (5), (6) and (7), vowel elision applies but there is no vowel hiatus to trigger it. Vowel elision has applied where the context is not expected (second case of opacity introduced by Kiparsky 1973).

In order to give an account of such opacity, we need to track the changes made from underlying representations to the surface forms. The underlying representations of forms (5), (6), and (7) are represented in (8), (9), and (10).

(9) 
$$/na + bu + en/$$
  
neg  $be$ -subjunctive 3P

(10) 
$$/na + by + en/$$
  
neg  $be$ -past 3P

In SK, non-dorsal voiced plosives are not stable in intervocalic position and undergo different changes depending on the following vowel. One of these changes is elision when the following vowel is high. If we assume such a process, we will have intermediate forms such as (11), (12), and (13).

(11) 
$$//$$
 na + i + en  $//$ 

(12) 
$$//$$
 na + u + en  $//$ 

## (13) // na + y + en //

Here, three vowels have met, resulting in a context in which both vowel elision and glide formation can apply. If glide formation applies first, hence changing the vowels /i/, /u/, and /y/ into [j], [w], and [ų] respectively, there will be no motivation for vowel elision to apply since the triggering context (hiatus) will no longer exist, and undesirable forms like \*[najen], \*[nawen], and \*[naųen] will be produced. Therefore, we have to assume that vowel elision is applied first, deleting the vowel /e/ of the suffix, in which case the next intermediate forms will be //na+i+n//, //na+u+n// and //na+y+n//. Now, there is only one case of vowel hiatus, in each of these forms, which is then resolved by the application of glide formation, creating the correct forms [najn], [nawn], and [naųn] respectively.

**Results and conclusion.** The application of glide formation as the first process would bleed the application of vowel elision, and since the reverse order leads to correct forms, the interaction of these processes is that of "counterbleeding". Such cases are problematic in theories like Parallel Optimality Theory, in which changes are made at once and on a single level. This study shows how Parallel OT is not able to deal with such issues and it proposes theories like Stratal Optimality Theory, or OT-Candidate Chains due to their gradual nature.

- Fattahi, M. 2016. *Verbal phonology in Kurdish: An optimality-theoretic account.*Doctoral dissertation, University of Tehran.
- Kiparsky, P. 1973. Phonological Representations. In: O. Fujimura (ed.). *Three dimensions of linguistic theory*, 1–135. Tokyo.
- McCarthy, J. J. 2008. Doing Optimality Theory. Oxford.
- Rakhieh, B. A. 2009. *The phonology of Ma'ani Arabic: stratal or parallel OT.* Doctoral Dissertation, University of Essex.
- Wolf, M. 2008. Optimal Interleaving: Serial phonology-morphology interaction in a constraint-based model. Doctoral Dissertation, University of Massachusetts at Amherst.
- Wolf, M. 2011. Limits on global rules in Optimality Theory with candidate chains. *Phonology* 28 (1), 87–128.

## Is the labial-palatal approximant a phoneme in Southern Kurdish?

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Semivowels, or vowel-like approximants, are found in most of the world's languages. According to one survey, the palatal approximant [j] occurs in 85% of languages, and the labial-velar [w] in 76% (Maddieson 1984). The remaining two semivowels – the labial-palatal approximant [ų] and the labial-velar [ų] – are much less common, together being found in less than 2% of the world's languages (Ladefoged and Maddieson 1996:322).

In the languages where the labial-palatal approximant  $[\eta]$  occurs, it has been variously interpreted as:

- an allophone of the high front rounded vowel ü [y] (e.g., French: Leon 2005; Swedish: McAllister et al. 1974; Mandarin Chinese: Duanmo 2000) or part of an allophonic extension ([yq]) of this vowel (Swedish: McAllister et al. 1974);
- an allophone of the phoneme *w* when followed by an unrounded front vowel (e.g., Korean: Lee 1999; Central Kurdish: MacKenzie 1961); or
- an allophone of the phoneme *y* in the context of a rounded vowel (e.g., Spanish: Martinez 2004; Shanghai Chinese: Chen and Gussenhoven 2015).

For some of these languages, the sound [q] has been conventionalised, even in major reference works, with a separate phonemic symbol q or  $\ddot{w}$  (e.g., French: Fagyal 2006; Leon and Bhatt 2009). All detailed phonological accounts of the topic, however, including those cited above, point to allophonic status – predictable variation of an existing phoneme. In other words, clear evidence is lacking for the manifestation of [q] as a distinct phoneme in any language.

In this paper, we investigate the phonemic status of the labial-palatal approximant [q] in Southern Kurdish. To our knowledge, apart from MacKenzie's brief reference to the sound in Central Kurdish (1961:7), it has not been

reported from other languages of the Iranian family. However, given the lack of detail or clarity in many of the relevant phonological descriptions, the possibility remains that it will be found, at least as an allophone, in other related languages.

The existence of a labial-palatal approximant in Southern Kurdish, and its possible patterning as a phoneme, was first observed by Fattah (2000:110), who writes it with the symbol  $\ddot{w}$ . He categorises this segment a "non-generalised phoneme", but his account of its phonetic and phonemic functioning is undeveloped. In contrast to all of the other phonemes described in his book, he does not provide a specific phonetic symbol, and his prose description of the sound is vague – "bilabiale continue centrale sonore" (voiced central bilabial continuant). By comparing the four lexical examples that Fattah provides here with our own data from Southern Kurdish, we can confirm that he is indeed referring to a labial-palatal approximant  $[\eta]$ .

Despite a lack of phonetic detail, Fattah (ibid.) provides useful commentary on several kinds of restrictions in the distribution of this segment: it is absent in "initial" position; it is found only in dialects that also have a high front rounded vowel  $\ddot{u}$  [y], and only in some of these dialects; and that even in the dialects where it does occur, it is limited both in its lexical distribution (found in only a few items) and among speakers (used by only some speakers of each dialect).

In the course of fieldwork for the Atlas of the Languages of Iran (ALI 2016) between June and December 2015, we encountered the labial-velar approximant  $[\eta]$  in a number of dialects of Southern Kurdish (Fattahi et al., forthcoming), as well as neighbouring dialects of Laki and Lori (Anonby et al., forthcoming). In light of the great range in dialectal variation, we focus our own investigation on the Kalhori dialect of Southern Kurdish, which is spoken in northern parts of Ilam Province, southern parts of Kermanshah Province, and across the border around Khanaqin in Iraq (Fattah 2000). In Kalhori in particular, the occurrence of  $[\eta]$  in several contexts and in a significant number words raises the question of whether it might indeed be best interpreted there as a phoneme.

From our data, we have observed that [q] occurs in three syllabic contexts in Kalhori: 1) in simple word-internal onsets; 2) as a second element in a complex word-initial onset; and 3) as a coda element. In addition, it is only ever found after the vowels  $\ddot{u}$ , a [a] and (rarely)  $\bar{a}$  [a]. In this study, basing our analysis on original sound files (to be included in the presentation), we examine its patterning in each of the three contexts and evaluate alternative explanations regarding its phonological status. (Nuances of the argumentation will be expanded in the full presentation, but an overview of key points and a selection of the data is provided here.)

1. The first situation – [y] in simple word-internal onsets between  $\ddot{u}$  and a

following vowel – is the most common. A partial list includes the simple and complex items:  $d\ddot{u}[u]a$  'back',  $r\ddot{u}[u]a$  'layer',  $k\ddot{u}[u]a$  'mountain';  $b\ddot{u}[u]\bar{e}$  'he/she was there',  $m\ddot{u}[u]aga$  'the hair',  $s\ddot{u}[u]eyl$  'husbands'. These examples do not preclude the existence of a phoneme  $\ddot{w}$ ; after all, the semivowels y and w (established as phonemic from word-initial contrasts) also appear predictably in equivalent contexts ( $\bar{a}s\bar{i}y\bar{a}w$  'mill',  $n\bar{u}w\bar{a}$  'front'). However, in absence of a phoneme  $\ddot{w}$ , the appearance of [u] could simply be due to an allophonic glide insertion after the phonetically similar vowel  $\ddot{u}$ .

- 2. There are also a number of items with [u] as a second element in a complex word-initial complex onset. Here is a partial list: d[u]aka 'yesterday', d[u]at 'girl', s[u]aqa 'cough (n.)', s[u]arāna 'vegetable sp.', t[u]anem 'I can'. Although this appears at first impression as distribution in a distinct context, the motivation for the appearance of [u] may be the same as in (1). Other complex word-initial onsets are an optional pronunciation of word-initial C + high V + inserted semivowel sequences (e.g., čyanī ~ čīyanī 'well (n.)'), with the high vowel being systematically dropped in natural speech. In the same way, it is possible that [u] is allophonically inserted after ü (as in (1)) before the syllabic component of the vowel is dropped, resulting in a C[u]V sequence.
- 3. In the third and final context, [u] occurs in coda position, alone or in combination with a single consonant: da[u] 'ogre', ma[u] 'grapevine', te[u]la 'stable', xa[u]r 'dough', za[u] 'earth'. Here, it is harder to justify any explanation that [u] is an allophone of  $\ddot{u}$  or any other phoneme. It does not depend on any other phoneme (such as  $\ddot{u}$ ) for its articulatory properties. Since it is word-final, and it contrasts with vowel-final words (e.g., la 'from',  $l\ddot{a}$  'side'), it cannot be viewed as epenthetic. Like the phonemes y and w in this position, and unlike an underlying word-final vowel, it cannot carry stress and does not add a syllable to the word.

In light of the evidence from this third context, we argue that the labial-palatal approximant  $[\eta]$  should be considered a distinct phoneme in the Kalhori dialect of Southern Kurdish. In parallel with phonemic semivowels y and w, which are also inserted in equivalent pre-vocalic contexts, we contend that this interpretation should also be extended to "epenthetic"  $[\eta]$ . We conclude the paper with a call for methodical further analysis in other languages since, as shown in the present study, the interpretive process can be multi-faceted and delicate.

#### References

ALI 2016 = Anonby, E. et al (eds.). 2016. Atlas of the Languages of Iran. Ottawa. Online: http://iranatlas.net.

- Fattahi et al. Forthcoming. Kermanshah Province. In: ALI 2016.
- Anonby et al. Forthcoming. Ilam Province. In: ALI 2016.
- Chen, Y. and C. Gussenhoven. 2015. Shanghai Chinese. *Journal of the International Phonetic Association* 45 (3), 321–327.
- Duanmu, S. 2000. The Phonology of Standard Chinese. Oxford.
- Fagyal, Zs., D. Kibbee and F. Jenkins. 2006. French: A linguistic introduction. Cambridge.
- Fattah, I. K. 2000. Les dialectes kurdes méridionaux: étude linguistique et dialectologique. Louvain.
- Ladefoged, P. and I. Maddieson. *The sounds of the world's languages*. Oxford.
- Lee, H. B. 1999. Korean. *Handbook of the International Phonetic Association*, 120–122. Cambridge.
- Léon, P. 2005. Phonétisme et prononciations du français. Paris.
- Léon, P. and P. Bhatt. 2009. Structure du français moderne: fonctionnement d'une langue. Paris.
- MacKenzie, D. Kurdish dialect studies 1. Oxford.
- Maddieson, I. 1984. Patterns of Sounds. Cambridge.
- Martínez Celdrán, E. 2004. Classification of approximants. *Journal of the International Phonetic Association* 34 (2), 201–210.
- McAllister, R., J. Lubker and J. Carlson. 1974. An EMG study of some characteristics of the Swedish rounded vowels. *Journal of Phonetics* 2, 267–278.

### On exponents of (in)definiteness in Kurdish and Lari

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The presentation deals with the exponents of (in)definiteness in Lari (Southwest Iranian) and in Kurdish (Northwest Iranian). Lari is spoken in the Larestan (Lar) region of Fars province, in parts of Hormozgan province in the south of Iran and in some of Arabic-speaking countries like United Arab Emirates, Qatar, Bahrain, Kuwait, and Oman. Kurdish is considered as a general name of closely-related group of Northwest Iranian languages that are spread on a vast geographical area of the Middle East – Iran, Turkey, Syria, Lebanon, Iraq; in Central Asia – Turkmenistan, and in the Caucasus – Armenia, Georgia, Azerbaijan.

In the modern Iranian languages the category of (in)definiteness is represented by the diverse morphological exponents such as article proper, deictic elements, numeral "one", definite and indefinite pronouns, case markers, stress, and etc.

The category of (in)definiteness in Lari and Kurdish are represented by the exponents listed below. Lari: -ak, -aka and  $-\ddot{u}$  (definiteness); -i/-e (indefiniteness); Kurmanji: -ak, -k (indefiniteness, singular); -in, -n (indefiniteness, plural); Sorani:  $-(y)\grave{e}k$  (indefiniteness);  $-\acute{a}ka$ ,  $-\acute{a}$  (definiteness); Suleimani:  $-\ddot{e}(k)$  (indefiniteness); Awromani/Avromani: -ew/-ewi (indefiniteness, singular), -ewa (indefiniteness, . singular); Zaza(ki):  $-\ddot{e}/-\ddot{e}(n)$  (indefiniteness, unity).

In Lari the productive derivational suffix with a meaning of diminutive -ak, -aka (descends from Iranian \*-(a)ka) is a marker of definiteness unlike the widely spread model of close connection between the markers of definiteness and the demonstratives.

The presentation is focused on investigation of -ak, -aka (both in Kurdish and in Lari). The diachronic and synchronic typological attitude. On the one hand, the comparison with the Persian and some other West and East Iranian languages allows to explore the specific features of "Kurdish (in)definiteness". On the other hand, the typological attitude reveals certain universal resemblances.

### References

MacKenzie, D. N. 1966. The dialect of Awroman, Copenhagen.

- Wabby, T. 1951. Sculptures in Gunduk Cave. Baghdad.
- Thackston, W. M. Sorani Kurdish. A reference grammar with selected readings. URL: https://www.fas.harvard.edu/~iranian/Sorani/sorani\_1\_grammar.pdf
- Leezenberg, M. 1993. Gorani Influence on Central Kurdish: Substratum or Prestige Borrowing? Amsterdam.
- Osnovi iranskogo yazikoznaniya. Moscow, 1997.
- Molchanova, E. K. 1987. Lari language. In: *Languages of the World*, Moscow (in Russian).

## Mismatching in Persian complex predicates: A focus on dual-nature of non-verbal element

## Tina Ghanbarian (Tarbiyat Modarress University)

Persian complex predicates in the standard dialect of Iran display a sort of mismatching, acting as a single unit in some ways and more than a unit in other ways. In the cases under this study, the Pre-verbal element (PV) might be considered both: as a part of a predicate and as an argument of it. In the instances like (1b), the PVs can appear with a determiner, behaving like a full NP, and According to this behavior, PVs show a dual nature. Some researchers who worked on Persian complex predicates (CPs) have ignored cases like (1b) (Megerdoomian 2001, Goldberg 2003; among others). Some others described this phenomenon but they did not explain why it occurs or why it is natural in the language (Folli et al 2005, Karimi-Doostan 1997, 2011, among others). This study aims to answer such these questions and claims that, the emergence of the cases like (1b) in Persian are typologically natural, based on some central notions of Construction Grammar (Goldberg, 1995, 2006); namely: Construction, Generalization, Motivation, and Inheritance.

(1) a. Iranian avalin medal-e banoo-ye keshvar-eshan ra Iranian first medal-ez lady-ez country-their дом jashn gereft-and. celebrate.3pl

'Iranians celebrate their women's first medal.'
A part of the predicate (http://www8.irna.ir)

b. Bache-ha surperayz-am kard-and va 7in jashn ra child-pl surprise-me did.3pl and this celebration dom gereft-and.

took.3pl

'The guys surprised me and held this celebration.'

An argument of the predicate (http://www.farsnews.com)

All levels of grammatical analysis involve constructions, 'learned pairings of form with semantic or discourse function'. According to this description, in examples (1a–b) the CP *jashn gereftan* is considered a construction (cf Goldberg 2003, Folli et al 2005, Family 2006, Samvelian and Faghiri 2014). Then,

how the differences between two form of CPs, (1a–b), could come into account. In constructionist approaches, syntactic constructions or configurations themselves bear meanings. In addition, based on the Principle of "No Synonymy" (see Goldberg 1995), semantic synonymy between the two constructions implies a pragmatic difference. According to these principles, the CPs which exist in the instances like (1a–b) which are different in the form and semantically synonymous, exhibit some functional differences to a degree. The approach adopted here is in concert with Dabir-Moghaddam (1997), saying, "Semantic difference exists between a non-incorporated construction (1b) and its incorporated counterpart (1a)".

By looking at the instances like (1b), one can see the footprint of the Persian "transitive pattern". As the grammatical patterns also stored as constructions in mind, we draw a pattern for the "Transitive Construction" in Persian (Figure 1). This research claims that the differences between (1a) and (1b), accrue because of the properties inherited from the "transitive construction" by CPs like (1b), in other words, the constructions like (1b), is motivated by the "transitive construction". Motivation can be provided by factors outside of the language-particular grammar; alternatively, motivation may come from within the grammar. There is two basic motivations both inside and outside the language. The main motivation outside the language, in these cases, is "discourse demand", in which case we need to focus on the part of the predicate (PV) and make it somehow referential rather than generic. In order to fulfill this discourse demand, language and mind cooperate to supply the demand. The main motivation inside the language is the syntactic independence of the elements of CPs to a certain degree. Some reasons for this claim are listed here: CPs are separated by the future auxiliary, imperfective and negation prefixes. Verbal element in CPs can also serve as input to the gerundive nominalization and adjectival past participle constructing (cf. Karimi-Doostan 1997, Folli et al 2005), according to these properties; the verbal element still preserves its verbal features. These two basic motivations are supported by some additional motivations inside and outside the language; we call them "supporting motivations". Here we consider some of them, namely: being able to take part in the Ezafe construction outside the CP, making PVs that bear [+N] feature so they can be definite by determiners ?in 'this' and ?an 'that'. Moreover, whenever direct object is definite/ specific, it is never used without "ra" (cf. Sadeghi 1349). Another supporting motivation comes from the cognitive ability of categorization and generalization, in some cases; we can categorize the meaning of the PVs, which co-accurse with a certain LV into one category. For example, in the case of the verb gereftan 'to take', as a light-verb in the CP construction, its PVs such as arusi 'wedding', jasn 'celebration', mehmani 'party', khatm' mourning', etc., can categorize into the 'social ritual meetings' category. This mechanism motivates a new sense for the verb gereftan, e.g.

'holding a ceremony, meeting, etc.' and makes its function more like a full verb than a light verb (cf. Samvelian and Faghiri, 2014, Family 2006, Ghanbarian 2016). For the last supporting motivation that is presented here, we can consider that in the CPs under this study (separated RA-marked CPs), the external argument should be semantically licensed by the meaning of the CP as an agent. According to Samvelian (2006, 2014), as you can see also in (1b); "projecting an external argument by the CPs which is also the semantic agent of it implies the condition of necessity for emerging accusative CPs, and this is a possibility for Ra –marking of the nominal element". In contrast with these CPs, there are CPs like; *xak gereftæn* 'get covered with dust' which cannot occur in the construction like (1b), because they are unaccusative.

The constructions from a network are linked by inheritance relations, which motivate many of properties of particular constructions (Goldberg 1995: 67). As is shown here, the more a CP inherits from the "transitive construction", the more motivation exists for it to become a construction, which we call it, "separated RA-marked CP" or "transitive CP". The CPs under this study might show mismatching in a certain discourse because of the syntactic independence of their elements which motivates (in)separability between their elements when they co-occur with the certain other elements in a network of language constructions.

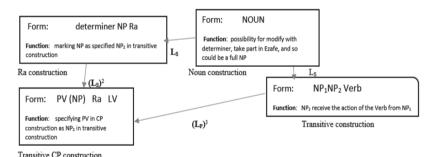


Figure 1. Inheritance in the CPs (<sup>2</sup>Subpart link, <sup>3</sup>Polysemy link)

#### References

Dabir-Moghaddam, M. 1997. Compound Verbs in Persian. *Studies in Linguistic Sciences* 27, 25–59.

Family, N. 2006. Explorations of semantic space: The case of light verb constructions in Persian. Doctoral dissertation, EHESS.

Folli, R., H. Heidi and S. Karimi. 2005. Determinants of event type in Persian complex predicates. *Lingua* 115, 1365–1401.

- Ghanbarian, T. 2016. Separability in Persian complex predicates and the verbal new sense, a lexicographical challenge. *Workshop on complex predicates in Iranian languages*, University of Tehran (https://sites.google.com/site/cprut2016/).
- Goldberg, A. E. 1995. A Construction Grammar approach to argument structure. Chicago.
- Goldberg, A. E. 1996. Words by default: Optimizing constraints and the Persian complex predicate. *Annual Proceedings of the Berkeley Linguistic Society* 22, 132–146.
- Goldberg, A. E. 2003. Words by default: The Persian complex predicate construction. In: E. Francis and L. Michaelis (eds.). *Linguistic mismatches*. Stanford, CA.
- Goldberg, A. E. 2006. Constructions at work. Oxford.
- Karimi-Doostan, Gh. 1997. *Light verb construction in Persian*. PhD dissertation, University of Essex.
- Karimi-Doostan, Gh. 2011. Separability of light verb constructions in Persian. *Studia Linguistica* 65 (1), 1–26.
- Megerdoomian, K. 2001. Event structure and complex predicates in Persian. *Canadian Journal of Linguistics* 46, 97–125.
- Samvelian, P. and P. Faghiri. 2014. Persian complex predicates: How compositional are they? *Semantics-Syntax Interface* 1 (1), 43–74.
- Sadeghi, A.-A. 1349. "Ra" in today's Persian language. *Letters and Humanities, University of Tabriz* 93, 9–22.
- Sharifpour, S. 2016. Processes of building complex verbs in consideration with separability of nouns as nonverbal elements. *Workshop on complex predicates in Iranian languages*, University of Tehran (https://sites.google.com/site/cprut2016/).

# What do small stories tell us about the situation of Persian as a heritage language?

### Narges Ghandchi

Small stories as a form of narrative genres have been used as a point of departure to explore the presentation of self, and they have been emphasized in relation to identity projects (Georgakopoulou 2006).

The present study is placed within the analytical framework of small stories (Phoenix and Sparkes 2009). The study deals with the ways of telling and the identity work that the tellers of the small stories involve in. Drawing upon data collected during two interactive interviews with one parent and one grandparent, classroom observations and fieldnotes from a heritage language class with a focus on one third--generation heritage language learner of Persian, the family's story of Persian is illustrated as a patchwork of small stories of being Persian speakers outside of the country of origin. The study trace where and when using, acquiring, and learning Persian as a heritage language are highlighted by three generations during their situated identity work (Bucholtz and Hall 2005).

The narratives came about during a linguistic ethnographic study (Rampton et al. 2015; Maybin and Tusting 2011) of two Farsi as heritage classes – affiliated to a larger linguistic ethnographic project, named Mother Tongue Education for linguistic minority pupils Copenhagen, and based at the University of Copenhagen, Denmark (2013–16). As its background, the study presents the general context of bolstering Persian as a heritage language in two heritage classes, as well as the cross–generational representations of the acquisition and practice of Persian as a heritage language.

- Bucholtz, M. and K. Hall. 2005. Identity and interaction: A sociocultural linguistic approach. *Discourse Studies* 7, 585--614.
- Georgakopoulou, A. 2006. Thinking big with small stories in narrative and identity analysis. *Narrative Inquiry* 16 (1), 122--130.
- Maybin, J. and T. Tusting. 2011. Linguistic ethnography. In: J. Simpson (ed.). *The Routledge Handbook of Applied Linguistics*, 515--528. London.

- Phoenix, C. and A. C. Sparkes. 2009. Being Fred: Big stories, small stories and the accomplishment of a positive ageing identity, *Qualitative Research* 9 (2), 219-- 236.
- Rampton, B., J. Maybin and C. Roberts. 2015. Methodological foundations in linguistic ethnography. In: J. Snell, S. Shaw and F. Copland (eds.). *Linguistic ethnography: Interdisciplinary explorations*, 14--50. London.

### New materials on the dialects of Hormozgan

Mikhail Grachev (The State Hermitage Museum)

The Province Hormozgan of IRI numbers a huge variety of different Iranian languages and dialects: dialects of Fars, Lar languages, Baškardī, Kūmzarī, Minābī, and the group of dialects, we henceforth call "Bandarī", after their geographical center, the capital of the province — the city of Bandar-Abbas.

According to the position of some scholars (O. Skjærvø , V. Moshkalo), the Bandarī dialect belongs to the group of Baškar, and inside it – to the Rūdbarī dialects (Moshkalo 1997: 195; Skjærvø 1989: 363). Bandarī is a language without its own alphabetic system and for the records of the local poetry and folk songs, Persian alphabet is used. Mainly the researchers point out that the group of south-western Iranian dialects and particularly the group of bandarī need more investigations to be done.

Some Iranian languages of the south-western group though were described in detail: the dialects of Fars (Kerimova 1982, 1997; Lecoq 1989), Lūrī and Bakhtiarī dialects (Kerimova 1982), the language of Lar (Molčanova 1982, 1997; Lecoq 1989). The group of Baškardī and Kūmzarī, which are probably the closest dialects for Bandarī, were studied in a lesser degree (Skjærvø 1989: 364). The dialect of Mināb was first studied by O. Skjærvø (Skjærvø 1975), and recently by G. Barbero (Barbero 2006) and Iranian scholars – P. Zareypur and H. Bahmani (Zareypur 2007; Bahmani 2005). As for the Bandarī dialect, it was described in the works of Iranian researcher A. Fathī (Fathī 2001) and M. Pelevin (Pelevin 2010).

The author of the present paper had a chance to visit the region of Hormozgan in the winter of 2016 and to provide the fieldworks with the informants. Finally it became obvious, that this is impossible to consider Bandarī as a solid dialect. It's a group of numerous subdialects (eight of them were distinguished during fieldwork and 5 of them were partly described), different in phonology:

- (1) a. New Persian gerye 'teardrop' < gar (Sūrūyī), gerī (Xamīrī), gīrī (Qešmī)
  - New Persian rūdxāne 'river' < rūtxāna (Bandarī, Qešmī, Sūrūyī), rūxūna (Xamīrī), rūxāna (Xūrgūyī)¹

 $<sup>^1\</sup>mathrm{X}\bar{\mathrm{u}}\mathrm{rg}\bar{\mathrm{u}}\mathrm{y}\bar{\mathrm{i}}$  probably occupies the transitional place between the dialects of Bandarī and the group of Mīnāb

c. New Persian *parīrūz* 'day before yesterday' < *parīr* (Qešmī), *pare* (Sūrūyī), *pareg* (Xamīrī), etc.

There are also differences in verbal morphology, e.g. the formation of Present Progressive (New Persian *dāram mīravam*/ *dāram nemīravam*):

- (2) a. Xamīrī
  - ne- raft -en -om / na- na- raft -en -om PrefCont 'go' SufInf 1Sing Neg PrefCont 'go' SufInf 1Sing
  - b. Sūrūyī
    - $n\bar{a}$  raft -en -om / no- raft -en -om PrefCont 'go' SufInf 1Sing Neg+PrefCont 'go' SufInf 1Sing
  - c. Qešmī
    - ne- raft -am / ne- raft -am -nam PrefCont 'go' 1Sing PrefCont 'go' 1Sing Neg+1Sing?
  - d. Gačī
    - no- raft -om / ni- ne- raft -om PrefCont 'go' 1Sing Neg PrefCont 'go' 1Sing

Thus, now it is necessary to reconsider the structure of the Bandarī subgroup and its place in the south western group of Iranian languages.

- Bahmanī, H. 2005. Gūyeš-e Mīnābī, Barrasī-ye va towsīf-e zabānšenāxtī. Tehrān.
- Barbero, G. 2006. The palm in Minab. *Proceedings of the 5th Conference of the Societas Iranologica Europaea*. Vol 2. Milano.
- Fathī, A. 2001. Sāxt-e fe'l dar gūyeš-e bandarī. *Majmū'e-ye maqālāt-e noxostīn hamandīšī-ye gūyeš-šenāsī-ye īrān*. Tehrān.
- Kerimova, A. A. 1982. Lurskie i baxtijarskie dialekty [Luri and Bakhtiari dialects]. In: *Osnovy iranskogo jazykoznanija. Novoiranskie jazyki: zapadnaja gruppa, prikaspijskie jazyki.* Moscow.
- Kerimova, A. A. 1997. Farsa dialekty [Dialects of Fars]. *Jazyki mira. Iranskie jazyki. Jugo-zapadnye jazyki.* Moscow.
- Lecoq, P. 1989. Les dialects du sud-ouest de l'Iran. *Compendium Linguarum Iranicarum*. Wiesbaden.
- Molčanova, E. K. 1982. Larskij jazyk [Lari language]. In: Osnovy iranskogo jazykoznanija. Novoiranskie jazyki: zapadnaja gruppa, prikaspijskie jazyki. Moscow.

- Molčanova, E. K. 1997. Larskaja gruppa dialektov [Lari dialect group]. In: Jazyki mira. Iranskie jazyki. Jugo-zapadnye jazyki. Moscow.
- Moškalo, V. V. 1997. Baškardi gruppa dialektov. In: Jazyki mira. Iranskie jazyki. Jugo-zapadnye jazyki. Moscow.
- Pelevin, M. 2010. Materials on the Bandari Dialect. Iran and the Caucasus 14(1).
- Skjærvø, O. 1989. Languages of Southeast Iran: Lārestānī, Kumzārī, Baškardī. *Compendium Linguarum Iranicarum*. Wiesbaden.
- Skjærvø, O. 1975. Notes on dialects of Minab and Hormoz. *Norsk Tidsskrift for Sprogvidenskap* 29.
- Zareypur P. 2007. Sāxt-e fe'l dar gūyeš-e Mīnābī. Tehrān.

# The Armenian word 'Ganj': A lost and found piece of Middle Persian treasury?

Piruza Hayrapetyan (Central European University)

The Armenian word ganj (Arm. quulà) has two meanings: besides the main meaning, i.e. treasure (gani I), it designates a certain type of liturgical hymns dating back from the tenth century (ganj II). While, the ganj I is a loanword from Middle Persian (MP ganj 'treasure, treasury'), the ganj II is believed to be a derivation from the incipits of the above-mentioned hymns. Thus, according to this view, the secondary meaning of the gani, i.e. song or sermon, emerged within the Armenian ecclesiastical and literary environment. However, in my paper, based on the etymological and phonological analysis of the three dialect forms of the Armenian word gani, I will argue that the word ganj meaning 'song' (or 'recited speech') has existed in Armenian language since the fifth-sixth centuries as a Middle Persian loanword (the few existing MP dictionaries refer to the word ganj meaning only 'treasure' or 'treasury'). Consequently, the secondary meaning of the MP ganj, attested in Early New Persian (NP گنج, 'a group of Persian musical modes or notes' attributed to Barbud), was already in use in the Middle Persian period. The three Armenian dialect forms of the ganj II display slight semantic differences; ritual or magic song (Łarabał dialect), announcement or edict (Śatax dialect) and lament to the dead (Van dialect), all going back to the same shared core meaning of 'song' or recited speech. These dialect forms may serve as a clue to reconstruct the complete semantic picture of the MP ganj and supplement the dictionary of Middle Persian.

# Frequency of the passive in Persian: A multilingual parallel corpus-based study

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- 1. Introduction. The purpose of this presentation is to shed light, both language-internally and cross-linguistically, on an aspect of the occurrence of the passive in contemporary Persian. Contrary to widespread belief, this construction is not used less frequently in Persian than in other languages. With the help of two multilingual parallel corpora, I will examine the frequency of the prototypical passive and explain its distribution with respect to the notion of agent.
- **2. Data and methods.** In order to investigate the use of the passive in Persian, I undertook a parallel corpus-based study using the written texts cited below.
  - Juridical Corpus: "Universal Declaration of Human Rights" and two bilateral treaties between the Islamic republic of Iran and Japan, written in Persian, English, and Japanese. (About 7,800 words in English)
  - Novel Corpus: a Japanese children's novel entitled *Totto-chan, the Little Girl at the Window* written by Tetsuko Kuroyanagi and its translated versions in Persian, English, and French. (About 45,300 words in English)

The text content is the same in each language. These two texts were chosen as suitable to assess the effect of different writing styles. As is standard practice in cross-linguistic studies, in order to identify passive constructions in each language version, I combined semantic criteria (the passive prototype proposed by Shibatani 1985) and formal properties proper to each language, i. e. "past participle of a transitive verb + \*\*sodan/be/être\*" in Persian/English/French and "verb + suffix -(r)are\*" in Japanese.

**3. Results.** The token frequency counts for each language are shown in Tables 1 and 2 below.

Persian	English	Japanese
14	143	139

Table 1. Text frequency of the passive in the Juridical Corpus

Persian	English	Japanese	French
104	348	104	233

Table 2. Text frequency of the passive in the Novel Corpus

**Result 1:** Cross-linguistic frequencies. Table 1 seems to confirm the traditional view about the Persian passive, according to which "The general rule is not to use it, if it can be avoided;" (Phillott 1919: 285, see also Windfuhr 1975); as compared to English and Japanese, the low token frequency of the passive in Persian is conspicuous. But my survey revealed that this widespread belief holds only in a certain style of text. Table 2 shows that in Persian, the passive construction occurs as often as in Japanese. The Persian prototypical passive is actually quite often used.

**Result 2: Language-internal frequency.** In the two corpora, the frequency rate of occurrence of the Persian passive construction is almost the same. (Note that the Novel Corpus is about 5.9 times as large as the Juridical Corpus.) In English and Japanese, on the other hand, there is a remarkable difference between the two corpora: in English, the frequency in the Juridical Corpus is almost 2.5 times as high as in the Novel Corpus, and in Japanese, the passive is used in the Juridical Corpus almost 8 times as often as in the Novel Corpus. It is clear that in these languages, the stylistic differences between the texts greatly affect the frequency of the passive, while in Persian these differences are irrelevant.

#### 4. Discussion

**Explanation of Result 1: Non prototypical passive.** In the Juridical Corpus, the frequency of the Persian prototypical passive is extremely low, compared to English and Japanese. This fact can be ascribed to frequent use of the non-prototypical passive, "noun/adjective + *šodan*", as *be jāye ān bā radīfhāī az deraxtān ehāte šode būd* 'Instead it was surrounded by the tree row'.

This peripheral construction occurs in the Juridical Corpus twice as often as in the Novel Corpus: 143 versus 73 occurrences. Given the difference in the size of the two corpora (see above), this difference is all the more remarkable. The peripheral construction compensates for the decreased use of the prototypical passive.

**Explanation of Result 2: Absence of explicit agent.** In Persian, the frequency of the prototypical passive is almost the same in the two corpora. This fact is closely related to the absence of an agent. In Persian, a passive construction with an explicit agent is, if not impossible (cf. Moyne 1974), at least, extremely rare in any style. In my corpora, only 3 agents are specified in the Juridical corpus and there are 3 occurrences also in the Novel Corpus. On the other hand, in the other languages considered here, the occurrence of an

agent depends largely on the text type; the agent is sometimes clearly specified in novels, but hardly ever in juridical texts, where the agent of an action mostly cannot be identified. My corpora confirm this tendency: in English, 27 agents are specified in the Juridical Corpus versus 37 in the Novel Corpus; in Japanese, 17 in the Juridical Corpus versus 48 in the Novel Corpus; and in French, 43 in the Novel Corpus. The Novel Corpus illustrates the general tendency, in which the agent is absent only in Persian. Because the agent is omitted as a general rule in Persian, the frequency rate of the prototypical passive is always the same, regardless of writing style.

- **5. Conclusion.** Based on this corpus-based analysis, the following conclusions can tentatively be drawn:
  - Contrary to widespread belief, in Persian the prototypical passive appears quite frequently. The present data suggest, however, that in juridical texts its frequency is relatively low compared to that in the other languages because non-prototypical constructions compensate for prototypical ones.
  - In Persian the frequency of the prototypical passive is almost the same in the two corpora examined here. This is because Persian does not clearly specify an agent for the action, in any writing style.

### References

Lazard, G. 1992. A Grammar of Contemporary Persian. San Diego, CA.

Moyne, J. A. 1974. The So-Called Passive in Persian. *Foundations of Language* 12, 249–267.

Phillott, D. C. 1919. Higher Persian Grammar. Calcutta.

Shibatani, M. 1985. Passives and Related Construction: A Prototype Analysis. *Language* 61, 821–848.

Windfuhr, G. L. 1975. Persian Grammar. History and State of its Study. The Hague.

دبیرمقدم، محمد. (1985 / 1364) مجهول در زبان فارسی، مجله زبانشناسی، ساله دبیرمقدم، محمد. (1985 / 1364) تهران: مرکز نشر دانشگاه

# Reflection of Indo-European opposition of the present-aorist stems in Old Iranian languages

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If we can assume material for the study of the stems of present in Avestan and Old Persian satisfactory, then the forms of the aorist and perfect are poorly represented and do not provide a sufficient basis for definitive conclusions on the morphology in these languages.

The comparative-historical linguistics based on data from the Old Indian and Greek languages. System of present and aorist in Avestan and partly Old Persian in general corresponds to the verb system of the Old Indian. With the help of the rich material of the Old Indian language this allows for the reconstruction of the Old Iranian languages' defective forms.

Morphological analysis of verbal stems of Indo-European languages gives us grounds to assert that the Proto-Indo-European language has developed a system of verbal stems opposition of present and aorist, in which the structure of tense-aspect stems of these categories were interdependent in such a way that they are formally differentiated within each verb separately. To this end, there are two types of Indo-European verbal stems — marked and unmarked. The tense- aspect system is based on their oppositeness: marked present corresponds to unmarked aorist and vice versa — marked aorist is characterized by unmarked presence.

Root verbs with the semantics of punctual action (terminative verbs) by affixation and reduplication acquire grammatical markers with different levels of aspectuality: inchoative, iterative, intensive repetition, etc. This - the so-called aorist verbs later, after the formation of the category of time, so-called aorist strong form (Austefjord 1988: 26). They cannot have a present tense in their original (unmarked) verb-form.

\*dheh<sub>1</sub>- 'put'  $\rightarrow$  \*dhedheh<sub>1</sub>- 'place'; Ved. aor. ádhāt, prs. dádhāti; Av. prs. dadāiti; O.P. aor. adā, imf. adadā; Grk. aor. ἔθεκε, Mic. te-ke; prs. τίθημι; Arm. aor. ed, prs. with nasal infix: dnem.

\* $deh_3$ -  $\rightarrow$  \* $dedeh_3$ - 'give'; Ved. aor. ádāt, prs. dádāti; Av. prs. daδāiti; Grk. aor. ἔδομεν, prs. δίδωμι; Arm. aor. et.

\*léik¾- / lik¾-  $\rightarrow$  \*li-né/n-k¾ 'let'; O.I. aor. áricat, prs. rinákti; Grk. aor. ἔλιπον, prs. λιμπἀνω; Lat. with nasal infix prs. linquō, -ere; Arm. aor. e-likc, prs. lkcanem.

\* $u\acute{e}id$ - /  $u\acute{i}d$ -  $\rightarrow$  \* $u\acute{i}$ - $n\acute{e}/n$ -d- 'see, know'; O.I. aor.  $\acute{a}vidat$ , prs.  $vind\acute{a}ti$ ; Av. aor. vidat, prs.  $vinast\bar{\iota}$ ; Grk. aor.  $e\~{i}\acute{o}ov$ ; Arm. aor. egit, prs. gtanem.

On the other hand, the present root (unmarked) verbs can form the reduplicated or sigmatic aorist (marked) stems. Often, in the Old Indian root present as (parallel to) the reduplicated aorist has sigmatic doublets. Over time another form of opposition perfective – imperfective distinguishes itself: unmarked root stems of present are opposed to marked (reduplicated or sigmatic stems of aorist):

\* $u\acute{e}$ - $u\acute{k}^u$ -e- $\leftarrow$   $u\acute{e}k^u$ -/ $uk^u$ - 'speak' O.I. aor. ávocat, prs. vákti see redupl. vívákti; Grk. aor.  $\ddot{\epsilon}(\varepsilon)$ ειπον,  $\ddot{\epsilon}$ πος; Arm. prs.  $go\acute{c}$ 'em.

\* $h_1 \mu e g^{\mu h}$ -s- $\leftarrow$  \* $h_1 \mu e g^{\mu h}$ -O.I. aor. áhuiṣṭa, prs. óhate; Grk. aor. ήξάμην, prs. εΰχομαι, arm. aor. uzeac', prs. uzem.

The objective of this paper is to test this concept on the meager material of verb Old Iranian languages and to identify the origins of formation of tense-aspect of present, imperfect and agrist in Avestan and Old Persian.

#### References

Austefjord, Anders. 1988. On the oldest type of aorists in Indo-European. *Journal of Indo-European Studies* 16 (1–2).

### The morpheme $x\bar{e}l$ composing toponyms and tribal names

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The reciprocal relation between toponyms and tribal names is known from long ago; sometimes toponyms become tribal names, but more often tribal names form toponyms.

In connection with this the morpheme  $x\bar{e}l$  (xayl) is showing an interesting and multilateral picture in the iranophone areas, appearing either in toponyms or tribal names. In fact,  $x\bar{e}l$  can serve as an exemplary sample of toponym-tribal name syncretism.

In the south-Caspian territories of Iran, especially in the provinces of Gilan and Mazandaran, and more to the west, in Kermanshah, and rarely in the province of Khuzestan, we meet toponymes formed with  $-x\bar{e}l$  / -xeyl (-xeyl). By the way, the morpheme has anyway the significance of 'locality, village'. We can find its specific use more to the north, on the territories populated with the Talysh of the Republic of Azerbaijan, for instance in the regions of Masali, in the form of  $X\bar{e}l$  (or more probably Xal). By the way, it is also possible that the locality of Xayl in the surroundings of Ghazvin, mentioned in the work  $Mu'ajam\ ul-buld\bar{a}n$  (see Dehxodā, s. v.), may be related with the word unit under discussion.

Now, may this so-called near-Caspian  $x\bar{e}l$  / xayl morpheme creating toponyms be in relation with the Afghan  $x\bar{e}l$  which is used in this language as nominated by the tribe and in words composed with the name of the tribe chief:  $Ism\bar{a}\bar{i}l$ - $x\bar{e}l$ ,  $Al\bar{i}$ - $x\bar{e}l$ ,  $M\bar{u}s\bar{a}$ - $x\bar{e}l$ , Ahmad- $x\bar{e}l$ , etc.?

In fact, the Afghan  $x\bar{e}l$  is the synonym of the Persian form  $xv\bar{e}s(\bar{a}n)$  which means 'members of the family, parents', and this is seen the best in the Afghan expression  $qawm\ \bar{u}\ x\bar{e}l$  which is the true mirror reflection of the Persian  $qaum\ \bar{u}\ xv\bar{e}s$ . Compare also Afghan  $padarx\bar{e}l$  'the wife's father family',  $x\bar{e}lx\bar{a}na$  'family, clan',  $x\bar{e}l\ o\ xatek$  'tribe'.

The word  $x\bar{e}l$  is a stabile social term in Pashto and has a pan-Afghani use in the meaning of 'tribe, clan'. Usually, each  $x\bar{e}l$  "tribe" lives in one village (while it is not excluded that it may occupy a larger territory) and the village

<sup>&</sup>lt;sup>1</sup>This local pronunciation x 
ildet lambda lambda and its meaning "mud" in Talish language put nevertheless under suspicion this rural relation with the morpheme x 
ildet lambda l

is called after it, thus  $x\bar{e}l$  becoming a toponym creating morpheme with the meaning 'place, locality'.

It is quite sure that  $x\bar{e}l$ , with its principal meaning of 'tribe' (in the social sense) and the toponym creating function, derived from it, is related with Kurdish and Pashto, in which it also became a unit expressing "tribal territory". In Persian xeyl means 'group, army, and detachment', cf. xeyl-xeyl 'group by group',  $xeylb\bar{a}\bar{s}$  'commander of cavalry', etc. However, in Arabic, from which the Persian word is considered to be borrowed, it has only the meaning of 'horse' (plural  $xuy\bar{u}l$ ,  $axy\bar{a}l$  'horses') and has no social meaning.

Such semantic developments of this Arabic word in the Iranian languages provide also Iranian etymology, especially given by F. Andreas, which is noted in the Etymological Vocabulary of Pashto by Morgenstierne (1927:96).<sup>2</sup> This paper, taking into account the version of the Iranian origin, shows that the unit xēl is considered to be one of the Arabic loanwords via Turkish of the Iranian lexicon. Thus, it has already entered the Persian from Turkish with the meanings 'comrade-in-arms, messenger, army'.

On the frame of this article we discussed a wide range of Iranian and Armenian toponyms, composed by  $x\bar{e}l$ . By the way, the transition of this unit to the Armenian toponyms via Kurdish is also analyzed in the scope of our paper.

<sup>&</sup>lt;sup>2</sup>In the publication of 2003 of this book (Wiesbaden, p. 95) the editors J. Elfenbein, D. N. Mackenzie, Nicholas Sims-Williams have abridged the note made by the author about the etymology presented by Andreas. Moreover, they consider that the word under discussion as an Arabic/Persian borrowing in Pashto and they refute its Iranian origin.

# The Voice grammar category in the Ossetic language (in comparison to Russian)

Zarema Kokoeva (North Ossetian State University)

The voice is one of the most complex and interesting verbal categories. In the Ossetic language different researchers identify three (Kozyrev 1963; Kambolov 2006) or four (Abaev 1959; Akhvlediani 1963) voice forms. The point of view according to which there are four voices in the Ossetic language seems more preferable to us: active and passive in two versions: the basic passive form and participle in -gæ form in modally- passive meaning (Vydrin 2014) causative (analytically formed, rather than causative verbs), and reflexive.

As for the two other passive-modal structures (passive: deontic necessity construction with future participle in -inag, facilitive-difficilitive construction, consisting of nominalized form in -æn, žən 'difficult' or ænson 'easy' and the auxiliary wæwn 'to be' described by A. Vydrin 2014), the element of impersonality is more actual there than passivity. Facilitive-difficilitive construction is impersonal, it expresses the state and is similar to the category of state constructions in the Russian language. The future participle in -inag constructions express modal meaning of advisability, though in some contexts with passive tone but it is rather implicit.

The grammar category of voice in the Ossetic language has the following peculiarities that distinguish it from the voice category in the Russian language:

- the Ossetian language has a special causative form of the voice, in the Russian language the causative meaning can be expressed only analytically;
- the passive construction in the Ossetian language is expressed by participles only, yet in Russian the imperfective verbs form the passive voice with postfix -sya finite verb forms ('Letters are delivered by a postman': raznosyatsya), and the perfective verbs form passive with the help of short passive participles ('The door is closed by the guard': zakryta);
- alongside with the main passive construction Ossetic has passive construction with participle in  $-g\alpha$ , where the passive meaning is concomitant with modal one (Vydrin 2014);

- the reflexive particle which serves to form the reflexive voice in Ossetic is declined whereas -sya in Russian is a postfix already and a former pronoun which has two functions: index of passive voice or reflexivity (compare grammar ambiguity: 'The heavy cargo is being lowered slowly' / 'He is slowly descending': Tyazhelyj gruz medlenno spuskaet-sya na zemlyu / On medlenno spuskaetsya po lestnice);
- the distinction between transitive and intransitive verbs in the Russian language is expressed syntactically (transitive verbs are combined with Accusative without a preposition, intransitive verbs are not combined), in the Ossetian language transitive verbs may differ from intransitive even morphologically by gradation of vowels (sometimes consonants), sometimes transitive and intransitive verbs are different tokens (A.Vydrin identifies semantically, syntactically and morphologically transitive and intransitive verbs, Vydrin 2014);
- affixes -d, -t, -gæ and auxiliary wæwn 'to be', sæwn 'to go' are grammar means of expressing passive voice in the Ossetian language; auxiliary verb kænn 'to do' expresses causative; pronoun xi expresses the reflexive voice. In Russian passive is expressed by postfix -sya (imperfective verbs) and participles with suffixes -n-(-nn-), -t-, -m-(perfective verbs). The active voice has no grammar means of expressing either in Russian or in Ossetic. On the basis of analysis of formal factors it has been concluded that the Ossetic morphological system has more analytic features;
- the agent of the Ossetic passive constructions is expressed by ablative, while in Russian by the instrumental case. The agent is seldom indicated in the Ossetic passive constructions which is also typical of the Russian language with widespread binominal passive constructions.

- Abaev, V. I. 1959. *Grammatičeskij očerk osetinskogo jazyka* [A grammatical sketch of Ossetic]. Ordžonikidze.
- Axvlediani, G. S. (ed.). 1963. Grammatika osetinskogo jazyka. [A grammar of the Ossetic language]. T. I. *Fonetika i morfologija* [Vol. I. Phonetics and morphology]. Ordžonikidze.
- Vydrin, A. P. 2014. *Glagol v osetinskom jazyke* [Verb in the Ossetian Language]. In *VOSTOKOVEDENIE*. *Istoriko-filologičeskie issledovanija*. *Mežvuzovskij sbornik statej* 30. *Pamjati akad*. *M.N. Bogoljubova*, 5–81. St. Petersburg.
- Kambolov, T. T. 2006. *Očerk istorii osetinskogo jazyka* [A historical sketch of Ossetic]. Vladikavkaz.
- Kozyreva, T. Z. 1963. Glagol. In: Axvlediani (ed.) 1963.

## Disambiguation of Persian homographs with word2vec

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All natural languages contain words that can mean different things depending on different contexts. Lexical ambiguity - the fact that a word can have more then one meaning - has become one of the main challenges in understanding natural language. The correct sense of an ambiguous word can be determined based on the context where it occurs. While most of the time humans do not even think about the ambiguities of a given language, machines need to process unstructured textual information and transform them into data structures which must be analysed in order to determine the underlying meaning. Lexical ambiguity is inherent to all natural languages and Farsi is no exception here. In fact, Farsi is greatly ambiguous at the levels of both polysemy and homonymy. The latter case, and to be more precise, the issue of homography is the main problem addressed here. The very fact that the Persian writing system often omits diacritics generates lots of ambiguity for computer processing of the Persian language, e.g. the form 'S' can mean 'worm', 'cream', 'chromium', 'generosity' and 'creamy colour'.

Assigning the most appropriate meaning to an ambiguous word is known as Word Sense Disambiguation (WSD). WSD is a fundamental task in computational lexical semantics and one of the oldest tasks in Natural Language Processing (NLP) and Artificial Intelligence (AI). There are four main approaches to WSD: supervised approach (e.g. Zhong and Ng 2010, Shen et al. 2013), unsupervised (e.g. Agirre et al. 2006, Di Marco and Navigli 2013), semi-supervised (e.g. Mihalcea and Faruque 2004) and finally knowledge-based approach (e.g. Ponzetto and Navigli 2010, Agirre et al. 2014). Lot of work has been done in the area of WSD for the English language, the Persian language in that respect is unfortunately not so much researched. The main contributions to word sense disambiguation for Persian can be found in the works by Hamidi, Borji and Ghidary (2007), Soltani and Faili (2010), Rekabsaz et al. (2016), Makki and Homayounpour (2008), Sarrafzadeh and Yakovets (2015). The main purpose here is to present word embeddings used as a method of WSD for the homographs of the Persian language.

Word embeddings are low dimensional representations of a natural language words as real-valued vectors. They are able to capture important semantic and syntactic features of words in a compact manner. The model presented here focuses on word vectors as described by Miklov et al. (2013).

Vector representations of words have proven useful in NLP tasks due to their ability to efficiently model complex semantic and syntactic word relationships and have therefore been increasingly used by many researchers, e.g. Pennington et al. (2014), Trask et al. (2015).

Here, we'd like to present the possible application of word embeddings in the form of word2vec approach for the disambiguation of Persian homographs. Firstly, the word2vec model and related works will be described. Then, a study of 10 ambiguous Persian homographs is to be presented. The results obtained with this approach will be compared with other approaches to word sense disambiguation for the Persian language.

- Agirre, E., D. Martínez, O. López de Lacalle and A. Soroa. 2006. Two graph-based algorithms for state-of-the-art WSD. In *Proceedings of the 2006 Conference on Empirical Methods in Natural Language Processing* (EMNLP '06).
- Agirre, E., O. López de Lacalle and A. Soroa. 2014. Random walks for knowledge-based word sense disambiguation. *Computational Linguistics* 40 (1).
- Di Marco, A. and R. Navigli. 2013. Clustering and Diversifying Web Search Results with Graph-Based Word Sense Induction. *Computational Linguistics* 39 (4).
- Hamidi, M., A. Borji and S. Shiry Ghidary. 2007. Persian Word Sense Disambiguation. In *Proceedings of 15th Iranian Conference of Electrical and Electronics Engineers* (ICEE 2007).
- Makki, R. and M. M. Homayounpour. 2008. Word Sense Disambiguation of Farsi Homographs Using Thesaurus and Corpus. In *Proceedings of the 6th international conference on Advances in Natural Language Processing* (GoTAL '08).
- Miklov, T., K. Chen, G. Corrado and J. Dean. 2013. Efficient Estimation of Word Representations in Vector Space.
- Mihalcea, R. and E. Faruque. 2004. Sense-learner: Minimally supervised word sense disam-biguation for all words in open text. In *Proceedings of ACL/SIGLEX Senseval-3*.
- Pennington, J., R. Socher, and C. D. Manning. 2014. GloVe: Global Vectors for Word Representation. In *Proceedings of the EMNLP 2014*.

- Ponzetto, S. P. and R. Navigli. 2010. Knowledge-rich Word Sense Disambiguation rivaling supervised systems. In *Proceedings of the 48th Annual Meeting of the Association for Computational Linguistics* (ACL '10).
- Rekabsaz, N., S. Sabetghadam, M. Lupu, L. Andersson and A. Hanbury. 2016. Standard Test Collection for English-Persian Cross-Lingual Word Sense Disambiguation.
- Sarrafzadeh, B. and N. Yakovets. 2015. Two Novel Approaches for Persian Word Sense Disambiguation (https://wiki.eecs.yorku.ca/course\_archive/2014-15/W/6339/\_media/clreport\_final.pdf).
- Shen, H., R. C. Bunescu and R. Mihalcea. 2013. Coarse to Fine Grained Sense Disambiguation in Wikipedia. In \*SEM@NAACL-HLT 2013.
- Soltani, M. and H. Faili. 2010. A statistical approach on Persian Word Sense disambiguation. In *Proceedings of the 7th International Conferences on Informatics and System*.
- Trask, A., P. Michalak and J. Liu. 2015. sense2vec A Fast and Accurate Method for Word Sense Disambiguation In Neural Word Embeddings.
- Zhong, Zh. and H. Tou Ng. 2010. It makes sense: a wide-coverage word sense disambiguation system for free text. In *Proceedings of the ACL 2010 System Demonstrations* (ACLDemos '10).

## The compositionality of Persian complex predicates

John Payne (University of Manchester) Siavash Rafiee Rad (University of Oxford)

In this talk we consider the compositionality of Persian Complex Predicates (CPREDs) by investigating the emergence of such constructions through the history of Persian. The talk aims to address the extent to which Persian CPREDs can be accounted for compositionally and the factors which play a role in their diachronic development.

Consider examples (1) and (2):

- (1) dariush xeili {kār kard}<sub>CPRED</sub>
  Dariush a.lot work do.3s.pst
  'Dariush worked a lot.'
- (2) Dariush be radio {guš dād}<sub>CPRED</sub>
  Dariush to radio ear give.3s.pst
  'Dariush listened to the radio.'

In the literature on Persian CPREDs, two major analytical trends can be identified. In one approach CPREDs are formed compositionally (see, for instance, Karimi---Doostan 1997, Folli et al. 2005, Megerdoomian 2012). It is argued that each element of a CPRED, i.e. the preverbal element (PV) and the light verb (V<sub>L</sub>), is an independent lexical item with its own semantic value, and the syntactic combination of the two lexical items accounts for all the properties of the CPRED. Such a framework well suits the type of CPRED shown in (1). On the other hand, some authors cite examples like (2) as an argument that a compositional approach cannot explain Persian CPREDs. In this second approach, the semantic value of the whole CPRED is different from that which might be predicted given the semantic values of the individual elements, and the whole should therefore be considered as an idiomatic expression (see, for instance, Goldberg 1995 and Samvelian 2012).

In this talk we will look at a range of verbs which function both as lexical verbs and as light verbs in Modern Persian, and investigate the role of the lexical verbs in the development of CPREDs. We will propose a semantic analysis based on compositionality which can account for the formation of CPREDs

in the history of Persian. This analysis uses a semantic language based on the work of Vendler (1967), Dowty (1977; 1979), Jackendoff (1990), and Van Valin (2005). We aim to demonstrate a general framework in which the meaning of CPREDs and their component elements can be expressed, including the ones that have been treated as idiomatic.

- Dowty, D. 1977. Towards a semantic analysis of verb aspect and the English imperfective progressive. *Linguistics and Philosophy* 1 (1), 45–77.
- Dowty, D. 1979. Word meaning and Montague Grammar. Dordrecht: Reidel.
- Folli, R., H. Harley, and S. Karimi. 2005. Determinants of event type in Persian complex predicates. *Lingua* 115, 1365–1401.
- Goldberg, A. E. 2003. Words by default: The Persian complex constructions. In: E. Francis and L. Machaelis (eds.). *Mismatches: Form-function incongruity and the architecture of grammar*, 83–112. Stanford: CSLI Publications.
- Jackendoff, R. 1990. Semantic structures. Cambridge, MA: MIT Press.
- Karimi-Doostan, G. 1997. *Light verb constructions in Persian*. Ph.D. thesis, Essex University.
- Van Valin, R. D. 2005. *Exploring the syntax-semantics interface*. Cambridge: Cambridge University Press.
- Vendler, Z. 1967. Linguistics in philosophy. Ithaca: Cornell University Press.

## Focus and ellipsis resolution in Persian

Siavash Rafiee Rad (University of Oxford)

In this talk we consider the role of Polarity Focus (PF) in elliptical constructions in Persian. We demonstrate how such PF licenses ellipsis and allows ellipsis resolution in various Persian elliptical constructions including sentential ellipsis and ellipsis in coordination constructions.

In certain coordination types, for instance the ones with the logical form  $p \wedge \neg q$ , when there are elements that are shared between the proposition  $p \wedge q$ , the presence of PF at the level of syntax is essential in order for ellipsis to be well-formed. PF plays a crucial role both syntactically and semantically in coordination types such as postsection  $(p \wedge \neg q)$  and presection  $(\neg p \wedge q)$ , which according to Payne "in most languages... are treated analytically as a combination of conjunction and negation, but rarely they may be realised by a distinct synthetic form" (1985: 3). Consider example (1):

(1) Dariush be ou xandid vali to NA xandid-i
Dariush to him laugh-3s.pst but you NEG laugh.2s.pst
'Dariush laughed at him but you DID not laugh at him.'

In (1), the negation NA stands parallel to positive polarity in the source sentence, which, in turn, allows the reconstruction of the elided elements by the speakers in the target sentence. Constructions like (1) receive different classification as elliptical constructions, such as VP ellipsis in English or gapping in others (see, for instance, Nejit (1979) for these constructions in Dutch).

This talk aims to first, present a clear syntactic description of elliptical constructions with PF in Persian and second, analyse the semantics of PF in elliptical constructions. By building on the work of Huet and Lang (1978) and Dalrymple et. al. (1991), we demonstrate that the semantic representation of PF functions as a remnant in the target sentence, and stands parallel to the semantic representation of its correlate in the source sentence. We propose a semantic analysis of PF, which accounts for ellipsis resolution in various types of elliptical constructions.

### References

Dalrymple, M., S. M. Shieber and F. C. N. Pereira. 1991. Ellipsis and higher-order unification. *Linguistics and Philosophy* 14 (4), 399–452.

Huet, G. and B. Lang. 1978. Proving and applying program transformations expressed with second-order patterns. *Acta Informatica*.

Neijt, A. 1979. Gapping. Dordrecht.

Payne, J. R. 1985. Negation. In: T. Shopen (ed.). Language typology and syntactic description, 3–43. Cambridge.

# Wearing the inside out: Word order variations in Persian

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Persian has been generally described as a language with basic SOV word order, while allowing a great degree of rearrangements for pragmatic purposes. As noted by Dryer (2007), this way of describing word order is often problematic since in practice, it is usually difficult to justify claims that one order is pragmatically neutral while another is non-neutral. This is especially true for Persian, since SOV seems to be more related to the standards of (some styles of) written language than to the norms of spoken language. I shall not concern myself here with the question of what the basic word order in Persian is. Instead, the question that will be addressed is: what are word order possibilities in Persian?

In line with Dryer's emphasis on using objective criteria to identify word order patterns and their governing factors, I will make use of accentuation patterns (as well as prosodic phrasing where relevant) to describe variations in the word order and their relation to pragmatic factors (focus, topic, etc.) and syntax (clause type, argument structure, etc.). In this discussion I am only concerned with the word order at the clause level, as opposed to the phrase level.

By providing data from spontaneous speech I will show that Persian word order is even more flexible than previously observed. By way of illustration, I focus here on monotransitive clauses with a definite object. For a sentence with N number of words (a finite verb plus some simple bare arguments/adjuncts), the number of possible word order alternations is the factorial of N. Thus, for a sentence with 4 words (Subject, Adjunct, Object, Verb), there are 24 word order possibilities. Crucially, word order systematically affects sentence prosody. In general, for every combination of words there is a 'normal' accent pattern which is determined with regard to the word order in an entirely mechanical manner. Specifically, for monotransitive sentences (with definite objects), the distribution of accents is determined with regard to the position of the verb: post-verbal words are obligatorily unaccented while all other words are obligatorily accented. All possible permutations of an SAOV structure with their 'normal' accent pattern are given in (1). Accented words are underlined. Persian definite objects are distinguished from subjects by morphological marking.

(1)	<u>S A O V</u>	$\underline{S} \underline{A} \underline{V} O$	<u>S</u> <u>V</u> O A	$\underline{\mathbf{V}} \mathbf{S} \mathbf{A} \mathbf{O}$
. ,	$\underline{O} \underline{S} \underline{A} \underline{V}$	$\underline{A} \underline{S} \underline{V} O$	<u>S</u> <u>V</u> A O	$\underline{V} O S A$
	<u>A O S V</u>	<u>S O V</u> A	<u>A</u> <u>V</u> S O	$\underline{V} A O S$
	$\underline{S} \underline{O} \underline{A} \underline{V}$	<u>O</u> <u>S</u> <u>V</u> A	$\underline{A} \underline{V} O S$	$\underline{V} S O A$
	<u>O A S V</u>	<u>A O V</u> S	<u>O</u> <u>V</u> A S	$\underline{V} O A S$
	<u> </u>	O A V S	OVSA	<u>V</u> A S O

These are all acceptable and usual sentences with regard to language use, given the appropriate discourse context. Generally, post-verbal elements in (1) are associated with a presupposed reading (this is especially true for the core arguments, i.e. S and O). Pre-verbal elements, on the other hand, may receive both presupposed and non-presupposed reading, depending on the discourse context.

To further complicate the picture, contrastive (narrow) focus may produce structures that deviate from the patterns in (1), in that a contrastively focused word in non-sentence-final position is prosodically marked by deaccenting the following word(s). This is illustrated in (2).

(2) a. <u>A</u> O S V narrow focus on A b. <u>A</u> O S V narrow focus on O c. <u>A</u> O S V narrow focus on S

As noted earlier, it is often assumed that in languages with flexible word order, variations in word order are determined by pragmatic/discourse factors like focus and topic. Specifically, Persian has become a syntax text-book example of an SOV language in which the object is shifted to initial position (by means of some syntactic movements) to be interpreted as focus or topic (Carnie, 2013). Apart from the fact that such descriptions fail to take into account the wide range of word-order variations in the language, we should note that it is not at all clear that Persian reorders words to mark focus/topic. As we have seen in (1) and (2), word order variations and focus marking work independently. A word may be interpreted as narrow focus only if it has the final accent in the sentence, regardless of its linear position with regard to other words in the sentence. As for the topic interpretation, (discourse) topic words in Persian tend to show idiosyncratic prosodic behaviours: they may be accented on the initial syllable (as opposed to the default accent on the final syllable) and/or form an independent intonational phrase.

What I have described so far is based only on simple finite clauses with one (definite) object. To give a wider picture, I will extend my analysis to some other clause types in the language. The results will suggest that clause type is a crucial factor in determining, first, the degree of word order alternations, and second, the boundary between the accented/unaccented areas within the sentence structure. That is, for the latter point, we will see that in some clausal structures, the accented/unaccented boundary is determined with regard to

the position of the internal arguments rather than that of the verb as illustrated above in (1) for monotransitive clauses.

#### References

Carnie, A. 2013. Syntax: A generative introduction. Oxford.

Dryer, M. S. 2007. Word order. In: T. Shopen (ed.). *Language typology and syntactic description*. Vol. 1, 61–131. Cambridge.

# The explanation of typological markedness of contemporary Standard Persian pertaining to the major manner of articulation of uvular consonant /G/

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Based on the recent acoustic studies, major allophonic variants of uvular consonant /G/ pertaining to its manner of articulation in Contemporary Standard Persian are: voiced stop [g], approximant [k] and voiced fricative [y]. Among these three, voiced stop [g] occurs more frequently in the phonological environments of this phoneme. Hence, the basic variant must be known as voiced stop [G] in this language. In this study, firstly we described the phono-typological status of Contemporary Standard Persian as a marked language pertaining to the major manner of articulation of /G/ on the basis of phonemic unmarked value of frequency of occurrence (Greenberg, 1966) and statistical universals of UPSID (1992) which introduces the voiced fricative [y] as the most frequent and unmarked variant among these allophones in the phonemes of the world languages. Secondly to explain the marked typological status of this language, we investigated the manner of articulation of the phoneme in periods before the Contemporary Persian according to researches done by linguists. Based on these studies, uvular consonant /G/ in Dari and Middle Persian was voiced fricative /y/ (the universal unmarked variant). Gradually Arabic voiceless uvular stop/q/was incorporated into Persian due to language contact of Persian and Arabic and also the admission of myriad of Fasih Arabic loanwords in the late Dari Persian period. Then it merged with Persian voiced fricative /y/ and corresponded to that in terms of voice feature. Thus, voiced uvular stop [g] was formed in allophonic distribution with voiced fricative [y] in Contemporary Standard Persian.

#### References

Abolghasemi, M. 1994. The History of Persian Language. Tehran.

Ali-nejad, B. and F. Hoseini-Balam. 2013. *An Introduction to Acoustic Phonetics*. Isfahan.

Bijankhan, M. 2005. Phonology: Optimality Theory. Tehran.

- Comrie, B. 1981. Language Universals and Linguistic Typology. 2nd ed. Chicago.
- Croft, W. 1990. Typology and Universals. Cambridge.
- Dabir-Moghaddam, M. 2013. Typology of Iranian Languages. Tehran.
- Greenberg, J. H. 1966. Language Universals. Berlin.
- Handbook of the International Phonetic Association. A Guide to the Use of the International Phonetic Alphabet. 1999. Cambridge.
- Hyman, L. M. 1990. *The Sound Pattern of Language: Theory and Analysis* (trans by Y. Samare). Tehran.
- Kalbasi, I. 2010. Descriptive Glossary of Iranian Language Varieties. Tehran.
- Kord Zafaranlou Kambuziya, A. 2007. Review and Modification of the Article by M. Majidi va E. Ternes. *Zaban va Zabanshenasi Journal* 1, 109–118.
- Kord Zafaranlou Kambuziya, A. 2007. *Phonology: Rule-Based Approaches*. Tehran.
- Krámský, J. 1939. A Study in the Phonology of Modern Persian. Archiv Orientální.

# Is Persian a "stress-accent" or a "non-stress-accent" language?

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1. Introduction. Jun (2005) classifies Persian with English, German, Dutch, Greek, Italian, Spanish, Portuguese, Lebanese Arabic, and Bininj Gun-wok (a Northern Australian language) as "stress-accent" languages. However, recent studies on the phonetic correlates of stress in Persian have shown that pitch is the only reliable acoustic parameter to cue stress in Persian, suggesting that Persian is a "non-stress accent" language. In a production study, Abolhasanizadeh, Bijankhan and Gussenhoven (2012) examined the phonetic correlates of the prominence contrast in Persian, and found that prominent syllables are not systematically differentiated by durational or spectral properties from non- prominent syllables, leading them to conclude that wordlevel prominence in Persian is "non-stress accent" in the sense of Beckman (1986), i.e., prominence is not the result of lexical stress, but post-lexical tonal marking (pitch accent). Similarly, in a more recent study, Rahmani, Rietveld and Gussenhoven (2015) performed a perception experiment in which they measured listeners' sensitivity to prominence contrasts (using a Sequence Recall Task) in subjects with different language backgrounds including Persian, and found that while speakers of Dutch and Japanese are sensitive to stress information in speech, speakers of Persian, like those of French, show little sensitivity to word prosodic contrasts. They argued that listeners' sensitivity to stress cues depends on the function of stress in their native language: Persian and French are languages without lexical stress or tone markings (in which prominence is marked in post-lexical constructions through the presence of a pitch accent), and as such, listeners develop little sensitivity to stress cues. By contrast, Dutch and Japanese possess lexically contrastive prosodic features and thus require that listeners develop sensitivity to stress contrasts.

No specific experimental study, however, has systematically investigated the acoustical properties that signal word-level prominence contrast in Persian in accented and unaccented positions. In a production experiment, duration and intensity measures were examined as the acoustic correlates of word prominence in a corpus of Persian materials that varied lexical stress independently of accentual prominence. The questions specifically asked in this experiment are: A) Can intensity and duration reliably differentiate accented syllables from unaccented syllables in Persian? B) Are measures of

intensity and duration reliable acoustic correlates of lexical stress in Persian when words are produced in unaccented condition (in the absence of F0 information)?

**2. Materials and acoustic measurements.** A corpus of 960 utterances was designed to exhibit the phonological variety needed to examine the acoustic correlates of the stress contrast in Persian. The test materials included 6 Persian minimal or near-minimal stress pairs with a CV(C).CV(C) structure (Table 1).

vowels	stress pairs			
	noun/adjective	noun/adjective plus clitic		
i	[miˈni]	[ˈmini]		
	(adjective: 'small')	(noun: 'a mine')		
e	[geˈle]	[ˈgele]		
	(noun: 'complaint')	(noun (genitive): 'mud of')		
a	[lænˈdæn]	[ˈlængæm]		
	(noun: 'London')	(adjective: 'my defective')		
u	[dʒuˈnun]	[ˈmumun]		
	(noun: 'madness')	(noun (possessive): 'our hair')		
0	[roˈmo]	[ˈromo]		
	(noun: 'Romo')	(noun (object): 'Romo')		
α	[naˈna]	[ˈnana]		
	(nonsense)	(nonsense)		

Table 1. Target minimal or near-minimal stress pairs representing each of the six vowels of the Persian language.

A Praat (Boersma and Weenink, 2005) script was used to extract all acoustic measurements for the data analysis, including F0 excursion (F0 excursion was used as a control variable in order to insure that lexical stress is cued by a pitch accent only in the accented utterances and not in the unaccented utterances), duration, vowel quality (in terms of the first two formant frequencies) and intensity.

**3. Results and Discussion.** The results for duration showed that syllable duration in Persian is sensitive to the stress condition of the target syllable independently of pitch accents. Similar findings have been reported for many "stress accent" languages like English (Huss 1978; Okobi 2006), Dutch (Suijter and van Heuven 1996), Spanish (Ortega-Llebaria and Prieto 2007), Catalan (Ortega-Llebaria and Prieto 2010).

Unlike duration, the evidence presented in this experiment revealed no consistent effect of stress on overall intensity. In general, stressed vowels had

higher overall intensity than their unstressed counterparts. However, differences in overall intensity between the stressed and unstressed vowels were significant only in the accented condition. In the unaccented condition, there was hardly any difference between the overall intensity of the stressed and unstressed vowels. These results agree with earlier findings by Okobi (2006) for English, Suijter and van Heuven (1996) for Dutch, Ortega- Llebaria and Prieto (2010) for Spanish and Catalan.

Overall, our analysis has substantiated the role of duration as an acoustic correlate of the distinction between stressed and unstressed syllables in both accented and unaccented words. Differences of overall intensity and spectral tilt between stressed and unstressed syllables are more pronounced for accented than unaccented words. Thus, for accented words, there are multiple acoustic parameters, namely, F0, duration and intensity that conspire to cue prominence. For unaccented words, we have discovered that the prominence contrast is not neutralized, but consistently signaled through durational differences. Unlike previous findings on the phonetic realization of stress in Persian (Abolhasanizadeh et al. 2012; Rahmani et al. 2015), we found empirical evidence for assuming that Persian features a phonetic distinction between stressed and unstressed syllables. Thus, our results represent acoustical evidence in favor of Jun's (2005) typological classification of Persian with "stress accent" languages (like West Germanic languages, or languages like Spanish or Catalan), which use multiple phonetic cues to signal prominence, and differentiate stressed and unstressed syllables in the absence of an accent. With respect to the phonological interpretation of our findings, the observation made in this research, namely that duration in stressed syllables is always significantly longer than unstressed syllables, irrespective of accentuation, points towards a stress-based phonological account of word-level prominence in Persian, according to which phonological representation needs to lexically mark prosodic prominence.

#### References

- Abolhasanizadeh, V., M. Bijankhan and C. Gussenhoven. 2012. The Persian pitch accent and its retention after the focus. *Lingua* 122, 1380–1394.
- Boersma, P. and D. Weenink. 2005. *Praat: Doing phonetics by computer* (Version 4.3.01) [Computer program]. Retrieved from http://www.praat.org/.
- Huss, V. 1978. English word stress in the post-nuclear position. *Phonetica* 35, 86–105.
- Jun, S. 2005. Prosodic typology. In Jun, Sun-Ah (ed.), *Prosodic typology: The phonology of intonation and phrasing*, 430–458. Oxford.

- Lieberman, P. 1960. Some acoustic correlates of word stress in American English. *Journal of the Acoustical Society of America* 33, 451–454.
- Okobi, A. O. 2006. *Acoustic Correlates of Word Stress in American English*. PhD dissertation, Massachusetts Institute of Technology.
- Ortega-Llebaria, M. and P. Prieto. 2007. Disentangling stress from accent in Spanish: Production patterns of the stress contrast in de-accented syllables. In P. Prieto, J. Mascaró, and M.-J. Solé (Eds.), *Segmental and prosodic issues in Romance phonology*, 155–176. Amsterdam.
- Ortega-Llebaria, M. and P. Prieto. 2010. Acoustic correlates of stress in Central Catalan and Castilian Spanish. *Journal of Language and Speech* 54, 73–97.
- Rahmani, H., T. Rietveld and C. Gussenhoven. 2015. Stress "Deafness" reveals absence of lexical marking of stress or tone in the adult grammar. *PLoS ONE*.
- Sluijter, A. M. C. and V. van Heuven. 1996. Spectral tilt as an acoustic correlate of linguistic stress. Journal of the Acoustical Society of America 100 (4), 2471–2485.

# The study of adpositions as case marker in Sangesari and Shahmirzadi languages

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Adposition is a word which accompanies with a noun phrase and represents the grammatical or semantic relations of that NP with the verb of the sentence/clause. There are two types of adpositions in languages: preposition and postposition. Preposition precedes the NP while postposition follows it. In some languages both of them exist simultaneously while in some other only one type of adposition may be used (Dryer 2005: 346–347; Dryer 2007: 81, 86). There are some correlations between typological word order components, for example OV languages tend to be postpositional while in VO languages the tendency is being prepositional. Therefore adposition and noun phrase form a correlation pair (Dryer 1992: 82). Blake (2004) in his book declares that case marking includes two systems: analytic case marking: the system in which adpositions play at least some part in marking the relations of dependent nouns to their heads like Japanese; and synthetic case marking (or inflectional case marking in traditional view) in which affixes are case markers like Latin (pp. 1, 9). Croft also believes in the role of adposition and affixes as case markers in different languages (2003: 34–35). Dabir Moghaddam states that there are three macro linguistic areas in Iran. One of them is the northern linguistic area in which languages are basically postpositional such as Gilaki, Mazandarani and Taleshi. On the other hand in the southern linguistic area the languages are prepositional like Persian, Lori, Bakhtiyari and Larestani. In the third area the mixed type can be observed, in other words in these languages there are both preposition and postposition (2007: 120–121).

Tthe importance of the study of case marking in languages makes the authors to survey the different case markers in Sangesari and Shahmirzadi languages based on Blake's (2004) theoretical framework believes in existing two systems (using affixes or adpositions) for case marking. Therefore, we aim to study adposition case markers including dative, ablative, accusative, commitive, instrumental, source-goal and locative cases in Sangesari and Shahmirzadi languages. The method of gathering data is to interview with the native speakers<sup>1</sup> by the provided questionnaire.

<sup>&</sup>lt;sup>1</sup>We thank for Ms. Faranak Jamaleddin for gathering data in Sangesari. Meanwhile

Sangesar and Shahmirzad are two cities in Semnan province which are 6 Kilometers far from each other. The languages of these two cities belong to west-northern Iranian languages (Dabir-Moghaddam 2013: 1034), while Schmitt (2004) has classified Shahmirzadi language in Caspian Sea languages (p. 490).

In the following table some of the data from these two languages are provided:

No.	Shahmirzadi	Sangesari	English
1	?öšön kətab-rə mæryəm-jən hagetenæ	?unnun kətab-də <b>mærəm-mo</b> hægertæ	They took Maryam the book.
2	<b>xune ta mædrəsə</b> ræ du bædamæ	<b>?æz kə ta mædresə</b> bədovi	I ran from home to school.
3	?ü <b>kæli væri (ba)</b> dær-æ va hakərdæ	ne bær-de <b>vore-mun</b> va kæ	(S)he opened the door with the key.
4	hær ruz <b>xöštene per</b> <b>ba</b> anæ mædrəsə	hær ru no <b>?əštun</b> <b>pəšə-mo</b> mædresə-re inda	(S)he comes to school with her/his father every day.
5	mə dæl <b>?öšön-ev</b> tæng bæveæ	mæ dæl <b>?ənun-re</b> tæng bebiyæ	I missed them.
6	færda <b>tænire dælə</b> nun pæjenni?	səbayi <b>tænduri</b> <b>dələ</b> nun bəžənun?	Will you bake bread in the oven tomorrow?
7	xöštene gusfənnə ali-r bærütæ	əštun pæs də <b>æli</b> <b>d(ə)</b> bəršut	(S)he sold his/her sheep to Ali.
8	?öšön <b>zəmin-(e)-sær</b> böxötenæ	?unun <b>zəmin-(i)-sær</b> bəxo(t)	They slept on the ground.
9	?ašqal hælæb ræ miz-e jer veštemæ	?æšqaldun-də mizi-žir hundiyæ	I put the dustbin under the table

As it has been shown in the above table, in Shahmirzadi and Sangesari postpositions function as the basic adpositions, therefore they are considered as postpositional and subsequently OV languages. As another conclusion,

Shahmirzadi language data are gathered by one of the authors' native language knowledge.

in both languages, cases mark by adpositions (not by affixes). These adpositions can be seen as either preposition or postposition. Based on Blake's view, the case marking system in these two languages is the analytical; one in other words, different cases such as dative, ablative, accusative, commitive, instrumental, source-goal and locative are marked by adpositions attaching to nouns. These adpositions are listed in the table below:

No.	adposition	case	Shahmirzadi	Sangesari
1	from	ablative	-j̃ən	-mo
2	from to	source-goal	(?æz) ta	?æz ta
3	with	instrumental	-væri (ba)	-mun
4	with	comitative	-ba	-mo
5	for	accusative	-ev / -v	-re
6	in	locative	-dælə	-dələ
7	to	dative	-r	-d(ə)
8	on	locative	-sær	-sær
9	under	locative	-jer	-žir
10	ra	accusative	-ræ / -æ / -r	-də

In these two languages there can be seen some similarities between adpositions, sometimes in complete form such as  $(2\varpi z) \dots ta \dots$  'from-to',  $-s\varpi r$  'on', or sometimes in incomplete form such as  $-\check{\textit{yer}}$ ,  $-\check{\textit{zir}}$  'under',  $-d\varpi lo$ , -dolo 'in', in the other cases the adpositions are completely different. Furthermore, all the adpositions appear as postposition except the source-goal adposition ( $2\varpi z \dots ta \dots$ ).

#### References

Aristar, A. R. 1991. On diachronic sources and synchronic patterns: An investigation into the origin of linguistic universals. *Language* 67, 1–33.

Blake, B. J. 2004. Case. 2nd edition. Cambridge.

Croft, W. 2003. Typology and universals. 2nd edition. Cambridge.

Dabir-Moghaddam, M. 2007. The scientific report of participating in International Conference of Iranian Languages. *Journal of Linguistics* 43, 119–131.

Dabir-Moghaddam, M. 2013. *Typology of Iranian languages*. Vol. 2. Tehran.

Dryer, M. S. 1992. The Greenbergian word order correlations. *Language* 68, 81–138.

- Dryer, M. S. 2005. Order of Adposition and Noun Phrase. M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie (eds.). *The World Atlas of Language Structures*, 346–349. Oxford.
- Dryer, M. S. 2007. Word order. In: T. Shopen (ed.). *Languae Typology and Syntactic Description*. Vol 1. Cambridge.
- Kurzon, D. 2006. Adpositions. In: K. Brown (ed). *Encyclopedia of Language and Linguistics*, 63–66. Amsterdam: Elsevier.
- Schmitt, R. 2004. *A guide to Iranian Languages*. Translated by H. Reza'i Bagh Bidi et al. Vol. 2. Tehran.

# The effect of three social variables on the contextual use of abusive swearwords among secondary school students in Qal'e-Ganj, Kerman Province (Iran)

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The topic of swearing has been investigated from various perspectives including psycholinguistic, evolutionary, historical, social, and psychological of which the last two factors are the main ones. Vingerhoets (2013:291-292) argues the strong positive/negative emotions of anger, frustration, humour, pain, surprise and sarcasm as the motivational triggers or psychological factors of swearing. In addition, the formality of the situation, presence of others, the relationship between the swearer and listener(s) in terms of differences in status or closeness, and gender as the main contextual factors may contribute to person's swearing behavior. He concludes that demographic factors, e.g. age and gender, socio-economic status, education level, personality, and certain neurological diseases, e.g. Alzheimer's disease or Gilles de la Tourette's syndrome, affect individual's swearing behavior. According to Timothy (2009:155) "swearing depends on one's group identity and personality factors and has been documented in the lexica of many social groups: soldiers, police, high school and college students, drug users, athletes, laborers, juvenile delinquents, psychiatric patients, and prisoners; although production rates are unknown.

Based on Andersson and Trudgill (2007) swearing is the language use in which the expression: (i) refers to something taboo or stigmatized in the swearer's culture, (ii) is not intended to be interpreted literally, (iii) can be used to express strong emotions or attitudes. The combination of these aspects results in an expression with a greater expressive power.

One of the important issues aimed to investigate in sociolinguistics is to measure the effect of a variety of social factors on the use of language in every society. In this regard, the present study concentrates on the three variables of gender, socio-economic, and cultural background and aims to investigate their effect on the contextual use of abusive swearwords in single-gender interactions among the senior secondary high school students in Qal'e-Ganj located in south part of Kerman province, Iran.

The swearwords used in this study have been collected by recording daily conversations of teenagers in different places and events, consulting some high school students and skilled teachers, and reviewing some studies of similar concern. Based on the collected data and needed library resources, a fieldwork research was done in which 123 (58 male and 65 female) senior secondary high school students were randomly selected and asked to fill in a questionnaire. In the questionnaire 12 anger-arousing single-gender contexts with different levels of formality were defined and the answers were arranged from the most offensive (i.e. 1) to the least offensive (i.e. 4) in a 4-degree scale, as well as a null choice suggesting "no swearword" (i.e. 5). Firstly, all respondents were of the same age (=18-20 years old); secondly, in all those situations, the respondent was assumed to be in a normal and neutral state of mind, neither filthy, angry or aroused, nor happy or cheerful, and finally, in all situations, the addressee was considered to be a person of the same age and gender to the respondent him/herself.

Overall, 87% of female and 91.4% of male students have used some kind of swearwords in those situations, and specifically, the percentage of swearwords' use in females decreases with the increase of swearwords offensiveness. So that no female has used the most offensive swearwords in none of those situations, while among males the mostly used answers have been the upper and lower intermediate offensive swearwords, i.e. 2 and 3, and the two extremes of offensiveness scale have been used less. Generally speaking, the results are quite in line with our hypothesis and Lakoff's theory (2004) that believed women avoid using strong swearwords and their language is more polite and refined.

It is hypothesized and proved that social class (socio-economic background) affects the way people use language (e.g. Modaressi (1978), Labov (1966), Hagen (2013), Jahangiri (1980), and swearwords (e.g. Johnson and Lewis (2010), and Vingerhoets (2013). Contrary to our expectation, as the socioeconomic background goes up, the frequency of the use of the most offensive swearwords (answer 1) also goes up, and the highest frequency of answers is the same between the persons with socio-economic background level 1 and 2, i.e. answer 3. Moreover, the persons belonging to the highest level of socioeconomic background have chosen answer 5 (i.e. "no swearwords") less than the other two lower groups. In short, the only relevant result to our hypothesis is the highest frequency of answer 4 (i.e. the least offensive swearwords) among the people with highest socio-economic background (i.e. level 3) compared to the frequency of other more offensive swearwords in the same group. There is also no statistically significant difference between the uses of swearwords by members of three levels of socio-economic background.

Logically, the person's cultural background should affect all aspects of one's way of speaking, and using swearwords is not an exception, so we expected

this social variable to have a direct and positive relationship with the way our respondents use swearwords. Clearly observable, in line with our hypothesis, as the cultural level of persons increases, the use of most offensive swearwords (i.e. 1) decreases, and the persons with highest cultural level (i.e. 3) have used "no swearwords" (i.e. 5) more than the other two groups. The formality of situation plays also no role in the use of swearwords for persons with different cultural background.

The results showed that in the intended society the variables of gender and cultural background have a determinant effect on the use of swearwords, while the socio-economic background is irrelevant and of meaningless difference in that ground.

#### References

- Andersson, L. and P. Trudgill. 1991. Bad language. Oxford.
- Hagen, S. H. 2013. Swearwords and attitude change: A sociolinguistic study. Bergen.
- Jahangiri, N. 1980. A sociolinguistic study of Tehrani Persian. Doctoral dissertation, University of London.
- Johnson, D. I. and N. Lewis. 2010. Perceptions of swearing in the work setting: An Expectancy Violations Theory perspective. *Communication Reports* 23 (2), 106–118.
- Labov, W. 1966. The Social Stratification of English in New York City. Cambridge.
- Lakoff, R. T. 1975. Language and Woman's Place. New York.
- Modaressi, Y. 1978. A sociolinguistic investigation of modern Persian. Doctoral dissertation, University of Kansas.
- Timothy, J. 2009. The Utility and Ubiquity of Taboo Words. *Perspectives on Psychological Science* 4 (2), 153–161.
- Vingerhoets, J., M. B. Lauren and V. Cornelis. 2013. Swearing: A Biopsychosocial Perspective. *Psychological Topics* 22 (2), 287–304.

## Quantitative rhythmic features of Persian modern poetry

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Linguists' recent investigation on quantitative rhythmic features of ordinary speech is an attractive subject in linguistics. However, acoustic consideration of poetry rhythm is rare in spite of long history study of rhythm in poetry (Patel 2010: 118). This study is an attempt to consider the acoustic-phonetic rhythmic features of Persian modern poetry quantitatively. Durational differences of vocalic-intervals and intervocalic-intervals of utterances can be measured to classify rhythm of languages in two groups of syllable-timed and stress-timed languages with the help of interval-based method (Patel 2010; Grabe and Low 2002; Ramus et al. 2002). Persian language is widely acknowledged by linguists to have rhythmic organization of syllable-timed languages (Haghshenas 2004; Abolhasani Zadeh et al. 2013). Moreover, while Persian modern poetry changes his way from Persian classical poetry (Hasan Lee 2005), Persian classical poetry is based on Arabic prosody (Lazar 2005; Sadeghi 1975) which is a stress-timed language (Ghazali et al. 2002; Hamdi et al. 2004). In this study, quantitative rhythmic features of Persian modern poetry have been considered based on PVI, Pairwise Variability Index, which is one of the approaches of interval-based method. Grabe and Low (2002) introduced PVI as a variable duration measure which computes the absolute value of the difference between each successive pair of durations in a sequence by the combination of vocalic nPVI (1), normalized Pairwise Variability Index, and intervocalic rPVI (2), normalized Pairwise Variability Index (Patel 2010; Grabe and Low 2002; Dellwo 2006; Nolan and Asu 2009).

(1) 
$$\text{nPVI} = \frac{100}{m-1} \times \sum_{k=1}^{m-1} \left| \frac{d_k - d_{k+1}}{\frac{d_k + d_{k+1}}{2}} \right|$$

Where m is the number of vocalic intervals in an utterance and  $d_k$  is the duration of the kth interval.

(2) 
$$\text{rPVI} = \frac{100}{m-1} \times \sum_{k=1}^{m-1} |d_k - d_{k+1}|$$

Where m is the number of inter-vocalic intervals in an utterance and  $d_k$  is the duration of the kth interval.

The results of this research compare to the existed results of Farsi language and Persian classical poetry (Taghva et al., 2014). Consequently, to consider the rhythmic features of Persian modern poetry, 40 simple declarative sentences of Persian modern poetry that is divided to three main types (Hassan Lee, 2005) of Moderate poetry, Sepid poem and New Wave poem by great Persian modern poets were chosen. These sentences were analyzed in Praat software. Afterward, TextGrids were made for each sentence in a way that the boundaries of vocalic intervals and intervocalic intervals were determined. Then the durational contrasts of these intervals were measured by nPVI and rPVI (Figure 1).

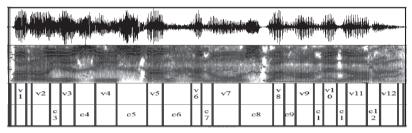


Figure 1. An example of a simple declarative Persian modern poetry sentence. /bæraje zistæn hænuz bæhane daræm/ (Ahmadi 2009, nPVI: 45, rPVI: 64)

The outcome of this study demonstrates that there are significant differences across the quantitative rhythmic features of Persian modern poetry and classical poetry. Although the latter locates among the stress-timed languages, the former contains the closer quantitative rhythmic features toward Farsi language.

#### References

Abolhasani Zadeh, V., N. Taghva, A. Sharifi Moghadam and A. Golshan. 2013. Effect of Farsi Language on Iranian traditional music. *Annali dell'Università degli Studi di Napoli "L'Orientale"*.

Ahmadi, A. R. 2009. For Spring. Tehran.

Ghazali, S., R. Hamdi and M. Barkat. 2002. Speech Rhythm Variation in Arabic Dialects. *Proceedings of speech prosody*. Aix-en-Provence.

Grabe, E. and L. Low. 2002. Durational variability in speech and the rhythm class hypothesis. In: C. Gussenhoven and N. Warner (eds.). *Laboratory phonology*, 515–546. Berlin.

Haghshenas, M. 2004. *Phonetics*. Tehran.

Hamdi, R., M. Barkat, E. Ferragne and F. Pellegrino. 2004. Speech timing and rhythmic structure in Arabic dialects: A comparison of two approaches. *Proceedings of the ICSLP*.

Hasan Lee, K. 2005. *Innovation in Iranian contemporary poetry*. Tehran.

Ladefoged, P. and K. Johnson. 2011. Course in phonetics. 6th ed. Wadsworth.

Lazard, G. 2005. A grammar of contemporary Persian. Tehran.

Patel, A. D. 2010. Music, Language, and the Brain. Oxford.

Ramus, F., M. Nespor and J. Mehler. 1999. Correlates of linguistic rhythm in the speech signal. *Cognition* 75, 265–292.

Sadeghi, A. 1979. Evolution of Farsi language. Tehran.

Taghva, N., V. Abolhasani Zadeh, A. Golshan. 2014. Acoustic consideration of Arabic prosody influence on Persian classical poetry. Paper presented at *2nd National Conference on Acoustic Phonetics*. Tehran.

### A first account of the languages in western Hormozgan

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Hormozgan Province<sup>1</sup> of south-western Iran is a rich, but for the most part little-explored venue for linguistic studies. In this paper we offer an initial overview of languages and linguistic structures in the western half of the province based on two weeks of fieldwork conducted there between in December 2016 and January 2017. This research is part of a large-scale study of languages and dialects in Hormozgan Province within the framework of the Atlas of the Languages of Iran programme (ALI 2017). The data for 1this phase of the project were gathered from 12 research sites<sup>2</sup> through a comprehensive questionnaire developed for the description of language variation in Iran (available at: http://carleton.ca/iran/questionnaires/) plus high-quality video and audio recordings of texts in various genres. Our selection of research sites was based on the initial global assessment of language distribution in Hormozgan province carried out in 2015 by Mohebbi Bahmani et al.

Western Hormozgan is characterized by a high degree of linguistic diversity, the result of population movements that have taken place repeatedly over past decades and centuries. The Southwestern Iranian variety Lārestāni (locally known as "Achomi") is the dominant language in the area; and the Southwestern variety Dashti, which is similar to the "Fars" dialects of southern Fars Province and Bushehr Province, is spoken at the western extremity of the Province. Other important language groups include Arabic along much of the coast; the Koroshi dialect of Southern Balochi in scattered locations; and the Indo-Aryan language Kholosi (first reported by Rashidi in Anonby and Mohebbi Bahmani 2014) is spoken in two villages.

Our initial investigations of the questionnaires provide a first account of linguistic and sociolinguistic features across the west of the province. The collected data reveal a number of salient characteristics as follows:

 $<sup>^1\</sup>mathrm{I}$  am grateful to Ali Rashidi for his invaluable help during the fieldwork in the west of Hormozgan province.

<sup>&</sup>lt;sup>2</sup>Research locations: Dashti, Buchir, Fumestan, Rostaq, Chahvaz, Hashniz, Bastak, Janah, Morbagh, Kharabeh, Bandar Moqam and Kholos.

- Gāvandini, Buchiri, Hashnizi, Chahvāzi, Rostāqi, Jamsi, Farāmarzi, Kemeshki, Koshkonāri, Bastaki, Sheykhān and Ruydari are the main varieties of Achomi in western Hormozgan.
- Although all the languages in Iran are generally under the direct influence of standard Persian, the level of language endangerment is not invariant in this region. Compared to the other language varieties in the western part of the province, Parsian (Gav Bandi), Fumestan, Milaki and Ehsham<sup>3</sup> (All Gāvandini speakers) are now more Persianized and a clear language shift from Gāvandini into Standard Persian is gradually occurring.
- The ergative-absolutive construction is the noticeable feature of verbal forms in Achomi languages. This form occurs in the past form of transitive verbs. For example, the simple past form of the verb 'hit' in Buchiri is conjugated as *omza* 1sg, *otza* 2sg, *ošza* 3sg, *munza* 1pl, *tunza* 2pl, *šunza* 3pl. But the simple past form of the verb 'sleep' as an intransitive verb is conjugated as *xatom* 1sg, *xateš* 2sg, *xat* 3sg, *xatedem* 1pl, *xatedi* 2pl, *xateden* 3pl.
- Nasalization does exist among Achomi languages. For example, in Buchir the words 'tongue' and 'hair' are pronounced as ezbũ and mĩ, respectively. However, it sounds allophonic rather than a phonemic nasalized yowel.
- In contrast to languages further north in the Zagros mountain range, which reaches western Hormozgan, we did not observe any examples of "Zagros d" [ŏ] (Windfuhr 2009) in the languages of this area. In this form, d is softened intervocalically and in final position of the words.
- It seems that the voiced uvular consonant of /G/ in standard Persian is produced as a voiceless uvular stop q, a voiced uvular fricative  $\dot{g}$  [ $\kappa$ ], a voiceless uvular fricative  $\kappa$  [ $\kappa$ ] and/or velar stops of  $\kappa$  and  $\kappa$ ]. For example,  $\dot{g}$   $\dot{g}$  i 'carpet',  $\kappa$   $\dot{g}$  sox 'spoon',  $\kappa$   $\dot{g}$  ali 'carpet',  $\kappa$   $\dot{g}$  sox 'spoon',  $\kappa$   $\dot{g}$   $\dot{$
- *darkā*, *dakā*, *daku* and *kar* are the common particles to show the incomplete aspect in past and present tenses. For example, the present continuous form of the verb "see" in Rostaq is conjugated as *dakā abonom* 1sg, *dakā aboneš* 2sg, *dakā abu* 3sg, *dakā anbonen* 1pl, *dakā aboni* 2pl, *dakā abonen* 3pl.

<sup>&</sup>lt;sup>3</sup>Ehsham is now part of Parsian city.

• The variation in the lexicon is observed in the languages of the region, as well. Among eighty lexical items in the questionnaire, the word 'house' has been used as  $sr\bar{a}$  (Achomi, Janah), xuno,  $ser\bar{a}$  (Achomi, Bastak),  $lu\dot{g}$  (Koroshi, Morbagh), xuna (Achomi, Hashniz), zuna (Achomi, Buchir), xuna (Dashti, Dashti), xuna (Achomi, Rostaq), xune (Achomi, Chahvaz),  $b\bar{e}t$  [be:t°] (Arabic, Bandar Moqam) and ge (Kholosi, Kholos).

Although it is only a beginning, and touches only on salient aspects of the data, this paper gives a first scholarly overview of the language varieties and noteworthy linguistic structures in the western part of Hormozgan province. To bring this same depth of coverage to the whole province, the author and colleagues in the ALI team for Hormozgan will continue working on these topics over the next year, in a second round of fieldwork for the many languages and dialect groups in the central and eastern districts of the province.

#### References

- ALI 2016 = Anonby, E. et al. (eds.). 2016. *Atlas of the languages of Iran*. Ottawa (http://iranatlas.net).
- Anonby, E. and H. Mohebbi Bahmani. 2014. Shipwrecked and landlocked: Kholosi, an Indo-Aryan language in south-west Iran. *Cahier de Studia Iranica* xx, 13–36.
- Mohebbi Bahmani, H., A. Rashidi, E. Anonby et al. 2015. Language and dialect distribution data for Hormozgan province. In: ALI 2016 (http://www.iranatlas.net/index.html?module=module.language-distribution.hormozgan).
- Rashidi, A. 2008/1387. *Barresi-ye sāxtāri-ye guyeš-e Bučiri* [Structural study of the Buchiri dialect]. MA thesis. Zahedan.

Windfuhr, G. (ed.). 2009. The Iranian languages. London.

### Morphological definiteness of nouns in Neyshabouri dialect

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**Introduction.** There are some categories for which nouns may be specified, either morphologically or syntactically. They include case, number, class or gender, and definiteness (Schachter and Shopen 2007: 277). Definiteness is a semantic category corresponding the most closely to the central function of grammatical *identifiability* — that is, the expression of whether or not a referent is familiar or already established in the discourse (Lyons 1999: 278). In this article, we try to review morphological facets of definiteness in Neyshabouri dialect as a Persian dialect to see if it is possible to define it based on the criteria introduced by Lyons (1999) on definiteness. There are other uses of definiteness which do not relate to identifiability — one of them is uniqueness . Based on Abbon (2006: 392), "semantically Identifiability and uniqueness are features of definiteness". By Identifiability, we mean how the reference of a noun is identifiable to both speaker and listener, and by uniqueness, we mean that there is just one entity satisfying the description used.

Different languages have various strategies to mark the definiteness of nouns. In this article, we try to extract the morphological strategies of definiteness in the mentioned dialect. By now there is no single research related to definiteness in Neyshaburi dialect, but there are some researches related to definiteness and indefiniteness in persian, like Sadeghi and Arzhang(1358), Ahmadi and Anvari (1374), Mahootian (1378), Lazard (1384), Abdolmaleki (1385), Ghatre (1385), and Rasekh Mahand (1388).

**Theoretical background.** Definiteness is a category of noun phrase. There is considerable variation between languages in the use of grammatical category of definiteness. Lyons (1999: 278) gives examples of variation that is found between languages. Lambrecht (1994: 38) assumes that the semantic concept of identifiability underlying grammatical definiteness is probably universal. Definiteness can be encoded using a wide range of lexical, syntactic and morphological devices. Lyons (1999) classifies definiteness encoding broadly into two categories: 'simple' and 'complex'. 'Simple' definiteness encoding occurs when the definite and indefinite noun phrases are marked with some type of article which are either affixes or free-form determiners

(see Lyons 1999: 47–106). Languages which marked the definiteness are in minority. Most of languages don't mark definiteness and indefiniteness but those who do can mark this category either syntactically or morphologically or both (ibid: 49). Those who mark it morphologically behaves in three possibilities: 1) they can have marker for definiteness; 2) they can have marker for indefiniteness; 3) they can have marker for both definiteness and indefiniteness. But it should be noted that the languages which morphologically mark definiteness removing definite marker may lead to indefiniteness in nouns (Plank 2003: 376). But the question is what types of definite noun phrase do languages have? which means in what ways languages in the world mark definiteness. Lyons (1999: 17–26) defines 5 types of noun phrases which includes Demonstratives, Proper nouns, Possessives, Personal pronouns and Universal quantifiers.

**Analysis.** Neyshaburi dialect adopts six strategies to show definiteness. The first strategy is lacking indefiniteness marker in a noun which is used as subject or indirect object. It encodes definiteness of that noun. The second strategy is using demonstrative adjectives before the noun. The third one is using ordinal numbers before the noun. The fourth strategy is utilizing r as a morpheme which marks direct object. This morpheme, which is the contracted form of the separate word ra in standard Persian, attaches to the noun as a clitic, and make a noun definite.

(1) xefti-r bedar ku
necklace-OBJ(DEF) out do.(you)
'Take off the necklace'

The fifth strategy, along with all the ways which mark the definiteness, is that Neyshaburi has an overt morpheme *a* which attaches to the nouns as a clitic and make them definite.

(2) xefti-a berad berifta necklace-DEF lost has.become 'The necklace has been lost.'

The sixth strategy is using possessive and genitive markers which attach to the nouns as clitics. Some attached possessive adjectives are: -om 'my', -et 'your', -ma 'our', -ta 'your'.

(3) xefti-**om** berad berifta necklace-my(DEF) lost has.become 'My necklace has been lost.'

Genitive marker is the morpheme -e.

(4) xefti-e mehri berad berifta necklace.of(DEF) PN lost has.become 'Mehri's necklace has been lost.' **Conclusion.** According to what was said, it is concluded that the Neyshaburi dialect encodes the category of definiteness morphologically by six strategies. Of what Lyons(1999) stated about the morphological definiteness, this dialect has definiteness of proper nouns, demonstratives, possessive and personal pronouns. Moreover the noun in this dialect can also be marked for definiteness by lacking a marker of indefiniteness while the noun has the role of subject of the sentence or indirect object of it. The clitics /r/, /a/ and /e/ are also used as definiteness markers in this dialect. So we can claim that definiteness in this article is justifiable by Lyons' views.

#### References

- Abbon, B. 2006. Definite and indefinite. In: K. Brown. *Encyclopedia of languages and linguistics*. Vol. 2. London.
- Comrie, B. 1989. Language Universals And Linguistic Typology. Syntax and Morphology. 2nd edition. Chicago.
- Hawkins, J. A. 1978. Definiteness and indefiniteness: A study in reference and grammaticality prediction. London.
- Lambrecht, K. 1994. *Information Structure and Sentence Form. Topic, Focus and the Mental Representations of Discourse Referents.* Cambridge.
- Lyons, C. 1999. Definiteness. Cambridge.
- Plank, F. 2003. Noun Phrase Structure in the Languages of Europe. Berlin.
- Schachter, P. and T. Shopen. 2007. Part of speech systems. In: T. Shopen (ed.). Language Typology and Syntactic Description. Vol. 2. Clause Structure. 2nd edition. Cambridge.

# Towards the documentation of Shughni language: Building on online dictionary and corpus

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Shughni is a Pamir language spoken in mountainous areas of Tajikistan and Afghanistan by approximately 80 000 speakers (according to Ethnologue 2016). There are two Shughni-Russian dictionaries published in Russia: one was compiled by Ivan Zarubin (Zarubin 1960) in the first half of the 20th century, the other by Dodkhudo Karamshoev in the second half of 20th century (Karamšoev 1988). Besides, (Zarubin 1960) includes a collection of spontaneous texts.

This paper presents a part of a bigger project of Shughni documentation and is aimed at systematizing of the available linguistic data through designing two online tools a dictionary and a corpus.

The dictionary is based on both previously mentioned sources, so that the user of the resource can choose between them or observe entries from both sources simultaneously and follow the evolution of meanings during the 20th century. The large majority of dictionary entries is supplied with morphological notation (i.e. inflection classes), paradigmatic and derivational information and annotated examples. For some words dialectal variants are provided. The online dictionary provides a reverse translation (to Shughni) from two languages: Russian and English.

The second part of the resource presented is a morphologically annotated corpus, based on texts from (Zarubin 1960), fragments of the Gospel of Luke and several oral texts collected from a native Shughni speaker.

Two transcription systems have been used for Shughni: one based on the Cyrillic script and one based on the Latin script. Both the corpus and the dictionary are supplied with a transliteration module which provides search in both scripts.

These tools could make Shughni materials available not only to Russian speaking scholars and prove useful for a wide range of linguistic studies as will be shown in our presentation.

#### References

Karamšoev, D. 1988. *Šugnansko-russkij slovar' v trëx tomax* [Shughni-Russian dictionary in 3 volumes]. Moscow.

- Karamšoev, D. 2005. *Russko-šugnanskij slovar'* [Russian-Shughni dictionary]. Vol. 4. Dushanbe.
- Lewis, M. P., G. F. Simons and C. D. Fennig. 2016. *Ethnologue: Languages of the World*, Nineteenth edition. Dallas, TX (http://www.ethnologue.com).
- Zarubin, I. I. 1960. *Šugnanskije texty i slovar*' [Shughni texts and dictionary]. Moscow.

# Reflexive pronoun in Shughni

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In this talk we will provide an account of the reflexive pronoun xu in Shughni: <sup>1</sup> its syntactic properties in light of the Canonical Binding Theory (Chomsky 1981) will be described and the range of predicates it can occur with will be stated. We will show that the case of Shughni differs significantly from the better-studied systems of anaphors described in (Reuland 2011). Data presented in the current study was partly elicited from a native speaker of Shughni and partly obtained from bilingual dictionaries (Karamshoev 1998, Zarubin 1960) and texts (Zarubin 1960).

The default reflexive pronoun is xu. It is not specified for gender, person or number, thus resembling Slavic rather than German and Romance reflexives. The pronoun xu is used in a number of syntactic positions: as a direct object (1), in prepositional and postpositional phrases (2, 3) and as a possessive reflexive pronoun (4). Pronominals cannot be bound so pronominals and reflexives are in complementary distribution.

- (1)  $\gamma i \delta \bar{a}$  wint xu tar jenak boy see.PST RFL.OBL LOC mirror 'The boy sees himself in the mirror.'
- (2) umed-i darboraji **xu** löd Umed-3sg about RFL.OBL say 'Umed speaks about himself.'
- (3) *umed-i xu-rd kitob zoxt* umed-3sg RFL.OBL-DAT book buy 'Umed bought himself a book.'
- (4) *yiδā xu* anyĭxt xičuxt boy RFL.OBL finger cut 'The boy cut his finger.'

<sup>&</sup>lt;sup>1</sup>Shughni is a Pamir language spoken by approximately 80 000 speakers in the mountainous areas of Tajikistan and Afghanistan.

The xu anaphor is only bound in the local domain: the anaphor and its antecedent cannot be placed in a different clauses (thus the interpretation of (5b) where xu is coreferent with umed):

- (5) a. umed-i xojĭx čud umeda wi tožd Umed-3sg wish Lv Umeda 3sg.obl draw 'Umed<sub>i</sub> wants Umeda<sub>i</sub> to draw him<sub>i/\*i</sub>.'
  - b. umed-i xojix čud umeda xu tožd Umed-3sg wish LV Umeda RFL.OBL draw 'Umed<sub>i</sub> wants Umeda<sub>i</sub> to draw herself<sub>\*i/i</sub>.'

The syntactic properties of the Shughni xu look very similar to those of the reflexive pronoun  $\chi u$  in the closely related Saricoli (Kim 2015).

A language can have two or more reflexive pronouns distributed according to certain rules. This is the case for most Germanic and Romance languages (e.g. Dutch has a three-way distinction between bound pronominals, *zich* and *zichzelf*). However, the Shughni system seems to be much poorer: *xu* is the only anaphor in Shughni.

In the approach developed by Reinhart and Reuland (1993) different types of anaphors are distinguished, namely SE and SELF anaphors. The choice between the types depends on the predicate the pronoun is used with. Morphologically simple SE-anaphors are used with inherently reflexive verbs. SELF-anaphors, which are usually derived from the pronoun meaning 'self', are used to reflexivize transitive verbs.

Although *xu* seems to be morphologically simple, it can hardly be classified as a SE-anaphor: unlike SE-anaphors, it can be used with experiential verbs like 'hate'. (cf. the German *sich*, which, according to (Reuland 2011), also shows a behaviour different from that of a SE- anaphor).

We propose that Shughni only has SELF-anaphor xu and consequently no inherently reflexive verbs. Indeed, a dictionary search shows that verbs like 'make a mistake', 'wash oneself', 'worry', which are inherently reflexive in the Germanic, Romance and Slavic languages, are all expressed without xu.

#### References

Chomsky, N. 1981. Lectures on binding and government. Dordrecht.

Karamšoev, D. 1988. *Šugnansko-russkij slovar' v trëx tomax* [Shughni-Russian dictionary in 3 volumes]. Moscow.

Kim, D. 2015. The Sarikoli reflexive pronoun. Open Linguistics 1 (1).

Reinhart, T. and E. Reuland. 1993. Reflexivity. *Linguistic Inquiry* 24 (4), 657–720.

Reuland, E. J. 2011. Anaphora and language design. Cambridge, MA.

Zarubin, I. I. 1960. *Šugnanskije texty i slovar*' [Shughni texts and dictionary]. Moscow.

# Baloch women: Their social networks and their language shift in Sindh, Pakistan

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Southern Balochi (Indo-Iranian) speakers have made their homes in Sindh (now a province in Pakistan) for centuries (Dames 1904). In recent years a noticeable shift has been underway in which rural speakers of Southern Balochi (Zubair 2017) have been shifting to Sindhi (Indo- Aryan). This contrasts the language patterns of urban Baloch in Lyari, Karachi who are not exhibiting significant shift. In analyzing the social network patterns of Baloch women in these two different speech communities, the impacts of gender, modern livelihood, and social relationships on language use are seen.

Baloch women have long been expected to be the family caretaker and child-raiser (Mahmad 1982), they 'were excluded from the public space...' (Swidler 2003), and their education levels in Iranian Balochistan (Jahani 2000) and Pakistan (Tan 2000) continue to fall far below that of Baloch men and other language groups. With this precedent, Baloch women continue to have highly dense networks and through this they affect the language usage found within the home. Their limited outside contact and interaction raises the question of how the current language shift to Sindhi is occurring, and if, at all, women are contributing to that shift through their social networks.

Using social network analysis in sociolinguistics has proven an efficient way to assess the vitality and stability of a speech community's language (Milroy 1980). For this current paper an informal interview and a questionnaire were used to gather and decipher the data of the social networks of eighty Baloch women in these two respective speech communities. The informal interviews took place to receive preliminary data and thereby establish the relevance of this study. The questionnaires were part of a larger questionnaire conducted to ascertain the sociolinguistic data relating to gendered language shift and language usage. Questions included references to their habits regarding shopping for food; what, if any, of their relatives' had a business that they regularly used (e.g. rickshaw); and the frequency with which they communicate with Balochi and non-Balochi speakers, among other questions.

In both locations, Karachi (Lyari) and rural Sindh (Mirpur Khas), the density and interconnectedness of the women's networks exhibit similarities, showing that the density is not contributing to the shift. However, in Karachi,

though Urdu (national language) is used with street vendors and low contact individuals, Balochi is used with more frequent and regular interactions. In contrast, according to current preliminary data, in Mirpur Khas, Sindhi holds a much stronger position in the interactions between low contact individuals, with familial interactions, and with other frequent and regular interactions. This deepens the question of how women are contributing to the shift from Balochi to Sindhi, and the answer provides next steps in potential maintenance or revitalization attempts for the Balochi language in Sindh.

#### References

- Dames, M. L. 1904. The Baloch race: A historical and ethnological sketch. London.
- Jahani, C. 2000. Language attitudes and language maintenance among Iranian Baloch in Sweden. In: C. Jahani (ed.). Language in society: Eight sociolinguistic essays on Balochi, 33–58. Uppsala.
- Mahmad, J. 1982. The Baloch Cultural Heritage. Karachi.
- Milroy, L. 1980. Language and Social networks. Baltimore, MD.
- Swidler, N. 2003. On the difficulty of telling a slave from a wife. In: C. Jahani and A. Korn (eds.). *The Baloch and their neighbours*, 343–356. Wiesbaden.
- Tan, E. 2000. A Mother Tongue Literacy Programme among the Baloch of the Singo Line, Karachi. In: C. Jahani (ed.). *Language in society: Eight* sociolinguistic essays on Balochi, 59–67. Uppsala.
- Zubair, S. 2017. A description of the language use patterns among women in two Balochi speech communities in southern Pakistan. Unpublished manuscript. Chiang Mai, Thailand: Payap University.