

A unified account for conjunctive, negative and disjunctive coordination in Serbo-Croatian
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We provide an analysis of **conjunctive and disjunctive coordination marking** in Serbo-Croatian (S-C) at the syntax-semantics interface, deriving its different instances from plain additive conjunction in combination with negative or unspecified polarity marking. General conclusions on the nature of coordination and disjunction are drawn, and discussed on a cross-linguistic background.

The paradigm of *(both-)and*, *(either-)or* and **Neg-nor coordination** in S-C is given in (1). Examples (1a, b), where the coordinator clearly consists of a common conjunctive component and a possible element sensitive to polarity (*i*, Neg+*i*), indicate that a similar analysis might be possible for (1c) too.

- (1) a. Jovan je pojeo (i) kolač i sladoled. (S-C)
Jovan Aux eaten and cake and icecream
'Jovan ate (both) the cake and the icecream.'
- b. Jovan ni-je pojeo (n-i) kolač n-i sladoled.
Jovan Neg-Aux eaten Neg-and cake Neg-and icecream
'Jovan ate neither the cake nor the icecream.'
- c. Jovan je pojeo (ili) kolač ili sladoled.
Jovan Aux eaten or cake or icecream
'Jovan ate (either) the cake or the icecream.'

We argue that indeed *ili* 'or' should be analyzed into the coordinator *i* and the clitic =*li*, as in (2).

- (2) Jovan je pojeo (i=li) kolač i=li sladoled. (S-C)
Jovan Aux eaten and=VarPolcake and=VarPolicecream
'Jovan ate (either) the cake or the icecream.'

This analysis is **supported by some dialectal data**, for instance the construction in (3), where the paratactic disjunctive coordination goes with =*li* on both disjuncts. Assuming that parataxis amounts to the absence of *i* 'and', it forces =*li* to cliticize on the disjuncts.

- (3) Ovam=li, tam=li, al mora si idem. (South-East Serbian)
here=li, there=li, but must Refl.Dat go
'Whether here or there, but I have to go.'

In S-C, the clitic =*li* usually marks the interrogative value of the PolP of a clause. It appears both in matrix and embedded questions, cliticizing on the first prosodic word, which is often also under focus.

- (4) a. Da=li si video Jovana? (S-C)
comp=li Aux seen Jovan
'Did you see Jovan?'
- b. Vidiš=li Jovana?
see.2Sg=li Jovan
'Do you see Jovan?'
- c. Pitao sam da=li vidiš Jovana?
asked Aux comp=li see.2Sg Jovan
'I asked whether you saw Jovan.'

Yet, in (5a), the **polarity** of the conditional clause is not subject to question, but rather **variable** (specified for sets of possible worlds only). In (5b), the sentence is interrogative, but not a *yes-no* question; the semantic effect of =*li* suggests that here it distributes places over possible worlds depending on the polarity of the sentence for the respective place. For each place, possible worlds are divided to those in which it is the one where the key was left, and those in which it is not the one.

- (5) a. Ukradeš=li nešto, čuvaj se! (S-C)
steel.2Sg=li something guard Refl
'If you steel something, watch out!'
- b. Gde(=li) sam ostavio ključ?!
who=li Aux left key
'Where (of all places) did I leave the key?!'

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We conclude that *=li* is a **particle modifying the value of the PolP**. It specifies that the **value of PolP varies across a set of worlds** including, naturally, a number of possible worlds, next to the actual one.

We show that the present view of S-C data supports **Wurmbrand's (2008) analysis of the *both-and/Neg-nor* construction**, and adopt her technical account, with one modification implied by our analysis: **both conjuncts universally involve a value of polarity**. This yields the structure in (6).

(6) $[[\text{Pol:Val}_i][1\text{st_conjunct}]] \text{ And } [[\text{Pol:Val}_i][2\text{nd_conjunct}]]$, $\text{Val}_i = \{\text{Pos, Neg, Var}\}$

The universal presence of a polarity specification amounts, in syntax, to a universal presence of the respective projection – PolP. In other words, **coordinations of the observed types are always coordinations of PolPs**. We argue for the following anatomy for the constructions of this type. The nature of the conjunctive element (And) is additive. Leaving aside, for sake of simplicity, the issue of extraction and ellipsis, we argue that the additive And conjoins two PolPs, which further contain the elements that surface as conjoined. The **two PolPs establish a relation with the closest C-commanding PolP which has a specified value**. Observing, for sake of simplicity, only broad focus readings, we can make **six combinations** of values of the two PolPs involved, as in *Table 1*.

	Higher PolP	Conjoined PolPs	Resulting interpretation
1	positive	positive: (i-)i '(both-)and'	(positive) additive conjunction
2	negative	positive: (i-)i '(both-)and'	negated additive conjunction
3	positive	negative: (ni-)ni '(neither-)nor'	ill-formed (Neg not licensed)
4	negative	negative: (ni-)ni '(neither-)nor'	additively conjoined negations
5	positive	variable: (ili-)ili '(either-)or'	positive disjunction
6	negative	variable: (ili-)ili '(either-)or'	negative disjunction

Table 1

We argue that the **positive** variant of the conjunction marker (*i*) is a default value, matching the default positive value of the higher PolP. The **negative** marker (*ni*) marks that the **scope of conjunction** is wider than that of negation; the negation is still sentential, generated in the higher PolP (following Zeijlstra 2004 on negative concord). This rules out the combination 3 in *Table 1*, where the higher PolP is positive while the conjuncts show reflexes of a sentential negation. The **variable** value of the conjunct PolPs exempts them from agreeing with the higher PolP, hence allowing for all the different combinations of values in the conjunction (four of them for two conjuncts), including those when they are all positive, or negative. However, there is a both syntactic and semantic requirement of the higher PolP to predicate over (i.e. match with) at least one conjunct. Else, the derivation crashes, because a situation emerges in which an eventuality is existentially quantified, while the participation of all the candidates for a certain role in it is negated; or vice versa, the high existential quantification is negated, but all the individual eventualities from the relevant set (distributing over candidates for a certain participant role) are existentially quantified beyond the scope of negation.

In this way, we not only explain the facts in *Table 1*, but also **derive the disjunctive coordination**. It is **based on a conjunction** of elements **unspecified for polarity**, the only restriction coming from the need to specify the higher PolP, which always eliminates one combination: that in which all the conjuncts are positive, or that in which they are all negative, for the negative and positive value in PolP, respectively. Another contribution of our account is that it characterizes all conjuncts as PolPs, and hence restricts the application of conjunction to one category only – that of polarity. This is in line with the logical properties of conjunction, which sensibly apply only to truth-values. Our account also neatly combines with the disjunction-accounts for questions, such as Groenendijk & Stokhof (1984).

We finish with a discussion of the **crosslinguistic applicability** of our analysis: is it only compatible with Slavic/Indo-European languages, or could it be a universal analysis of conjunctive and disjunctive coordination in natural language. We mention examples from other languages that seem to point towards the strongest thesis. As a further research question, we point the possible **extension** of our account to **but-coordination**, which is characterized by different values of the coordinated PolPs.

References: Wurmbrand, S. 2008. Nor: Neither Disjunction nor Paradox. *Linguistic Inquiry* 39/3, 511-522. Zeijlstra, H. 2004. Sentential Negation and Negative Concord. Doctoral dissertation, U. Amsterdam. Groenendijk, J. and M. Stokhof. 1984. Studies in the Semantics of Questions and the Pragmatics of Answers. Doctoral dissertation, U. Amsterdam.