

Linking agreement and anticausality: Semantic effects of agreement on exclusives in Serbian

Overview. We discuss morpho-semantic differences between the standard focus operator *samo* ‘only’ in Serbian and its agreeing counterpart *sam(-a/o)* ‘alone, by himself/herself’, and argue that agreement on the latter restricts its semantic domain of quantification to individuals, which accounts for its different interpretation/distribution. A similar account has been proposed for English adjective *mere* in comparison with *only*, where the former takes scope only over the noun it modifies while the latter take sentential scope (Coppock & Beaver 2011). Our account differs in that it ties this behavior to the agreement mechanism and connects exclusivity with anticausality. In particular, when agreement corresponds to subject position, its domain is restricted to agents/causers of events. We also show that the agreeing *sam(-a/o)* is an exclusive operator which does not associate with a prosodically focused element in the preajacent (unlike *only/samo*), and is in this sense similar to the ‘unexplanatory’ *just* (Wiegand 2017).

Data. The non-agreeing *samo* ‘only’ behaves as a standard exclusive operator and associates with a prosodically focused element in the phrase. Focus invokes alternatives for the focused constituent, which depending on the location of prosodic prominence, may vary (Rooth 1985, 1992). In (1), focus on the verb *plivala* provides alternatives to the denotation of the verb itself (*Ana didn’t run or exercise yesterday, she only swam*). Focus on *Ana* makes alternative individuals available that could have swam yesterday (*Marija, Jovan etc.*). The focus operator *samo* ‘only’ says that of all these alternatives it is false that they swam yesterday, except for the one stated (*Ana*). However, the agreeing *sam(-a/o)* can only be interpreted as ‘alone, by herself/himself’, i.e., as a quantifier ranging over individuals. In (2) *sam(-a/o)* agrees with the subject *Ana* in case, number and gender, and the sentence has two interpretations which we call *agentive* and *causal*. Under the *agentive* interpretation no one else apart from *Ana* participated in the single swimming event/situation; i.e., there were no non-*Ana* swimmers in the single swimming event (*Ana swam alone, without the company of other swimmers*). This reading is compatible with a situation where other people also swam yesterday, but crucially not at the same time as *Ana*. Note that this situation is not compatible with (1), when *Ana* is focused. On the *causal* reading, on the other hand, there were no other cause elements involved in the event of *Ana*’s swimming. That is, *Ana* was the only initiator/causer of the swimming event; e.g., *Ana swam without anyone’s help* (her trainer, inflatable armbands etc.), although others may have been swimming at the same time.

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| <p>(1) Ana je juče samo plivala.
Ana is yesterday only swam
‘Ana only swam yesterday.’</p> | <p>(2) Ana je juče sam-a plivala.
Ana is yesterday sam-n.s.f swam
‘Ana swam yesterday alone/(all) by herself.’</p> |
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Depending on the context/our world-knowledge, one of these readings may be preferred for (2). In (3) the causal reading is more natural: i.e., it is a preconception that snakes attack without being provoked. Here, the contextually salient potential cause for snake-attack excluded by the use of *sam* is understood to be a provocation. Although possible, the agentive reading is less plausible: we do not immediately interpret *zmije napadaju same* as “snakes attack without the company of other attackers (snakes or non-snakes)”.

- (3) Predrasuda je da zmije napadaju **sam-e**. https://www.b92.net/zivot/vesti.php?yyyy=2017&mm=12&dd=15&nav_id=1336472
Preconception is that snakes attack sam-n.pl.f
‘It is a preconception that snakes attack by themselves.’

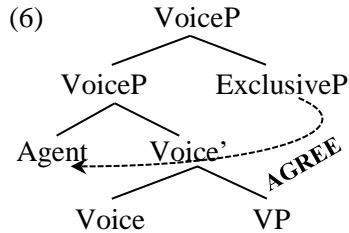
The availability of these readings also depends on syntactic properties of the verb. With typical unaccusative/reflexive verbs with inanimate subjects the agentive reading becomes unavailable (or extremely marginal). In (4a), for example, the speaker is implying that the lamp broke spontaneously, denying knowledge of how it broke. We argue that the asserted content of (4a) is a negation of an available explanation for the cause of the lamp breaking. This is very similar to the behavior of the so-called ‘unexplanatory’ *just* in English in (5) (Wiegand 2017). The agentive reading, however, is really difficult to get: (4a) is not interpreted as “the lamp broke without the company of other things that broke” (not: *This lamp is the single thing that broke in this breaking event*). (4b-c) behave the same way.

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| <p>(4) a. Lampa se sam-a razbila.
Lamp refl sam-n.s.f broke
‘The lamp broke by itself.’</p> | <p>b. Buka je sam-a prestala.
Noise is sam-n.s.f stopped
‘The noise stopped by itself.’</p> | <p>c. Led se sam istopio.
Ice refl sam-n.s.m melted
‘Ice melted by itself.’</p> |
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- (5) I was sitting there and the lamp just broke!

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Analysis. The agreeing *sam(-a/o)* is semantically an exclusive operator and syntactically an adverb (ExclusiveP) adjoined to the highest functional projection of the verb phrase. ExclusiveP agrees with the closest argument, which is the agent in the case of verbs that include the agent-introducing projection (e.g., VoiceP (Kratzer 1996)) – see (6). Agreement here restricts the semantic domain of quantification to individuals; i.e., event participants, who stand in the thematic relation to the eventuality denoted by the verb. In this type of situation both agentive and causal readings are possible (e.g., (2)). However, verbs in (4) lack the agent-introducing projection and therefore the agentive reading is absent.



The following assumptions about semantics of the agreeing *sam(-a/o)* account for its interpretations. The agreement operation requires that the exclusive operator take scope within the event denoted by the predicate in question. On the other hand, lack of agreement indicates that the exclusive operator *samo* is scoping over the entire proposition, with alternatives derived via Roothian association with focus.

One useful way of conceptualizing this is utilizing a neo-Davidsonian event semantics which introduces events via existential quantification. Thus, for the agreeing *sam(-a/o)*, the interpretation would be: there is an event e of swimming such that Ana is the only participant x in e , as given in (7). (7a) shows the relative scope of the exclusive, while the equivalent (7b) translates this into a quantification over individuals.

(7) a. $\exists e[\text{swim}(e) \wedge \text{only}(\text{participant}(e, x))]$ b. $\exists e[\text{swim}(e) \wedge \forall x[\text{participant}(e, x) \rightarrow x = a]]$

Note this formulization is compatible with there being separate swimming events involving individuals other than Ana. Therefore, this only states that Ana was alone (or unhelped) in her swimming, not that she was the only person who swam. Compare this to the non-agreeing form, which in the case that it associates with an individual, results in the equivalent of the exclusive quantification occurring outside the scope of the event quantifier. The interpretation here would be that Ana is the only individual x such that there is an event e of swimming such that the agent of e is x , shown below in (8). As above, (8a) shows that the exclusive scopes over the event quantifier, while (8b) translates this in the case that there is focus on an individual (rather than, e.g., a VP).

(8) a. $\text{only}(\exists e[\text{swim}(e) \wedge \text{participant}(e, x)])$ b. $\forall x[(\exists e[\text{swim}(e) \wedge \text{participant}(e, x)]) \rightarrow x = a]$

Unlike (7), the interpretation for (8) is incompatible with a situation where multiple different people were swimming, resulting in the typical exclusive interpretation of ‘only’ for non-agreeing *samo*. We argue that it is the agreement relationship that keeps agreeing *sam(-a/o)* from scoping out of the event quantifier and restricts the domain of quantification to individuals. Also, unlike *samo* ‘only’, the agreeing *sam(-a/o)* does not associate with a prosodically focused element. For instance, *samo* ‘only’ cannot associate with pro-dropped arguments, because such arguments necessarily lack prosodic prominence and thus cannot be focused. While in (9a), where the subject is overt, alternatives can be individuals (*Only Ana swims, not John or Mary*), this is impossible in (9b); here we only have alternatives to the denotation of the verb itself (*She only swims, she doesn’t run or exercise*). There is no such restriction in (10), where the semantic domain of quantification of the agreeing *sam(-a/o)* is restricted to individuals denoted by the subject, regardless of whether the subject is overt (10a) or covert (10b).

(9) a. Samo Ana pliva. b. Samo pliva. (10) a. Ana pliva sam-a. b. Pliva sam-a.
 Only Ana swims Only swims Ana swims sam-n.s.f Swims sam-n.s.f
 ‘Only Ana swims.’ ‘She only swims.’ ‘Ana swims by herself.’ ‘She swims by herself.’

Further Questions. Finally, *sam(-a/o)* in Serbian can also function as an intensifier (e.g., Despić 2013, Progovac 1998), which is different from the cases presented here (e.g. (11)). In the talk we discuss ways in which the analysis presented here can be extended to the intensifying uses of *sam(-a/o)*.

(11) I sam predsednik je došao. ‘The president himself arrived.’

And sam-n.s.m president is arrived

References. Coppock & Beaver. 2011. Mere-ology. *Alternatives in Semantics*. Despić 2013. Intensifiers, Focus, and Clitics. *Nominal Constructions in Slavic*. Progovac. 1998. Determiner phrase in a language without determiners. *JoL* 34. Rooth. 1985. Association with focus. Dissertation. UMass. Rooth. 1992. A theory of focus interpretation. *NLS* 1. Wiegand. 2017. Exclusive morphosemantics: *Just* and covert quantification. *WCCFL* 35.