

Balkar X-marking: a change in progress

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 - Those scenarios: subjunctive conditionals
- (2) a. If Mary knows the answer, then John will know the answer too.
- b. If Mary **knew** the answer, then John **would** know the answer too.

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- X-marking (proposed by von Stechow & Iatridou 2020) := grammatical means for grammar to mark certain scenarios
 - Those scenarios: subjunctive conditionals, weak necessity modals
- (3) a. He must do his homework (#but he is not obliged to)
- b. He should do his homework (but he is not obliged to)

What is X-marking?

- X-marking (proposed by von Stechow & Iatridou 2020) := grammatical means for grammar to mark certain scenarios
 - Those scenarios: subjunctive conditionals, weak necessity modals, unattainable desires
- (4) a. I want Mary to know the answer
- b. I wish Mary **knew** the answer

What is X-marking?

- X-marking (proposed by von Stechow & Iatridou 2020) := grammatical means to mark certain scenarios
- Those scenarios: subjunctive conditionals, weak necessity modals, unattainable desires
- English is a bad language to demonstrate this: the weak necessity modal and the unattainable desire attitude verb have independent lexical entries. Let's look elsewhere.
- NB: by X-marking I understand the grammatical means that *differentiate* X-marked conditionals/modals/desires from regular ones

(5) Subjunctive conditional

Ha János tudná a választ, Mari is tudná
if János know-NA the answer-ACC Mari too know-NA
a választ.
the answer-ACC

'If János knew the answer, then Mary would know the answer too.' (von Stechow & Iatridou 2020:10)

(6) unattainable desire

Szeretném ha Marcsi tudná a választ.
like-NA-1SG if Marcsi know-3SG-NA the answer-ACC
'I wish Marcsi knew the answer.' (von Fintel & Iatridou
2020:11)

(7) Weak necessity modal

Péter-nek el kell-ene mosogat-ni-a az edény-ek-et,
Péter-DAT part must-NA wash-INF-3SG the dish-PL-ACC

de senki nem követeli meg tőle.

but no_one not require-3SG.SUBJ-3.OBJ part 3.SG.ABL

'Peter should wash the dishes, but he is not obliged to.'

(von Fintel & Iatridou 2020:17)

(8) Subjunctive conditional

Si fuera *más alto sería* *un jugador*
if be.3SG.PAST.SUBJ more tall be.3SG.COND a player
de balcesto
of basketball

'If s/he were higher, s/he would be a basketball player.'
(von Fintel & Iatridou 2020:12)

(9) unattainable desire

Querría *que fuera* *más alto de lo*
want.3SG.COND that be.3SG.PAST.SUBJ more tall that it
que es
that be.3SG

'I wish s/he was taller than s/he is.' (von Stechow & Iatridou
2020:12)

(10) Weak necessity modal

Deberia limpiar los platos, pero no estoy
must.COND.1SG clean the dishes, but not am
obligado.
obliged

'I ought to do the dishes but I am not obliged'

English, Spanish, Hungarian

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English, Spanish, Hungarian

- English: past tense marks both subjunctive clauses and embedded clauses of unattainable desire
- Hungarian: *-nA* marks both subjunctive clauses and embedded clauses of unattainable desire and also the verbs of unattainable desire and weak necessity themselves
- Spanish: past subjunctive on subjunctive antecedents and embedded clauses of unattainable desire
- Spanish: conditional marker on subjunctive consequents and the verbs of unattainable desire and weak necessity themselves

The X-marking generalization

- X-marked conditional: If **p**, then **q**.
- unattainable desire: I **wish** p
- Weak necessity: I **must** NFIN

Hungarian X-marking i

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if János know-NA the answer-ACC Mari too know-NA
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'If János knew the answer, then Mary would know the answer too.' (von Fintel & Iatridou 2020:10)

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de senki nem követeli meg tőle.

but no_one not require-3SG.SUBJ-3.OBJ part 3.SG.ABL

'Peter should wash the dishes, but he is not obliged to.'

(von Fintel & Iatridou 2020:17)

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Si fuera *más alto sería* *un jugador*
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'If s/he were higher, s/he would be a basketball player.'
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(15) unattainable desire

Querría *que fuera* *más alto de lo*
want.3SG.COND that be.3SG.PAST.SUBJ more tall that it
que es
that be.3SG

'I wish s/he was taller than s/he is.' (von Stechow & Iatridou
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(16) Weak necessity modal

Deberia limpiar los platos, pero no estoy
must.COND.1SG clean the dishes, but not am
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'I ought to do the dishes but I am not obliged'

Introducing Balkar

- Balkar (or Karachay-Balkar): a Turkic language spoken by ca. 310K people in Russia (2010 data)
- Balkar data was collected in August 2021 in village Verkhnyaya Balkariya (Kabardino-Balkaria republic, Russian Federation)

(17) Regular conditional

min *šorpa et-se-m* *Kerim* *quan-iriq-di*
I.NOM soup make-COND-1SG Kerim.NOM be_happy-FUT2-3SG

'If I cook a soup, Kerim will be happy.'

(18) X-marked conditional

men *šorpa* *et-se* *e-di-m* *Kerim*
I.NOM soup make-COND AUX-PST-1SG Kerim.NOM
quan-iriq *e-di*
be_happy-FUT2 AUX-PST

'If I cooked a soup, Kerim would be happy.' (but I didn't)

(19) Regular conditional

Kerim xičin aša-sa meni züreg-im
Kerim.NOM khychin eat-COND.3SG I.GEN heart-POSS.1SG
qijnal-liq-di
struggle-FUT2-3SG

'If Kerim eats the khychin, I will be sad.'

(20) X-marked conditional

Kerim xičin-ni aša-sa e-di, meni
Kerim.NOM khyčin-ACC eat-COND AUX-PST I.GEN
züreg-im qıjnal-lıq-di e-di
heart-POSS.1SG struggle-FUT2 AUX-PST

'If Kerim ate the khyčin, I would be sad.' (but he didn't)

A generalization?

- It appears that Balkar has an English-type situation in conditionals: past tense is used to mark both **antecedents** and **consequents** of X-marked conditionals
- There is, however, a problem

(21) Agreement marker on the auxiliary

tünene sen xicin aša-sa e-di-ŋ,
yesterday you.NOM quesadilla eat-COND AUX-PST-2SG

men saŋa uruš-uruq e-di-m
I.NOM you.DAT scold-FUT2 AUX-PST-1SG

'If you had eaten the khychin yesterday, I would have scolded you'.

Agreement morphology in antecedents ii

- (22) Agreement marker on the lexical verb, auxiliary is present

tünene sen xičin aša-sa-ŋ e-di,
yesterday you.NOM quesadilla eat-COND-2SG AUX-PST

men saŋa uruš-uruq e-di-m
I.NOM you.DAT scold-FUT2 AUX-PST-1SG

‘If you had eaten the khychin yesterday, I would have scolded you’.

Agreement morphology in antecedents iii

- (23) Agreement marker on the lexical verb, auxiliary is absent

tünene *sen* *xičin* *aša-sa-ŋ,* *men*
yesterday you.NOM quesadilla eat-COND-2SG I.NOM
saŋa *uruš-uruq* *e-di-m*
you.DAT scold-FUT2 AUX-PST-1SG

‘If you had eaten the khychin yesterday, I would have scolded you’.

A generalization lost?

- It appears that Balkar has an English-type situation in conditionals: past tense is used to mark both **antecedents** and **consequents** of X-marked conditionals
- There is, however, a problem: agreement morphology
- It appears as if the **past** is optional. Is **past**?

Agreement morphology in consequents i

(24) Agreement marker on the auxiliary

tünene sen xičin aša-sa e-di-ŋ,
yesterday you.NOM quesadilla eat-COND AUX-**PST**-2SG

men saŋa uruš-uruq e-di-m
I.NOM you.DAT scold-FUT2 AUX-**PST**-1SG

‘If you had eaten the khychin yesterday, I would have scolded you.’

Agreement morphology in consequents ii

- (25) Agreement marker on the lexical verb, auxiliary is present

**tünene sen xičin aša-sa e-di-ŋ,*
yesterday you.NOM quesadilla eat-COND AUX-**PST**-2SG

men saŋa uruš-uruq-ma e-di
I.NOM you.DAT scold-FUT2-1SG AUX-**PST**

‘If you had eaten the khychin yesterday, I would have scolded you’.

- (26) Agreement marker on the lexical verb, auxiliary is absent

**tünene sen xičin aša-sa e-di-ŋ,*
yesterday you.NOM quesadilla eat-COND AUX-**PST**-2SG
men saŋa uruš-uruq-ma
I.NOM you.DAT scold-FUT2-1SG

‘If you had eaten the khychin yesterday, I would have scolded you’.

A generalization lost

- It appears that Balkar has an English-type situation in conditionals: past tense is used to mark both **antecedents** and **consequents** of X-marked conditionals
- There is, however, a problem: agreement morphology. It appears as if the **past** is optional.
- The behaviour of antecedents cannot be reduced to independent factors (as consequent data shows). What is up with antecedents? Let us examine weak necessity and unattainable desires.

(27) Regular necessity

Alim qol-lar-i-n zua-rba kerek-di
Alim.NOM hand-PL-POSS.3SG-ACC wash-INF must-3SG
'Alim must wash his hands.'

(28) Weak necessity

Alim qol-lar-i-n zua-rva kerek e-di
Alim.NOM hand-PL-POSS.3SG-ACC wash-INF must AUX-PST

'Alim should wash his hands (but it is not obligatory).'

(29) Regular desire

men xičin aša-rba süj-e-me

I.NOM khychin eat-INF want-IPFV-1SG

'I want to eat a khychin.'

(30) unattainable desire

men xičin aša-rka süj-e e-di-m

I.NOM khyčin eat-INF want-IPFV AUX-PST-1SG

'I wish I ate a khyčin.' (but I'm likely to be late, so none will be left)

(31) Regular desire

men Alim xičin aša-sa süj-me-j-me

I.NOM Alim.NOM khyčin eat-COND want-NEG-IPFV-1SG

'I don't want Alim to eat a khyčin.'

Unattainable desires iv

(32) unattainable desire

men Alim xičin aša-sa süj-me-j
I.NOM Alim.NOM quesadilla eat-COND want-NEG-IPFV
e-di-m
AUX-PST-1SG

'I wish Alim didn't eat a khychin.' (but he likes them so much, there's no way)

Desires and necessity

- Consequent X-marking: fake past

Desires and necessity

- **Consequent X-marking**: fake past
- **Antecedent X-marking**: null?

Desires and necessity

- **Consequent X-marking**: fake past
- **Antecedent X-marking**: null?
- If **antecedent X-marking** were null, it would make sense to hypothesize that there are two X-marking systems in Balkar simultaneously: one with fake past as **antecedent X-marking**, and one with null **antecedent X-marking**

Towards explaining the agreement data

- Suppose that there are two X-marking systems in Balkar, X1 and X2, and the Balkar grammar is undergoing a shift from X1 to X2

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- X1: fake past, fake past
- X2: null, fake past

Towards explaining the agreement data

- Suppose that there are two X-marking systems in Balkar, X1 and X2, and the Balkar grammar is undergoing a shift from X1 to X2
- X1: fake past, fake past
X2: null, fake past
- The agreement data follows. Fake past is first left as a particle of sorts (hence, no agreement) and then disappears completely.

Is this viable? i

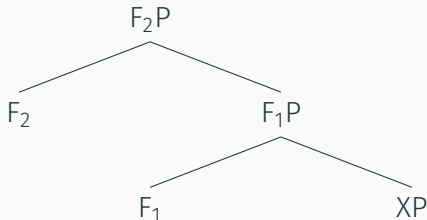
- It is rather weird to suggest that **antecedent X-marking** is null. Can we reformulate the point?
- Suggest that **antecedent X-marking** is actually the conditional marker itself. Thus, the conditional -sA- satisfies two requirements: it performs the function of X-marking and the marker of antecedent/embedded clause of desire

Is this viable? ii

- Note, however, that the difference is purely in presentation. A more 'formal' way of presenting would be to say that there are two syntactic elements F_1 and F_2 that get spelled out together as $-sA-$, while F_1 does the semantic job of a conditional and F_2 does the semantics job of X-marking

Concluding

System X1 (subjunctive antecedent):

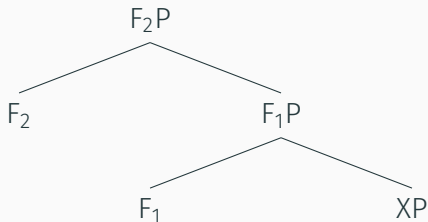


PF: F2 ↔ *-di-* (fake past, an auxiliary is inserted), F1 ↔ *-sA-* (conditional)

LF: F2 ↔ X-semantics, F1 ↔ conditional semantics

Concluding

System X1.5 (subjunctive antecedent):

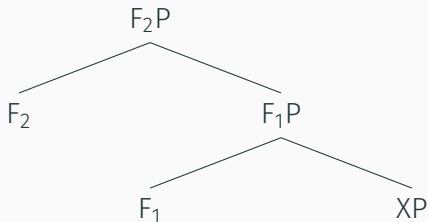


PF: F2 ↔ *e-di* (treated as particle), F1 ↔ -sA- (conditional)

LF: F2 ↔ X-semantics, F1 ↔ conditional semantics

Concluding

System X2 (subjunctive antecedent):



PF: $F_2 + F_1 \leftrightarrow -sA-$ (conditional)

LF: $F_2 \leftrightarrow X$ -semantics, $F_1 \leftrightarrow$ conditional semantics

Conclusion

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- Balkar is undergoing a change wrt. X-marking, the antecedent X-marking is starting to be expressed cumulatively with conditional marker
- It is unclear what triggered this process
- Maybe another analysis is possible but any contender should be able to capture the variability in agreement wrt. auxiliary verb in subjunctive antecedents

Fin.

Thank you for your attention!

von Fintel, Kai & Sabine Iatridou. 2020. Prolegomena to a theory of X-marking. *Ms. under review for Linguistics and Philosophy.*