Linking Agreement and Anticausality:
Semantic Effects of Agreement on Exclusives in Serbian

Miloje Despić & Mia Wiegand
Cornell University

FASL 27, Stanford, California, May 4–6th, 2018

1 INTRODUCTION

- In this presentation, we discuss morphosemantic differences between the standard focus operator samo ‘only’ in Serbian and its agreeing counterpart sam(-alo) ‘alone, by himself/herself’.  
  - (1) Non-agreeing:  
    Ana je juče samo plivala.  
    Ana swam yesterday alone.
  - (2) Agreeing:  
    Ana je juče sam-a plivala.  
    Ana swam yesterday alone/all by herself.

- We argue that agreement on the latter restricts its semantic domain of quantification to individuals and events which introduce those 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.
  - We show that the agreeing sam(-alo) is an exclusive operator which does not associate with a prosodically focused element in the prejacent (unlike only/samo).
  - It is in this sense similar to the ‘unexplanatory’ just (Wiegand 2017, 2018), which also exhibits anticausality.
  - We also argue that agreement indicates low scope of the exclusive operator, which restricts its domain of quantification to individuals and events.

2 EXCLUSIVES IN SERBIAN: MAIN FACTS AND GENERALIZATIONS

2.1 Samo and sam-a/o in Serbian

- The non-agreeing samo ‘only’ behaves as a standard exclusive operator and associates with a prosodically focused element in the sentence it modifies.
  - Focus gives rise to alternatives for the focused constituent, which depending on the location of prosodic prominence, may vary (Rooth 1985, 1992).
- In (1), repeated below, focus on Ana provides alternative for the subject position (Only Ana swam yesterday, no one else did). (Focus on the verb plivala would provide alternatives to the denotation of the verb itself, i.e., Ana didn’t run or exercise yesterday, she only swam).
  - (1) [Ana] je juče samo plivala.  
    Ana is yesterday only swam  
    ‘Only Ana swam yesterday.’

- However, the agreeing sam(-alo) can only be interpreted as ‘alone, by herself/himself’, i.e., as a quantifier ranging over individuals.
- In (2), repeated below, sam(-alo) agrees with the subject Ana in case, number and gender.
  - (2) Ana je juče sam-a plivala.  
    Ana is yesterday sam-N.S.F swam  
    ‘Ana swam yesterday alone/all by herself.’

2.2 Three readings of the agreeing sam-a/o

- We identify three independent readings of the agreeing sam-a/o: the no-company reading (A), the no-help reading (B), and the no-other-cause reading (C).
- Consider the following example with the agentive verb jesti ‘eat’:
  - (3) Ana je počela da jede sama.  
    Ana started that she eats sam-N.S.F  
    ‘Ana started to eat by herself.’
A. **No-company reading**: Ana started eating alone (i.e., without anyone’s company). Ana is performing the activity of eating without anyone’s company. This doesn’t seem to be limited to other eaters (i.e., it indicates the absence of some general company).

- We will not focus on this reading today, since it’s not in the scope of our presentation.

B. **No-help reading (agentive reading)**: Ana started to eat without anyone’s help (e.g., she’s 4 years old now, so she can use utensils without anyone’s help). On this reading Ana is executing or carrying out the act/activity of eating all by herself, without any assistance. That is, she is the single agent of eating.

C. **No-other-cause reading (causal reading)**: Ana needs no convincing; she initiates the activity of eating by herself.

- A naturally occurring example exemplifying this reading is shown below:

(4) **Context**: A mother is complaining on a blog that her son is too skinny and he never wants to eat. Another blogger replies:

- ‘The weight of your son is fine. Do not worry about the scale (about weighing him): His weight is an exclusive operator which in some sense singles out an individual. That is, **sam-al/o od sebe** unambiguously has the C reading.

- Note that when **sam-al/o** is extended with **od sebe** ‘from self’, only the C reading is available. That is, **sam-al/o od sebe** unambiguously has the C reading.

---

Note that when this version of **sam-al/o** is the main predicate it displays some interesting animacy restrictions:

(1) **Ana je sama.**
Ana is sam-N.S.F
‘Ana is alone/by herself.’

(2) **Lampa je sama.**
Lamp is sam-N.S.F
‘The lamp is alone/by itself.’

- Although we do not concentrate on this reading, our intuition about it is the following:
- As discussed in the next section, **sam-al/o** is an exclusive operator which in some sense singles out an individual. When it is the main predicate, it essentially says that the subject is “without company.” It is then possible that **sam-al/o** is restricted to animate individuals here since only sentient beings may have “company” (i.e., it is a similar to **lonely**)
- However, when **sam** modifies another (verbal) predicate (i.e., when it is an adjunct), this restriction does not apply—only the restrictions of the main predicate apply

(3) **Slika je na zidu visila sama.**
Picture is on wall hanged sam-N.S.F
‘The picture was hanging on the wall by itself.’

---

Linking Agreement and Anticausality

- According to (4) then, the boy will one day become the only initiator/cause of the event of eating.

(5) **Jer nije kontolor došao sam od sebe, to je neko prijavio**
Because didn’t inspector come sam-N.S.M from self that is someone reported that he was sent out main-office

- ‘Because the inspector didn’t come by himself. Someone must have reported him and then he was sent from the main office.’ (Selimović 1970: 16)

- (5) says that an inspector does not in general initiate the event of inspecting; this is usually caused externally (e.g., he is sent from the main office).

- This C-reading is very similar to the interpretation of English just in the ‘unexplanatory’ use (Wiegand 2017, 2018)

(6) I was sitting there and the lamp just broke! (All by itself!)

- Here, just expresses that the lamp broke with no apparent cause

- The syntax and distribution of just in English is quite different from agreeing **sam-al/o**; however, both are exclusive markers that are able to target cause events for quantification

- This is in fact the only reading we have with the so-called “anti-causative” verbs in Serbian (Alexiadou & Schäfer 2006; Dowty 1979; Kratzer 2005; Levin & Rappaport Hovav 1995; Pesetsky 1995; Reinhart 2003)

(7) a. **Lampa se razbila sam-a (od sebe).**
Lamp REFL melted sam-N.S.F from self

- ‘The lamp melted by itself.’

b. **Led se istopio sam** (od sebe).
Ice REFL melted sam-N.S.M from self

- ‘The ice melted by itself.’

- At the same time, unaccusatives like umreti ‘die’ or pasti ‘fall’ also seem to lack the B reading:

A. **No-company reading:**

(8) **Bivši predsednik je umro sam.**
Former president is died sam-N.S.M

- ‘The former president died by himself.’

---

4http://www.serbiancafe.com/lat/diskusije/mesg/140/16131993/bucmasto-il-zdravo-dete.html
Questions that we address now:  
- What is the core meaning difference between the non-agreeing *samo* ‘only’ and its agreeing counterpart *sam-o* ‘alone, by itself’?  
- Why is there a variation in the availability of different meanings of *sam-o* among different types of verbs and how to account for it?

3 OUR ANALYSIS: EXCLUSIVES, AGREEMENT AND ARGUMENT STRUCTURE

- We argue that the agreeing *sam(-o)* is semantically an exclusive operator and syntactically an adverb (ExclusiveP) adjoined within the verbal layers

- 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))

- Non-agreeing *samo* ‘only’ will presumably adjoin higher in the tree, outside of the verbal complex

- We argue below that agreement here indicates that the exclusive must take low scope

- As a result, the semantic domain of quantification is restricted to (i) individuals; i.e., event participants, who stand in the thematic relation to the eventuality denoted by the verb, and (ii) events involving those individuals

3.1 *Samo* ‘only’ vs. *sam-o* ‘alone, by itself’

- The following assumptions about semantics of the agreeing *sam(-o)* account for its interpretations:

  - *Sam-o*: the agreement operation requires that the exclusive operator take scope within the event denoted by the predicate in question

  - *Samo* ‘only’: the lack of agreement indicates that the exclusive operator *samo* is scoping over the entire proposition, with alternatives derived via Roothian association with focus

- Consider again the contrast again between (1) and (2), repeated below:

  1. *Ana je juče samo plivala.*  
  2. *Ana je juče sam-a plivala.*

   *Ana is yesterday only swam*  
   *Ana is yesterday sam-N.S.F swam*

   ‘Only Ana swam yesterday.’  
   ‘Ana swam yesterday alone/(all) by herself.’

- One useful way of conceptualizing this is utilizing a neo-Davidsonian event semantics which introduces events via existential quantification

- Thus, for the agreeing *sam(-o)* in (2), the interpretation for the B reading would be: there is an event of swimming such that Ana is the only agent *x* of *e*, as given in (14)
3.2 Sam-a/o and the variation in meaning

- (14a) shows the relative scope of the exclusive, while the equivalent (14b) translates this into a quantification over individuals

\[
\begin{align*}
(14) & \quad \exists e [\text{swim}(e) \land \text{only}(\text{agent}(e, a))] \\
& \quad \forall x [\text{swim}(e) \land \text{agent}(e, x) \rightarrow x = a]
\end{align*}
\]

- Note that this formulation is compatible with there being separate swimming events involving individuals other than Ana.

- Therefore, this only states that Ana was the only agent in her swimming, not that she was the only person who swam.

- Compare this to the non-agreeing form in (1), 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 (15).

\[
\begin{align*}
(15) & \quad \text{only}(\exists e [\text{swim}(e) \land \text{agent}(e, \langle a, f \rangle)]) \\
& \quad \forall x [(\exists e [\text{swim}(e) \land \text{agent}(e, x)]) \rightarrow x = a]
\end{align*}
\]

- Unlike (14), the interpretation for (15) 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 the agreement relationship is an indicator of the structural properties of agreeing samo-alo keeping it from scoping out of the event quantifier and restricting the domain of quantification to individuals.

3.2 Sam-a/o and the variation in meaning

- What factors govern the variation in meaning of sam-a/o we see with different verb types?

- Recall that the example in (3) (repeated as (16)) has three different readings, summarized below:

\[
\begin{align*}
(16) & \quad \text{Ana je počela da jedi sama.} \\
& \quad \text{Ana started eating alone (i.e., without anyone’s company).}
\end{align*}
\]

A. No-company reading: Ana started eating alone (i.e., without anyone’s company).

(we ignore this reading here)
3.2.1 Agentive verbs

- If we apply this to the verb *jesti* ‘eat’ (in *Ana started to eat by herself*), we would have two events: (a) the event of eating, and (b) the event that causes this event of event, which plausibly is the event of the agent deciding to perform some action—this would be true for all agentive verbs.

- When *sam-alo* agrees with the agent Ana there are two options:

  1. On this reading, Ana is the only agent of the event of eating—she is the only individual that executes the event of eating.
  2. When *sam-alo* agrees and no other (causer) events. That is, the meaning we get essentially is that the causer event is missing—this is again very similar to the unexplanatory *just*.

3.2.2 Anticausative verbs

- Recall that these verbs have only the C reading (causative reading).

(20) a. Lampan se razbila sam-a (od sebe).
   Lamp refl. broke sam-N.S.F. from self
   ‘The lamp broke by itself.’

b. Led se istopio sam (od sebe).
   Ice refl. melted sam-N.S.M. from self
   ‘The ice melted by itself.’

- We follow Alexiadou & Schäfer (2006), Levin & Rappaport Hovav (1995) etc. in assuming that anti-causatives are inherently causative. That is, a sentence like (21a) has the structure in (21b)

(21) a. The door opens.
   b. v-CAUSE [the door √OPEN ]
Linking Agreement and Anticausality

Despić & Wiegand

ONCLUSIONS

4 CONCLUSIONS

In this presentation, we discussed morphosemantic differences between the standard focus operator samo ‘only’ in Serbian and its agreeing counterpart sam(-alo) ‘alone, by himself/herself’

We proposed that agreement on the latter restricts its semantic domain of quantification to individuals and events which introduce those individuals, which accounts for its different interpretation/distribution

In the case of the agreeing sam(-alo) the agreement operation requires that the exclusive operator take scope within the event denoted by the predicate in question, while in the case of samo ‘only’ the exclusive operator is scop ing over the entire proposition

We discussed different readings of sam(-alo) and argued that their availability depends on the argument structure of the verb sam(-alo) combines with (e.g., whether the verb in question has VoiceP and CauseP or just the latter)

– In particular, the differences between the B (no-agent) and C (no-other-cause) readings lies in where in the verbal projection layer agreeing sam(-alo) takes scope: either at the VoiceP level or the CauseP level

– This provides support for bieventive analyses of causative structures, as arguments introduced by both VoiceP and CauseP are available for quantification by exclusives

Finally, we showed that sam(-alo) is an exclusive operator which does not associate with a prosodically focused element in the prejacent (unlike only/samo), and is in this sense similar to the ‘unexplanatory’ just (Wiegand 2017, 2018)

4 CONCLUSIONS

In this presentation, we discussed morphosemantic differences between the standard focus operator samo ‘only’ in Serbian and its agreeing counterpart sam(-alo) ‘alone, by himself/herself’

We proposed that agreement on the latter restricts its semantic domain of quantification to individuals and events which introduce those individuals, which accounts for its different interpretation/distribution

In the case of the agreeing sam(-alo) the agreement operation requires that the exclusive operator take scope within the event denoted by the predicate in question, while in the case of samo ‘only’ the exclusive operator is scop ing over the entire proposition

We discussed different readings of sam(-alo) and argued that their availability depends on the argument structure of the verb sam(-alo) combines with (e.g., whether the verb in question has VoiceP and CauseP or just the latter)

– In particular, the differences between the B (no-agent) and C (no-other-cause) readings lies in where in the verbal projection layer agreeing sam(-alo) takes scope: either at the VoiceP level or the CauseP level

– This provides support for bieventive analyses of causative structures, as arguments introduced by both VoiceP and CauseP are available for quantification by exclusives

Finally, we showed that sam(-alo) is an exclusive operator which does not associate with a prosodically focused element in the prejacent (unlike only/samo), and is in this sense similar to the ‘unexplanatory’ just (Wiegand 2017, 2018)

4 CONCLUSIONS

In this presentation, we discussed morphosemantic differences between the standard focus operator samo ‘only’ in Serbian and its agreeing counterpart sam(-alo) ‘alone, by himself/herself’

We proposed that agreement on the latter restricts its semantic domain of quantification to individuals and events which introduce those individuals, which accounts for its different interpretation/distribution

In the case of the agreeing sam(-alo) the agreement operation requires that the exclusive operator take scope within the event denoted by the predicate in question, while in the case of samo ‘only’ the exclusive operator is scop ing over the entire proposition

We discussed different readings of sam(-alo) and argued that their availability depends on the argument structure of the verb sam(-alo) combines with (e.g., whether the verb in question has VoiceP and CauseP or just the latter)

– In particular, the differences between the B (no-agent) and C (no-other-cause) readings lies in where in the verbal projection layer agreeing sam(-alo) takes scope: either at the VoiceP level or the CauseP level

– This provides support for bieventive analyses of causative structures, as arguments introduced by both VoiceP and CauseP are available for quantification by exclusives

Finally, we showed that sam(-alo) is an exclusive operator which does not associate with a prosodically focused element in the prejacent (unlike only/samo), and is in this sense similar to the ‘unexplanatory’ just (Wiegand 2017, 2018)

4 CONCLUSIONS

In this presentation, we discussed morphosemantic differences between the standard focus operator samo ‘only’ in Serbian and its agreeing counterpart sam(-alo) ‘alone, by himself/herself’

We proposed that agreement on the latter restricts its semantic domain of quantification to individuals and events which introduce those individuals, which accounts for its different interpretation/distribution

In the case of the agreeing sam(-alo) the agreement operation requires that the exclusive operator take scope within the event denoted by the predicate in question, while in the case of samo ‘only’ the exclusive operator is scop ing over the entire proposition

We discussed different readings of sam(-alo) and argued that their availability depends on the argument structure of the verb sam(-alo) combines with (e.g., whether the verb in question has VoiceP and CauseP or just the latter)

– In particular, the differences between the B (no-agent) and C (no-other-cause) readings lies in where in the verbal projection layer agreeing sam(-alo) takes scope: either at the VoiceP level or the CauseP level

– This provides support for bieventive analyses of causative structures, as arguments introduced by both VoiceP and CauseP are available for quantification by exclusives

Finally, we showed that sam(-alo) is an exclusive operator which does not associate with a prosodically focused element in the prejacent (unlike only/samo), and is in this sense similar to the ‘unexplanatory’ just (Wiegand 2017, 2018)

4 CONCLUSIONS

In this presentation, we discussed morphosemantic differences between the standard focus operator samo ‘only’ in Serbian and its agreeing counterpart sam(-alo) ‘alone, by himself/herself’

We proposed that agreement on the latter restricts its semantic domain of quantification to individuals and events which introduce those individuals, which accounts for its different interpretation/distribution

In the case of the agreeing sam(-alo) the agreement operation requires that the exclusive operator take scope within the event denoted by the predicate in question, while in the case of samo ‘only’ the exclusive operator is scop ing over the entire proposition

We discussed different readings of sam(-alo) and argued that their availability depends on the argument structure of the verb sam(-alo) combines with (e.g., whether the verb in question has VoiceP and CauseP or just the latter)

– In particular, the differences between the B (no-agent) and C (no-other-cause) readings lies in where in the verbal projection layer agreeing sam(-alo) takes scope: either at the VoiceP level or the CauseP level

– This provides support for bieventive analyses of causative structures, as arguments introduced by both VoiceP and CauseP are available for quantification by exclusives

Finally, we showed that sam(-alo) is an exclusive operator which does not associate with a prosodically focused element in the prejacent (unlike only/samo), and is in this sense similar to the ‘unexplanatory’ just (Wiegand 2017, 2018)

4 CONCLUSIONS

In this presentation, we discussed morphosemantic differences between the standard focus operator samo ‘only’ in Serbian and its agreeing counterpart sam(-alo) ‘alone, by himself/herself’

We proposed that agreement on the latter restricts its semantic domain of quantification to individuals and events which introduce those individuals, which accounts for its different interpretation/distribution

In the case of the agreeing sam(-alo) the agreement operation requires that the exclusive operator take scope within the event denoted by the predicate in question, while in the case of samo ‘only’ the exclusive operator is scop ing over the entire proposition

We discussed different readings of sam(-alo) and argued that their availability depends on the argument structure of the verb sam(-alo) combines with (e.g., whether the verb in question has VoiceP and CauseP or just the latter)

– In particular, the differences between the B (no-agent) and C (no-other-cause) readings lies in where in the verbal projection layer agreeing sam(-alo) takes scope: either at the VoiceP level or the CauseP level

– This provides support for bieventive analyses of causative structures, as arguments introduced by both VoiceP and CauseP are available for quantification by exclusives

Finally, we showed that sam(-alo) is an exclusive operator which does not associate with a prosodically focused element in the prejacent (unlike only/samo), and is in this sense similar to the ‘unexplanatory’ just (Wiegand 2017, 2018)