# Morphological and syntactic alignment in two dialects of Wakhi

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# 1 Morphological versus syntactic alignment

- There is now wide agreement that every language distinguishes grammatical relations systematically, although the mapping from argument structure to grammatical relations is highly diverse across languages and partly unpredictable for any given language.
- SYNTACTIC FUNCTIONS: S intransitive subject, A transitive agent, P transitive patient/object
- GRAMMATICAL RELATIONS: Subject, Object, Oblique...
- Here we will only consider the three primary relations of two types of canonical clauses: arguments of intransitive and transitive predicates.
- An easy English example, two cases for pronouns:

	Singular	Plural			Singular	Plural
1	Ι	we	1	1	me	us
2	you	you	2	2	you	you
3	he/she	they	3	3	him/her	them

Table 1: Case X

Table 2: Case Y

- (1) S of an intransitive clause
  - a. We danced
  - b. \*Us danced

- (2) A AND P OF A TRANSITIVE CLAUSE
  - a. I see him
  - b. \*I see he
  - c. \*Me see him
  - d. \*Me see he
- Schematically, the above pattern can be summarized as:  $S_X$  for an intransitive clause and  $A_X P_Y$  for the transitive clause, i.e. NOMINATIVE-ACCUSATIVE alignment.
- Note that morphological case doesn't always follow the canonical mapping.
- (3) Silly me left the stove on all night.
  - The subject in (3) takes case Y (accusative). Does this reflect something about its actual syntactic status within the clause?
  - Research over the last few decades has shown that morphological case very often diverges from "underlying case" .
  - Today's question: Is Wakhi<sup>1</sup> case superficial, as in (3), or does it reflect the syntactic organization of the clause?

# 2 Case marking and agreement in Murgab and Gojali

- The most unusual feature of Pamiri case systems is the double oblique pattern in which both the A and P argument of a transitive take oblique marking in the past tense.
- Payne (1980) shows how this system has gradually disintegrated through the Pamiri languages.
  - "Of all the Pamir languages, Roshani is the only one to preserve to any great extent the double-oblique case-marking system." Payne (1980, p.182)
  - This is incorrect, however, if we include Gojali Wakhi in our comparison. Gojali Wakhi displays a completely undiluted form of the double oblique pattern in past transitives.

<sup>&</sup>lt;sup>1</sup>Wakhi is a Pamiri language whose dialects are spoken in Ishkashim, Murgab in Tajikistan, parts of the Wakhan corridor of Afghanistan and Gojal in North Pakistan. Bashir (2009), Lorimer (1958), Morgenstierne (1938), Paxalina (1975), and Grunberg and Steblin-Kamensky (1988) are the main contributions to grammatical descriptions of Wakhi.

• Gojali is thus best suited to analyze syntactically for potential differences between nominative and oblique subjects.

### 2.1 Forms

- Two primary cases: Nominative  $\dot{\mathcal{C}}$  oblique
- Two secondary cases built on top of the OBLIQUE: ABLATIVE  $\mathring{\sigma}$  DATIVE

	Singular	Plural		Singular	P
NOMINATIVE	Ø	-i∫t	ABLATIVE	-e-n	-1
BLIQUE	Ø/-e	-ve	DATIVE	-e-r	-1

- The personal pronouns follow the same general pattern: all pronouns except the 3sg and 1PL have distinct forms in the nominative and oblique.
- The ABLATIVE and DATIVE case markers take the OBLIQUE forms as their base, with the apparent addition of the *-e* that marks OBLIQUE case noun phrases.
- There also exists the possibility of using oblique pronouns in combination with the oblique marker *-e*, but this usage is the most difficult to characterize.

Table 5: Nominative pronouns

	Singular	Plural
1	maz-ə-n	sak-e-n
2	taw-e-n	sav-e-n
3	jaw-e-n	jav-e-n

Table 7: Ablative pronouns

	Singular	Plural
1	maz	sak
2	to	sav
3	јо	jav

Table 6: Oblique pronouns

	Singular	Plural
1	maz-ə-r	sak-e-r
2	taw-e-r/tor	sav-e-r
3	jaw-e-r/jor	jav-e-r

Table 8: Dative pronouns

#### 2.2 Functions

- The two dialects under discussion here make very similar use of the ABLATIVE and DATIVE case. Their use of NOMINATIVE and OBLIQUE, however, is surprisingly divergent.
- In Gojali Wakhi, the null nominative case is used to express the subjects of intransitive predicates (in both past and non-past) as well as subjects of transitive predicates in the NON-PAST.
- This pattern, referred to as the DOUBLE OBLIQUE, is shown schematically in (4)-(5-c).
- (4) Gojali INTRANSITIVE NON-PAST PREDICATES a. Subject.nom Pred
  - INTRANSITIVE PAST PREDICATES
  - b. Subject.nom Pred Transitive non-past predicates
  - c. Agent.nom Patient.obl Pred Transitive past predicates
  - d. Agent.OBL Patient.OBL Pred
- (6) INTRANSITIVE NON-PAST Gojali
   wuz=ş gefs-am
   1SG.NOM=PROG run-1SG
   'I run.'
- (8) TRANSITIVE NON-PAST Gojali
   wuz=ş to win-am
   1SG.NOM=PROG 2SG.OBL see-1SG
   'I see you/I am seeing you'

- (5) Murgab
   INTRANSITIVE NON-PAST PREDICATES
   a. Subject.NOM Pred
   INTRANSITIVE PAST PREDICATES
   b. Subject.NOM/OBL Pred
   TRANSITIVE NON-PAST PREDICATES
   c. Agent.NOM Patient.OBL Pred
  - TRANSITIVE PAST PREDICATES
  - d. Agent.NOM/OBL Patient.OBL Pred
- (7) INTRANSITIVE PAST Gojali
   wuz=m gefst-ε 1sg.nom=1sg run.pst-pst 'I ran.'
- (9) TRANSITIVE PAST Gojali maz to wind 1SG.OBL 2SG.OBL see.PST 'I saw you'

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- (10)INTRANSITIVE NON-PAST – Murgab (11) INTRANSITIVE PAST – Murgab gefs-am wuz=ş wuz=m/maz gefst-ε 1SG.NOM=PROG run-1SG 1SG.NOM=1SG/1SG.OBL run.PST-PST 'I ran.' 'I run.' (12)TRANSITIVE NON-PAST – Murgab (13)TRANSITIVE PAST – Murgab taw-i wind wuz=s win-am wuz=m/maz taw-i 1SG.NOM=PROG 2SG.OBL-ACC see-1SG 1SG.NOM=1SG/1SG.OBL 2SG.OBL-ACC SEE.PST 'I see you/I am seeing you' 'I saw you' (14)INTRANSITIVE NON-PAST - Shughni (15)INTRANSITIVE PAST – Shughni ΟZ zoz-im oz=m zaçt 1SG.NOM run-1SG 1SG.NOM=1SG run.PST 'I run.' 'I ran.' (16)TRANSITIVE NON-PAST – Shughni (17)TRANSITIVE PAST – Shughni to win-em wind ΟZ to oz=m 1SG.NOM 2SG.OBL see-1SG 1SG.NOM=1SG 2SG.OBL see.PST
  - The use of the oblique case marker -*e* in Gojali is even more exotic.
  - Within noun phrases, it marks possessors, as the ezafe marker generally does in Iranian languages.

'I saw you'

(18) a.	ja ç <del>i</del> nan-e	∫at∫	b.	ja ç <del>i</del> nan-ve ∫	at∫
	the woman-OBL.SC	G dog		the woman-OBL.PL d	log
	'the woman's dog	,		'the women's dog'	11.14.11

- On arguments, it is never obligatory but can be used optionally on:
  - the patient of a non-past transitive predicate

'I see you/I am seeing you'

- on EITHER argument of a past tense transitive predicate (but not both)!

- (19) INTRANSITIVE PREDICATES (PAST AND NON-PAST) Subject(\*-OBL) Pred
- (20) TRANSITIVE NON-PAST PREDICATES Agent(\*-OBL) Patient(-OBL) Pred
- (21) TRANSITIVE PAST PREDICATES
  - a. Agent(-OBL) Patient Pred
  - b. Agent Patient(-OBL) Pred
  - c. \*Agent-OBL Patient-OBL Pred
- (22) Gojali
  - a. wuz=m to-e win-em 1sg.nom=1sg 2sg.obl-obl see-1sg 'I see you.'
- (23) Gojali
  - a. maz to-e wind 1sg.obl 2sg.obl-obl see.pst 'I saw you.'
  - b. maz-e to wind 1sg.obl-obl 2sg.obl see.pst 'I saw you.'
  - c. \*maz-e to-e wind 1SG.OBL-OBL 2SG.OBL see.PST

# 3 Diagnosing syntactic structure and grammatical relations

## 3.1 Word order

- Agent-Patient-Verb (SOV) order is a very strong tendency in both dialects.
- Scrambling is permitted but, as might be expected, speakers tend to dislike scrambling when case and agreement offer no clues as to Agent-Patient relations.

possible interpreta- tion)		
rind-i		
1sg.nom 2sg.obl-acc see.pst-pst		
rind-i		
e.pst-pst		
i i		

- No differences in ordering possibilities have ever been reported for the double oblique pattern in Pamiri languages, nor, as far as I am aware for ergative subjects in the vast majority of Indo-Iranian languages that display morphological ergativity.
- We have not yet found anything that distinguishes nominative and oblique subjects in the linear order.

# 3.2 Binding

• We examine here reflexives, reciprocals, condition-C effects and the possessive reflexive.

## 3.2.1 Reflexives

- Wakhi shows the expected asymmetry between the Agent and Patient argument in reflexive binding (with a twist).
- (28) Gojali

Maria=s çat wind maria-prog REFL see 'Maria saw herself.' 11.28.11

- Reflexive binding, however, has never been shown in any language to allow the binding of an Agent anaphor by a Patient argument, i.e. even syntactically ergative languages disallow the analogues of *\*Himself saw John*.
- The twist is found in a typologically bizarre (but completely commonplace in Wakhi) construction where reflexive anaphors are found in both the A and P positions.

(29) Gojali

- a. çat=i jezi çat wine-tu self=3sg yesterday self see-prftv 'He saw himself yesterday.'
- b. çat=m jezi çat wine-tu self=1sg yesterday self see-prftv 'I saw myself yesterday.'
- This is exactly what we expect if reflexive anaphora is derived by c-command and the oblique subject and object are in a mutual c-command relationship!
- Things of course, are not so simple: the construction also exists in the non-past, where we wouldn't have an oblique subject.

(30) Gojali

- a. çat=ş çat wind SELF=PROG SELF see.3sG 'He sees himself.'
- b. çat=ş çat win-em SELF=PROG SELF see-1SG 'I see myself.'
- Nonetheless, the double reflexive construction offers an unexpected symmetry between the subject and object which could be relevant.

#### 3.2.2 Reciprocals

- Reciprocals behave in a more expected fashion
- The relation between the reciprocal anaphor *loman/joman* (Gojali/Pamiri) and its antecedent is strictly asymmetric.

#### (31) Murgab

- a. sak=s joman-i win-en 1PL.NOM=PROG each.other-ACC see-1PL 'We see each other.'
- b. \*joman=s sak-i win-en each.other=prog 1PL.NOM-ACC see-1PL
- c. \*joman joman-i win-en each.other each.other-acc see-1PL
- (32) Murgab
  - a. sak=en joman-i wind-i 1PL=1PL each.other-ACC see.PST-PST 'We saw each other.'
  - b. \*joman=en sak-i wind-i each.other=1pl 1PL-ACC see.PST-PST
  - c. \*joman=en joman-i wind-i each.other=1pl each.other-acc see.PST-PST
  - Facts appear identical in Gojali: order does not effect grammaticality
- (33) Gojali
  - a. ja∫t=ş loman win-en 3PL.NOM=PROG each.other see-3PL 'They see each other.'
  - b. loman=ş ja∫t win-en each.other=prog 3pl.NOM see-3pl 'They see each other.'
  - but the antecedent must be A and the anaphor must be P
- (34) Gojali
  - \*loman=s jav win-en each.other=prog 3pl.obl see-3pl
- (35) Gojali
  - a. ja∫t=ş loman win-en 3PL.NOM=PROG each.other see-3PL

'They see each other.'

 b. loman=s ja∫t win-en each.other=prog 3pl.nom see-3pl
 'They see each other.'

#### 3.2.3 The possessive reflexive

- Many Iranian languages have two different possessive pronouns, a SELF/REFL possessor and a plain third person.
- Haig (1998) has shown that ergativity in Kurdish does not interact at all with the interpretation of the SELF possessor.
- (36) *Kurmanci Kurdish* (Haig, 1998)
  - a. cotkar  $kur_j$ -î di-şîn-e mal-a xwe farmer:DIR boy-OBL DUR-send-3SG house-LK:FEM REFL 'The farmer<sub>i</sub> sends the boy to his<sub>i</sub> house.'
  - b.  $\operatorname{cotkar}_i$ - $\hat{i}$  kur $_j$  sand mal-a xwe $_i$ farmer-OBL boy:DIR send:PAST(3SG) house-LK:FEM REFL 'The farmer sends the boy to his house.'
  - In Murgab the reflexive possessor is *çe* and in Gojali *çu*.
  - The following shows that past tense and non-past tense subjects behave as obligatory antecedents for the SELF possessor.

#### (37) Murgab

- a. ja mayoze-t $\int i=s$  ja kas-i tam-xun støjd DET store-AGTNMLZR=PROG DET boy-ACC to.3SG.GEN house send.3SG 'The storekeeper<sub>i</sub> sends the boy<sub>j</sub> to his<sub>j</sub> house.'
- b. ja mayoze-t $\int i=s$  ja kas-i tə çə-xun støjd DET store-AGTNMLZR=PROG DET boy-ACC to SELF.GEN house send.3sG 'The storekeeper<sub>i</sub> sends the boy<sub>j</sub> to his<sub>i</sub> house.'
- (38) Murgab
  - a. ja mayoze-t∫i ja kaş-i tam xun stət-i DET store-AgtNMLZR DET boy-ACC to.3sg.gen house send.pst-pst

'The storekeeper<sub>*i*</sub> sent the boy<sub>*j*</sub> to his<sub>*j*</sub> house.'

b. ja mayoze-t $\int i$  ja kaş-i tə çə xun stəti DET store-AGTNMLZR DET boy-ACC to SELF.GEN house send.PST-PST 'The storekeeper<sub>i</sub> sent the boy<sub>i</sub> to his<sub>i</sub> house.'

#### (39) Gojali

- a. ja dukondor ja kas tram xun remet DET storekeeper DET boy to.3sG.GEN house send.3sG 'The storekeeper<sub>i</sub> sends the boy<sub>i</sub> to his<sub>i</sub> house.'
- b. ja dukondor ja kas tra çu xun remet DET storekeeper DET boy-ACC to SELF.GEN house send.3sG 'The storekeeper<sub>i</sub> sends the boy<sub>j</sub> to his<sub>i</sub> house.'

#### (40) Gojali

- a. ja dukondor ja kas tram xun remet-tu DET storekeeper DET boy to.3SG.GEN house send.PST-PRFCT 'The storekeeper<sub>i</sub> sent the boy<sub>i</sub> to his<sub>i</sub> house.'
- b. ja dukondor ja kas tra çu xun remet-tu DET storekeeper DET boy-ACC to SELF.GEN house send.PST-PRFCT 'The storekeeper<sub>i</sub> sent the boy<sub>i</sub> to his<sub>i</sub> house.'

#### 3.2.4 Bound variables and condition C

• In the basic cases, linear order does not seem to effect binding relations. In (41-b), where the object is scrambled to precede the subject, the binding relations still hold, i.e. the identity of "her mother" co-varies with each daughter.

#### (41) Murgab

- a. kuli ðojd çe nan-er jordam tsart every daughter SELF.GEN mother-DAT help DO.3SG 'Every daughter helps her mother.'
- b. çe nan-er kuli ðojd jordam tsart self.gen mother-dat every daughter help do.3sg 'Every daughter helps her mother.'
- Reversing the grammatical relations here, leaving *çe* REFL in the subject position renders the sentence ungrammatical regard less of linear order.

#### (42) Murgab

- a. \*çe nan kuli ðojd-er jordam tsart SELF.GEN mother every daughter-DAT help do.3sG
- b. \*kuli ðojd-er çe nan jordam tsart every daughter-dat self.gen mother help do.3sg
- Neither past tense nor linear order ameliorate the unacceptability of having *çe* as an A argument, as shown in (43) and (44).

#### (43) Murgab

- a. \*çe nan Hassan-i adzi dust ðurd SELF.GEN mother Hassan-ACC very love LightV.3sG
- b. \*Hassan-i çe nan adzi dust ðurd Hassan-ACC SELF.GEN mother very love LightV.3sG

#### (44) Murgab

- a. \*çe nan Hassan-i adzi dust ðord-i self.gen mother Hassan-Acc very love LightV.pst-pst
- b. \*Hassan-i çe nan adzi dust ðord-i Hassan-ACC SELF.GEN mother very love LightV.PST-PST

### 3.3 Scope

- We might expect nominative and oblique subjects to behave differently in regard to scope if they are at associated with different syntactic positions.
- This would mean that past tense subjects would have different scopal properties than non-past tense subjects, an unlikely situation.
- Yet, this is exactly what Anand and Nevins (2006) claim for Hindi. They assert that the ergative construction in the perfective does not allow for 'inverse scope'.
- NB: I haven't found anyone who confirms this judgment.

#### (45) *Hindi* (Anand and Nevins, 2006)

a. koi shaayer har ghazal likhtaa hai some poet.NOM every song.ACC write.m-IMPF be-PRES 'Some poet writes every song.' (∃>∀, ∀>∃)  b. kisii shaayer-ne har ghazal likhii some poet-ERG every song.NOM write.f-PERF 'Some poet writes every song.' (∃>∀, \*∀>∃)

#### 3.3.1 Indefinites and negation

#### (46) Murgab

- a. ji kaş xun-i toza ne-kert-i
  one boy house-ACC clean NEG-do.PST-PST
  'One boy didn't clean the house.' (??NEG>one, one>NEG)
- b. ji kaş be xun-i toza ne-kert-i one boy also house-ACC clean NEG-do.PST-PST
  'Not one boy cleaned the room.' (NEG>one, \*one>NEG)

#### (47) Murgab

- a. ji kaş xun-i toza ne-tsart
  one boy house-Acc clean NEG-do.3sG
  'One boy won't clean the house' (??NEG>one, one>NEG)
- b. ji kaş be xun-i toza ne-tsart
  one boy also house-ACC clean NEG-do.3SG
  'Not one boy will clean the house' (NEG>one, \*one>NEG)

#### 3.3.2 Indefinite pronouns and quantifiers

#### (48) Murgab

- a. kujkitsøj jan de kuli pert∫od-en raqs tsart someone.spec FUT with every girl-ABL dance do.3sG 'Someone danced with every girl.' (∃>∀, \*∀>∃)
- b. kujkitsøj de kuli pert∫od-en raqs kert-i someone.SPEC with every girl-ABL dance do.PST-PST 'Someone danced with every girl.' (∃>∀, \*∀>∃)
- However, when we begin to examine scope relations with indefinite pronouns we find that they are lexically determined.
- *kujkitsøj* always takes wide scope (i.e. as a specific indefinite) while *jitf kuj* must always take narrow scope in relation to another operator.

#### (49) *Murgab*

- a. kujkitsøj taw-i perst-i someone.spec 2sg.obl-ACC ask-pst 'Someone asked for you.'
- b. jit∫ kuj ma-r perst-i=a?
   any who 1sG.OBL-DAT ask-PST=QM
   'Did someone ask for me?'

(50) Murgab

%kujkitsøj ma-r perst-i=a? someone.spec 1sg.obl-dat ask-pst=qm 'Someone asked for me?' (OK in echo context)

• The example in (51-a) is bad for precisely the same reason English, \**Anyone asked for you* is unacceptable, it requires a higher operator (e.g. negation, modal, interrogative, etc.).

(51) Murgab

- a. \*jit∫ kuj taw-i perst-i any who 2sg.obl-Acc ask-pst
- b. jit∫ kuj taw-i ne-perst-i any who 2sg.obl-ACC Neg-ask-pst 'Nobody asked for you.'

• The following interactions with negation are also predicted if *kujkitsøj* must be specific and *jitf kuj* requires narrow scope.

#### (52) Murgab

- a. jit∫ kuj=ş da-n-en raqs ne-tsart any who=prog with-3sg-ABL dance NEG-do.3sg 'No one is dancing with her.'
- b. kujkitsøj=s da-n-en raqs ne-tsart someone.spec=prog with-3sg-Abl dance Neg-do.3sg 'There is someone who is not dancing with her.'

# 3.4 Coordination

- Assuming a verb-phrase constituent as in (53), we expect an asymmetry in what terminals can be coordinated.
- In particular we expect Verb+Complement coordination should be possible but Subject+Verb coordination should not be possible (without elision of an underlying complement).



• V'COORDINATION lookes like (54) in English



- Can V'coordination help us distinguish different positions for the nominative and oblique subject in Wakhi?
- There are complications!
  - First of all, as shown in (55) and (57) neither dialect allows bare past tense verbs without 2P clitics, making these clitics closer to detached agreement markers than pronominal arguments. (Same is true for Shughni.)

			Gojali	Murgab
(55)	wuz=m jit= 1sg.nom=1sg eat. 'I ate and ran.'	et gefste PST=CONJ run.PST	×	x
(56)	wuz=m jit= 1sg.nom=1sg eat. 'I ate and ran.'	et gefste=m PST=CONJ run.PST=1SG	×	OK
(57)	maz jit=et 1sg.овь eat.psт=c 'I ate and ran.'	gefste CONJ run.PST	×	x
(58)	maz jit=et 1sg.obl eat.pst=c 'I ate and ran.'	gefste=m CONJ run.PST=1SG	OK	OK

• As a result, we don't know what data like (59) really tells us.

				Gojali	Murgab
(59)	wuz=m	gefste=t	jit=m		
	1SG.NOM= $1$	lsg run.pst=co	NJ eat.PST=1SG	OK	OK
	ʻI ran and	ate.'		011	011

• Does this represent coordination of two V's under a single subject, as in (60), or is there a null oblique subject in the second conjunct, as in (61)?



(60)



# 3.5 Sub-extraction

- Sub-extraction proves to be an interesting diagnostic tool in English and other languages due to a universal tendency for subjects to constitute islands.
  - (62) TOPICALIZATION
    - a. [About dolphins]<sub>i</sub>, I read a [book  $t_i$ ] once.
    - b. \*[About dolphins]<sub>*i*</sub>, [a book  $t_i$ ] bothered me once.
  - (63) Wh- movement
    - a. [About what]<sub>*i*</sub> did he make [a movie  $t_i$ ]?
    - b. \*[About what]<sub>*i*</sub> did [a movie  $t_i$ ] win an emmy?
- However, it appears impossible to find a context that allows any kind of sub-extraction in Wakhi. Interrogatives are in-situ in Pamiri so *wh*-movement can't help us here.
- (64) Murgab

jet rangin xalg this kind person 'this kind of person'

#### (65) Murgab

- a. wuz xo:li jet raŋgin xalg-ver jordam tsar-em 1sg.nom always det.dist kind person-pl.dat help LightV-1sg 'I always help these kinds of people.'
- b. jet raŋgin, wuz xo:li xalg-ve-r jordam tsar-em DET.DIST kind 1SG.NOM always person-PL.DAT help LIGHTV-1SG 'That way, I help the people all the time.' Not, 'These kinds of people, I always help.'
- (66) Murgab
  - a. wuz xo:li fırbε maj xrid tsar-em 1sg.NOM always fat sheep buy LIGHTV-1sg 'I always buy fat sheep.'
  - b. \*firb $\varepsilon_i$  wuz xo:li [ $t_i$  maj] xrid tsar-em fat 1SG.NOM always sheep buy LIGHTV-1SG

#### (67) Murgab

- a. wuz bu maj xrid tsar-em 1sg.noм two sheep buy LigнтV-1sg 'I will buy two sheep.'
- b.  ${}^{*}$ bu(j)<sub>i</sub> wuz [ $t_i$  maj] xrid tsar-em two 1sg.nom sheep buy LIGHTV-1sg

#### (68) Murgab

- a. Hasan tsum maj xrid kert-i? Hasan how.many sheep buy LIGHTV.PST-PST 'How many sheep did Hassan buy?'
- b. \*tsum<sub>i</sub> Hasan [t<sub>i</sub> maj] xrid kert-i? how.many Hasan sheep buy LIGHTV.PST-PST
- (69) Gojali
  - a. ??dʒaŋg bara jezi ji kitob maz dʒojd
    war about yesterday one book 1sg.obl read.pst
    'About war, I read a book yesterday.' ('OK, but not really OK')
  - b. ??dʒaŋg bara jezi ji kitob maz periſon goçt
     war about yesterday one book 1sg.obl bother make.pst
     'About war, a book bothered me yesterday.' ('OK, but not really OK')

#### (70) Gojali

- a. ??dʒaŋg bara jezi ji kitob maz peri∫on goçt
   war about yesterday one book 1sg.obl bother make.pst
   'About war, a book bothered me yesterday.'
- b. ??dʒaŋg bara jakinan kitob maz periſon goçt war about definitely one book 1sg.obl bother make.pst 'About war, a book definitely bothered me'

### 3.6 Discourse anaphora

- The interpretation of null anaphora has been shown to be sensitive to grammatical relations in a number of languages.
- Haig (1998) shows that (with a small caveat) the interpretation of null anaphora in Kurmanci Kurdish, a morphologically ergative language (both in case and agreement), does not interact with tense or morphological marking. The A argument is always the preferred antecedent
- (71) *Kurmanci Kurdish* (Haig, 1998)
  - a.  $jin_i$  cotkar- $\hat{i}_j$  di-bîn-e  $\hat{u}$  paşê  $\emptyset_{i/*j}$  tere bazar-ê woman farmer-OBL DUR-see:PRES-3SG and then go:PRES.3SG market-OBL 'the woman sees/meets the farmer then  $\emptyset$  goes to the market.'
  - b.  $jin-\hat{e}_i$   $cotkar_j$  dît  $\hat{u}$   $paş\hat{e} \phi_{i/*j}$  ç $\hat{u}$  bazar- $\hat{e}$ woman-OBL farmer see:PST(3SG) and then go:PAST.3SG market-OBL 'the woman saw/met the farmer then  $\phi$  goes to the market.'
  - Again we find that the facts are similar for Wakhi
  - In the simplest case, coreference of a null/clitic anaphor with a preceding P argument is impossible, as shown in (72).
- (72) Murgab
  - a. ja çinan=ş ja t∫upon-i wind=xə jan=i bozor rujd DEF woman=PROG DEF shepherd-ACC see.3sG=then FUT=3sG market go.PST 'The woman sees the shepherd and then (she/\*he) will go to the market.'
  - b. ja çinan ja t∫upon-i wind-i=xə bozor=i rujd
     DEF woman DEF shepherd-ACC see.PST-PST=then market=3sG go.PST
     'The woman saw the shepherd and then (she/\*he) went to the market.'

- Note however that this is not a hard constraint but rather only comes into play when there are two competing antecedents. In (73), we find reference back to the P argument when the A argument is not third person.
- (73) Murgab

wuz=m ja tſupon-i wind-i=xə bozor=i rujd 1sG.NOM=1SG DEF shepherd-ACC see.PST-PST=then market=3SG gO.PST 'I see the shepherd and then (he) goes to the market.'

- Same pattern for Gojali. (Note that in Gojali this is true null anaphora.)
- To get coreference with a P in case both A and P are third person, a full pronoun has to be used.
- The facts are identical for both past tense clauses (74) and non-past tense clauses (75).

#### (74) Gojali

- a. ja çinan ja ðaj wind=çe tra bozor regda DEF woman DEF man see.PST=then to market go.PST 'The woman<sub>i</sub> saw the man<sub>j</sub> and  $\emptyset_i$  went to the market.'
- b. ja çinan ja ðaj wind=çe jow tra bozor regda DEF woman DEF man see.PST=then 3sG.NOM to market go.PST 'The woman<sub>i</sub> saw the man<sub>j</sub> and  $\emptyset_j$  went to the market.'

#### (75) Gojali

- a. ja çinan=ep ja ðaj wind=çe tra bozor=ep reşt DEF woman=FUT DEF man see.3sG=then to market=FUT go.3sG 'The woman<sub>i</sub> will see the man<sub>i</sub> and then  $\emptyset_i$  go to the market.'
- b. ja çinan=ep ja ðaj wind=çe jow=ep tra bozor reşt DEF woman=FUT DEF man see.3sG=then 3sG.NOM=FUT to market go.3sG 'The woman<sub>i</sub> will see the man<sub>i</sub> and then  $\emptyset_i$  go to the market.'

• This is also a soft constraint in Gojali, where coreference with P is possible without a competitor.

- (76) Gojali
  - a. maz ja t∫ipin wind=çe jow tra bozor regda
    1SG.OBL DEF shepherd see.PST=then to market go.PST
    'I see the shepherd and then (he) goes to the market.'

• The following facts show a similar pattern for the interpretation of a null anaphor as P in the second clause.

#### (77) Murgab

- a. ja çinan pe bozor ruşt=xə ja t∫upon-i wind DEF woman to.UP market go.3sG=then DEF shepherd-ACC see.3sG 'The woman goes to the market and sees the shepherd.'
- b. ja çinan pe bozor ruşt=xə ja t∫upon wind DEF woman to.UP market go.3sG=then DEF shepherd see.3sG
  'The woman goes to the market and the shepherd sees.' or
  'The woman goes to the market and sees the shepherd.' (unmarked accusative) but NOT, 'The woman goes to the market and the shepherd sees her.'
- Surprisingly, null anaphora even seems to be possible for a P argument in the second clause in Murgab *when there is no competing A antecedent.* (This has not been tested yet for Gojali.)
- Note that the object *maz* is optional in (78).
- (78) Murgab

wuz=m bozor tsə rujd-i ja tſupon (maz) wind-i 1sg.NOM=1sg market when go.PST-PST DEF shepherd 1sg.OBL see.PST-PST 'When I went to the market the shepherd saw me.'

# 3.7 Raising

- The strict selection of raising predicates for either subject or object has provided an excellent diagnostic for grammatical relations in other languages.
- (79) SUBJECT-TO-SUBJECT RAISING
  - a. It seems that John likes you.
  - b. John<sub>*i*</sub> seems  $t_i$  to like you.
  - c. You<sub>i</sub> seem John likes/to like  $t_i$

#### (80) OBJECT-TO-SUBJECT RAISING

- a. It's easy to fool John.
- b. John<sub>*i*</sub> is easy to fool  $t_i$ .
- c. \*John<sub>*i*</sub> is easy  $t_i$  to fool you.

#### 3.7.1 qrib 'close'

- A potential raising pattern is found in (81-b).
- (81) Murgab Wakhi
  - a. qrib=i ki uz taw(-i) di-m close=3sg comp 1sg.nom 2sg-Acc hit-1sg 'It's close that I hit you.' ('I'm close to hitting you.')
  - b.  $uz_i$  qrib ki  $t_i$  taw(-i) di-m 1SG.NOM close COMP 2SG-ACC hit-1SG 'I'm close to hitting you .'
  - c. \*uz qrib ki uz taw(-i) di-m 1sg.nom close comp 1sg.nom 2sg-acc hit-1sg
  - In fact, this turns out to be mere scrambling.
  - We would expect a 2P clitic if *uz* was really an argument of *qrib*.
  - Note also that the lower predicate still agrees with 1st person.
  - (82) shows an unambiguous case of scrambling.
- (82) Murgab

taw-i qrib=i ki uz di-m 2sg-Acc close=3sg comp 1sg.nom hit-1sg 'It's close that I hit you.' ('I'm close to hitting you.')

### 3.7.2 səðuid 'to seem'

- Predicates with the meaning 'appear, seem' often offer good candidates for raising verbs.
- The Wakhi verb səðuid/sdujd looks like one such candidate.

(83) Gojali

jɛ-m jərk=sɛ ma·z-ər bʌf səðʉid DET-PROX work=PROG 1SG.OBL-DAT good appears 'This appears good to me.' (Lorimer, 1958, p.111) • (84) shows *sduj* can agree with its subject in the meaning 'to be visible'.

#### (84) Murgab

- a. tu=s mar sdʉj 2sg.nom=prog 1sg-dat seem.2sg 'You're visible to me.'
- Raising seems to obtain from a non-verbal predicate in (85-b).
- Note that the apparent raising verb *sdujd* agrees with the subject in (85-b) for 2sG

#### (85) Murgab

- a. ma-r sdujd tu=t xi∫ 1sg-dat seem.3sg 2sg.nom=2sg happy 'It looks to me like you're happy.'
- b. tu=ş ma-r xi∫ sduj 1sg.nom=prog 1sg-dat happy seem.2sg 'You look happy to me.'
- Crucially though, this is impossible with a lower verbal predicate.
- The sentence (86-a) clearly instantiates scrambling as evidenced by the third person agreement on  $sd{\it ujd}$
- Agreement with second person is ungrammatical, as shown in (86-b)
- The same can be seen in (87).

#### (86) Murgab

- a. tu=s ma-r sdʉjd jaw win-i 2sg.NOM=PROG 1sg-DAT seem.3sg 3sg see-2sg 'It looks to me like you see him.'
- b. \*tu=s ma-r sdʉj jaw win-i 2sg.nom=prog 1sg-dat seem.2sg 3sg see-2sg
- (87) Murgab
  - a. taw-i ma-r dzi sdʉjd jaw wind-i 2SG.OBL-ACC 1SG-DAT COMP seem.3SG 3SG see.PST-PST 'It seems to me that he saw you.'

b. \*tu=t ma-r (dzi) sdʉj jaw (taw-i) wind-i 2sg.nom=2sg 1sg-dat comp seem.2sg 3sg 2sg-acc see.pst-pst

# 3.8 Secondary predication

• We've only begin to look at the possibilities for secondary predication.

(88) Gojali

- a. maz jo tun wind 1sg.obl 3sg drunk see.pst 'I saw him drunk.' (\*Agent, Patient)
- b. wuz=ep jo tun win-em 1sg.Nom=FUT 3sg drunk see-1sg 'I will see him drunk.' (\*Agent, Patient)
- (89) Gojali

\*jo maz-e tun ka:l goçt 3sg 1sg.овг-овг drunk call make.psт She called me drunk

(90) Gojali

tu=\$ tun drajv tsart 2sg.nom=prog drunk drive LightV.3sg 'He is driving drunk.'

# 4 Conclusion

- The most interesting thing about the preceding facts is not that an exotic alignment pattern is underlyingly like English but rather *how few cues there are for grammatical relations*.
- Things that are done syntactically in English are done morphologically in Pamiri, e.g. Passive, elements of reflexive binding.

# 5 Appendix: Transitive and intransitive agreement patterns

Subject	Past	Perfective	Imperfective
1SG	maz jo diç-t	maz jo diε-tu	wuz jo di-m
2sg	to jo diç-t	to jo diε-tu	tu jo di
3sg	jo jo diç-t	jo jo diε-tu	jo jo diç-t
1pl	sak jo diç-t	sak jo diɛ-tu	sak jo di-n
2pl	sav jo diç-t	sav jo diε-tu	sa∫t jo di-j1t
3pl	jav jo diç-t	jav jo diɛ-tu	ja∫t jo di-n
'The sheep'	ja maj jo diç-t	ja maj jo diε-tu	ja maj jo diç-t

Table 9: Gojali: to hit him

Subject	Past	Perfective	Imperfective
1sg	wuz=m gɛzda	wuz=m gɛs-tu	wuz giz-əm
2sg	tu=t gεzda	tu=t gεs-tu	tu giz
3sg	jo gɛzda	jo gɛs-tu	jo giz-d
1pl	sak=ən gɛzda	sak=ən gɛs-tu	sak giz-ən
2pl	sa∫t=əv gεzda	sa∫t=əv gεs-tu	sa∫t giz-it
3pl	ja∫t=əv gεzda	ja∫t=əv gεs-tu	ja∫t giz-ən
'The sheep'	ja maj gɛzda	ja maj gɛs-tu	ja maj giz-d

Table 10: Gojali: to rise

Subject	Past	Perfective	Imperfective
1SG	uz=m jaw-i diçt-i	uz=m jaw-i diɛ-tu maẓ jaw-i diɛ-tu	uz jaw-i di-m
2sg	tu=t jaw-i diçt-i	tu=t jaw-i diε-tu to jaw-i diε-tu	tu jaw-i di
3sg	jaw jaw-i diçt-i	jaw jaw-i diɛ-tu	jaw jaw-i diçt
1pl	sak=ən jaw-i diçt-i	sak=ən jaw-i diɛ-tu	sak jaw-i di-n
2pl	saji∫ jaw-i diçt-i	saji∫ jaw-i diε-tu *sav jaw-i diε-tu	saji∫ jaw-i di-v
3pl	jawi∫ jaw-i diçt-i	jawi∫ jaw-i diε-tu jaw diwol-i diε-tu	jawi∫ jaw-i di-n
'the wall'	jaw ja diwol-i diçt-i	*jav jaw-i diɛ-tu	jaw diwol-i diçt

## Table 11: Pamiri: to hit him

Subject	Simple Past	Perfective	Imperfective
1sg	uz=m gøz-di	uz=m gøs-tu maz gøs-tu	uz giz-im
2sg	tu=t gøz-di	tu=t gøs-tu to gøs-tu	tu giz-i
3sg	jaw gøz-di	jaw gøs-tu	jaw giz-d
1pl	sak=ən gøz-di	sak=ən gøs-tu	sak giz-ən
2pl	saji∫ gøz-di	saji∫ gøs-tu *sav gøs-tu	saji∫ giz-əv
3pl	jawi∫ gøz-di	jawi∫ gøs-tu *jav/jawi∫ gøs-tu	jawi∫ giz-ən

Table 12: Pamiri: to stand

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