

Selected topics in Shughni grammar: Information structure, oblique-first constructions, and irregular verbs

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Background

- This presentation comes from my (almost finished 🙌) dissertation titled ***A grammar of the Shughni language***
- Three primary aims of the dissertation:
 - **Synthesize previous research** on Shughni (esp. Soviet-era Russian-language publications)
 - Provide a **theory-neutral description** of un(der)-described areas of Shughni grammar
 - Point out **issues & puzzles for future research**

Roadmap

1. Dissertation overview & highlights
2. Expression of focus in Shughni
3. Oblique-first constructions
4. Verb shortening

Dissertation overview & highlights

Section I: Preliminaries

- **Genealogical classification**

- Pamir languages are a Sprachbund within the Iranian branch of I-E
- They have not been shown to not constitute a distinct genetic subgroup within Iranian
- Four genetic subgroups within Pamir: Ishkashimi, Wakhi, Munji-Yidgha, N. Pamir (incl. **Shughni-Rushani** & Yazghulami)
- cf. esp. Sokolova 1967; 1973; also Wendtland 2009

- **Phonology**

- Acoustic data on vowel quality and length (corroborating Sokolova 1953)
- Discussion of (morpho-)phonological vowel groupings
- **Issues in Shughni orthography (Latin, Cyrillic, Arabic scripts)**

- ***Red text** indicates that I have included some data on this topic in the appendix. If there is time and interest, we can discuss.

Section II: Nominals

- **Content & reference of noun phrases**

- E.g., bare nouns with generic vs. indefinite vs. definite reference

- **Grammatical gender in nominals**

- Agreement & concord patterns

- Gender assignment & factors which modulate it (phonological, historical, semantic)

- Gender of Russian borrowings as a potentially fruitful area for future research

- cf. esp. Karamshoev 1978, 1986

- **Demonstrative pronouns**

- & other deictic elements: adverbs, presentatives

- **Factors modulating choice of degree (proximal vs. medial vs. distal)**

Section III: Verbs

- **Regular & irregular verbs**
- **Historical factors in vowel & consonant irregularities** (cf. Sokolova 1967; Dodykhudoeva 1988)
 - **Stem ablaut** ($x\bar{a}r-$ (PRS) \sim $x\bar{u}d$ (PST) 'eat'), **consonant irregularities** ($wiraf\bar{c}-$ \sim $wir\bar{u}vd$)
 - **Historical perfect plural forms** (sic (PRF.F) \sim $su\check{d}\check{r}$ (prf.m) \sim $sa\check{d}\check{r}$ (PRF.PL) 'go')
- **Other verb irregularities**
 - Verb-stem shortening (e.g. $x\bar{a}r-en$ $>$ $\bar{x}-en$ 'eat.3PL')
 - **Hybrid complex verbs** (e.g. $d\bar{a}ktow$, $d\bar{a}k \check{c}\bar{i}dow$ 'give')
 - **Leveling of verb-stem paradigms**
- **Issues in Tense, aspect, mood (TAM)**
 - Description of factual enclitic $=ta$ (Spoiler: this is a tough one)
 - Temporal & aspectual compatibilities of each stem
 - Mood and evidentiality (esp. with perf. stems)
- **Issues in transitivity**
 - Reflexive verbs (with xu , e.g. $is xu \check{c}\bar{i}dow$ 'to feel (intr.)')
 - Passive (dynamic passive in $-ak$ vs. adjectival passive in $-in$)
 - Morphological & syntactic causatives (and their semantics)
 - Oblique-first constructions

Section IV: Syntax

- **Complex sentences**

- Temporal adverbial clauses
- Indirect speech
- 3 types of relative clauses (incl. *correlative clauses*)

- **Information structure**

- Expression of topic
- Expression of focus

- **Questions**

- Question particles, including those used for *echo questions*

Expression of focus in Shughni

Shughni word order: The fundamentals

- Neutral word order in Shughni is **Subject–Object–Verb (SOV)**:

(1) Neutral (SOV) word order in Shughni

Subj. – **ADV.FRQ** – **ADV.TMP** – **Ind. Obj.** – **Dir. Obj.** – **ADV.MNR** – **Verb**

- SOV occurs in discourse-neutral contexts (e.g., in response to the question *čīz gāp?* ‘what happened’), where the entire response constitutes new information:

(2) SOV word order in discourse-neutral context

Context: The speaker and addressee are sitting at the addressee's house when a group of men approaches. The speaker, not anticipating the arrival of the men, asks the addressee what is happening.

[Māð čorik-en]_S=ta nur [mu mošīn]_O [xarīd-en]_V.
 DEM.DIR.PL man-PL=FAC today my car buy.PRS-3PL

‘These men are going to buy my car today.’

- But word order is flexible and scrambling is common. Non-canonical word order often occurs to express nuances in information structure

Information structure fundamentals: Focus

- **Focus:** the part of an utterance which contributes new information to the discourse context
 - **Discourse context:** the set of presuppositions shared between interlocutors
 - see Aissen (to appear) for a recent overview of notions in information structure
- Focus stands in contrast to *background* (i.e. old or presupposed information)
- Focus can be contrastive (CF) or non-contrastive (NCF)
 - A contrastively focused element (CF) is selected among a contextually salient (usually small) subset of alternatives
 - A focused element which is not contrastive (NCF) is not selected from such a subset

(3) Non-contrastive focus in English

SPEAKER A: Where is Kazakhstan located?

SPEAKER B: [Kazakhstan is located]_{BKCD} [in CENTRAL ASIA]_{NCF}.

(4) Contrastive (*corrective*) focus in English

SPEAKER A: Kazakhstan is located in South Asia.

SPEAKER B: No, Kazakhstan is located in [CENTRAL]_{CF} Asia.

Focus in Shughni: Basic observations

- Focused elements which are non-contrastive seem to obligatorily remain in-situ
→ i.e. scrambling does not occur to express non-contrastive focus
- Contrastively focused elements are optionally fronted
- Sentence-level prosodic prominence occurs on the focused constituent

Focus in Shughni: Basic observations

- **Observation 1:** Focused elements which are non-contrastive tend to (always?) remain in-situ:

Context: Nekruz's sister arrives home and is hungry. She doesn't know what to eat and asks her mother what Nekruz ate.

(5) Narrow Focus: Direct object focused

a. Question:

Nekrūz=i čīz xūd?
 Nekruz=3SG what eat.PST
 'What did Nekruz eat?'

b. Answer:

Nekrūz=i [LAPŠĀ]_{NCF} xūd.
 Nekruz=3SG noodles eat.PST
 'Nekruz ate **noodles**.'

c. Infelicitous word order for 5b: OSV

[LAPŠĀ]_{NCF}=yi Nekrūz xūd.
 noodle=3SG Nekruz eat.PST

Non-contrastive focus remains in-situ (second example)

Context: Nekruz's father has been concerned that Nekruz is falling behind on his homework. While walking around the house, he notices Nekruz's completed homework lying on a table. He asks Nekruz's mother about when the homework was done.

(6) **Narrow Focus: Temporal adverb focused**

- a. Nekrūz=i **cawaxt** xu dars x̣êyd?
 Nekruz=3SG when self's class study.PST
 'When did Nekruz do his homework?'
- b. Nekrūz=i [BIYOR]_{NCF} xu dars x̣êyd.
 Nekruz=3SG yesterday self's class study.PST
 'Nekruz did his homework **yesterday**.'
- c. **Infelicitous word order for (5b): Temporal adverb precedes subject**
 # [BIYOR]_{NCF}=i Nekrūz xu dars x̣êyd.
 yesterday Nekruz self's homework study.PST

Topic in Shughni: Basic observations (continued)

- **Observation 2:** Contrastively focused constituents are optionally fronted

Context: Sattor and Mirzo are telling a story to Karim. Both Sattor and Mirzo are familiar with the story, which is about Andrey. However, as Sattor begins to tell the story (with the sentence in 7a), he mixes up a few details and is subsequently corrected by Mirzo.

(7) Corrective focus: Adverb focused

a. Initial Utterance

Andrey=i biyor xu mošin parđod.
 Andrey=3SG yesterday REFL car sell.PST
 'Andrey sold his car yesterday.'

b. Corrective focus in-situ (✓)

Nay, Andrey=i [AĤĪB]_{CF} xu mošin parđod.
 No, Andrey day.before.yesterday REFL car sell.PST
 'No, Andrey sold his car **the day before yesterday**.'

c. Corrective focus with movement (✓)

Nay, [AĤĪB]_{CF}=i Andrey xu mošin parđod.
 No, day.before.yesterday=3SG Andrey REFL car sell.PST

d. Infelicitous word orders for this context (X)

Nay, parđod=i Andrey [AĤĪB]_{FOC} xu mošin. (V – S – Adv – O)
 Nay, xu mošin=i Andrey [AĤĪB]_{FOC} parđod. (O – S – Adv – V)

Focus in Shughni: Basic observations (continued)

- Fronting of verbs often indicates corrective focus on polarity, but corrective focus on polarity may also remain in-situ

Context: A group of friends have just had dinner at a restaurant and decide to pay individually – i.e. each only for what (s)he ordered. One takes the bill and starts making the calculations out loud. A friend disagrees and makes the following corrections:

(8) Corrective focus on (affirmative) polarity: Verb optionally fronted

a. Initial utterance

. . . =at Gulnoza=yi pitsā xūd.
 . . . =and Gulnoza=3SG pizza eat.PST
 '... and Gulnoza ate pizza.'

b. Corrective focus (polarity): Verb not fronted

Gulnoza=yi pitsā [NA-XŪD]_{CF}!
 Gulnoza=3SG pizza NEG-eat.PST
 'Gulnoza **didn't** eat pizza!'

c. Corrective focus (polarity): Verb fronted

[NA-XŪD]_{CF}=i Gulnoza pitsā!
 NEG-eat.PST=3SG Gulnoza pizza
 'Gulnoza **didn't** eat pizza.'

Focus in Shughni: Summary

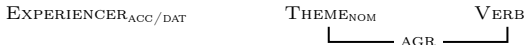
- Focused constituents which are non-contrastive are obligatorily *in-situ* (i.e. scrambling does not occur to express non-contrastive focus)
- Contrastively focused elements are optionally fronted
- Prosodic prominence occurs on the focused constituent
 - Possibly two different types of intonation patterns, including one which is only possible with contrastive focus
 - (Observations on the interface of prosody and focus need further examination.)
- Also for future research: Interface of prosody and the expression of *topic*

Oblique-first constructions

Oblique-first constructions: Overview

- **Oblique-first constructions (OFCs):** A heterogeneous set of constructions where, in neutral word order, the oblique argument comes before the direct argument
- Semantically, these are often *psych-predicates*, which express psychological states such as liking or wanting
 - In some cases, physical states and changes of states may be expressed in oblique-first constructions
- Syntactically, it is noteworthy that verbal agreement invariably takes place with the direct argument (I have yet to see any exception to this)

(9) **Oblique-first construction (neutral word order)**



- Shughni OFCs are similar in many ways to *impersonal constructions* found in European languages (e.g. Ger. *mich fröstelt* 'I'm shaking' or *mir ist schlecht* 'I feel sick')
 - There is disagreement on what constitutes an impersonal construction, so I choose the descriptively more precise 'oblique-first'
- We'll look at accusative-first and dative-first OFCs, and then issues regarding subjecthood in these constructions

Accusative-first constructions

- **Accusative-first constructions (AFCs)** involve a bare oblique argument (i.e. without a suffix such as dative *-(a)rd/-ra*)
- There seem to be fewer accusative-first constructions than dative-first, and they are more likely to denote a physical state such as sleeping or shivering. Examples:

<u>VERB</u>	<u>GLOSS</u>	<u>LITERAL TRANSLATION</u>
<i>xūðm yêdow</i>	'to feel sleepy / fall asleep'	sleep take
<i>šev cîdow</i>	'to shiver'	shiver do
<i>šittow ðêdow</i>	'to catch a cold'	cold hit
<i>ba yoð ðêdow</i>	'to remember'	to memory fall

- (10) Samîra kasal ca vad, [wam]_{ACC}=i dis [šev]_{DIR} čûd.
 Samira sick SUBR be.PST.F her=3SG so shiver do.PST
 'When Samira was sick, she shivered very badly.'
- (11) [Mu]_{ACC} [xūðm]_{DIR} yêst=atā mu-nd lap kor.
 me sleep take.PRS.3SG=but me-POSS much work
 'I'm sleepy, but I have a lot of work.'

Dative-first constructions

- Dative-first constructions (DFCs) have an oblique argument with the dative suffix *-ard/-ra*.
- Seem to be significantly more common than accusative-first
- May be built on a *non-copular verb* (either simplex, e.g. *fortow* 'be desirous to', or complex, e.g. *garmi cīdow* 'feel warm') or on the *copula together with a non-verbal element* (generally a noun or adjective)
- Examples of DFCs built on non-copular verbs:

<u>CONSTRUCTION</u>	<u>GLOSS</u>	<u>LITERAL TRANSLATION</u>
<i>fortow</i>	'~ want'	'be desirous/favorable to'
<i>garmi cīdow</i>	'feel warm'	'do warm (to)'
<i>qini cīdow</i>	'be difficult for'	'do difficulty to'
<i>xušrūyi cīdow</i>	'seem beautiful to'	'do beauty to'

Dative-first constructions: Examples

- (12) *qīni čīdow* ‘be difficult (for)’

[Tu-rd]_{DAT=3PL} [wāð ikzamin sawol-en]_{DIR} qīni čūd o?
 you-DAT=3PL DEM.DIR.PL exam question-PL difficulty do.PST PQ
 ‘Were those exam questions difficult for you?’

- (13) *fortow* ‘be desirous’ – (concrete) nominal theme

[Wi-rd]_{DAT} [disga birūken]_{DIR} na-for-en.
 him-DAT this.type pants.PL NEG-be.desirous.PRS-3PL
 ‘He doesn’t want this kind of pants.’

- (14) *fortow* ‘be desirous’ – infinitival theme

[Mu nān-ard]_{DAT} [kīno čīxt-ow]_{INF} fort.
 my mother-DAT movie watch.INF-PURP be.desirous.PRS.3SG
 ‘My mom wants to watch a movie.’

Dative-first constructions with the copula

- Examples of DFCs built on the copula:

<u>CONSTRUCTION</u>	<u>GLOSS</u>	<u>LITERAL TRANSLATION</u>
<i>šumak</i> (<i>vidow</i>)	'feel lazy (to)'	'exist laziness (to)'
<i>šūñčak</i> (<i>vidow</i>)	'feel like laughing'	'exist laughter (to)'
<i>nīwjak</i> (<i>vidow</i>)	'feel like crying'	'exist crying (to)'
<i>xuš</i> (<i>vidow</i>)	'like'	'be pleasant (to)'
<i>berawot</i> (<i>vidow</i>)	'feel uncomfortable (doing)'	'be uncomfortable (to)'
<i>darkor</i> (<i>vidow</i>)	'need'	'be necessary (to)'

Dative-first constructions with the copula

- (15) **berawot** (*widow*) 'be uncomfortable for'

[Mu-rd]_{DAT} berawot čap ðust qati nivišt-ow.
me-DAT uncomfortable left hand with write.INF-NMZ

'It's uncomfortable for me to write with my left hand.'

- (16) **šumak** (*widow*) 'feel lazy (to)'

Wuz=ta na-sām, [mu-rd]_{DAT} dis šumak mi gar-mi-ndi naḫtīd-ow.
I=FAC NEG-go.PRS.1SG, me-DAT such laziness this heat-LOC go.out.INF-NMZ

'I'm not going; I'm so lazy to go out in this heat.'

Subjecthood in OFCs: Basic observations

- **Fundamental questions:** Are the oblique arguments in OFCs subjects? Are the direct arguments subjects? Is there a true subject?
 - Allowing for the possibility that different OFCs behave differently in this regard
- **We already saw that in OFCs, verbal agreement is always with the direct argument**
- **What about other subjecthood tests?**
 - To my knowledge, there hasn't been much (any?) work on this for Shughni

Other subjecthood tests for OFCs

- One potential test is with the **oblique anaphor *xu***, which appears to be subject oriented

(17) Subject orientation of the anaphor *xu* (non-OFC)

- a. Wuz_i=um tu_j-rd **xu**_{i/*j} čīd divišt.
 I=1SG you-DAT REFL house show.PST
 'I showed you my (*your) house.'
- b. Davlat_i=i Nkrūz_j-ard **xu**_{i/*j} čīd divišt.
 Davlat=3SG Nekruz-DAT REFL house showed
 'Davlat_i showed Nekruz_j his_{i/*j} house.'

Subject-oriented oblique anaphor *xu* in OFCs

- In OFCs without infinitival complements, *xu* cannot be co-indexed with the dative argument:

- (18) [Tu_i-rd]_{dat} tu_i (*/**xu**_i) čoy fort o?
 you-DAT your (/**xu*) tea be.desirous.3SG.PRS PQ
 'Do you want your tea?'
- (19) [Sayora_i-yard]_{dat} wam_{i/j} (*/**xu**_i) naw mošin dis xuš.
 Sayora-DAT her (/**xu*) new car so pleasant
 'Sayora likes her new car a lot.'
- (20) Bādi mu (/**xu*) dars=ta mu xūdm yêst.
 after my (/**xu*) class=FAC me sleep take.PRS.3SG
 'After class I (will) get sleepy.'

Subject-oriented oblique anaphor *xu* in OFCs

- In OFCs with an infinitival complement, *xu* is interchangeable with the corresponding personal pronoun *within the infinitival complement*

(21) Infinitival complement of dative-first construction: *xu* OR personal pronoun

- a. Māš_i-ard [māš_i (/x_u_i) tāt-en wīnt-ow] fort.
 1PL.OBL-DAT 1PL.OBL (/REFL) father-PL see-CVB want.PRS.3SG
 'We want to see our fathers.'
- b. Wam_i-ard [tar wam_{i/j} (/x_u_{i/*j}) čīd nīst-ow] xuš.
 her-DAT in her (xu) house sit-INF-CVB pleasant
 'She likes to stay at her house.'

- What does this data tell us?
 - Something about the dative argument?
 - Something about the pronoun *xu*?
 - Does it tell us something about infinitival complements?

Subjecthood in OFCs: Summary

- Despite being in first position in neutral word order, the oblique argument of an OFC does not display other properties associated with subjects:
 - Ability to control verbal agreement
 - Ability to be co-indexed with the subject-oriented anaphor *xu* (except possibly in infinitival complements)
- **Outstanding questions:**
 - What are the defining properties of subjects in Shughni?
 - Are there quirky subjects in Shughni?
 - Do different kinds of OFCs behave differently with respect to the status of their oblique argument?
 - How often does *xu* (vs. personal pronouns co-indexed with the dative argument) occur in an infinitival complement of an OFC? A corpus of naturally occurring speech would help test this!
 - What about this type of construction in other Pamir languages?

Verb shortening

Defining regular and irregular verbs in Shughni

Regular verb: A verb whose stems follow one of the two patterns in (22) or (23).

Irregular verb: A verb whose stems do not follow one of the two patterns in (22) or (23).

(22) **Stem-final voiceless C, liquid, or nasal**

PRS: **X-**
 PST: **X-t**
 INF: **X-t**
 PRF: **X-č**

Example: *binêstow* ‘to lose (sthg)’

PRS: *binêš-*
 PST: *binêst*
 INF: *binêšt*
 PRF: *binêšč*

(23) **Final V, semi-vowel, or vd. obstruent**

PRS: **X-**
 PST: **X-d**
 INF: **X-d**
 PRF: **X-j̃**

Example: *qīwdow* ‘call’

PRS: *qīw-*
 PST: *qīwd*
 INF: *qīwd*
 PRF: *qīwǰ*

Which verbs are regular?

- The following kinds of verbs tend to be regular:
- **Borrowings from Persian**
 - e.g., *fāmtow* 'know' (ultimately Arabic; cf. Tj.); *nivištow* 'write' (Tj.); *fortow* 'be desirable' (Tj.)
- **Morphological causatives (both via ablaut and suffixation)**
 - e.g., *firēptow* 'deliver' (cf. *firīptow* 'arrive'); *xambentow* 'raise' – cf. *xāvdow* 'rise'; *warventow* 'boil (tr.)' – cf. *wīrvdow* 'boil (intr.)'
- **Onomatopoeic verbs (modulo gender agreement)**
 - e.g., *kurtow* 'rummage', *dungtow* '(make a) bang'; *buydow* 'buzz'
- **Verbs which were formerly irregular but whose stem paradigm has been leveled**
 - e.g. *ǰūdzdow* 'milk' (formerly *ǰīwdow*, PRS *ǰūdz-*, PST *ǰūyd*)

In what ways can verbs be irregular?

- Verbs can be irregular due to:
- **Suppletion in stem vowels due to regular sound change**
→ e.g., *vār-* 'bring.PRS' ~ *vūd* 'bring.PST'
- **Consonant irregularities across stems**
→ e.g., *zīn-* 'kill.PRS' ~ *zīd* 'kill.PST'
- **Existence of two forms (one simplex-like and one complex-like)**
→ e.g., *dāktow* ~ *dāk cīdow* 'give'
- **Stem shortening**
→ e.g., *zēz-um* ~ *zē-m* 'I take'

Types of verb shortening

- Shortening of **past stems**
- Shortening of **inflected present stems** (1_{SG}, 2_{PL}, 3_{PL})
- Shortening of 2_{SG} **imperative stems**
- Verb shortening (especially the first and last types) provides evidence for the traditional classification of Shughni vowels into series of short and long

Shortening of past stems

- An *optional* shortening process occurs for past stems with a stem-final shape $C\bar{u}d$ (C = consonant)
 → The final d of the stem is dropped, and the long \bar{u} becomes short u

<u>LONG STEM</u>		<u>SHORT STEM</u>	<u>GLOSS</u>
$C\bar{u}d$ $C\bar{u}d$	>	Cu	
$x\bar{u}d$ $x\bar{u}d$	>	xu	'eat'

<u>LONG PST STEM</u>		<u>SHORT PST STEM</u>	<u>GLOSS</u>
$\check{c}\bar{u}d$	>	$\check{c}u$	'do'
$v\bar{u}d$	>	vu	'bring'
$zid\bar{u}d$	>	$zidu$	'sweep'
$vir\bar{u}d$	>	$viru$	'find'
$ni\check{x}p\bar{u}d$	>	$ni\check{x}pu$	'step on'

Shortening of inflected present stems (two types)

- **Type 1 (*tīm*-type, for 1sg only):**

- In verbs with stem vowel *i*, the vowel lengthens to *ī* and the connecting glide *y* and short *u* of the agreement suffix are deleted (*ti-y-um* > *tīm* 'I go'; cf. *ti-yi* 'you go', *ti-yām* 'we go')
- Occurs more often (always?)

	<u>LONG FORM</u>		<u>SHORT FORM</u>
1sg	(...)Ci-y- ui-y-uī m	>	(...)C ī m
Ex.	ti-y-um	>	tīm 'I go'

<u>PRS STEM</u>		<u>1SG.PRS</u>		<u>PRS STEM</u>
<i>ti-</i>	>	tīm		'go; leave'
<i>vi-</i>	>	vīm		'be'
<i>ǫi-</i>	>	ǫīm		'fall'
<i>vārǫi-</i>	>	vārǫīm		'be able to'
<i>zini-</i>	>	zinīm		'wash'
<i>virī-</i>	>	virīm		'find'

Shortening of inflected present stems: Type 2

- Occurs only for 1SG, 2/3PL
- For present stems ending in $C\bar{V}C-$, final C of verb stem is dropped and either stem vowel or vowel in agreement suffix is dropped.
 - 1SG: Short *u* of agreement ending *-um* is dropped ($\check{\delta}\bar{a}\check{\delta}-um > \check{\delta}\bar{a}m$ 'I hit/give')
 - 2PL/3PL: Stem vowel is dropped and full agreement ending *-et* (2PL) / *-en* (3PL) is retained ($\check{\delta}\bar{a}\check{\delta}-et > \check{\delta}et$ 'you (PL) hit/give')

	<u>LONG FORM</u>	<u>SHORT FORM</u>
1SG	$C\bar{V}_1C-um$ $C\bar{V}_1C-um$ $C\bar{V}_1C-um$	$C\bar{V}_1m$
EX:	$x\bar{a}r-um$ $x\bar{a}r-um$ $x\bar{a}r-um$	$x\bar{a}m$
2PL	$C\bar{V}_1C-et$ $C\bar{V}_1C-et$ $C\bar{V}_1C-et$	$C-et$
EX:	$x\bar{a}r-um$ $x\bar{a}r-et$ $x\bar{a}r-et$	xet
3PL	$C\bar{V}_1C-en$	$C-en$
EX:	$x\bar{a}r-en$	xen

Shortening of inflected present stems (Type 2): Examples

<u>PRS STEM</u>		<u>1SG.PRS</u>	<u>2PL.PRS</u>	<u>3PL.PRS</u>	<u>GLOSS</u>
<i>xār-</i>	>	<i>xām</i>	<i>xet</i>	<i>xen</i>	'eat'
<i>vār-</i>	>	<i>vām</i>	<i>vet</i>	<i>ven</i>	'bring'
<i>sāw-</i>	>	<i>sām</i>	<i>set</i>	<i>sen</i>	'go; become'
<i>ǰāǰ-</i>	>	<i>ǰām</i>	<i>ǰet</i>	<i>ǰen</i>	'hit; give'
<i>parǰāǰ-</i>	>	<i>parǰām</i>	<i>parǰet</i>	<i>parǰen</i>	'sell'
<i>niǰpār-</i>	>	<i>niǰpām</i>	<i>niǰpet</i>	<i>niǰpen</i>	'step on'
<i>zêz-</i>	>	<i>zêm</i>	<i>zet</i>	<i>zen</i>	'take'
<i>lûv-</i>	>	<i>lûm</i>	<i>lûvet*</i>	<i>lûven*</i>	'say'

- cf. also *kin-* 'do', which only shortens this way in negative imperatives (*mā-k*, *mā-ket*, *mā-ken*)

Shortening of 2SG imperatives

- 2SG imperatives are identical to a bare present stem (i.e. a present stem without an agreement suffix)
→ e.g., INF *nīstow* 'sit', PRS *niθ-*, IMPER.2SG *nīθ!*
- Shortening of imperatives involves the dropping of the final C and shortening of the stem vowel to its *short equivalent* (more on short and long vowel correspondences shortly)

<u>LONG FORM</u>	<u>SHORT FORM</u>	<u>GLOSS</u>
CV ₁ :C- CV ₁ :C-	CV ₁	
<i>xār xār</i>	<i>xa</i>	'eat!'

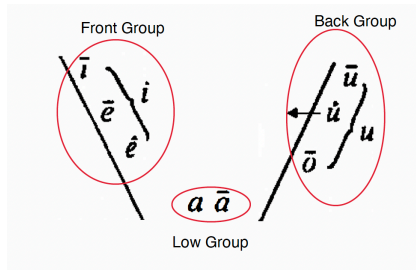
Shortening of 2SG imperatives: Examples

<u>PRS. STEM</u>		<u>2SG.IMP</u>	<u>GLOSS</u>
<i>xār-</i>	>	<i>xa</i>	'eat'
<i>vār-</i>	>	<i>va</i>	'bring'
<i>sāw-</i>	>	<i>sa</i>	'go; become'
<i>ḏāḏ-</i>	>	<i>ḏa</i>	'hit; give'
<i>parḏāḏ-</i>	>	<i>parḏa</i>	'sell'
<i>niḵpār-</i>	>	<i>niḵpa</i>	'step on!'
<i>lūv-</i>	>	<i>lu</i>	'say'
<i>zēz-</i>	>	<i>zi</i>	'take'
<i>*kin-</i>	>	<i>ki</i>	'do'

*The stem vowel of *kin-* is short to begin with

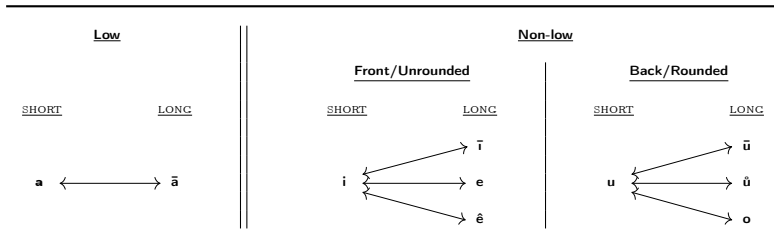
Verb shortening and phonology

- Certain types of verb shortening provide morphophonological evidence for the way Shughni vowel phonemes have traditionally been organized
- Specifically, verb shortening suggests that the correspondences between long vowels and short vowels are not only phonetic in nature, but also (morpho-)phonological
- Shughni has ten vowel phonemes, 7 long and 3 short:
 - **Short:** *a, i, u*
 - **Long:** *ā, ī, e, ê, ū, û, o*
 - e.g., Edelman & Yusufbekov (2000: 227)



Correspondences between vowel phonemes

- Shughni vowels have traditionally been categorized based on correspondences between certain long vowels and certain short vowels
 - **Low group:** *a, ā*
 - **(Non-low) front/non-rounded group:** *i, ī, e, ê*
 - **(Non-low) back/rounded group:** *u, ū, ũ, o*



Correspondences between vowel phonemes (continued)

- Evidence for these correspondences has generally been phonetic (acoustic and articulatory)
- Sokolova (1953: 86–98) notes that each short vowel can resemble its corresponding long vowel(s) in quality, depending on its position in a word



Short /i/			
<u>VARIANT</u>	<u>PHONETICALLY</u>	<u>EXAMPLE</u>	<u>GLOSS</u>
High	[i]	/stjo:/ > [stjo:]	'sin'
Midde	[e]	/mis/ > [mes]	'also'
Low	[ɛ]	/ki/ > [kɛ]	'do!'

Short /u/			
VARIANT	PHONETICALLY	EXAMPLE	GLOSS
High	[u]	/ɡuːnoː/ > [ɡuːnoː]	'sin'
Midde	[o]	/kud/ > [kod]	'dog'
Low	[ɔ]	/xu/ > [xɔ]	'and (then)'

- Notably missing is a variant in which short *u* resembles *û* in quality
→ Stand by for verb shortening!

Correspondences between vowel phonemes: Evidence from verb shortening

- In cases of verb shortening where a long vowel is shortened (past-stem and imperative shortening), the long vowel invariably shortens to its short counterpart (see the correspondences above)
- This provides morphophonological evidence for vowel correspondences to supplement the phonetic evidence shown by, e.g., Sokolova 1953
- In one case (*lūv* ~ *lu* 'say!'), we see a correspondence between short *u* and long *ū*

<u>GROUP</u>	<u>CORRESPONDENCE</u>	<u>LONG FORM</u>	<u>SHORT FORM</u>	<u>GLOSS</u>
Low	$\bar{a} \leftrightarrow a$	<i>sāw</i>	<i>sa</i>	'go!'
Non-low, Unrounded	$\bar{i} \leftrightarrow i$ $\bar{e} \leftrightarrow e$	<i>parjīv</i> <i>zēz</i>	<i>parjī</i> <i>zi</i>	'take away!' 'take'
Non-low, Rounded	$\bar{u} \leftrightarrow u$ $\bar{ū} \leftrightarrow u$	<i>čūd</i> <i>lūv</i>	<i>ču</i> <i>lu</i>	'do' 'say!'

- For future research:
 - Phonetic correspondences between *ū* and *u*
 - Morphophonological correspondences between *e* ~ *i*, *o* ~ *u*

Quluyi bisyor !
(Thank you!)

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Orthography puzzle

Orthography: A puzzle for the Arabic script

Table 1: Shughni consonant letters in the Arabic script.

IPA	Grapheme	IPA	Grapheme	IPA	Grapheme
b	ب	ð	ځ	q	ق
p	پ	r	ر	k	ک
t	ت	z	ز	g	گ
θ	ټ	ʒ	ژ	l	ل
ḍʒ	ج	ɣ	د	m	م
tʃ	چ	s	س	n	ن
χ	خ	ʃ	ش	w	و
ts	څ	x	ځ	v	ف
dz	ځ	ʁ	غ	j	ي
d	د	f	ف		

- From Persian: پ = /p/, گ = /g/, چ = /tʃ/, ژ = /ʒ/
- From Pashto: څ = /ts/, ځ = /dz/, ځ = /x/, د = /ɣ/
- What about ټ = /θ/ and ځ = /ð/?

Orthography: A puzzle for the Arabic script

- /θ/ and /ð/ are phonemes in Arabic and Shughni, but not Persian
- Arabic uses < ث > for /θ/ and < ذ > for /ð/
- In Persian, Arabic /θ/ in borrowings is realized /s/
→ Ar. مِيرَاث /mīrāt/ 'heritage' > Dr. /mīrās/
- In Persian, Arabic /ð/ in borrowings is realized /z/
→ Ar. ذِكْر /ḏikr/ 'recitation' > Dr. /zikr/
- In Shughni, Ar. /θ/ and /ð/ in borrowed words are also /s/ and /z/, resp.
→ cf. Sh. *miros* 'heritage'; *zíkri* 'recitation'
→ despite the fact that Shughni possesses the phonemes /θ/ and /ð/

How to represent native /θ/ and /ð/

- **Question:** How to represent Shughni /θ/ and /ð/ in native words in an Arabic-based script?

→ e.g. θīr 'ash'; moθ 'stick'

→ e.g. garðā 'bread'; zimāð 'land'

Two schools of thought on the issue:

- Haidari (2004): Represent native Shughni /θ/ and /ð/ with their original Arabic graphemes < ث > and < ذ >
 - Fewer letters to learn means less burden on learners
 - Learners can deal with the ambiguity that each character represents two phonemes
- Dost-Mohammad, et al. (2011): Represent native Shughni /θ/ and /ð/ with separate graphemes < ث̣ > and < ذ̣ >
 - This moves towards one-to-one phoneme~grapheme correspondence; lack of ambiguity means less stress on learners
 - Learners can deal with the need to learn two more letters.

Echo questions

Echo questions

- Shughni uses two question-final particles – *ik* and *a* – to signal echo questions
 - a type of question in which the speaker acknowledges that the information being sought has already been given previously in the discourse
 - cf. Eng. *You at **what** for dinner?* (in English, *wh*-echo questions can be *wh*-in-situ)
- In Shughni, the particle *ik* is used with *wh*-echo questions. It appears at the end of a question:

(24) Čīz **ik**?
what ECWH

‘What was that (again)?’

(25) Čīz=at lūd **ik**?
what=2SG say.PST ECWH

‘What did you say (again)?’

(26) Tu tāt biyor tar kā sut **ik**?
your father yesterday to where go.PST.M ECWH

‘Your father went *where* yesterday?’

Echo questions (cont'd)

- The particle *a* is used in polar echo questions:

→ It can be used to ask clarification on statements, polar questions, or *wh*-questions:

Utterance	Example	Gloss
PROPOSITION	<i>Sohiba tar kor na-vad.</i>	'Sohiba wasn't at work.'
WH-ECHO	<i>Sohiba tar kor na-vad <u>a</u>?</i>	'(You said) Sohiba wasn't at work, (right)?'
POLAR Q	<i>Sohiba tar kor vad o?</i>	'Was Sohiba at work?'
WH-ECHO	<i>Sohiba tar kor vad <u>a</u>?</i>	'(You asked) whether Sohiba was at work, (right)?'
WH-Q	<i>Čāy tar kor vud?</i>	'Who was at work?'
WH-ECHO	<i>Čāy tar kor vud <u>a</u>?</i>	'(You asked) who was at work, (right)?'

- It is also used as a dubitative (DUB) particle:

- (27) Yā kitob na-fām-um rošt vad-a, safed-a, rozovi-ya.
DEM.F book NEG-know.PRS-1SG red was.F-DUB white-DUB pink-DUB
'I don't know whether that book was red, white, or pink.'

Demonstratives

Nominals (demonstratives)

- Shughni has a triple deictic system with proximal, medial, and distal forms:

Table 2: Demonstrative pronouns (gender-distinguishing cells shaded).

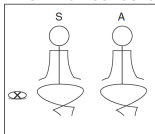
	Proximal		Medial		Distal	
	DIR	OBL	DIR	OBL	DIR	OBL
SG.F	<i>yam</i>	<i>mam</i>	<i>yid</i>	<i>dam</i>	<i>yā</i>	<i>wam</i>
SG.M		<i>mi</i>		<i>di</i>	<i>yu</i>	<i>wi</i>
PL	<i>māð</i>	<i>mev</i>	<i>dāð</i>	<i>dev</i>	<i>wāð</i>	<i>wev</i>

Nominals: Demonstratives

- Basic exophoric (non-contrastive) demonstrative usage:
 - **Proximal**: For objects in the speaker's personal space (outside the addressee's)
 - **Medial**: For objects in the addressee's personal space (outside the addressee's)
 - **Distal**: For objects not within personal space of speaker or addressee
- The medial form is fundamentally *addressee oriented*, but with a twist?

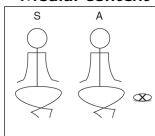
Canonical uses of demonstrative degrees

Proximal context



- (28) **Mam** kitob=at xeyj o?
DEM.DIST book=2SG read.PRF PQ
'Have you read this book?'

Medial context



- (29) **Yid** tilifun tu-nd o?
DEM.MED telephone you-POSS PQ
'Is that telephone yours?'

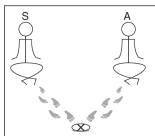
Distal context



- (30) **Pi wi** puxtā=yat sific o?
up.to DEM.DIST meadow=2SG go.up.PRF.F PQ
'Have you gone to that mountain meadow before?'

Ambiguous context

(MED or DIST)



- (31) **Dam** (//**wam**) pūt qati=ta bozi-yām, ani?
DEM.MED (//DIST) ball with=FAC play-1PL right?
'We're going to play with that ball, right?'

- In (31), referent is not in the personal space of either spkr. or addr.
- Here, either medial or distal forms are possible.
- A medial form appears to be more likely when:
 - Referent is perceived to be between spkr. and addr.
 - Referent is perceived to be in the *shared interactional space* of spkr. and addr.
 - Spkr. perceives that addr.'s attention is already on referent

Relative clauses

Relative clauses

- Shughni uses **internally headed** (correlative) and **externally headed** relative clauses, as well as **free-choice free relatives**:

(32) Externally headed relative construction: Schema

Head N_i	[	(. . .)	(\text{PRON_i)	<i>ca</i>	V]	$_{\text{RC}}$	
<i>yā</i>	<i>ȳāc_i</i>	[	<i>biyor=um</i>	<i>wam_i</i>	<i>ca</i>	<i>wīnt</i>]	$_{\text{RC}}$
that.F girl		yesterday=1SG	her	REL		see.PST	
'the girl I saw yesterday'							

- (33) $Ik=wāḏ$ **piš-en**=en tar kā sat [wam mošin pi bīr=en
 PREC=DEM.DIR.F cat-PL=3PL to where go.PST.PL DEM.OBL.F car to under
ca vad] $_{RC}$?
 REL be.PST
 'Whose are those **cats** which were lying under the car?'

Internally headed relative clauses

- Shughni employs a subtype of internally headed relative clause known as a **correlative clause**, which has the following properties (cf. Comrie & Tuteva (2013a; 2013b):
 - Relative clause obligatorily precedes matrix clause
 - An element within the matrix clause co-references the head noun of the relative clause (i.e. a resumptive-pronoun like element)

(34) Correlative clause: Schema

[	(. . .)	Head N_i	(. . .)	<i>ca</i>	<i>V</i>	]_{RC}	(. . .)	PRON _{<i>i</i>}	(. . .)
	<i>tu=t</i>	<i>wam yāc</i>	<i>biyor</i>	<i>ca</i>	<i>wīnt</i>				
	you=2SG	that girl	yesterday	REL	see.PST				
	'the girl you saw yesterday'								

- (35) [Tu=t wam **yāc_i** biyor ca wīnt]_{RC} **yā_i** mu yax.
you=2SG DEM.OBL.F girl yesterday REL see.PST she my sister
'The girl you saw yesterday is my sister.'

- Correlative clauses may be an areal feature
 - They exist in Indo-Aryan (e.g., Bhatt 2003; Litpák 2012) and in Wakhi (Bashir 2009: 849-840)

Free-choice free relatives

(36) Free-choice free relative clause: Schema

[	<i>ar</i> -WH	(. . .)	<i>ca</i>	V	]	RC
	<i>arčiz</i>	<i>tu-rd</i>	<i>ca</i>	<i>fort</i>		
	whatever	you-DAT	REL	want.PRS.3SG		
	'whatever you want'					

- (37) [Arči-rd ca na-fort]_{RC} mā-xīrt!
whoever.OBL-DAT REL NEG-want.PRS.3SG PROH-eat.PRS.3SG
'Whoever doesn't want it (lit. 'to whomever it's not desirable), don't eat it!'

Free-choice free relatives

Table 3: *Wh*-words used in free-choice free relatives.

<i>arcarāṅg</i>	‘however’
<i>arcūnd</i>	‘however much/many’
<i>arcāy</i> (DIR)	‘whoever’
<i>arči</i> (OBL)	‘whomever’
<i>arciz</i>	‘whatever’
<i>arjoy</i>	‘wherever’
<i>ar(ca)waxt</i>	‘whenever’

(38) **Manner adverb type: *arcarāṅg* ‘however’**

[Tu-rd **arcarāṅg** ca fort]_{RC} māš=ta ik=az wi moz-ām.
you-DAT however REL want.PRS we=FAC PREC=from DEM.OBL.M build.PRS-1PL

‘However you want it, that’s how we’ll build it.’

(39) **Locative adverb type: *arjoy* ‘wherever’**

[Arjoy=ta ca sāv-i]_{RC} wuz=ta mis taram sām.
wherever=FAC REL go.PRS-2SG I=FAC also to.there go.PRS.1SG

‘I’ll go wherever you go.’

Irregularities in verb stem vowels

In what ways can verbs have irregular stem vowels?

(40) Vowel pattern in the stems of a regular verb

<u>PRS</u>	<u>PRS.3SG</u>	<u>PST</u>	<u>INF</u>
CV ₁ C	CV ₁ C-t/d	CV ₁ C-t/d	CV ₁ C-t/d
<i>fām-</i>	<i>fāmt</i>	<i>fāmt</i>	<i>fāmt</i>

- In irregular verbs, the following vowels may differ from one another:
 - (i) the present-stem vowel;
 - (ii) the present-stem vowel in the third-singular form;
 - (iii) the past-stem vowel, which is always identical to the perfect-stem vowel;
 - (iv) the infinitive-stem vowel.
- A verb may have as many as four different vowels in its verb stems
→ e.g., 'bring': *vār-* ~ *vīrt* ~ *vūd* ~ *vīd*
- Or only one stem where a different vowel is found:
→ e.g., 'see': *wīn-* ~ *wīnt* ~ *wīnt* ~ *wīnt*
- Or anywhere in between

Historical reasons for ablaut in verb stems

- Many vowel irregularities in verbs can be traced to regular sound changes
- These are detailed by Sokolova (1967) and referred to in Dodykhudoeva (1988)
- Sokolova: the following factors modulated the development of a vowel from Proto-Iranian into Shughni:

Today's
focus

- (i) **Stress** (is the vowel in stressed or unstressed position?)
- (ii) **Umlaut** (is the vowel in *i*-, *a*-umlaut, or no umlaut position?)
- (iii) **Syllable shape** (is the vowel followed by one or two consonants?)
- (iv) **Surrounding consonants** (is the vowel adjacent to, e.g., uvular consonant?)
- (v) **Word-final or word-initial position**

Basics of vowel changes: Proto-Iranian vowels

- Proto-Iranian had at least four vowel phonemes: **a*, **ā*, **i*, and **u*
→ Two further vowels were possibly phonemic: **ī* and **ū*

Table 4: Proto-Iranian vowels (cf. Cantera 2017: 482).

	Front	Central	Back
High	<i>i</i> (<i>ī</i>)		<i>u</i> (<i>ū</i>)
Mid			
Low		<i>a</i> , <i>ā</i>	

Basics of vowel changes: Umlaut (cf. Sokolova 1967: 24-63)

- The reflex of Proto-Iranian vowels in Shughni depends, in part, on whether it was historically in an umlaut position
- There are three relevant positions: (i) *i*-umlaut, (ii) *a*-umlaut, (iii) no umlaut (neutral position)

(i) ***i*-Umlaut Position** – the vowel is followed by a reconstructed high front vowel **i* (**ī*) or palatal glide **y* in the following syllable. Here:

- | | | |
|---|------------------------------------------|-------------------------------------------|
| → | <i>*a</i> > <i>ī</i> | (<i>*gari-</i> > <i>zīr</i> 'rock') |
| → | <i>*ā</i> > <i>ê</i> | (<i>*māsti-</i> > <i>mêst</i> 'moon') |
| → | <i>*u</i> , <i>*ū</i> > <i>i</i> (_ 1C) | (<i>*kuti-</i> > <i>kīd</i> 'dog.F') |
| → | <i>*u</i> , <i>*ū</i> > <i>ī</i> (_ 2C) | (<i>*supti</i> > <i>sīvd</i> 'shoulder') |

Basics of vowel changes: Umlaut (cont'd)

(ii) **a-Umlaut Position** – the vowel is followed by a reconstructed long low vowel $*\bar{a}$ in the following syllable. Here:

- $*a > \bar{a}$ (_ 1C) $*k\bar{a}f\bar{a}- > \check{s}\bar{a}f$ 'saliva'
- $*a > o$ (_ 2C) $*t\bar{a}xt\bar{a} > t\bar{o}yd$ 'went.F'
- $*\bar{a} > o$ $*d\bar{a}t\bar{a}- > \check{d}\bar{o}d$ 'fell/hit.PST'
- $*u, *\bar{u} > a$ $*b\bar{u}z\bar{a}- > v\bar{a}z$ 'goat.F'

(iii) **Neutral position** – all other positions, including vowels in stems ending in a consonant or in the vowels $*a$ or $*u$. Here:

- $*a > \bar{i}$ (_ 1C) $*k\bar{a}ta > \check{c}\bar{i}d$ 'house'
- $*a > *\bar{u}$ (_ 2C) $*h\bar{a}pta- > w\bar{u}vd$ 'seven'
- $*\bar{a} > o$ $d\bar{a}ru-$ (Av.) $> \check{d}\bar{o}rg$ '(piece of) wood'
- $*u, *\bar{u} > u$ $*k\bar{u}ta- > k\bar{u}d$ 'dog'

Basics of vowel changes: Summary

	PROTO-IRANIAN VOWEL	SHUGHNI VOWEL	ANCIENT WORD	EXAMPLE MODERN SHUGHNI	GLOSS
Neutral Pos.	$*a$	$\xrightarrow{-1C} \bar{i}$	$*k\bar{a}ta-$	$\bar{c}\bar{i}d$	‘house’
		$\xrightarrow{-2C} \bar{u}$	$*h\bar{a}pta-$	$w\bar{u}vd$	‘seven’
	$*\bar{a}$	$\longrightarrow o$	$d\bar{a}ru-$ (Av.)	$\bar{o}org$	‘wood’
	$*u, *\bar{u}$	$\longrightarrow u$	$*k\bar{u}ta-$	kud	‘dog (M)’
<i>i</i> -Umlaut Pos.	$*a$	$\longrightarrow \bar{i}$	$*g\bar{a}ri-$	$\bar{z}\bar{i}r$	‘rock’
	$*\bar{a}$	$\longrightarrow \hat{e}$	$*m\bar{a}sti-$	$m\hat{e}st$	‘moon’
	$*u, *\bar{u}$	$\xrightarrow{-1C} i$	$*k\bar{u}ti-$	$k\bar{i}d$	‘dog (F)’
		$\xrightarrow{-2C} i/\bar{i}$	$s\bar{u}pti-$ (Av.)	$s\bar{i}vd$	‘shoulder’
<i>a</i> -Umlaut Pos.	$*a$	$\xrightarrow{-1C} \bar{a}$	$*k\bar{a}f\bar{a}-$	$\bar{s}\bar{a}f$	‘saliva’
		$\xrightarrow{-2C} o$	$*t\bar{a}xt\bar{a}-$	$t\bar{o}yd$	went (F)
	$*\bar{a}$	$\longrightarrow o$	$*d\bar{a}t\bar{a}-$	$\bar{o}od$	‘fell; hit (PST STEM)’
	$*u, *\bar{u}$	$\longrightarrow a$	$*g\bar{a}nt\bar{u}m\bar{a}-$	$\bar{z}ind\bar{a}m$	‘wheat’

Common phenomena in Shughni irregular verbs

- *a*-umlaut of non-3_{SG} present stem due to long **ā* following agreement morpheme
→ e.g. 1_{SG} *-āmi*, 1_{PL} *-āmahi*
- *i*-umlaut of present stem due to surrounding palatal consonant
→ e.g. **č*, **y*
- *i*-umlaut of 3_{SG}-present stem due to following agreement morpheme **-ti*
- Vowels in (non-gender-distinguishing) past stems reflect neutral position (< participial suffix **-ta*)
- *i*-umlaut in infinitive stems due to nominal suffix **-ti*
- Let's look at a couple common patterns in irregular verbs and the historical processes behind them

Pattern 1: PRS **a* in *a*-umlaut position

<u>PRS</u>	<u>PRS.3SG</u>	<u>PST</u>	<u>INF</u>	<u>GLOSS</u>
<i><u>ā</u></i>	<i><u>ī</u></i>	<i><u>ū</u></i>	<i><u>ī</u></i>	
<i>vā̄r-</i>	<i>vīrt</i>	<i>vū̄d</i>	<i>vīd</i>	'bring'

- e.g. *vīdow* 'bring' < **bar-*
- **a* > *ā* in PRS due to *a*-umlaut (*vā̄r-*)
- **a* > *ī* in PRS.3SG due to *i*-umlaut (*vīrt*)
- **a* > *ū* in PST due to neutral pos. before 2C (*vū̄d*)
→ disappearance of **r* in past stems is also regular
- **a* > *ī* in INF due to *i*-umlaut (*vīd*)
- Other verbs which follow this vowel pattern: *xīdow* 'eat'; *niṣpīdow* 'step on'; *zidīdow* 'sweep'; *anjīvdow* 'grab; hold'

Pattern 1: PRS *a in a-umlaut position (Summary)

<u>PRS</u>	<u>PRS.3SG</u>	<u>PST</u>	<u>INF</u>	<u>GLOSS</u>
<i>ā</i>	<i>ī</i>	<i>ū</i>	<i>ī</i>	
<i>vār-</i>	<i>vīrt</i>	<i>vūd</i>	<i>vīd</i>	‘bring’
<i>xār-</i>	<i>xīrt</i>	<i>xūd</i>	<i>xīd</i>	‘eat’
<i>niṣpār-</i>	<i>niṣpīrt</i>	<i>niṣpūd</i>	<i>niṣpīd</i>	‘step on’
<i>zidār-</i>	<i>zidīrt</i>	<i>zidūd</i>	<i>zidīd</i>	‘sweep’
<i>anjāv-</i>	<i>anjīvd</i>	<i>anjūd</i>	<i>anjīvd</i>	‘grab; hold’

Pattern 2: PRS **u* in *a*-umlaut position

<u>PRS</u>	<u>PRS.3SG</u>	<u>PST</u>	<u>INF</u>	<u>GLOSS</u>
<i>a</i>	<i>ī</i>	<i>u</i>	<i>i</i>	
<i>kaŷ-</i>	<i>kīŷd</i>	<i>kuŷt</i>	<i>kīŷt</i>	'slaughter'

- e.g. PRS *kaŷ-* 'slaughter' < **kuš-*
- **u* > *a* in PRS due to *a*-umlaut
- **u* > *ī* in PRS.3SG due to *i*-umlaut; lengthening to *ī* regular in 3SG.PRS before **š* (cf. Sokolova 1967: 48)
- **u* > *u* in PST due to neutral position
- **u* > *i* in INF due to *i*-umlaut
- Other verbs which follow this vowel pattern: *virixtow* 'break (tr.)'; *zibidow* 'jump'; *žirixtow* 'bite; sting'

Pattern 2: PRS **u* in *a*-umlaut position (Summary)

<u>PRS</u>	<u>PRS.3SG</u>	<u>PST</u>	<u>INF</u>	<u>GLOSS</u>
<i>a</i>	<i>ī</i>	<i>u</i>	<i>i</i>	
<i>k<u>a</u>y-</i>	<i>k<u>ī</u>ȳd</i>	<i>k<u>u</u>ĭxt</i>	<i>k<u>i</u>ĭxt</i>	'slaughter'
<i>zib<u>a</u>n-</i>	<i>zib<u>ī</u>nt</i>	<i>zib<u>u</u>d</i>	<i>zib<u>i</u>d</i>	'jump'
<i>vir<u>a</u>ȳ-</i>	<i>vir<u>ī</u>ȳd</i>	<i>vir<u>u</u>ĭxt</i>	<i>vir<u>i</u>ĭxt</i>	'break (tr.)'
<i>žir<u>a</u>y-</i>	<i>žir<u>ī</u>ȳd</i>	<i>žir<u>u</u>ĭxt</i>	<i>žir<u>i</u>ĭxt</i>	'bite; sting'

Irregularities in verb stem consonants

Types of consonant irregularities

- If a regular verb's present stem has pattern $C_1V_1C_2$, we would expect the past and infinitive stems to be of shape $C_1V_1C_2-t$ or $C_1V_1C_2-d$.
 - e.g. *fām-* ~ *fāmt* ~ *fāmt* 'know'
 - Note that in the discussion here, the final stop *t/d* of past and infinitive stems is excluded from calculations of the number of consonants present in the past and infinitive stems.
- Consonant irregularities in Shughni verb stems are generally:
 - Generally in stem-final consonants (with the exception of *kin-* ~ *čūd* ~ *čīd* 'do')
 - Generally consonants of PRS stem differ from those of other stems
- Two broad sources of consonantal irregularities:
 - **Source 1:** Formerly productive suffixes which once targeted only present stems, and whose reflexes are still found in some present stems.
 - **Source 2:** Regular sound changes which targeted consonant clusters found in past stems (due to the juxtaposition of a stem-final C with -t/-d)

Type 1: Erstwhile productive suffixes

- Two common erstwhile productive affixes whose reflexes are found in modern Shughni:
- **PIE *-ské-**, thought to once mark iterative or inchoative verbs > Proto-Sh. *-sa- (a marker of intransitivity) > Sh. -s-, -c-, θ- (modulated by phonetic position)
 - > Sh. -s- when following a vowel (e.g. *naǰǰs-* ~ *naǰǰid* 'pass')
 - > Sh. -c- when following a consonant (except *d) (e.g. *wirafc-* ~ *wirūvd* 'stand')
 - > Sh. -θ- when following *d (e.g. *nθ-* ~ *nūst* 'sit')
- **PIE nasal infix *-n- or suffix *-n(a)u-** (thought to once mark transitivity in Shughni)
 - e.g. *ǰin-* ~ *ǰid* 'hear'

Type 1: Erstwhile productive suffixes: Summary

Present				Past		
<u>AFFIX</u>	<u>REFLEX</u>	<u>STEM</u>	<u>HISTORICALLY</u>	<u>STEM</u>	<u>HISTORICALLY</u>	<u>GLOSS</u>
* <i>-ské-</i> > * <i>-s(a)-</i>	-s-	<i>naǰǰis-</i> <i>piðis-</i>	* <i>nir-ga-sa-</i> * <i>pati-di-sa-</i>	<i>naǰǰid</i> <i>piðid</i>	* <i>nir-ga-ta-</i> * <i>pati-di-ta-</i>	‘pass’ ‘ignite’
	-c-	<i>wirāfc-</i> <i>biðafc-</i>	* <i>awi-rab-s-ya</i> * <i>upa-dab-sa-</i>	<i>wirūvd</i> <i>biðūvd</i>	* <i>awi-rab-ta-</i> * <i>upa-dab-ta-</i>	‘stand’ close
	-θ-	<i>ricīθ-</i> <i>niθ-</i>	* <i>frat-rad-s-ya</i> * <i>ni-had-s-ya</i>	<i>ricūst</i> <i>nūst</i>	* <i>frat-rad-ta-</i> * <i>ni-had-ta-</i>	‘flee’ ‘sit’
* <i>-n(a)u-</i> / * <i>-na-</i>	-n-	<i>ǰin-</i> <i>piðin-</i> <i>yān-</i>	* <i>sɾ-nau-</i> * <i>pati-di-na-</i> * <i>ar-na-</i>	<i>ǰud</i> <i>piðid</i> <i>yūd</i>	* <i>sru-ta-</i> * <i>pati-di-ta-</i> * <i>ar-ta-</i>	‘hear’ ‘ignite’ ‘grind’

Type 2: Regular sound changes targeting consonant clusters

- As a rule, the stem-final consonant of a present stem was generally found in a position before a vowel, as most inflectional affixes are vowel-initial, while the same consonant appeared before the consonant **t/d* in past and infinitive stems. These differing phonetic environments provided the preconditions for the distinct development of certain stem-final sounds.
- **s, š, *z* > Sh. *š* when preceding **t*
 - leads to alternations (PRS~PST/INF) *s*~*š* and *z*~*š*
 - e.g. **ati-dais-* > *dives-* ~ *divišt* 'show; seem'
- **rt* and **rd* > Sh. **š* when preceding **t*
 - alternation *rđ*~*š*
 - e.g. **us-tard-a-* > *zidađ-* ~ *zidušt* 'unravel'
- the glide **w* and liquid **r* were often deleted when preceding a *t/d*
 - alternations of the type *w*~*∅* and *r*~*∅*
 - e.g. **bar-a-* > *vār-* ~ *vūd* 'bring'

Type 1: Irregularities due to regular sound changes: Summary

<u>SOUND CHANGE</u>	<u>PRS. STEM</u>	<u>HISTORICALLY</u>	<u>PST STEM</u>	<u>HISTORICALLY</u>	<u>GLOSS</u>
*s, š, z > ǰ, _t	<i>aboz-</i> <i>diveš-</i> <i>žoz-</i>	* <i>apa-āz-a-</i> * <i>ati-dais-a-</i> * <i>gāz-a-</i>	<i>abēǰt</i> <i>diviǰt</i> <i>žēǰt</i>	<i>apa-āš-ti</i> <i>de-diš-ta-</i> <i>gāš-ti-</i>	swallow show run
*rt, rd > ǰ, _t	<i>rarǰ-</i> <i>tidarǰ-</i> <i>zidarǰ-</i>	* <i>fra-rd-</i> * <i>ati-tard-a-</i> * <i>us-tard-a-</i>	<i>ruǰt</i> <i>tiduǰt</i> <i>ziduǰt</i>	<i>fra-rd-ta</i> <i>ti-tard-ta</i> <i>us-tard-ta</i>	take apart rip unravel
*w, r > ∅, _t	<i>sāw-</i> <i>vār-</i> <i>xār-</i>	* <i>čyaw-a-</i> * <i>bar-a-</i> * <i>xwar-a-</i>	<i>sut</i> <i>vūd</i> <i>xūd</i>	<i>č(y)u-ta</i> <i>bar-ta</i> <i>xwar-ta</i>	go; become bring eat

Leveling of stem paradigms

- **Paradigm leveling:** One or more of a verb's stems are restructured based on the form of another one if its stem.

→ Somewhat common process

	Non-leveled (irregular) paradigm			Leveled (regular) paradigm		
<u>GLOSS</u>	<u>PRS</u>	<u>PST</u>	<u>INF</u>	<u>PRS</u>	<u>PST</u>	<u>INF</u>
'milk'	<i>ðũdz-</i>	<i>ðũyd</i>	<i>ðĩwd(ow)</i>	<i>ðũdz-</i>	<i>ðũdzd</i>	<i>ðũdzd(ow)</i>
'irrigate'	<i>vidêdz-</i>	<i>vidũyd</i>	<i>vidĩwd(ow)</i>	<i>vidêdz-</i>	<i>vidêdzd</i>	<i>vidêdzd(ow)</i>
'beat'	<i>řeb-</i>	<i>řĩvd</i>	<i>řĩvd(ow)</i>	<i>řeb-</i>	<i>řebt</i>	<i>řebt(ow)</i>
'grind'	<i>yān-</i>	<i>yũd</i>	<i>yĩd(ow)</i>	<i>yān-</i>	<i>yānt</i>	<i>yānt(ow)</i>

Verb paradigm change: Addition of stems

- In some instances, the stem(s) of one verb are restructured, or else a new verb is created, based on analogy with those of another verb.
 - Less common process
- **Example 1:** The verb *ǰicêdow* 'freeze' is intransitive, despite having the stem vowel ê, which is commonly found in causatives.
 - cf. **strā*, where **ā* > Sh/. ê in *i*-umlaut position
 - A causative *ǰicêwdow* has been formed on the basis of verbs such as *θêwdow* (caus. of *θāw-* 'burn')
- **Example 2:** Leveling of plural perfect stems (e.g. *saǰǰ* 'go/become.PRF.PL'
 - cf. the discussions in Karamshoev (1978: 114-141) and Dodykhudoeva (1988: 110-115)

Hybrid complex verbs

Simplex, complex, and hybrid verbs

- Shughni has verbs which:

- are clearly simplex (e.g. *ǰêdow* 'do; hit', *čîdow* 'do', *virixtow* 'break', etc.)
- are clearly complex (e.g. *soz lûvdow*, *raqosâ čîdow*, *ay čîdow* 'drive (livestock); send away')
- display properties of both simplex and complex verbs (I refer to these as **hybrid complex verbs**)

- **Simplex verbs**

- Tend to have (synchronically) morphologically simplex stems (but cf. verbs such as *firiṗtow* 'arrive' with old pre-verbs)
- Are negated via a negation prefix which attaches directly to the verb stem (e.g. *na-viraṣ-um* 'I don't break')

- **Complex verbs**

- Are composed of a **non-verbal component** – often a noun (e.g. *raqosa* 'dance'), adjective (e.g. *têr* 'black', or more recently a Russian infinitive (e.g. *paprobuvat* 'try') and a **light verb** – often *ǰêdow* 'do; hit', *čîdow* 'do', *sittow* 'become'.
- Are negated via a negation prefix which attaches directly to the light verb stem (e.g. *ay na-kin-um* 'I don't send away', cf. **na-ay-kin-um*)

Hybrid complex verbs: *lāk* (čīdow) and *dāk* (čīdow)

- The verbs *lāktow* (*lāk čīdow*) 'leave (sthg. somewhere); allow' and *dāktow* (*dāk čīdow*) 'give' display properties of both simplex and complex verbs
- In their present-tense usage, there seems to be a preference for simplex forms
 - With the exception of a 3_{SG} variant *lāk(k)iĕt* 'allows' and *dāk(k)iĕt* 'gives' (where *kiĕt* < 3_{SG}.PRS of *čīdow* 'do')

	<u>SG</u>	<u>PL</u>		<u>SG</u>	<u>PL</u>
<u>1</u>	<i>dāk-um</i>	<i>dāk-ām</i>	<u>1</u>	<i>lāk-um</i>	<i>lāk-ām</i>
<u>2</u>	<i>dāk-i</i>	<i>dāk-et</i>	<u>2</u>	<i>lāk-i</i>	<i>lāk-et</i>
<u>3</u>	<i>dāk-t //</i> <i>dāk(k)iĕt</i>	<i>dāk-en</i>	<u>3</u>	<i>lāk-t //</i> <i>lāk(k)iĕt</i>	<i>lāk-en</i>

- In the present, negation is directly on the verb stem – even with the long 3_{SG} form
 - i.e. *na-lāk(k)iĕt* 'doesn't allow' but **lāk na-kiĕt*

Hybrid complex verbs (examples): *lāk* (čīdow) and *dāk* (čīdow)

- (41) Mu mūm=ta māš-ard ūžin **dāk-t** (// **dāk(k)iřt**).
my grandmother=FAC us-DAT dinner give.PRS-3SG (// give.PRS.3SG)
'My grandmother will give us dinner.'
- (42) Tu xu ziryot-en **lāk-i** (*// **lāk kin-i**) dis der nařtīd-ow.
you REFL child-PL let.PRS-2SG (*// let do.PRS-2SG) so late leave.INF-INF
'You let your children go out very late.'

Hybrid complex verbs (cont'd): *lāk* (čīdow) and *dāk* (čīdow)

- While mostly (exclusively?) simplex forms are used in the present, simplex and complex forms are widely used for past, perfect, and infinitive forms:

	'to give'		'to let; allow'	
	<u>SIMPLEX</u>	<u>COMPLEX</u>	<u>SIMPLEX</u>	<u>COMPLEX</u>
PST	<i>dākt</i>	<i>dāk čūd</i>	<i>lākt</i>	<i>lāk čūd</i>
PRF	<i>dākč</i>	<i>dāk čūỹj</i>	<i>lākč</i>	<i>lāk čūỹj</i>
INF	<i>dākt(-ow)</i>	<i>dāk čīd(-ow)</i>	<i>lākt(-ow)</i>	<i>lāk čīd(-ow)</i>

- Both simplex and complex forms are possible in the following example:

- (43) Mu mūm=i māš-ard ūžin **dākt** (// **dāk** čūd).
 my grandmother=3SG us-DAT dinner give.PST (// giving do.PST)
 'My grandmother gave us dinner.'

Lāk (čīdow) and *dāk* (čīdow): Past negation

- Regarding negation, *lāk* (čīdow) and *dāk* (čīdow) seem to prefer the negation marker first, even when the light verb *čīdow* 'do' is used:
 - i.e. *na-dākt* or *na-dāk čūd* 'didn't give'; *na-lākt* or *na-lāk čūd* 'didn't give'
 - the forms *dāk na-čūd* and *lāk na-čūd* appear to be less acceptable

- (44) Yā=yi mu-rd wam kitob **na-dāk-čūd** (// *dāk na-čūd).
she=3SG me-DAT DEM.OBL.F book NEG-give-do.PST (// *give NEG-do.PRS.3SG)
'She didn't give me the book.'

- However, examples of negation coming between *dāk* and *čūd* are attested in e.g., Karamshoev (1963) – thanks to Sasha Sergienko for pointing out this example:

- (45) Mu=yen tar wi xez **lāk** **na-čūd**.
me=3PL to his place letting NEG-do.PST
'They didn't let me (go) to him.'

- Outstanding questions:
 - Are there dialectal variations regarding simplex vs. complex usages of these verbs?
 - Are there differences between the usage of *lāk* (čīdow) and *dāk* (čīdow)
 - Are they trending toward simplex or complex usages?

Hybrid verbs: The case of *vārǎêdow* ‘be able to’

- The verb *vārǎêdow* presents another potential case of a hybrid complex verb, but it behaves somewhat differently than *lāk* (č) and *dāk* (č)
 - *vārǎêdow* exhibits a higher degree of *morphosyntactic coalescence*
 - Thanks to Prof. Plungian for this term and for pointing out *vārǎêdow* as a candidate for hybrid complex verbs
 - *Vārǎêdow* displays a few important characteristics:
 - Part of its stem is clearly analyzable as the common light verb *ǎêdow*
 - This part of the stem has an identical paradigm to the light verb, including the contracted 1SG PRS form: *vārǎi-yum* > *vārǎim* ‘I can’
 - Its non-verbal component (NVC or pre-verb) is not a commonly encountered pre-verb reflex (e.g. *fir-/ri-*, *ni-*, etc.), but at the same time is semantically opaque, unlike the NVC of most complex verbs
 - Although native speakers I’ve worked with indicate that negation must precede *vār-*, there are attested examples of negation appearing in between *vār-* and the remainder of the verb; cf. the following from Karamshoev (1988: 299), who calls *vār-* a “separable component” of the verb:
- (46) Yā māš yula-yen firūz vīrt=at yid=ta dam vār na-ǎed.
she us adult-PL annoys=and he=FAC her ability? NEG-fall
‘She annoys us adults, and he (really) can’t stand her.’

A cline of morphosyntactic coalescence in simplex ~ complex verbs

LEAST COMPLEX

MOST COMPLEX

