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A TYPOLOGY OF REPETITIVE(LY STRONG) DISJUNCTIONS

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OVERVIEW

We advocate a typological generalisation, and a theoretical account thereof, concerning the strength of coordinate enrichment. In some languages, repeating the coordinating morphemes is optional and yield a SI (XOR for disj. and focal additive distributivity for conj.), in other languages (e.g., Dravidian family), repetition of coordination markers is obligatory and does not yield SIs. We try to explain this using a universal decomposition of coordinate structures from which a tentative differential calculation of meanings follows.

A TYPOLOGICAL GENERALISATION

There exists **a typological split** of (XOR interpretation of) repetitive disjunction: [±OPT] ⇔ [±XOR] — two groups of languages:

OPT The other group **optionally** repeats the κ morpheme.

In the OBL group, such means of enrichment are not available with the explanandum resting on, or at least correlating with, the morphosyntactic un/droppability of the DIS morpheme. The Indo-European is OPT.

OBL One group of languages express disjunction (DIS) of two arguments, ϕ and ψ, by **obligatorily** repeating the disjunctive morphemes (=κ).

In the OPT group, a DIS expression 'ϕ **or** ψ' may be (ignoring embedding in DE contexts; cf. Chierchia 2013: 18–20) strengthened into an exclusive (XOR) format '**either** ϕ **or** ψ'. The Dravidian family is OBL.

κ morphemes in OPT-languages: SI possible

- Serbo-Croatian (/English): SI

(1) (✓**ili**) Mujo **ili** Haso
(**or**) M **or** H
'(✓**either**) Mujo **or** Haso'

κ morphemes in OBL-languages: SI impossible

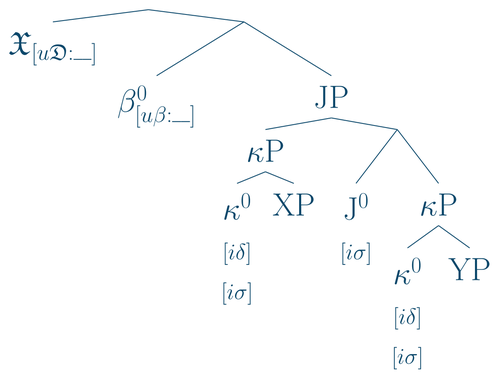
- Malayalam no SI:

(2) John *(**oo**) Bill **oo**
J **or** B **or**
'(***either**)John **or** Bill'

INGREDIENTS FOR AN EXPLANANDUM: AN ARTICULATED JUNCTION SYSTEM

- We adopt a model developed in Mitrović (2014), based on den Dikken (2006), *int. al.*, and assume there to exist a generalised Junctional layer (JP), neutrally encoding both con- and dis-junction.
  - We employ κ as a category to refer to markers of disjunction (and ∃-quantifiers) cross-linguistically.
  - We assume there to exist a Boolean operator, β, which maps JP-denoting tuples onto Boolean values (See Mitrović 2014 for details).

A universal JP structure



$[\![J^0]\!](p)(q) = p \bullet q = \langle p, q\rangle$
(from Winter 1995)

$[\![\kappa^0]\!](p) = ?p = p \vee \neg p$
(from InqSem; e.g. Ciardelli, *et al.* 2013)

$[\![\beta_{[\mathfrak{u}:\beta:\kappa]}]\!]([\![JP]\!]) = \langle p, q\rangle \mapsto [p \vee q]$
(from Mitrović 2014)

$[\![\mathfrak{X}]\!](p) = p \wedge \forall q \in \mathfrak{A}(p)\big[[p \not\vdash q] \rightarrow \neg q\big]$
(from Chierchia 2013)

(δ) subdomain (non-scalar) alternatives
(σ) strictly scalar alternatives

ANALYSIS

- We rest on the assumption that sub-domain δ-level exhaustification is unavailable in an OBL language like Malayalam. Inversely, an OPT language, like English, allows this options.
  - Parametrising disjunctive enrichment: ±local δ-exhaustification via syntactic structure.
- **Configurational variation of $\mathfrak{X}$ and β yields inferential variation** (and availability of SI):

OPT XOR arises from local exhaustification. Hypothesis: $\beta \rangle \mathfrak{X}$:

OBL Exhaustification (δ or σ) is blocked structurally by β (intervention/phasal status of β). Hypothesis: $\beta \rangle \mathfrak{X}$:

EXPLAINING SZABOLCSI'S (2015) OBSERVATION

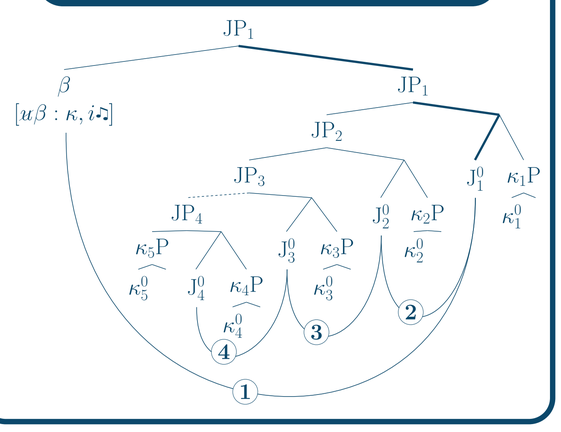
- Szabolcsi (2015: 194–5) implicitly makes an observation regarding the linear placement and strength of disjunction: exhaustive readings obtain when the first κ, in an iterative disjunctive sequence, precedes the disjunct; otherwise 'plain' or non-enriched/inclusive. Cf. Russian (ditto for French, Hungarian, etc.)

(3) a. Katja ✓(**ili**) Masha *(**ili**) Iulija
b. *(**ili**) Katja *(**ili**) Masha *(**ili**) Iulija

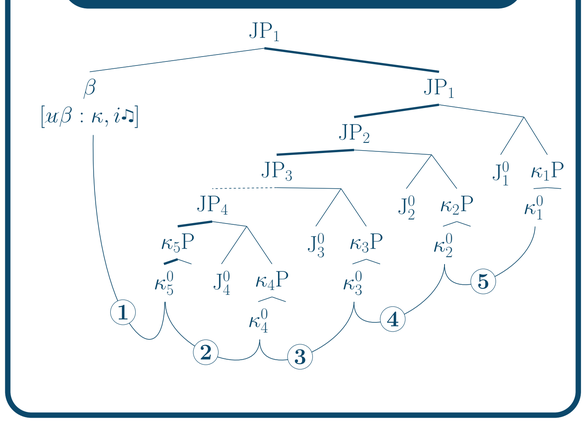
- Mitrović (2011, 2014) develops a further arithmetic correlation:

(4) An arithmetic correspondence of syntactically and phonologically realised κ^0 and J^0 coordinators (r) and coordinands (d) in polysyndetic constructions
a. the number of realised κ^0 heads: $\boxed{r_{\kappa^0} = d}$
b. the number of realised J^0 heads: $\boxed{r_{J^0} = d - 1}$
c. the number of all syntactically present (dis)junction markers ($\{J^0, \kappa^0\}$, covert+overt): $\boxed{r_{J^0+\kappa^0} = 2d - 1}$

ⓘ ♫-index following structure



ⓘⓘ ♫-index following linear order



But why would ⓘⓘ have an exclusive reading? $\mathfrak{X}$ could be a ♫-bearer (i.e. $[i♫] \in \mathfrak{X}$).

DERIVING ENRICHMENT

- We propose the same mechanics to explain un/availability of disjunctive SIs, patterning with un/droppability of κ markers.
- Given (4), (2) implies overtness of κ (and not J) markers.
- Tentative account resting on unavailability of δ-exhaustification of (dis)juncts:

Type ⓘⓘⓘ : OPT languages

- Structure: $\beta_{[\mathfrak{u}\beta:\kappa]} \rangle \mathfrak{X}_{[\mathfrak{u}\mathfrak{D}:\delta]} \rangle [\![JP]\!]$
- $\mathfrak{X}$ pointwise applies across κ-headed disjuncts. With it, the cyclicity of ♫-assignment.
- This yields local exhaustification of κPs which β turns into disjunctions of the form $\mathfrak{X}(p) \vee \mathfrak{X}(q) \vee \ldots$.

NB We assume ∃-presupposition prevents negative disjuncts from obtaining ($\sim$ [\![neither …nor…]\!]); Brasoveanu & Szabolcsi's (2013) postsuppositional analysis is also able to prevent this inference, albeit in a different spirit.

Type ⓘⓥ : OBL languages

- Structure: $\mathfrak{X}_{[u\mathfrak{D}:\_]}\ \beta_{[\mathfrak{u}\beta:\kappa]} \rangle [\![JP]\!]$
- $\mathfrak{X}$ cannot pointwise apply across κ-headed disjuncts.
- We stipulate that β is an intervener for $\mathfrak{X}$ which cannot obtain its alternative restriction ($[u\mathfrak{D} : \_]$) and is hence inactive, therefore no enrichment arises.

Open question Details and nature of the unavailability of enrichment are left for future. investigation

Selected References

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