Particles, disjunctions and inquisitivity in Avar

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Introduction

Research programme on logical constants

Tradition

- logical tradition: conjunction and disjunction treated on a par
- ditto for the syntax of conjunction and disjunction

Recent developments

- conjunction is more basic than disjunction (Szabolcsi 2015; Mitrović 2014; Mitrović 2015, a.o.)
- all action is performed by **quantifier particles** (Szabolcsi 2015), a.k.a. **superparticles** (Mitrović)

Superparticles

μ/MO

- alternative activation
- obligatory (possibly recursive) exhaustification
  - $[\![\mu]\!] = \lambda p[\mathcal{X}^R(p)] \vdash \lambda p[p \wedge \neg\mathcal{X}(p)]$
  - $\mathcal{X}^R$ is an exhaustification operator (cf. Chierchia 2013)

κ/KA

- non-tautological disjunction addition
- $[\![\kappa]\!] = \lambda p[p \vee \neg p]$

Why these particles?

- crosslinguistic argument
  - Avar forms the core of the argument for both the structure of conjunction (Mitrović and Sauerland 2014)
  - and the analysis of exclusive disjunction (Mitrović 2015)

=*nigi* marking: two empirical claims

- complex disjunction markers containing an additive particle are obligatorily strong/exclusive (Mitrović 2015)
- =*nigi*-marked pronouns are *negative* (Alekseev and Ataev 1997 a.o.)

Aims for today

- show both claims to be false
- sketch a path towards dispelling the confusion

Additivity, exhaustification and XOR

- Mitrović (2015) proposes the following structure for exclusive disjunction, where J is Den Dikken's (2006) **Junction** head:

(1) $\underbrace{\Big[_{\text{JP}}\ \big[_{\kappa\text{P}}\ \kappa^{0}\ \overbrace{\big[_{\mu\text{P}}\ \ \mu^{0}\ \ \text{XP}\ \big]}^{\textit{NPI/additive}}\big]\Big[\text{J}^{0}\big[_{\kappa\text{P}}\ \kappa^{0}\ \overbrace{\big[_{\mu\text{P}}\ \ \mu^{0}\ \ \text{YP}\ \big]}^{\textit{NPI/additive}}\big]\Big]\Big]}_{\textit{coordination}}$

- how does (1) give rise to exclusive disjunction?

Conjunction and disjunction in Avar

Avar: key facts

- Northeast Caucasian
- over 700,000 speakers
- morphologically ergative, largely agglutinative
- extensive *pro*-drop
- **extensive use of multifunctional particles** (cf. Forker 2013)

Avar conjunction

XP=gi YP=gi (Uslar 1889: p. 241)

(2) wac=gi, jac=gi, emen=gi, ebel=gi ana xurire
brother=GI sister=GI father=GI mother=GI go.PST field
'Brother and sister and father and mother went to the field.'

Avar disjunction strategies (Uslar 1889: p. 241)

(3) ja wacas ja jacał hab-ila heb
κ brother.ERG κ sister.ERG do.N-FUT that

(4) ja=gi wacas ja=gi jacał hab-ila heb
κ=μ brother.ERG κ=μ sister.ERG do.N-FUT that
'Either brother or sister will do it.'

(5) wacas=nigi jacał=nigi hab-ila heb
brother.ERG=NIGI sister.ERG=NIGI do.N-FUT that
'Either brother or sister will do it.'

jagi disjunction is exclusive

The interpretational differences between the three disjunction types are best seen in their interaction with sentential negation.

(6) ja=gi wacas ja=gi jacał habila-ro heb
κ=μ brother.ERG κ=μ sister.ERG will.do-NEG that.ABS
'Either brother won't do it or sister won't do it.'

- predicted by Mitrović (2015)

=*nigi* disjunction isn't exclusive

Both the =*ni*=*gi* and the *ja* strategies display proper De Morganic readings when embedded under negation, being obligatorily interpreted as a conjunction of negations (7).

(7) a. ja wacas ja jacał habila-ro heb
ʞ brother.ERG ʞ sister.ERG will.do-NEG that.ABS

b. wacas=ni=gi jacał=ni=gi habila-ro heb
brother.ERG=?=μ sister.ERG=?=μ will.do-NEG that.ABS
'Neither brother nor sister will do it.'

- not predicted by Mitrović (2015)

Is *ni* actually a κ-particle?

- no robust diagnostics of κ-hood
- rule of thumb: wherever there are alternatives, κs must be at play
- if that's right, then *ni* is definitely a κ-particle

Yes

- then Mitrović is wrong:
  - =*nigi* disjunction is clearly discontinuous
  - =*nigi* disjunction contains the additive particle =*gi*

No

(8) $\underbrace{\left[_{JP}\ \left[_{\kappa P}\ \kappa^{0}\ \overbrace{\left[_{\mu P}\ \ \mu^{0}\ \ XP\ \right]}^{NPI/additive}\right]\left[J^{0}\left[_{\kappa P}\ \kappa^{0}\ \overbrace{\left[_{\mu P}\ \ \mu^{0}\ \ YP\ \right]}^{NPI/additive}\right]\right]\right]}_{coordination}$

- then something else is responsible for the disjunction-like reading triggered by *=nigi*

=*nigi* marking: other uses

- polarity marking
- concessives/unconditionals
- free choice

=*nigi* marking: other uses

Polarity

(9) ask'osa 'ebede **šiw=nigi** w–uk'-in-č'o
nearby who=NIGI M–be-MSD-NEG
'There was no one around.'

- **Chierchia:** FC effects obtain from $\mathcal{X}(p)$ under ¬

=*nigi* marking: other uses

Concessives/unconditionals

- morphosyntactically decomposable into *also/even* + *if* (Haspelmath and König 1998):

(10) kije hej a=nigi dica kida=nigi hej tola-ro.
where she go-COND.μ I.ERG ever she.ABS leave.FUT-NEG
'Wherever she goes, I will never leave her.'

- unconditionals involve conjunction of alternatives
- they exhaust the relevant alternatives
- alternatives are mutually exclusive

=*nigi* marking: other uses

FCIs (Uslar 1889, 109)

(11) łie=nigi ł'e
who.DAT=NIGI give.IMP
'Give it to anyone.'

(12) kinaw=nigi čijasda božula mun
which.M=NIGI man.LOC believe.PRS 2SG.ABS
'You believe whichever man.'

- **Chierchia:** FC effects obtain from $\mathcal{X}(p)$ under $\diamond$

Summary

- *=nigi* disjunction seems problematic for exhaustification-based analysis of exclusive disjunction (Mitrović 2015)
- unless *=ni* isn't a κ particle but is e.g. a topic marker
- parallels with unconditionals should be explored further

References

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