

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

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In this paper, we discuss morphosemantic differences between the standard focus operator *samo* ‘only’ in Serbian and its agreeing counterpart *sam(-a/o)* ‘alone, by himself/herself’.<sup>1, 2</sup> Examples of these are shown in (1) and (2) below.

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\* We would like to thank graduate students in the Spring 2018 Syntax Seminar at Cornell. The authors’ names are listed in alphabetical order, which is in no way intended to indicate primacy of authorship.

<sup>1</sup> To the best of our knowledge, everything we discuss here regarding Serbian also holds for Bosnian, Croatian, Montenegrin and other varieties of the area.

<sup>2</sup> We are not discussing the Serbian emphatic particle *sam* (Progovac 1998; Despić 2013), which also exhibits agreement and is clearly morphologically related to the exclusives we are discussing in this paper. It certainly appears that this use should ultimately be included in the discussion of exclusivity and agreement in Serbian, especially given the similarity to English emphatic reflexives and the presence of the English paraphrase ‘by it/him/herself’ we see with agreeing *sam-a/o*. See Despić and Wiegand (in preparation) and Wiegand (forthcoming), for some discussion of how to merge accounts of emphatic *sam* (and English emphatic reflexives) with this account.

- (1) *Standard focus operator (non-agreeing):*  
 Ana je juče samo plivala.  
 Ana is yesterday only swam  
 ‘Ana only swam yesterday.’ or  
 ‘Only Ana swam yesterday.’
- (2) *Agreeing operator:*  
 Ana je juče sama plivala.  
 Ana is yesterday sam<sub>N,S,F</sub> swam  
 ‘Ana swam yesterday alone/(all) by herself.’

We argue that both operators can be captured with a common semantic entry, and that their difference in interpretation is attributable to a different semantic scope. We argue that the agreement as in (2) indicates a restricted semantic domain of quantification for *sam-a/o* to individuals and events which introduce those individuals. This then accounts for its different interpretation and distribution when compared to the non-agreeing *samo*.

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(-a/o)* is an exclusive operator which does not associate with a prosodically focused element in the preadjacent, 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.

## 1 Exclusives in Serbian: Main Facts and Generalizations

### 1.1 *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, much like *only* in English. As discussed in standard literature on focus, this gives rise to alternatives for the focused constituent (Rooth 1985, 1992). Likewise, depending on the locus of the focus prosody, the

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alternative set will vary. In (1), repeated below as (3a), focus on *Ana* provides alternatives for the subject position, resulting in the quantificational meaning ‘Only Ana swam yesterday, no one else did’. Focus on the verb *plivala* would provide alternatives to the denotation of the verb itself, which would result in a different set of denied alternatives, shown in (3b).

- (3) a. [Ana]<sub>F</sub> je juče **samo** plivala.  
Ana is yesterday only swam.’  
‘Only [Ana]<sub>F</sub> swam yesterday (and no one else swam yesterday).’
- b. Ana je juče **samo** [plivala]<sub>F</sub>.  
Ana is yesterday only swam.’  
‘Ana only [swam]<sub>F</sub> yesterday (and Ana did not do anything else yesterday)’

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), repeated below as (4), *sam(-a/o)* agrees with the subject *Ana* in case, number and gender. In this case, it cannot be interpreted as in (3a). Rather, here the interpretation is not that Ana was the only person swimming, but rather that Ana swam ‘by herself’.

- (4) Ana je juče **sama** plivala.  
Ana is yesterday sam<sub>N,S,F</sub> swam  
‘Ana swam yesterday alone/(all) by herself.’

There are actually three different specific interpretations available for (4): one where Ana’s swimming was unaccompanied (alone), one where her swimming was unassisted, and another where her swimming was uncaused/unprompted. We discuss the three possible interpretations of (4) in more detail in the following section.

### 1.2 Three readings of the agreeing *sam-a/o*

We identify three independent readings of the agreeing *sam-a/o*: the **no-company (A) reading**, the **no-help (B) reading**, and the **no-other-cause (C) reading**. Consider the following example in (5) with the agentive verb *jesti* ‘eat’.

- (5) Ana je počela da jede **sama**.  
 Ana is started that eats sam<sub>N,S,F</sub>  
 ‘Ana started to eat by herself.’

### 1.2.1 No-company reading

The first and generally most obvious of the three readings for agreeing *sam-o/a* is what we have called the no-company reading, or the A reading. Here, (5) is interpreted as ‘Ana started eating alone’ Ana is performing the activity of eating without anyone’s company. Importantly, this doesn’t seem to be limited to other eaters. Rather, it indicates the absence of some general company at the time and place of the eating event.

Note that when this version of *sam-a/o* is the main predicate it displays some interesting animacy restrictions, as demonstrated in the contrast between the animate subject in (6) and inanimate subject in (7).

- (6) Ana je **sama**.  
 Ana is sam<sub>N,S,F</sub>  
 ‘Ana is alone/by herself.’
- (7) #Lampa je **sama**.  
 Lamp is sam<sub>N,S,F</sub>  
 ‘The lamp is alone/by itself.’

As discussed in the next section, *sam-a/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”. Although this reading is not the main focus of this paper, is possible that *sam-a/o* is restricted to animate individuals here since only sentient beings may have “company”. It is in this sense similar to *lonely*.

However, it should be noted that 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. This is demonstrated below in (8), where the no-company reading is perfectly felicitous with the inanimate subject *slika* ‘picture’ when it modifies the verb *visila* ‘hang’.

- (8) Slika je na zidu visila **sama**.

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Picture is on wall hanged  $sam_{N,S,F}$   
'Picture was hanging on the wall by itself.'

### 1.2.2 No-help reading (agentive reading)

The second reading we identify for agreeing *sam-o/a* is the B reading, or the no-help/agentive reading. Under this reading, (5) is interpreted as 'Ana started to eat without anyone's help'. For example, consider a context where Ana is four years old, so she has just started to be able to use utensils on her own without anyone's help. On this reading Ana is executing or carrying out the act/activity of eating all by herself, without any assistance. In other words, she is the single agent of eating within the eating event.

### 1.2.3 No-other-cause reading (causal reading)

The third and final reading we have identified for agreeing *sam-o/a* is the C reading, or the no-other-cause/causal reading. Here, (5) is interpreted as 'Ana needs no convincing' or 'Ana's eating has no cause external to Ana'. In other words, she initiates the activity of eating by herself. A naturally occurring example exemplifying this reading is shown below:

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

Težina tvog sina je zdrava. Nemoj toliko da se  
Weight your son is healthy Do-not that-much that refl.  
opterećuješ vagom, on će početi da jede **sam od sebe**  
worry scale he will start that eat  $sam_{N,S,M}$  from self  
jednog dana.  
one day

'The weight of your son is fine. Do not worry about the scale (about weighing him) that much, one day he will start eating by himself.'

<http://www.serbiancafe.com/lat/diskusije/mesg/140/16131993/bucmasto-ili-zdravo-dete.html?6>

Note that when *sam-a/o* is extended with *od sebe* ‘from self’, only the C reading is available. That is, *sam-a/o od sebe* unambiguously has the C reading. According to (9) then, the boy will one day become the only initiator/cause of the event of eating.

Another naturally occurring example of the no-other-cause reading is given below in (10) (Selimović 1970: 16). Here again, *od sebe* is utilized; however, note that it is not necessary to get this reading.

- (10) Jer nije kontrolor došao **sam od sebe**, to je  
 Because didn't inspector come sam<sub>N,S,M</sub> from self that is  
 neko prijavio pa su ga poslali iz direkcije.  
 someone reported then are him 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.’

(10) says that an inspector did not initiate the event of inspecting. Rather, this is usually caused externally (e.g., he was sent from the main office). This contrasts with the A and B readings, as this neither says that the inspector was alone when he came nor that he came unassisted.

This C reading is very similar to the interpretation of English *just* in the ‘unexplanatory’ use (Wiegand 2017, 2018). An example of this is given below in (11).

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

Here, *just* expresses that the lamp broke with no apparent cause. Interestingly, just like the Serbian follow-up *od sebe*, the unexplanatory use of *just* is made more salient with the optional follow up *by itself* or *all by itself*. In fact, the examples of the C reading of agreeing *sam-o/a* shown above could be paraphrased in English with unexplanatory *just*. An English near-equivalent of (10) is given below in (12).

- (12) The inspector didn't just show up. Someone must have sent him from the main office.

The syntax and distribution of *just* in English is quite different from agreeing *sam-a/o*. However, the fact that both are exclusive markers and are able to target cause events indicates strongly that causation is a

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visible semantic object for quantification. It is further evidence that we should be looking at agreeing *sam-o/a* as an extension of ordinary non-agreeing *samo*, as clearly other exclusives can quantify over these finer-grained event structures like causation.

The C reading 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). This is shown below in (13a-b), neither of which have the B reading or A reading available<sup>3</sup>.

- (13) a. Lampa se razbila **sam-a** (**od sebe**).  
Lamp refl. broke sam<sub>N,S,F</sub> from self  
‘The lamp broke by itself.’  
b. Led se istopio **sam** (**od sebe**)  
Ice refl. melted sam<sub>N,S,M</sub> from self  
‘Ice melted by itself.’

Additionally, unaccusatives like *umreti* ‘die’ or *pasti* ‘fall’ also seem to lack the B reading. In (14), for example, the salient reading is the A reading, where the president died alone/unaccompanied.

- (14) Bivši predsednik je umro **sam**  
Former president is died sam<sub>N,S,M</sub>  
‘The former president died by himself.’

This is likewise the intended interpretation for (15), where a woman has fallen in the bathroom when she was alone.

- (15) Juče je pala **sama** u kupatilu.  
Yesterday is fell sam<sub>N,S,F</sub> in bathroom  
‘Yesterday she fell by herself in the bathroom.’ (she was alone)  
(<https://www.doktor.rs/forum/kardiologija/aritmija-t22517-840.html>)

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<sup>3</sup> The question of whether these actually do have the A reading is an open one. According to native speakers, both (13a) and (13b) are pragmatically odd, likely due to the animacy effects discussed earlier. However, those animacy effects do seem to be cancellable: in a context where the lamp or the ice were anthropomorphized in some way, these would be better. Importantly, though, the B reading is completely unavailable even in such a hypothetical anthropomorphic lamp case.

Unaccusatives also have access to the C reading, as demonstrated in (16–18) below.

- (16) *Context from an online newspaper:* A disabled convict died in prison, and someone is making the following comment:

A sada kažu kao čovek umro **sam od sebe**, nije  
 And now say like man died sam<sub>N,S,M</sub> from self didn't  
 umro **sam od sebe** - nije mogao sam da  
 die sam<sub>N,S,M</sub> from self didn't could sam<sub>N,S,M</sub> that  
 uzima hranu i vodu potrebna mu jebila osoba  
 take food and water needed him is was person  
 koja bi se brinula o njemu.  
 which would refl. take-care about him  
 'And now they say that the guy died by himself, he didn't die by  
 himself, he couldn't take food and water, he needed a person that  
 would take care of him'  
[\(http://jugmedia.rs/preminuo-nepokretni-osudenik/\)](http://jugmedia.rs/preminuo-nepokretni-osudenik/)

- (17) *Context: an online newspaper headline*

Kakav amater: Drogba **pao sam od sebe** pa virio na  
 What amateur Drogba fell sam<sub>N,S,M</sub> from self then peeked on  
 jedno oko.  
 one eye  
 'What an amateur: Drogba fell by himself and then he peeked  
 with one eye.'  
<http://forum.source.ba/clanak/Fudbal/282309/Kakav-amater--Drogba-pao-sam-od-sebe-pa-virio-na-jedno-oko>

- (18) *Bandera je pala sama od sebe.*  
 Pole is fell sam<sub>N,S,F</sub> from self  
 'The pole fell by itself.'

The question remains why the B reading is unavailable with *fall* or *die*. On the B reading, *sam-o/a* says that someone is not helped in carrying out an activity, i.e., that she is the only agent who executes/carries out an activity. But, dying or falling is not something that people actively carry out and where they can have the help of other agent - these things happen



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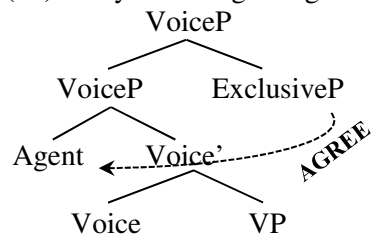
to people. On the other hand, people can have no company when these events occur (the A reading), or there might not be an identifiable external cause for these events (the C reading).<sup>4</sup>

In the next section, we provide an analysis explaining the core meaning difference between the non-agreeing *samo* ‘only’ and its agreeing counterpart *sam-a/o* ‘alone, by itself’ and accounting for the variation in the availability of different meanings of *sam-a/o* among different types of verbs.

### 2 Our Analysis: Exclusives, Agreement and Argument Structure

We argue that the agreeing *sam(-a/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)). The general syntactic structure of agreeing *sam(-a/o)* is provided below in (19).

(19) Syntax of agreeing *sam-a/o*



<sup>4</sup> A reviewer wonders if all verbs which allow modification by *sam od sebe* contain CAUSE, even a verb like *spavati* ‘to sleep’. Although in an out-of-the-blue context it might be odd to modify this verb with *sam od sebe*, in a context in which it is not unusual to have external causes of sleep (e.g., a small baby) such examples are perfectly fine. A naturally occurring example of this type is given in (i) below:

- (i) Rekoše sestri u jaslama da polako krene da smanjuje te rituale  
 Told nurse in nursery-school that slowly starts that reduce those rituals  
 pred spavanje, da se nauči da spava sam od sebe.  
 before sleeping that refl. learn that sleep samN.S.M from self  
 ‘They told the nurse in the nursery school to slowly cut down on those pre-sleep rituals, so that he can learn to **sleep by himself**’.  
<https://www.ana.rs/forum/index.php?topic=74551.2175>.

Non-agreeing *samo* ‘only’ will presumably adjoin higher in the tree, outside of the verbal complex. The exact syntactic position of the non-agreeing form is not necessary to specify for the purposes of the present inquiry. Any adjunction position above VoiceP would be consistent with our analysis.

We argue that agreement between *sam* and an argument originating within the verbal projection indicates that the exclusive must take low scope with respect to the event denoted by the verb. 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.

### 2.1 *Samo* ‘only’ vs. *sam-a/o* ‘alone, by itself’

Essentially, our claim is that agreement is tied to semantic scope, which in turn accounts for the different behavior between agreeing and non-agreeing *sam*. We argue that the agreement operation requires that the exclusive operator take scope within the event denoted by the predicate. That is, the locality of the Agree operation that this operator participates in also restricts its scope. On the other hand, the lack of agreement with ordinary *samo* ‘only’ indicates that the exclusive operator *samo* is scoping over the entire proposition, with alternatives derived via Roothian association with focus.

Consider again the contrast between (1) and (2), repeated below as (20) and (21):

- (20) Ana je juče **samo** plivala.  
 Ana is yesterday only swam  
 ‘Only Ana swam yesterday.’
- (21) Ana je juče **sama** plivala.  
 Ana is yesterday  $sam_{N,S,F}$  swam  
 ‘Ana swam yesterday alone/(all) by herself.’

One useful way of conceptualizing the scopal interactions of these examples is utilizing a neo-Davidsonian event semantics which introduces events via existential quantification. Given such a framework, for the agreeing *sam(-a/o)* in (21), the interpretation (for the B reading) would be ‘there is an event *e* of swimming such that Ana is the only

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agent  $x$  of  $e$ ', as given in (22) below. (22a) shows the relative scope of the exclusive, while the equivalent (22b) translates this into a quantification over individuals.

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

Note that this formulization 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 (20), 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 '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 (23). As above, (23a) shows that the exclusive scopes over the event quantifier, while (23b) translates this in the case that there is focus on an individual (rather than, e.g., a VP).

- (23) a.  $\text{only}(\exists e[\text{swim}(e) \wedge \text{agent}(e, [a]_F)])$   
b.  $\forall x[(\exists e[\text{swim}(e) \wedge \text{agent}(e, x)]) \rightarrow x = a]$

Unlike (22), the interpretation for (23) 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 *sam(-a/o)* keeping it from scoping out of the event quantifier and restricting the domain of quantification to individuals. However, in order to account for the differences between the three readings discussed in the last section for agreeing *sam(-o/a)*, we will need to introduce some finer-grained distinctions.

### 2.2 *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 (5), repeated as (24), has three different readings, summarized below.<sup>5</sup>

(24) Ana je počela da jede **sama**.  
 Ana is started that eats sam<sub>N,S,F</sub>  
 ‘Ana started to eat by herself.’

- a. **No-company reading**: Ana started eating alone (i.e., without anyone’s company). (we ignore this reading here)
- 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). Here, Ana 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.

First, we adopt the bieventive view of causative structures like *John melted the ice* from Pylkkänen (2002), which we believe is particularly useful for our purposes. On this view, a sentence like *John melted the ice* has two relations that the corresponding non-causative (*The ice melted*) does not have: a causation relation relating the causing event to the caused event, and a thematic relation between the causing event and the individual expressed as the external argument.

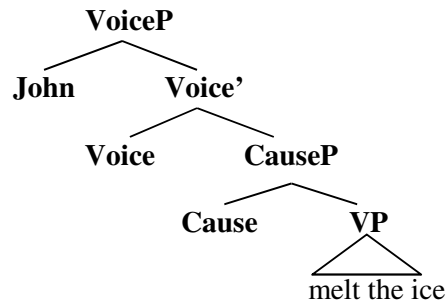
Assuming that external arguments are introduced by Voice (Kratzer 1996), we get the syntactic tree (25b) (Pylkkänen 2002: 88), where the predicate Cause first merges with the VP describing the caused event and where Voice then relates an agent to the event introduced by Cause. The semantic contribution of the Cause head is given in (25a), the bare syntax in (25b), and the semantic composition tree in (25c).

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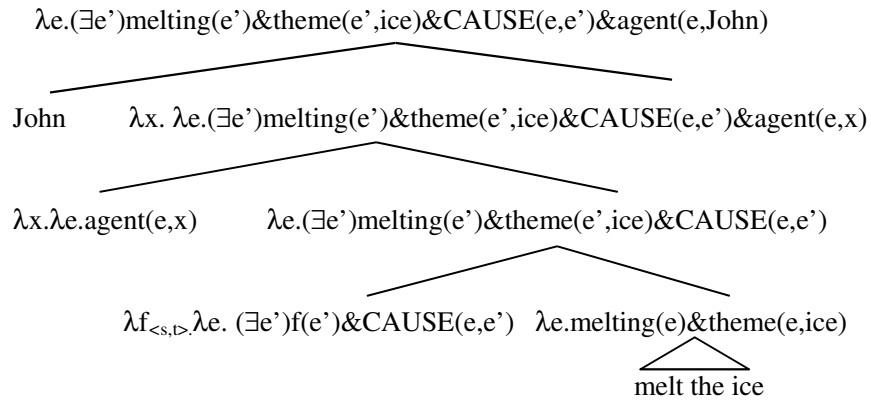
<sup>5</sup> As pointed out by a reviewer, these readings are somewhat similar to different readings of “sociative causation”, which involves a causer who does not only make the causee do an action, but also participates in it (e.g., Shibatani & Pardeshi 2002, Tatevosov 2018 etc.). This is in a way similar to our agentive reading (e.g., when a mother helps a child eat), but the help-provider in our examples is in no way required to be a causer. Also, the languages with “sociative causation” usually involve multiple cause heads/projections, which is different from Slavic/Serbian. We leave exploring the connection with “sociative causation” to future work.

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- (25) a. *Cause*:  $\lambda f_{\langle s, t \rangle} . \lambda e (\exists e') f(e') \& \text{CAUSE}(e, e')$   
 b. *Syntactic Structure*:



- c. *Compositional Semantics*



This structure allows us to account for the differing availability of the B and C readings, ignoring for the moment the A reading. This applies fairly straightforwardly in the case of agentive verbs.

2.2.1 Agentive verbs: both B and C readings

If we apply this to a verb like *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 eating, which plausibly is the event of the agent

deciding to perform some action. This would be true for all agentive verbs.

Thus, when *sam-a/o* agrees with the agent Ana there are two options. First, its domain of quantification may be individuals, which gives us the B reading (agentive reading). On this reading, Ana is the only agent of the event of eating - she is the only individual that executes the event of eating. This is formally represented in (26) below for the intransitive verb *swim*.

- (26) a.  $\lambda x.\lambda e.\exists e'[\text{swim}(e') \wedge \text{CAUSE}(e,e') \wedge \text{only}(\text{agent}(e,x))]$   
 b.  $\lambda x.\lambda e.\exists e'[\text{swim}(e') \wedge \text{CAUSE}(e,e') \wedge \forall y[\text{agent}(e,y) \rightarrow y = x]]$

Second, its domain of quantification may be events, which gives us the C reading. This reading says that the decision making event *e*, which introduces the agent Ana with which *sam-a/o* agrees, is the only event which causes the event of eating *e*. This is formally represented in (27).

- (27) a.  $\lambda x.\lambda e.\exists e'[\text{swim}(e') \wedge \text{only}(\text{CAUSE}(e,e')) \wedge \text{agent}(e,x)]$   
 b.  $\lambda x.\lambda e.\exists e'[\text{swim}(e') \wedge \forall e''[\text{CAUSE}(e'',e') \rightarrow e'' = e] \wedge \text{agent}(e,x)]$

### 2.2.2 Anticausative and unaccusative verbs: B reading only

Recall that anticausative verbs have access only to the C reading (causative reading), but lack the B reading (agentive reading).

- (28) a. Lampa se razbila **sam-a (od sebe)**.  
 Lamp refl. broke  $\text{sam}_{N,S,F}$  from self  
 'The lamp broke by itself.'  
 b. Led se istopio **sam (od sebe)**  
 Ice refl. melted  $\text{sam}_{N,S,M}$  from self  
 'Ice melted by itself.'

We follow Alexiadou & Schäfer (2006) and Levin & Rappaport Hovav (1995) in assuming that anticausatives are inherently causative. That is, a sentence like (29a) has the structure in (29b).

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- (29) a. The door opens.  
 b. v-CAUSE [the door  $\sqrt{\text{OPEN}}$  ]

Alexiadou & Schäfer (2006), for instance, motivate the presence of a causative event in anticausatives by the observation that cross-linguistically anticausatives license causer PPs (but not agent PPs). One such causer PP, *durch den starken Wind* ‘through/from the strong wind’ is shown in the German example (30) below.

- (30) Das Segel zerriss (durch den starken Wind).  
 The sail tore through the strong wind  
 ‘The sail tore from the strong wind. ‘ (Copley and Martin 2014: 224)

So, under these assumptions, anticausatives have a similar structure to the one proposed for agentive verbs in that they have a CauseP projection in their syntactic structure. However, the B reading is excluded with these verbs because they lack the agent-introducing projection VoiceP.

The C reading, on the other hand, derives in a parallel manner to that for agentive verbs. In (28a), for example, *sam-a/o* agrees with the theme *lampa* ‘lamp’ and quantifies over events, shown below in (31).

- (31) a.  $\lambda e. \exists e'[\text{break}(e') \wedge \text{theme}(e', \text{lamp}) \wedge \text{only}(\text{CAUSE}(e, e'))]$   
 b.  $\lambda e. \exists e'[\text{break}(e') \wedge \text{theme}(e', \text{lamp}) \wedge \forall e''[\text{CAUSE}(e'', e') \rightarrow e'' = e]]$

As a result we have the interpretation that there is only the event of breaking which introduces the theme with which *sam* agrees and no other (causer) events. That is, the meaning that we get essentially is that the causer event is missing.

This is again very similar to the unexplanatory *just*. Wiegand (2017, 2018) argues for a covert cause morpheme to account for unexplanatory readings of *just*. The account presented here predicts the presence of exactly such an element in the form of the functional layer CauseP. As such, despite the different syntactic behavior of Serbian agreeing *sam(-o/a)* and English *just*, it should be the case that the unexplanatory use of *just* also makes use of the semantic contribution of the syntactic projection CauseP.

The same logic discussed here for anticausatives extends to unaccusative verbs like *umreti* ‘die’ or *pasti* ‘fall’ and explains why they also lack the B reading, as they also lack VoiceP (see Alexiadou et al. 2015 and references therein).

### 3 Further Considerations: Sam(-a/o) and Focus

Unlike *samo* ‘only’, the agreeing *sam(-a/o)* does not associate with a prosodically focused element.<sup>6</sup> For instance, *samo* ‘only’ cannot associate with pro-dropped arguments, because such arguments necessarily lack prosodic prominence and thus cannot be focused. While in (32a), where the subject is overt, alternatives can be individuals (*Only Ana swims, not John or Mary*), this is impossible in (32b). Here we only have alternatives to the denotation of the verb itself (*She only swims, she doesn’t run or exercise*).

- (32) a. **Samo** Ana pliva.  
           Only Ana swims  
           ‘Only Ana swims.’  
       b. **Samo** pliva.  
           Only swims  
           ‘She only swims.’

There is no such restriction in (33), 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, as in (33a), or covert, as in (33b):

- (33) a. Ana pliva **sam-a**.  
           Ana swims  $\text{sam}_{N,S,F}$   
           ‘Ana swims by herself.’  
       b. Pliva **sam-a**.  
           Swims  $\text{sam}_{N,S,F}$   
           ‘She swims by herself.’

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<sup>6</sup> This is also consistent with the behavior of *just* in English (e.g., Wiegand 2017, 2018).



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This indicates further that the exclusive quantification provided by the agreeing form is distinct from the traditional focus-sensitivity of non-agreeing *samo*. While their underlying semantic contribution follows the same general schema, the way the alternatives are derived is not identical. More research is needed to determine how these unfocused syntactic elements like the Cause head can yield semantic alternatives.

### 4 Conclusions

In this paper, we discussed morphosemantic differences between the standard focus operator *samo* ‘only’ in Serbian and its agreeing counterpart *sam(-a/o)* ‘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-a/o* 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 scoping over the entire proposition. We discussed different readings of *sam-a/o* and we argued that their availability depends on the argument structure of the verb *sam-a/o* 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-a/o* takes scope: either at the VoiceP level or the CauseP level.

We did not formally discuss the derivation of the A (no-company) reading in this talk. There are several routes for analysis that could account for it. For example, we could posit an additional functional layer below CauseP which introduces states (presumably present with all nominals and stative predicates). This would explain why the A reading is available in such a wide variety of contexts, as well as why it is available for both subject and object agreement. Another similar option is to argue that in object agreement cases, we actually have a small clause structure involving the predicate *to be*, following the subject agreement pattern for quantification only over that small clause event/state. There are likely other options as well, all of which will need to take into account the animacy restrictions observed earlier. We leave this to future research.

Overall, this analysis provides support for bieventive analyses of causative structures, as arguments introduced by both VoiceP and CauseP are available for quantification by exclusives. This required modifying the bieventive analysis to include a CauseP projection even when the verb in question is an anticausative.

Finally, we showed that *sam(-a/o)* is an exclusive operator which does not associate with a prosodically focused element in the preadjacent (unlike *only/samo*), and is in this sense similar to the ‘unexplanatory’ *just* (Wiegand 2017, 2018). Future work should be devoted to applying this syntactically-driven explanation to the English data, as previous accounts have been purely semantic.

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