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
  - $[\![\mu]\!] = \lambda p[X^R(p)] \vdash \lambda p[p \wedge \neg X(p)]$
  - 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 & 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 & 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
κ brother.ERG κ 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) $\underbrace{\Big[_{\text{JP}}\ \big[_{\kappa\text{P}}\ \kappa^0\ \overbrace{\big[_{\mu\text{P}}\ \ \mu^0\ \ \text{XP}\ \big]}^{\textit{NPI/additive}}\big]\Big[\text{J}^0\ \big[_{\kappa\text{P}}\ \kappa^0\ \overbrace{\big[_{\mu\text{P}}\ \ \mu^0\ \ \text{YP}\ \big]}^{\textit{NPI/additive}}\big]\Big]\Big]}_{\textit{coordination}}$

- 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 $X(p)$ under $\neg$

=*nigi* marking: other uses

Concessives/unconditionals

- morphosyntactically decomposable into *also/even* + *if* (Haspelmath & 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 $X(p)$ under $\square$

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

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