# 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 |
| :--- | :--- | :--- |
| $\mathbf{1}$ | I | we |
| $\mathbf{2}$ | you | you |
| $\mathbf{3}$ | he/she | they |

Table 1: Case X

|  | Singular | Plural |
| :--- | :--- | :--- |
| $\mathbf{1}$ | me | us |
| $\mathbf{2}$ | you | you |
| $\mathbf{3}$ | him/her | them |

Table 2: Case Y
(1) S of an intransitive clause
a. We danced
(2) A and P of a transitive clause
b. *Us danced
a. I see him
b. *I see he
c. *Me see him
d. *Me see he

- Schematically, the above pattern can be summarized as: $\mathrm{S}_{X}$ for an intransitive clause and $\mathrm{A}_{X} \mathrm{P}_{Y}$ 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 ${ }^{1}$ 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.

[^0]- Gojali is thus best suited to analyze syntactically for potential differences between nominative and oblique subjects.


### 2.1 Forms

- Two primary cases: nominative dr oblique
- Two secondary cases built on top of the obliQue: ablative ひூ dative

|  | Singular | Plural |
| :---: | :--- | :--- |
| nominative | $\varnothing$ | -i ft |
| Oblique | $\varnothing /-\mathrm{e}$ | -ve |

Table 3: Primary cases

|  | Singular | Plural |
| :---: | :--- | :--- |
| Ablative | -e-n | -ve-n |
| DATIve | -e-r | -ve-r |

Table 4: Secondary cases

- 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.

|  | Singular | Plural |
| :--- | :--- | :--- |
| $\mathbf{1}$ | wuz | sak |
| $\mathbf{2}$ | tu | saft |
| $\mathbf{3}$ | jo | jaft |

Table 5: Nominative pronouns

|  | Singular | Plural |
| :---: | :---: | :--- |
| $\mathbf{1}$ | maz-a-n | sak-e-n |
| $\mathbf{2}$ | taw-e-n | sav-e-n |
| $\mathbf{3}$ | jaw-e-n | jav-e-n |

Table 7: Ablative pronouns

|  | Singular | Plural |
| :--- | :--- | :--- |
| $\mathbf{1}$ | maz | sak |
| $\mathbf{2}$ | to | sav |
| $\mathbf{3}$ | jo | jav |

Table 6: Oblique pronouns

|  | Singular | Plural |
| :--- | :--- | :--- |
| $\mathbf{1}$ | maz-ə-r | sak-e-r |
| 2 | taw-e-r/tor | sav-e-r |
| $\mathbf{3}$ | 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
$\mathbf{w u z}=\mathbf{s}$ gefs-am
1SG.NOM=PROG run-1SG
'I run.'
(8)
(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

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intransitive past - Gojali
wuz=m gefst- \(\varepsilon\)
1SG.NOM=1SG run.PST-PST
'I ran.'
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wuz=s to win-am
1sG.NOM=PROG 2SG.OBL see-1sG
'I see you/I am seeing you'
transitive past - Gojali
maz to wind
1sG.obl 2SG.OBL see.PST
'I saw you'
transitive non-past - Murgab
wuz=s taw-i win-am
1SG.NOM=PROG 2SG.OBL-ACC See-1SG
'I see you/I am seeing you'
intransitive non-past - Shughni
oz 3oz-Im
1sG.nOM run-1sG
'I run.'
(16)
transitive non-past - Shughni
oz to win-em
1sG.nom 2sg.obl see-1sg
'I see you/I am seeing you'
wuz=s gefs-am
1sG.NOM=PROG run-1SG
'I run.'
transitive past - Murgab
wuz $=\mathrm{m} / \mathrm{maz}_{z}$ taw-i wind 1SG.NOM=1SG/1SG.OBL 2SG.OBL-ACC see.PST 'I saw you'
INTRANSITIVE PAST - Shughni

| oz $=\mathrm{m} \quad$ 3açt |
| :--- |
| 1SG.NOM=1SG run.PST |
| 'I ran.' |

transitive past - Shughni
$\mathbf{o z}=\mathbf{m}$ to wind
1sG.NOM=1SG 2SG.OBL see.PST
'I saw you'

- 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.
(18)
ja çinan-e fatf the woman-obl.sG dog
'the woman's dog'
b. ja çinan-ve fat $\int$ the woman-obl.pl 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
- 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.
(24) Gojali
a. wuz taw win-em

1SG.NOM 2SG.OBL see-1SG
'I see you.'
b. taw wuz win-em

2SG.OBL 1SG.NOM see-1SG
'I see you.'
(26) Murgab
a. wuz=s taw-i win-em

1SG.NOM=PROG 2SG.OBL-ACC see-1SG
'I see you.'
b. taw-i=s wuz wind-i

2SG.OBL-ACC=PROG 1SG.NOM See.PST-PST
'I see you.'

Gojali
maz taw wind
1SG.OBL 2SG.OBL see.PST
'I see you.'
('You see me' may be a possible interpretation with proper intonation)
(27) Murgab
a. wuz taw-i wind-i

1SG.NOM 2SG.OBL-ACC see.PST-PST 'I saw you.'
b. taw-i wuz wind-i

2SG.OBL-ACC 1SG.NOM See.PST-PST
'I saw you.'

- 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).

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 fohn.
- 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.
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.

Gojali
a. çat=s çat wind

SELF=PRog SELf see.3SG
'He sees himself.'
b. çat=s 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)
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
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 $=1$ pl 1Pl-ACC see.PST-PST
c. *joman=en joman-i wind-i each.other $=1 \mathrm{pl}$ each.other-acc see.PST-PST

- Facts appear identical in Gojali: order does not effect grammaticality

Gojali
a. jaft=s loman win-en 3PL.NOM=PROG each.other see-3PL 'They see each other.'
b. loman=s jaft 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. jaft=s loman win-en

3PL.NOM=PROG each.other see-3PL
'They see each other.'
b. loman=s jaft 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 $\operatorname{kur}_{j}$-î di-şinn-e mal-a xwe farmer:DIR boy-Obl DUR-send-3SG house-LK:FEM REFL 'The farmer ${ }_{i}$ sends the boy to his $_{i}$ house.'
b. $\operatorname{cotkar}_{i}-\hat{1} \quad \operatorname{kur}_{j}$ sand mal-a $\mathrm{xwe}_{i}$ 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 $\int \mathrm{i}=\mathrm{s}$ ja kas-i tam-xun støjd det store-AgtNmlzr=Prog det boy-Acc to.3sg.gen house send.3sg 'The storekeeper ${ }_{i}$ sends the boy $_{j}$ to his $_{j}$ house.'
b. ja mayoze-t $\int \mathrm{i}=\mathrm{s}$ ja kaş-i tə çə-xun støjd det store-AgTNMlZR=Prog det boy-ACC to SElf.gen house send.3sG 'The storekeeper ${ }_{i}$ sends the boy $_{j}$ to his $_{i}$ house.'
(38) Murgab
a. ja mayoze-t j i ja kaş-i tam xun stat-i
det store-AgtNmlzr det boy-Acc to.3sg.gen house send.pst-PSt
'The storekeeper ${ }_{i}$ sent the boy $_{j}$ to his ${ }_{j}$ house.'
b. ja mayoze-t i ja kaş-i tə çə xun stəti
det store-AgtNmlzr det boy-acc to self.gen house send.pst-pst
'The storekeeper ${ }_{i}$ sent the boy $_{j}$ to his ${ }_{i}$ house.'
Gojali
a. ja dukondor ja kas tram xun remet

DET storekeeper DET boy to.3sg.gen house send.3sG
'The storekeeper ${ }_{i}$ sends the boy $_{j}$ to his $_{j}$ house.'
b. ja dukondor ja kas tra çu xun remet

DET storekeeper DEt boy-ACC to SElf.GEN house send.3sG
'The storekeeper ${ }_{i}$ sends the boy $_{j}$ to his $_{i}$ 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 ${ }_{i}$ sent the boy $_{j}$ to his $_{j}$ house.' $^{\text {. }}$
b. ja dukondor ja kas tra çu xun remet-tu

DET storekeeper DET boy-ACC to SELF.GEN house send.PST-PRFCT
'The storekeeper ${ }_{i}$ sent the boy $_{j}$ to his ${ }_{i}$ 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.
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.


## 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).


## 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

## 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. 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.' ( $\exists>\forall, \forall>\exists$ )
b. kisii shaayer-ne har ghazal likhii some poet-ERG every song.NOM write.f-PERF
'Some poet writes every song.' ( $\exists>\forall,{ }^{*} \forall>\exists$ )


### 3.3.1 Indefinites and negation

(46) Murgab
a. ji kas 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 kas 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)
Murgab
a. ji kas 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 kas 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

## 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.' ( $\left.\exists>\forall,{ }^{*} \forall>\exists\right)$
b. kujkitsøj de kuli pertfod-en raqs kert-i
someone.spec with every girl-ABL dance do.pst-PST
'Someone danced with every girl.' ( $\exists>\forall,{ }^{*} \forall>\exists$ )

- 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 $j i t \int k u j$ must always take narrow scope in relation to another operator.
(49)
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 jit§ kuj requires narrow scope.
(52) Murgab
a. jit $\int \mathrm{kuj}=\mathrm{s}$ 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
(54)

- Can $V^{\prime}$ 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)
maz jit=et gefste $=\mathrm{m}$
1sG.OBL eat.PST=CONJ run.PST=1SG
'I ate and ran.'
1SG.NOM=1SG eat.PST=CONJ run.PST
'I ate and ran.'
wuz $=\mathrm{m} \quad$ jit $=$ et $\quad$ gefste $=m$
$1 \mathrm{SG} . \mathrm{NOM}=1 \mathrm{SG}$ eat.PST=CONJ run.PST=1SG
'I ate and ran.'
maz $_{2}$ jit=et gefste
1SG.OBL eat.PST=CONJ run.PST
'I ate and ran.'
$x \quad x$
$x \quad$ OK

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


## Gojali Murgab

(59)
wuz $=\mathrm{m} \quad$ gefste $=\mathrm{t} \quad$ jit $=\mathrm{m}$
1SG.NOM=1SG run.PST=CONJ eat.PST=1SG
'I ran and ate.'

- 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)

(61)



### 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 $]_{i}$, I read a [book $t_{i}$ ] once.
b. *[About dolphins $]_{i}$, [a book $\left.t_{i}\right]$ bothered me once.
(63) Wh- MOVEMENT
a. [About what $]_{i}$ did he make [a movie $t_{i}$ ]?
b. *[About what $]_{i}$ did [a movie $\left.t_{i}\right]$ 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 raygin 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 raygin, 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.'
a. wuz xo:li frrbe maj xrid tsar-em

1sg.nom always fat sheep buy LightV-1sg
'I always buy fat sheep.'
b. ${ }^{*}$ frrb $\varepsilon_{i}$ wuz xo:li [ $t_{i}$ maj] xrid tsar-em
fat 1sG.nom always sheep buy LightV-1sg
a. wuz bu maj xrid tsar-em

1sG.nom two sheep buy LightV-1sg
'I will buy two sheep.'
b. *bu(j) $)_{i}$ wuz $\quad\left[t_{i}\right.$ 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 ${ }_{i}$ Hasan [ $t_{i}$ maj] xrid kert-i?
how.many Hasan sheep buy LightV.pst-pst
(69) Gojali
a. ??dzang bara jezi ji kitob maz dzojd war about yesterday one book 1sG.OBL read.PST 'About war, I read a book yesterday.' ('OK, but not really OK')
b. ??dzang bara jezi ji kitob maz perifon goçt
war about yesterday one book 1sG.OBL bother make.PST
'About war, a book bothered me yesterday.' ('OK, but not really OK')

Gojali
a. ??dzang bara jezi ji kitob maz perifon goçt
war about yesterday one book 1sG.obl bother make.pst
'About war, a book bothered me yesterday.'
b. ??dzang bara jakinan kitob maz perifon 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 ${ }_{i} \quad$ cotkar- $\hat{1}_{j}$ di-bîn-e $\hat{\text { u }}$ paşê $\varnothing_{i / * j}$ tere bazar-ê woman farmer-OBL DUR-see:PRES-3SG and then go:PRES.3SG market-OBL 'the woman sees/meets the farmer then $\varnothing$ goes to the market.'
b. jin- $\hat{e}_{i} \quad \operatorname{cotkar}{ }_{j}$ dît $\hat{\mathrm{u}} \quad$ paşê $\varnothing_{i / * j}$ çû bazar-ê woman-obl farmer see:PST(3SG) and then go:PAST.3sG market-ObL 'the woman saw/met the farmer then $\varnothing$ 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=s ja tfupon-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 tfupon-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.


## Murgab

wuz=m ja tfupon-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).


## Gojali

a. ja çinan ja ðaj wind=çe tra bozor regda

DEF woman DEF man see.PST=then to market go.PST
'The woman ${ }_{i}$ saw the $\operatorname{man}_{j}$ and $\phi_{i}$ 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 ${ }_{i}$ saw the $\operatorname{man}_{j}$ and $\varnothing_{j}$ went to the market.'
(75) Gojali
a. ja çinan=ep ja ðaj wind=çe tra bozor=ep rest DEF woman=FUT DEF man see. $3 \mathrm{SG}=$ then to market=FUT go.3sG 'The woman ${ }_{i}$ will see the $\operatorname{man}_{j}$ and then $\varnothing_{i}$ go to the market.'
b. ja çinnan=ep ja ðaj wind=çe jow=ep tra bozor rest DEF woman=FUT DEF man see.3SG=then 3sG.nOM=FUT to market go.3sg
'The $\operatorname{woman}_{i}$ will see the $\operatorname{man}_{j}$ and then $\varnothing_{j}$ 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 tfipin 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 tfupon-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 tfupon 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).

Murgab
wuz=m bozor tsə rujd-i ja tfupon (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.

SUBJECT-TO-SUBJECT RAISING
a. It seems that John likes you.
b. $\mathrm{John}_{i}$ seems $t_{i}$ to like you.
c. $\mathrm{You}_{i}$ seem John likes/to like $t_{i}$

OBJECT-TO-SUBJECT RAISING
a. It's easy to fool John.
b. John ${ }_{i}$ is easy to fool $t_{i}$.
c. ${ }^{*} \mathrm{John}_{i}$ 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 $\operatorname{taw}(-\mathrm{i})$ 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. $\mathrm{uz}_{i} \quad$ 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 $\operatorname{taw}(-i) \quad$ 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 2 P clitic if $u z$ 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

DET-PROX work=prog 1sG.obl-dAT good appears
'This appears good to me.' (Lorimer, 1958, p.111)
- (84) shows $s d t j$ can agree with its subject in the meaning 'to be visible'.

Murgab
a. $\quad t u=s \quad \operatorname{mar} \quad s d u j$

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 $s d u j d$ agrees with the subject in ( $85-\mathrm{b}$ ) for 2 SG
(85) Murgab
a. ma-r sdujd tu=t xif

1SG-DAt seem.3SG 2 SG.NOM=2SG happy
'It looks to me like you're happy.'
b. $t u=s \quad$ ma-r xif 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 sdujd
- Agreement with second person is ungrammatical, as shown in (86-b)
- The same can be seen in (87).

Murgab
a. tu=s ma-r sdujd 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 sduj jaw win-i

2SG.NOM=PROG 1SG-DAT seem.2SG 3SG see-2SG
a. taw-i ma-r dzi sdujd jaw wind-i

2SG.obl-ACC 1sG-DAT COMP seem.3sG 3sG see.PST-PST
'It seems to me that he saw you.'

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b. *tu=t ma-r (dzi) sduj jaw (taw-i) wind-i
2SG.NOM=2SG 1SG-DAT COMP seem.2SG 3SG 2SG-ACC see.PST-PST
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### 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)
Gojali
*jo maz-e tun ka:l goçt
3sg 1sg.obl-obl drunk call make.pst
She called me drunk
(90) Gojali
tu=s 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 dic-tu | wuz jo di-m |
| 2SG | to jo diç-t | to jo di $\varepsilon$-tu | tu jo di |
| 3SG | jo jo diç-t | jo jo di -tu | jo jo diç-t |
| 1PL | sak jo diç-t | sak jo di $\varepsilon$-tu | sak jo di-n |
| 2PL | sav jo diç-t | sav jo di $\varepsilon$-tu | saft jo di-jit |
| 3PL | jav jo diç-t | jav jo di -tu | jaft jo di-n |
| 'The sheep' | ja maj jo diç-t | ja maj jo di $\varepsilon$-tu | ja maj jo diç-t |

Table 9: Gojali: to hit him

| Subject | Past | Perfective | Imperfective |
| :---: | :---: | :---: | :---: |
| 1SG | wuz=m gezda | wuz=m ges-tu | wuz giz-əm |
| 2SG | tu=t gezda | tu $=$ t ges-tu | tu giz |
| 3SG | jo gezda | jo ges-tu | jo giz-d |
| 1PL | sak=ən gezda | sak=ən ges-tu | sak giz-ən |
| 2PL | saft=əv gezda | saft=əv ges-tu | saft giz-it |
| 3pl | jaft=əv gezda | jaft=əv ges-tu | jaft giz-ən |
| 'The sheep' | ja maj gezda | ja maj ges-tu | ja maj giz-d |

Table 10: Gojali: to rise

| Subject | Past | Perfective | Imperfective |
| :---: | :---: | :---: | :---: |
| 1SG | $u z=m$ jaw-i diçt-i | uz=m jaw-i die-tu maz jaw-i dic-tu | uz jaw-i di-m |
| 2SG | tu=t jaw-i diçt-i | tu=t jaw-i die-tu to jaw-i die-tu | tu jaw-i di |
| 3SG | jaw jaw-i diçt-i | jaw jaw-i die-tu | jaw jaw-i diçt |
| 1PL | sak=ən jaw-i diçt-i | sak=ən jaw-i dic-tu | sak jaw-i di-n |
| 2PL | saji jaw-i diçt-i | saji jaw-i die-tu *sav jaw-i die-tu | saji jaw-i di-v |
| 3PL | jawi jaw-i diçt-i | jawi $\int$ jaw-i die-tu jaw diwol-i dic-tu | jawi ${ }_{\text {jaw-i }}$ di-n |

'the wall' jaw ja diwol-i diçt-i $\quad$ *jav jaw-i dic-tu $\quad$ jaw diwol-i diçt

Table 11: Pamiri: to hit him

| Subject | Simple Past | Perfective | Imperfective |
| :---: | :---: | :---: | :---: |
| 1SG | $u z=m \mathrm{~g}$ ¢ z -di | $u z=m$ gøs-tu <br> mazgøs-tu | uz giz-im |
| 2SG | tu=t gøz-di | tu=t gøs-tu <br> 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 <br> *sav gøs-tu | saji ${ }^{\text {giz-əv }}$ |
| 3PL | jawi $\int$ gøz-di | jawi gøs-tu *jav/jawi $\int$ gøs-tu | jawi $\int$ giz-ən |

Table 12: Pamiri: to stand

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[^0]:    ${ }^{1}$ 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.

