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Agentive Reading in the Middle: The Structure of Polish *reflexiva tantum*

Abstract

Morphosyntactic marking connected with the Middle contexts, broadly speaking expressing the involvement and affectedness of the subject (Cotticelli Kurras and Rizza 2013, Inglese 2020), tends to give rise to characteristic Voice syncretism, i.e., the appearance of different readings, e.g., inherently reflexive, anticausatives, antipassive, etc., which are argued to occur via allosemy at LF (Arad 2003, 2005; Marantz 2013a, 2013b; Wood 2015, 2016; Wood and Marantz 2017; Oikonomou and Alexiadou 2022).[1] Looking at *reflexiva tantum* (RT), i.e., predicates with reflexive clitic *się* (SE) without any non-*się* marked counterparts, this paper claims that in a language like Polish, where the Middle readings are not expressed by non-active/mediopassive synthetic morphology, this class of contexts does not have to be related to one specification of the Voice, but since it depends on the reflexive SE-clitic, the syntax of the Middle encompasses all the contexts that license the insertion of this element. Only a subset of the syncretic readings in Polish arises as post-syntactic allosemy, and unergative and unaccusative SE-reflexives differ with regards to the base-generation of the nominative-marked subject. Importantly, agentive readings involve the agentive Voice with the NP argument merged in its specifier. Polish *reflexiva tantum* are discussed in cross-linguistic contexts of other non-alternating predicates, i.e., *media tantum* and deponents, and it is shown that they cover the same semantic spectrum, but differ in the syntax, especially in their active and

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[1] The data come from Polish unless indicated otherwise. Abbreviations used: ACC – accusative case; CUML – cumulative prefix; DAT – dative case; EA – external argument; F – feminine; GEN – genitive case; IA – internal argument; IMPFV – imperfective; IMPRS – impersonal; LF – logical form; M – masculine; NACT – non-active; NEUT – neuter; NO – impersonal suffix; NOM – nominative case; P – predicate; PASS – passive; PF – phonological form; PFV – perfective; PL – plural; RT – *reflexiva tantum*; SE – a reflexive clitic; SG – singular; S-IMPFV – secondary imperfective; SUBJ – subjunctive; 1, 2, 3 – person features.

agentive readings. It is shown that the idiosyncratic and complex nature of *reflexiva tantum* is reflected in its potential to create idiomatic extensions, which arise due to both overt syntax and post-spellout allosemy.

Abstrakt
Formalne wykładniki związane z szeroko rozumianą „konstrukcją zwrotną" (*the Middle*), używaną by wyrazić zaangażowanie podmiotu i jego jednoczesne podleganie danej sytuacji (Cotticelli Kurras i Rizza 2013; Inglese 2020), pojawiają się w kilku powiązanych konstrukcjach (np. niekauzatywnych, lub *antipassive*), które otrzymują zróżnicowaną interpretację dzięki alosemii (*allosemy*) operującej w post-syntaktycznej strukturze LF (formy logicznej), jak przekonują np. Marantz (2013), Alexiadou et al. (2015), Oikonomou i Alexiadou (2022). Analizując czasowniki *reflexiva tantum*, które występują jedynie w formach złożonych z klitykiem *się*, artykuł przedstawia tezę, że w języku, w którym strona zwrotna jest składniowo stroną czynną i polega na zróżnicowanych użyciach czasowników zwrotnych z klitykiem *się*, jak to ma miejsce w języku polskim, interpretacje związane z kontekstami *Middle* nie są ograniczone do jednej specyfikacji struktury VoiceP (Kratzer 1996), ale odzwierciedlają składniowo wszystkie użycia tego klityka. W związku z tym tylko niektóre znaczenia związane z synkretyzmem konstrukcji zwrotnych są funkcją post-syntaktycznej alosemii (*allosemy*), a konstrukcje inakuzatywne (*unaccusative)* i nieergatywne (*unergative*) różnią się składniowo we wspomnianych konfiguracjach zwrotnych. Szczególnie istotne jest to, że konstrukcje z interpretacją agensa mają autentycznie nieergatywną (*unergative*) składnię, a ich podmiot pojawia się w kanonicznej pozycji agensa, tzn. w strukturze VoiceP. Polskie *reflexiva tantum* omawiane są w perspektywie podobnych konstrukcji, tj. *media tantum* i deponentów, gdzie – mimo podobnych znaczeń – konstrukcje te różnią się składniowo od zwrotnych *tantum*, szczególnie w zakresie składni znaczeń agentywnych. Dodatkowo, omawiany jest potencjał idiomatyczny tych konstrukcji w odniesieniu do składni tych elementów, gdzie niektóre idiomatyczne znaczenia powstają po transferze do LF, w wyniku allosemii (*allosemy*), ale te związane z agentywną składnią powstają w jawnej strukturze syntaktycznej (*overt syntax*).

1. Alternating and non-alternating SE-marked predicates[2]

Polish reflexive marker *się*, SE-reflexive, similarly to its cross-linguistic counterparts, appears in a variety of constructions where it alternates with the structures without this element, just like in the causative alternation below (Alexiadou et al. 2004, 2015; Schäfer 2008; Wood 2015, a.o.):

(1) a. Zosia   otworzyła okno.
     Sophie.NOM opened   window
     'Sophie opened the window.'

    b. Okno   otworzyło się.
     Window.NOM opened   SE
     'The window opened.'

Other alternating constructions involve dispositional middles, reflexive unaccusatives, antipassives, reciprocals, or psychological predicates (Kupść 2000; Rivero 2001; Rivero and Golędzinowska 2002; Rivero and Milojević Sheppard 2003; Golędzinowska 2004; Kibort 2004; Frąckowiak and Rivero 2011; Malicka-Kleparska 2012; Janic 2014; Holvoet and Linde-Usiekniewicz 2015; Rozwadowska and Bondaruk 2020; Willim 2020a, 2020b, a.o.).[3]
    The same reflexive marker appears in a non-oppositional use, i.e., where the SE-marked verb is the only grammatical option (Geniušenė 1987; Wróbel 1999; Tabakowska 2003; Jabłońska 2007). A few examples are shown below in (2):

(2) a. Janek   ulotnił   *(się) z   przyjęcia.
     John.NOM evaporated SE   from party
     'John escaped from the party.'

    b. Janek   bał   *(się) spytać o   drogę.
     John.NOM feared SE   ask   about way
     'John was afraid to ask the way.'

    c. Janek   wydawał *(się) zmęczony.
     John.NOM seemed SE   tired
     'John seemed tired.'

Reflexiva tantum (henceforth, also RT), or inherent reflexives in (2), are puzzling not only because of their non-alternating character, but also due to their ambiguous nature, as they display characteristics of unaccusatives and unergatives, i.e., their sole argument can be interpreted as a theme, an experiencer,

or an agent. Consider the data in (3) below, illustrating a sample of a variety
of interpretations connected to the SE-marking in Polish:

(3) a. Janek   drze ten papier.   [transitive]
        John.NOM tears this paper
        'John is tearing this paper.'

    b. Ten papier sam   się drze.   [anticausative]
        this paper alone SE tears
        'This paper tears by itself.'

    c. Ten papier drze się łatwo.   [dispositional middle voice]
        this paper   tears SE easily
        'It is easy to tear this paper.'

    d. Janek   drze się jak szalony.   [unergative]
        John.NOM tears SE like crazy
        'John is shouting like mad.'

The Polish root for 'tear' (from Proto-Slavic *der-) appears above in the tran-
sitive, the unaccusative (anticausative and middle voice), and the unergative
syntax. I will argue that the nominative-marked NP *Janek* in (3a) and (3d) is
assigned the same agentive θ-role and appears in the canonical agent posi-
tion in the specifier of the eventive VoiceP (Kratzer 1996) in both of them.[4]
Moreover, the same root in (a) and (c) above gives raise to two different read-
ings, when combined with a SE-reflexive: a literal 'tear' and an idiomatic
'shout'. As such, the agentive (3c) is closely related to *reflexiva tantum,* as it
does not have a non-SE-marked alternant in that interpretation.[5]

    Cross-linguistically, *tantum,* i.e., non-alternating forms, are considered
to exhibit canonical traits of a morphosyntactic strategy used in their mark-
ing. Hence, in languages where most *tantum* are mediopassive, those predi-
cates will display a canonical mediopassive/middle syntax. Various interpre-
tive variants (e.g., reflexive, anticausative, passive, etc.) are argued in such
languages to arise as a function of the contextual allosemy at LF (Arad 2003,
2005; Marantz 2013a, 2013b; Myler 2014), which applies in the Voice do-
main (Wood 2015, 2016; Wood and Marantz 2017; Oikonomou and Alexi-
adou 2022). In a language where middle voice is marked by a reflexive clitic
like SE, the examples of *tantum* will also preserve and exhibit typical proper-
ties of the SE-reflexive syntax, including some common syncretism patterns

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[4] I follow Bošković (2008 et seq.) here in assuming that the lack of definite articles in Pol-
ish indicates the lack of DP. Therefore, I will be consequently using the [N] feature to indicate
a nominal element. This feature will be used interchangeably with a [D] feature, the latter
applying to DP-languages, like Germanic. A cross-linguistic distinction into semantics and
syntax of the D-layer vs the N-layer will not play a role in this paper.

[5] A reviewer notices that the fact that, e.g., Bosnian-Croatian-Serbian *derati* 'to tear, fray'
also means 'to shout' when accompanied by a reflexive clitic in *derati se,* may indicate that
this split into two different semantic classes could go back to Proto-Slavic.

of the type we saw in (3). I will argue that despite the appearance of the same classes of readings as in languages with synthetically encoded Middle, in languages without non-active morphology in these contexts, such polysemy cannot be limited to the same syntactic structure, as argued for languages with the synthetic Middle marking, e.g., by Oikonomou and Alexiadou (2022).[6] Instead, in a language like Polish, where the Middle readings are marked with a clitic rather than by synthetic morphology, we are dealing with, at least, two syntactic configurations, one of which involves the 'high' agent in its canonical position in the specifier of VoiceP. Thus, not all syncretic readings arise as post-syntactic allosemy, and some of them are a function of different configurations in overt syntax.

The paper is organized as follows. Section 2 presents Oikonomou and Alexiadou's (2022) allosemic account of the Middle-related syncretism in languages with synthetic morphological marking of the Middle. Section 3 discusses Polish syntax with the Middle being expressed by the reflexive clitic in a specifier position. Importantly, it is the reflexive clitic that is the locus of the voice syncretism in this language. Both alternating and non-alternating SE-marked predicates are discussed. Section 4 argues that agentive *reflexiva tantum* in Polish are unergative and involve the agent argument

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[6] The term *Middle* is used here in a broad way, i.e., to refer to the readings where the subject is in some way affected by the event (after Cotticelli Kurras and Rizza 2013). It is worth remembering that, as a reviewer rightfully notes, the Middle is not one single phenomenon, and e.g., Goodwin (1900) specifies that Greek middle voice includes the readings with the subjects being represented as acting 'upon himself' and/or 'in some manner which concerns himself' or expressing a causative meaning (Goodwin 1900: 267), each of these uses being encoded with different case marking, e.g., 'upon himself' getting accusative object, while self-benefacting, or 'on an object belonging to himself' expressed with a dative-marked object. What is important here, and Greek shows that convincingly, is that multiple readings (e.g., 'upon himself' as well as 'for himself') may use the same morphological marking ('may be united in one verb', Goodwin 1900: 267), and we are focusing here on the family of readings expressed by the same (i.e., consistent within one language) Middle morphosyntax. This consistent marking resulting in different interpretations is referred to here as Voice syncretism after Oikonomou and Alexiadou 2022. More specifically, the term *middle voice* is restricted here to dispositional constructions of the type shown in (3c). Languages with morphosyntactic distinction of active and passive voice vary as to which will be used in dispositional middles. In languages like English, a distinctive non-active voice is only used to mark passive voice and the middle voice is realized without non-active marking (*These cars drive well*). Consequently, English will also use active voice to express the family of construction associated with the Middle, such as anticausatives (*The window opened by itself*), or inherent reflexives (*Sophie washed*). Languages that use non-active voice to express dispositional middle, also use it to express the above readings. This is the case in Modern Greek, where non-active is used in dispositional middle (*to pukamiso sideronete efkola* 'This shirt irons (NACT) easily' (Alexiadou and Doron 2012: 26), as well as in anticausative (*I Ana gratzunistike* 'Ana got scratched (NACT)'). Such readings expressed by non-active morphology, which is shared with passive, will also be referred to as *mediopassive.*

merged in the canonical position in the VoiceP. Section 5 discusses crosslinguistic counterparts of *reflexiva tantum*, i.e., *media tantum* and deponents. It is shown that *tantum* characteristically involve the same semantic classes of predicates, which may be expressed using the exclusively active syntax. Thus, in some cases, the same classes of reading appear as *activa tantum*. Section 6 concludes the paper and discusses some potential issues that arise in the context of *reflexiva tantum.*

2. The Middle, reflexives, and voice syncretism

Synthetic marking of the Middle (broadly taken as morphological marking of the subject's affectedness and involvement) has only been preserved in a handful of Indo-European languages, and Slavic is not exceptional in its lack of the inflectionally marked middle voice.[7] Instead, many of the Middle contexts are expressed with a reflexive element. In light of this, it is important to look at the connection between the reflexive and the Middle readings.

Non-active morphology can often give raise to a reflexive interpretation, sometimes on its own, e.g., with inherently reflexive verbs of body grooming or with action verbs, or when augmented by an additional reflexive element like Greek -*afto*, Hittite -*za*, or Vedic *tanŭ* (also Old Avestan) (Kulikov 2007; Alexiadou 2012; Grestenberger 2015; Spathas et al. 2015; Inglese 2020). Doron (2003) argues that the reflexive reading of the mediopassive verbs results from the middle morpheme assigning an agent thematic role to the argument of the root. Alexiadou and Doron (2012) show that mediopassive morphology is not really used to achieve the reduction of the external argument, as active marking can express events without a participation of an agent, anyway. Thus, the use of the middle or passive morphology, in fact, indicates that the described event has an agent. It should not be surprising then that the Middle may be expressed with the reflexive elements, with or without a specialized inflectional morphological marking. Kemmer (1993) even argues that of the two categories (i.e., the reflexive and the Middle), it is the reflexive that is 'synchronically and diachronically primary' (Kemmer 1993: 231). Indeed, we can observe that in many languages with a morphological expression of mediopassive, non-active morphology becomes optional in reflexive readings (while the reflexive element being retained), as attested e.g., in later Sanskrit, Hittite, or Latin (Cennamo 1999; Puddu 2007; Cotticelli Kurras and Rizza 2013; Grestenberger 2018c, Inglese 2020).

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[7] Inflectional Middle was only preserved in Anatolian, Greek, Latin, Tocharian, Indo-Iranian, Celtic, and Gothic.

Hence, we have the evidence for both, reflexivization with non-active morphology, and marking the affectedness of the subject (i.e., Middle reading) via reflexivization. We expect then similar syncretism, understood as the use the same form in varying syntactic contexts, for both, mediopassives and reflexives. Similarly, we expect the existence of *tantum* in both these groups.

Looking at languages where Middle marking involves synthetic morphology, Oikonomou and Alexiadou (2022) argue that the patterns of polysemy analogous to Polish (3a–d), are strongly related to the Voice layer (Kratzer 1996), which is a syntactic locus of the Middle readings. Lexical specifications of the Voice (e.g., optional absence of a specifier, regulated by a [+/− D] feature) can give rise to different interpretations, based on the properties of the embedded vP, altogether with the encyclopedic knowledge connected to the root.
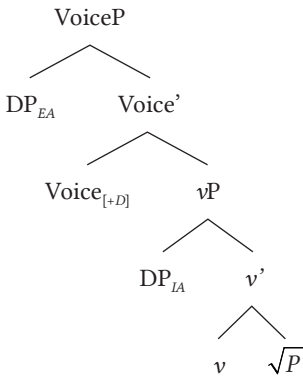
(4) a. Active Voice   b. Non-active Voice
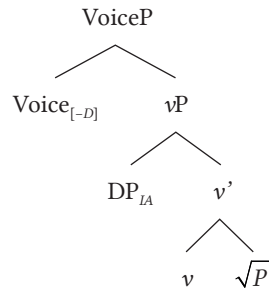
Different interpretations that the syntactic configurations above can give rise to, e.g., passive, middle, or anticausative, are argued there to emerge via contextual allosemy, which is taken to be the LF-counterpart of allomorphy, and which also arises as a consequence of the post-syntactic interface instructions, where the competition for interpretation is involved (just like with the allomorphic competition for the PF insertion) (Marantz 2013a, 2013b; Harley 2014; Wood 2015, 2016, a.o.). For the reflexive interpretation to be contextually selected with the absence of a naturally reflexive predicate, an overt reflexive morpheme should be merged. In languages with morphological middle/non-active/mediopassive marking, the Voice layer does not project a position for the external argument (see also Embick 1997), and any agentive NP that may appear there will be identified with a theme, as below (Oikonomou and Alexiadou 2022: 6):

(5)   [[Voice $_{-D}$]] / __ vP$_{REFL}$ = $\lambda f_{<s,t>}\lambda e.$ f(e)& Agent (e) = Theme (e)

However, I argue that for languages without synthetic mediopassive morphology, nothing precludes the active analysis, where the Voice is specified as [+D], and the sole agentive argument is merged in the Spec of VoiceP. The reflexive element is merged below the Voice layer, with the vP. I will show that such a configuration is attested also outside Slavic, e.g., in Vedic (Grestenberger 2018b). Importantly, this is not the only option for languages without the synthetic Middle, as non-agentive SE-marked contexts, such as anticausative, involve the expletive Voice with a [+D] specification. The SE element in such contexts is merged in the specifier of VoiceP (Schäfer 2008 et seq.; Alexiadou et al. 2015; Wood 2015), like in (6) below:

(6)   [[Voice $_{+D}$]] / __ vP$_{Change-of-state}$ = $\lambda f_{<s,t>}\lambda e.$ f(e)

I will show that both configurations are attested in the alternating SE-marked predicates, as well as in *reflexiva tantum*. Overall, the Voice syncretism discussed in Oikonomou and Alexiadou (2022), in a language like Polish arises in the presence of the Voice layer in conjunction with the interpretation of the vP and the root, but crucially, it does not have to be limited to one specification of Voice or the same syntactic structure of VoiceP. Crucially, it is the SE-reflexive that is the locus of syncretism in the active Middle languages and as long as the structural conditions for SE insertion are satisfied, such characteristic syncretic patterns may arise. The presence of the Voice projection is a necessary but not a sufficient condition for the Middle-related syncretism.

3. Polish SE and RT

Polish, like many other Indo-European languages, uses reflexive strategies derived from the pronominal stems *se-* and *s(e)we*, with the latter giving rise to possessive adjectives (Polish *swoje*), and the former retaining its anaphoric value and appearing in both alternating SE-reflexives and *reflexiva tantum*. Polish *się* differs from many SE-reflexives cross-linguistically, e.g., from German *sich* (Schäfer 2008) or Icelandic *-st* (Wood 2013, 2015, 2023) in the fact that this clitic-like element is devoid of phi-features. This relates to its inability to realize a grammatical case. It is illustrated in (7), where sentences (a) and (b) differ in the case that is assigned to the NP argument, accusative and genitive respectively. The form of *się* does not reflect this difference. Sentence (8) shows that SE also does not participate in case transmission.

(7) a. Jan   ogolił **brodę**. / Jan   nie ogolił **brody**.
   John.NOM shaved beard.ACC John.NOM neg shaved beard.GEN
   'John shaved / didn't shave the beard.'

 b. Jan   ogolił **się**. / Jan   nie ogolił **się**.
   John.NOM shaved SE / John.NOM neg shaved SE
   'John shaved / didn't shave.'

(8) a. On$_i$ przedstawił go$_j$ jako kolega$_i$ / jako kolegę$_j$
   He.NOM introduced him.ACC as friend.NOM / as friend.ACC
   'He introduced him as a friend would do / him as somebody's friend.'

 b. On   przedstawił siebie jako kolega / jako kolegę.
   He.NOM introduced self.ACC as friend.NOM / as friend.ACC
   'He introduced himself as a friend would do / as a friend of his.'

 c. On   przedstawił się jako kolega / *jako kolegę.
   He.NOM introduced SE as friend.NOM / *friend.ACC
   'He introduced himself as a friend would do / *as a friend of his.'

Additionally, Polish SE cannot appear in the inherent case position. Only an anaphoric and a phi-features-containing reflexive pronoun can appear there (9).

(9) *Jan pomógł ***się /** sobie zdać egzamin.
  John helped SE / self.DAT pass exam
  Intended: 'John helped himself pass the exam.'

All this could mean that if SE is indeed inserted into a case licensing position, its lack of phi-features precludes the case realization and transmission/copying into the adjunct clause, as in (8). A θ-role realization is also blocked for SE and it cannot appear in the inherent case position like in (9) above. Another feature of the Polish reflexive marker is its mobility and a possibility to appear together with various verbal markers, such as thematic vowels and participles, which suggests that unlike some instances of Romance *se/si* or Russian *-sja*, Polish SE is not a bound, affixal element.[8] SE-reflexive in Polish, therefore, fits the description of a defective clitic-like element, devoid of phi-features, with only a categorial feature [N] present. In a Distributed Morphology-style analysis, SE is inserted into a functional projection with an [N] feature licensing requirement, but no overt NP merged. Similarly to Icelandic *-st* (Wood 2015) or German *sich* (Schäfer 2008 et seq.), SE is merged in a traditional specifier position. However, a defective clitic status of SE allows it to be base-generated within different projections inside the VoiceP/*v*P structures, and to move.[9] Importantly, SE-reflexives appear in both unaccusative and unergative configurations.

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[8] Russian *-sja-* reflexives, despite involving what looks like a synthetic marker, are also syntactically active, as they assign structural accusative (Madariaga 2017).

[9] This extends to SE-marked impersonal contexts, where SE is merged with the IMPRS functional projection (Legate et al. 2020). This high position of SE is confirmed by its incom-

In the unaccusative class of SE-reflexive contexts, this marker is in the Spec of the expletive Voice (Schäfer 2008 et seq.; Alexiadou et al. 2015; Wood 2015, a.o.), with the nominative NP being the internal argument (10b). I adopt this analysis for (among others) SE-marked anticausatives (1b) (see also Malicka-Kleparska 2012), dispositional middles (3c), and reflexive unaccusatives.[10] One of the characteristics of *się* generated in the VoiceP-Spec is the failure of the agentivity diagnostics, i.e., incompatibility with agentive adverbs and inability to control into the purpose clause (10b).[11]

(10) a. Bałwanek   się   (*specjalnie)   stopił.
        snowman   SE   (deliberately)   melted
        'A little snowman has melted (*on purpose).'

    b. Te   książki czytają się   szybko (*żeby zdać egzamin).
        These books   read   SE   fast.   (that.SUBJ pass exam)
        'These books read fast (*in order to pass the exam).'

Unfortunately, most of the unaccusativity diagnostics proposed for Slavic produce ambiguous results for Polish, even in cases of canonical unaccusatives like 'die' and 'fall', and those suggested to work best, e.g., in Cetnarowska (2000) (e.g., resultative *-ły* adjectives, which do work for simple unaccusatives like *umarły/upadły anioł* 'dead/fallen angel') do not appear with SE-marked predicates.[12] However, the impersonal *-no/-to* construction, which targets sentient and volitional subjects, shows that the expletive VoiceP predicates (e.g., in (11)) are not agentive.

(11) a. *Stopiono   się.
        Melted-*NO*   SE
        Int: 'One got melted.'

    b. *Czytano się szybko.
        read-*NO* SE   fast
        Int: 'One read fast.'

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patibility with nominalizations (*Tańczenie* (*się*) *Tanga było obowiązkowe* 'Dancing (*SE) the Tango was required.' See also Wolfsgruber (2021) on Romance impersonals.

[10] Another context that could potentially involve expletive Voice is dative impersonal middle (DIM) (Willim 2020a).

[11] Polish anticausatives and middles are also incompatible with the agentive *przez* 'by'-phrase. See Bruening (2013) on the logic of the by-phrase licensing and other agentive diagnostics targeting agentive Voice. The incompatibility with these test supports the expletive analysis of SE in these constructions in Polish.

[12] Other unaccusativity diagnostics that can be applicable in other Slavic languages involve e.g., compatibility with distributive prefix *po+NP* (*Potopiło się bałwanów*: 'Po-melted snowmen.GEN'), perfective prefix *na+ NP.GEN* (*Na-otwierało się okien:* 'Na-opened windows. GEN'), or first-conjunct agreement in post-verbal position (Glushan 2013) (*Za oknem topił się bałwan i śnieżka* 'Outside the window melted.M snowman.M and snowflake.F'). All three are grammatical options in Polish, but they also give positive results with some unergatives. This includes other tests like long scrambling, a wide scope for negation over quantifiers, or the locative inversion and postverbal subjects (see also Potsdam 2011).

Polish SE-clitics also appear in unergative, i.e., agentive, constructions. This group involves e.g., body grooming/dressing verbs (12a), antipassives (Basilico 2021) (12b), or aspectual, saturative, or cumulative (among others) prefix-induced reflexives (Jabłońska 2007; Armstrong 2013) (12c). These predicates are compatible with the agentive modification and display other non-unaccusative characteristics, such as compatibility with -*no/-to* particles (13) (Cetnarowska 2000; Jabłońska 2007).

(12) a. Zosia się przygotowała do wyjścia, żeby złapać autobus.
        Sophie SE prepared to go.out that.SUBJ catch.INF bus
        'Sophie prepared to go out to catch the bus.'

    b. Zosia się często biła jako dziecko, żeby pokazać innym, że jest silna.
        Sophie SE often beat as child that.SUBJ show others that is strong
        'Sophie was fighting a lot as a child to show others that she is strong.'

    c. Zosia *na*czytała się tych książek, żeby być specjalistką.
        Sophie CUML-read SE these books that.SUBJ be expert
        'Sophie read these books (to her heart's content) to become an expert.'

(13) a. Przygotowano się do wyjścia.
        got.ready-*NO* SE to go.out
        'People got ready to go out.'

    b. Bito się wczoraj.
        fought-*NO* SE yesterday
        'People were fighting yesterday.'

    c. Naczytano się tych książek.
        CUML-read-*NO* SE these books
        'People read enough of these books.'

Thus, these predicates appear to involve the agentive VoiceP with the NP subject in its Spec (see also Marelj 2004; Reinhart and Siloni 2004; Basilico 2021). I assume that the reflexive SE is merged below, with the vP projection, which has a [+N] (or [uN]) feature that triggers SE-insertion (14b).

(14)   a. unaccusative/anticausative reflexives   b. unergative reflexives
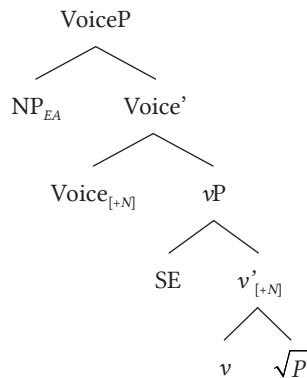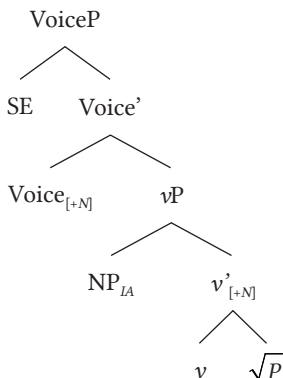
Hence, SE in Polish appears in both agentive and unaccusative contexts, and a variety of syncretic readings that arise with this element are not bound to one configuration or a Voice specification, as it could be the case with the non-active Middle marking languages. Importantly, we find analogical behavior in Polish non-alternating SE-reflexives, *reflexiva tantum*.

One of the most systematic studies of the reflexives is offered in Geniušienė (1987), where four types of non-alternating ('non-reversible') reflexive predicates are distinguished, and their complex derivational history is being stressed. This classification offers an important insight into the nature of these constructions.

The first type represents 'formal, or morphological non-reversibility.' Those predicates plausibly once had their transitive alternants, but they were lost (also Tabakowska 2003). Some examples include Lithuanian *bastyti-s*, Polish *włóczyć się*, both meaning 'wander around, roam'.

The second type displays 'syntactic non-reversibility,' where SE-marked predicates have undergone some valency changes in either direction (either acquiring an extra argument or losing one). The examples include 'give', Polish *dać* (see (37) below) and Lithuanian *duoti*, or Latvian *paveicā-s* 'carried-out', which has a Polish counterpart *powieść się*, both meaning 'succeed'.

(15) Vin-am   paveicā-s
     he.DAT   carried.out-SE
     'He was lucky.' (Latvian; Geniušienė 1987: 147)

Next, a 'lexical non-reversibility' type, according to Geniušienė, is an instance of the expansion of the lexical combinability to different lexical and semantic noun types. The examples include Latvian *meklēt* 'look for', which acquires the meaning 'be on heat', when used to talk about animals. Some Polish *tantum* that represent this class include *łasić się* 'to fawn', which is used to talk about animals or, metaphorically, humans.

Finally, the fourth type, 'semantic non-reversibility', involves an additional semantic derivation superimposed on a formal reflexive derivation, e.g., Latvian *ardo-si*, which literally means 'tear down' (e.g., a house), but gets the meaning of 'shouting/bawling' when reflexivized, analogically to Polish *drzeć się* 'tear/shout', which gains an unergative reading of 'shouting' whenever combined with a human subject (3d). Geniušienė (1987) argues that a derivation of this class of reflexive predicates involves two subsequent processes: a valency-reduction or semantic reflexivization, and then the figurative extension of the meaning based on a metaphor (e.g., metonymy-based, or via associative connotations).

Taking a minimalistic view, one can attempt to account for the derivational complexity stressed by Geniušienė (1987) analogously to the polysemy attested with the Middle and SE-marking in general, i.e., by appealing to the

allosemic variation (Arad 2003, 2005; Marantz 2013a, 2013b; Myler 2014; Wood 2016; Wood and Marantz 2017; Oikonomou and Alexiadou 2022). However, there is evidence that we are dealing with more than just post-syntactic meaning exponence (allosemy), and some readings must arise in the overt syntax. The next section looks closer at the agentive readings with SE-reflexives.

4. Unergative *reflexiva tantum* and agentive syntax

Broadly speaking, we can divide Polish *reflexiva tantum* into two groups: unergative and unaccusative (see Jabłońska 2007; Medová 2009 for similar observations). I will mainly focus on the unergative group here, as the fact of the unaccusativity of many SE-marked predicates and *tantum* is generally accepted. I propose that the purely agentive syntax in *tantum* is more likely to arise in a language with the Middle realized via active syntax, rather than in those with non-active morphology (see deponents in Grestenberger 2014 et seq.).

Below, I list a sample of the *reflexiva tantum* verbs belonging to each group, altogether with their broadly defined semantic classes. I am using a wide definition of *reflexiva tantum*, specified as verbs without non-SE marked counterparts. The last category, (21), includes the ambiguous readings, (unaccusative and unergative), and each reading involves a different structure.

(16) Unergative / verbs of body movement: *łasić się* 'fawn', *uwijać się* 'hurry/bustle, *zachować się* 'behave', *skradać się* 'sneak', *stawić się* 'show up', *uśmiechać się* 'smile', *śmiać się* 'laugh', *wzdrygać się* 'cringe/wince/flinch', *gramolić się* 'clamber'

(17) Unergative / verbs of speech / behavior: *odezwać się* 'speak up', *modlić się* 'pray', *chełpić się/ szczycić się* 'brag', *żalić się* 'complain, grumble', *awanturować się* 'brawl, fight', *jąkać się* 'stutter/falter', *mizdrzyć się* 'ogle/wheedle'

(18) Unergative / verbs of cognition / psychological: *sprzeciwić się* 'oppose', *litować się* 'show mercy', *opiekować się* 'take care', *starać się* 'try, attempt', *patyczkować się* 'go easy on sb.', *lękać się, bać się, obawiać się* 'fear'

(19) Unaccusative /anticausatives: *zalęgać się* 'breed, swarm', *chmurzyć się* 'get cloudy', *pocić się* 'sweat', *czerwienić się* 'blush'

(20) Unaccusative/ raising verbs / middles: *wydawać się* 'seem', *składać się* 'fold up/ coincide', *okazać się* 'turn out', *nadać się, przydać się* 'be suitable, useful', *stać się* 'become', *dziać się* 'happen/occur'

(21) Ambiguous/alternating: *wymknąć się* 'sneak out (unerg.)/ 'elude, get out (unacc)' *ulotnić się* 'make oneself scarce (unerg.)'/'evaporate/leak' (unacc.), *pojawić się* 'turn up/show up (unerg.)/ 'appear' (unacc), *domagać się* 'demand' (unerg.)/ 'need/require' (unacc.), *udać się* 'go' (+ NP$_{NOM}$; unerg.)/ 'succeed' (+NP$_{DAT}$, unacc.), *dać się* 'allow/let sth. happen (unerg.)/'be possible (unacc.)'

The agentive status of the first groups (16–17) is supported by several tests.[13] Firstly, these predicates allow agent-oriented adverbs and control into adjunct purpose clauses (Alexiadou et al. 2015).

(22) a. Jan {celowo}   uwijał się w pracy {żeby   dostać podwyżkę}.
        John deliberately hurried SE at work that.SUBJ get   raise
        'John deliberately hurried at work to get a raise.'

    b. Jan {celowo}   się odezwał {żeby   pokazać, że   ma
        John deliberately SE spoke   that.SUBJ show   that has
        coś   do powiedzenia}.
        something to say
        'John deliberately spoke out to show that he has something to say.'

This is not the case with the unaccusative variants, which align with the expletive Voice structures (Schäfer 2008; Alexiadou et al. 2015, a.o.).

(23) a. Jan {*celowo}   się pocił,   {*żeby   móc pójść do domu}.
        John deliberately SE sweated, that.SUBJ can go   to home
        'Joh was sweating on purpose so that he could go home.'

    b. Jan {*celowo}   wydawał się nam   zajęty, {*żeby   dostać podwyżkę}.
        John deliberately seemed SE us.DAT busy, that.SUBJ get   raise
        INT: 'John deliberately seemed busy to us to get a raise.'

Another argument in favor of the agentive status of some RT comes from their compatibility with the impersonal participle *-no/-to* (Cetnarowska 2000, Jabłońska 2007).

(24) *zachowano się jak należy* 'they behaved properly', *podkradnięto się* 'they sneaked in', *przeżegnano się* 'they crossed themselves', *wzdrygnięto się* 'they cringed', *odezwano się*' they spoke up', *pomodlono się* 'they prayed a bit', *sprzeciwiono się* 'they opposed', *zlitowano się* 'they took pity'

Migdalski (2006) shows that diachronically, *-no/-to* derives from the 'have-perfect' structures. Note that this perfect auxiliary (HAVE) is used with unergative and transitive predicates (in contrast to unaccusatives, where BE is used) in languages where different auxiliaries are used in different argument structures, like Germanic and Romance (Bjorkman 2001).[14] Additionally, we assume that *-no/-to* is generated above the Voice projection, and it licenses the arbitrary pro in the [VoiceP, Spec].[15] Thus, not only is *-no/-to*'s

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[13] Except for the stative psych-predicates like *lękać się, bać się, obawiać się* 'fear', which involve unergative-type syntax with the external argument interpreted as the holder (as in Kratzer 1996).

[14] These structures also license accusative case (e.g., *Skradziono pieniądze* 'They stole the money.ACC'), which fact indicates that *-no/-to* is closer to the perfect morpheme connected to agentive/unergative syntax rather than to passive (see also Kibort 2004, Migdalski 2006, a.o.)

[15] Based on its incompatibility with any other tense than past, Lavine (2000) proposes that *-no/-to* is generated in T, while Lavine (2005) places it in AuxP. Migdalski (2006) suggests

morphological make up directly related to the presence of Voice and the external argument, but also the presence of this marker forces SE-reflexive to the lower verbal domain (the specifier of *v*P), as these elements are not in complementary distribution.[16]

The status of the *-no/-to* particles as agentive diagnostic is not uncontroversial. Several works point out that these particles may appear with some unaccusatives (Rozwadowska 1992; Lavine 2000; Bondaruk and Charzyńska-Wójcik 2003; Kibort 2004). Importantly, many good examples of *-no/-to* with apparent unaccusatives involve primary or secondary imperfectives, often with iterative interpretation:

> (25) *Upadnięto/ upadano z wycięczenia.
>   '*People fell-PFV/ People were falling.S-IMPFV from exhaustion.'

In this context, the role of aspect is interesting and could be telling with regards to the position of the nominative NP. Glushan (2013) shows that the animacy of the subject plays a role in the unaccusativity diagnostics in Russian.

> (26) a. Po jabloku krasnelo   na každom dereve.
>   Po apple   reddened on each   tree
>   'An apple reddened on each of the trees.'
>
>   b. *Po studentu krasnelo v každoj gruppe.
>   Po student   blushed in each   group
>   'A student blushed in each of the groups.' (Russian; Glushan 2013: 64)

Glushan (2013) suggests that the animate arguments, as in (26b), are in fact experiencers and they move to a higher verbal projection (to ApplP, as in Pylkkänen 2008), causing the failure of the unaccusative diagnostics. Hence, we see that animate arguments of the unaccusative predicates may already target higher projections in the verbal domain. Nash (2021) shows that dynamic semantics connected to imperfective aspect plays a role in obtaining agentive interpretation in Georgian intransitives. Unaccusative accomplishments pattern with activities as both are atelic in imperfective aspect and may denote advancement of time. Note that many unaccusatives like *padać* 'fall' above are built with an *-a-* theme vowel, which appears in many process verbs (e.g., Polish *rwać* 'tear', *wiązać* 'tie', or *pisać* 'write'). Nash argues that dynamicity entails the presence of the initiator, and atelicity entails the absence of the result, both of which characterize unergative verbs, with

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the placement of this particle in MoodP. All these proposals involve projections higher than VoiceP/*v*P.

[16] Note its syncretic morphological make up (*-n-/-t-*), shared with the passive, which also necessarily involves the presence of Voice. See also Grestenberger (2018a) for discussion on Voice-related participle *-ant* in Hittite.

the agent bringing about the eventuality. Note that with the imperfectives (both primary and secondary) we often get a habitual/iterative interpretation, which denotes a series of mini events, each plausibly including an initiator that can have the agentive interpretation. This is also the interpretation we obtain with the impersonal *-no/-to* particles in these contexts: *upadano* 'people used to fall/kept falling, *mdlano* 'people used to faint/kept fainting'. Hence, it is likely for a theme to be reanalyzed as an experiencer, and then possibly as an agent in the VoiceP. This is in fact attested diachronically, with the following direction of change:

(27) Object experiencer>subject experiencer>agent (Haspelmath 2001).

This reanalysis has occurred in English, where for example, the psych-predicate *fœran* was ambiguous between the objective experiencer reading 'frighten' and the experiencer subject interpretation 'fear', which became prevalent after the object experiencer meaning was lost for this predicate in the 16th century (van Gelderen 2014). The shift into agentive reading in Modern English is visible in the imperfective contexts like below:

(28) Wall Street is fearing a bloodbath (van Gelderen 2014: 119)[17]

Finally, notice that *-no/-to* is generally infelicitous with verbs of existence (Cetnarowska 2000), unless they involve a secondary imperfectivization and iterative, eventive meaning:[18]

(29) *Byto   /by-wa-no   w domu.
     was-*no*.IMPFV/   was-*no*.S-IMPFV   at home
     'People *were/used to be at home.'

The locative construction with a copula is argued to involve post-verbal subjects marked with the Genitive of Negation (Witkoś 2000). When the locative copula in present tense is negated, it appears in its suppletive form 'have' (30a). However, with the secondary imperfective, not only do we not get the verb suppletion in the scope of negation, but also the argument cannot bear the Genitive of Negation anymore, which confirms its status as an external argument. The interpretation is also closer to agentive rather than existential, i.e., 'John does not frequent/visit his home.'

(30) a. Jana   nie ma w domu.
        John.GEN neg has at home
        'John is not at home.'

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[17] The example dated for 2007 is taken from the *Corpus of Contemporary American English* (COCA); see van Gelderen (2014).

[18] Lavine (2000: 113) refers to the predicates which are incompatible with *no-/to-* as 'perfective unaccusatives.'

    b. *Jana   / Jan   nie bywa   w domu.
       *John.GEN / John.NOM neg be.S-IMPFV at home
       'John is often not at home.'

Taking all these arguments together, we keep treating *-no/-to* particles as a diagnostic to detect external arguments generated in VoiceP and assume a structural unergative status of many RT in Polish.

    There is some further morphological indication of the agentive status of the NP in the unergative class of RT, e.g., the possibility of deriving agentive nouns with the agentive suffix, going back to Proto Slavic *-teljь*, e.g., *modliciel* 'the one who prays. (Krasnowolski and Niedźwiedzki 1920: 182). Also, some of these predicates include a semelfactive stem *-ną-*: *uśmiechnąć się* 'to smile', *wymknąć się* 'to sneak out', *uwinąć się* 'to hurry/bustle', or *wzdrygnąć się* 'to wince/flinch', which stem denotes a single quick action with an agentive subject, like in typical agentive and unergative *kop-ną-ć* 'to kick' or *jęk-ną-ć* 'to moan'.[19] Semelfactives are connected to nouns, such as *kop* 'kick', or *jęk* 'moan' (see also Taraldsen Medová and Wiland 2019) and we can still find corresponding nominals for some semelfactive RT, e.g., *uśmiech* 'smile'. This may indicate their more complex structure, as some of them are in fact based on the primary unaccusative predicates with the reflexive merged in the *v*P specified for the internal argument (hence, the [+N] feature), which nevertheless projects agentive VoiceP.

    We have seen that cross-linguistically, *tantum* often involve roots with nominal and adjectival characteristics (e.g., Kallulli 2013, 2021). In a grammatical theory like Harley (2014) or Embick (2010), where roots have no categorial features, this could mean that *tantum* are built on other, previously derived structures, with the verbal head embedding a nominal head *n* or an adjectival head *a.* If we assume, after Harley (2005), that some roots may have fixed meaning and they fall into basic ontological types like states and events, we do not need to assume a prior categorization and we can appeal to those semantic properties. Canonical unergatives and unaccusatives can be assumed to be derived from event-like roots for unergatives (e.g., *dance, sneeze*), and change-of-state, property-like roots, in case of unaccusatives (e.g., *sink, fall*). While some of the denominal RT involve more straightforward events (e.g., *uśmiechać się* 'to smile' < *uśmiech* 'smile', *modlić się* 'to pray' < *modły* 'prayers', *wygłupić się* 'to fool around' < *wygłupy* 'antics'), many of them are built on states (*żalić się* 'to complain' < *żal* 'regret', *zgadzać się* 'to agree' < *zgoda* 'consent/agreement', *sprzeciwić się* 'to oppose' < *sprzeciw*

---

[19] Another group that involves similar marking are inchoative degree achievements like *chudnąć* 'become thin', *mięk-ną-ć* 'become soft', *bled-ną-ć* 'become pale', which are unaccusative, and deadjectival (*chudy* 'thin', *miękki* 'soft'). Polish unergative RTs do not have scalar readings associated with degree achievements and they are closer to semelfactive meaning.

'opposition'), while others involve purely metaphorical extensions (*szczycić się* 'to brag/boast' < *szczyt* 'peak', *patyczkować się* 'to handle sb. with kid gloves' < *patyczek* 'a small stick'). Examples of the unergative *reflexiva tantum* that indicate a historical possibility for the adjectival sources involve: *łasić się* 'to fawn' <*łasy* 'greedy/starved' or *litować się* 'to show pity' <**ljutъ* (Proto Slavic) 'cruel'.

Unergatives are typically activities and processes. Most of the agentive *reflexiva tantum* fit this category, including the deadjectival ones, despite adjectives typically denoting states. I would like to propose that their structure is analogical to Hebrew intensive voice, which involves a presence of an additional 'intensifying' head, which is responsible for the introduction of the agentive VoiceP (Doron 2003, Kastner 2020). The reading of the affectedness of the external argument is arising with the presence of the SE-reflexive, merged with the *v*P containing the [+N] feature, which cannot be satisfied by the sole argument NP, as it is severed from the verbal projection and merged in the [VoiceP, Spec].

Doron (2003) shows that a Hebrew intensive voice template involves a morpheme that contributes the valency-increase in case of the external argument added to a primarily unaccusative structure (31), or intensifying entailments, when applied to unergative or transitive predicates (32).

(31) a. Unaccusative: [n]a[f]a[x] 'blow' – Intensive (transitive): [n]i[p]ea[x] 'blow up'
     b. Unaccusative: [x]a[s]a[r] 'miss'- Intensive (transitive):[h]i[s]e[r] 'subtract'
                                                              (Hebrew; Doron 2003: 26)

(32) a. Unergative: [š]a[h]a[n] 'dwell' – Intensive (transitive): [š]i[k]e[n] 'relocate'
     b. Unergative: [l]a[m]a[d] 'study/learn' – Intensive (transitive): [l]i[m]e[d] 'teach'
                                                              (Hebrew; Doron 2003: 28)

Crucially, in many cases, simple verbs that function as an input to the intensification are ambiguous between stative and inchoative but become activities when the intensive morphology is applied to them. Doron (2003) analyses Hebrew reflexivization and intensification as the introduction of different agency heads, which combine with the root and assign agency roles to the root's external arguments. Kastner (2020) assumes that in both reflexives, and intensive structures, what is responsible for the agency interpretation is the 'agency modifier' √ACTION, which is merged with the *v*P and triggers the agentive alloseme of Voice. An intensifying template in this theory typically involves an agent-like argument in the Spec of the agentive Voice, as below:[20]

_____

[20] For Kastner (2020) reflexivization involves Voice with [-D] specification, i.e., lacking the external argument, however he shows that many Hebrew reflexives fail unaccusative

(33) Unergative intensifying template [x]i[y]e[z] (based on Kastner 2020: 56)
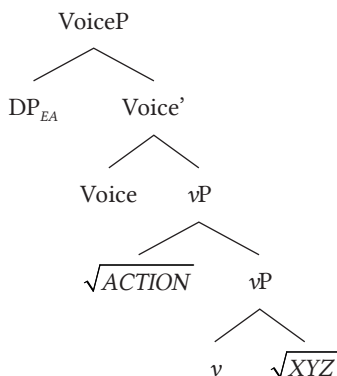
The proposal here is that Polish RT in their unergative and process-like readings also involve the intensifying and agentivizing component, however the 'action' head is bundled (Harley 2017) together with *v*. Polish *reflexiva tantum*, therefore, share some characteristics of both the reflexive and the intensive voice in Hebrew. Additionally, similarly to the Middle expressed via mediopassive morphology, where the reflexive reading arises as an identification of the internal argument with the agent role, in case of the SE-marking with the agent argument, the reflexive merged with the bundled *v* identifies the agent as an affected participant.[21, 22]

The fact that Polish RT involve unergative syntax, also allows for deriving agentive readings in examples (b) below. These include some ambiguous cases listed in (34).

(34) a. Jankowi   wymknęło się przekleństwo.
        John.DAT   escaped   SE swearword
        'John let the curse word slip.'

diagnostics (Kastner 2020: 110). See the discussion there on his interpretation of this fact and the nature of these diagnostics.

[21] We can also draw some parallels here between the present analysis and the complex verbal heads analysis as in Cuervo (2015), where the appearance of the SE-reflexive in Spanish indicates the presence of additional functional verbal projection.

[22] Wood (2015) argues that with some agentive denominal *reflexiva tantum* in Icelandic, the reflexive *-st* element merged in the verbal projection below the Voice has a detransitivizing function, as the noun-derived structures tend to occur in the transitive syntax and their appearance in the unergative syntax only requires some adjustments. Icelandic examples, which are not attested in Polish, involve e.g., names of professions used as verbs to denote the activity characteristically performed by these professions (see Wood 2015: 252). Such cases are extremely reminiscent of some Latin deponents (Xu et al. 2007), indicating that we are dealing with the same Middle phenomena, however expressed differently in different languages, with the non-active mediopassive in Latin, but with the active voice with the reflexive, in the Icelandic or Polish type.

    b. Janek   wymknął się tylnymi drzwiami.
        John.NOM escaped SE back   door
        'John escaped through the back door.'

(35) a. Gaz   ulotnił się z   balonu.
        gas.NOM leaked SE from balloon
        'The gas leaked out of the balloon.'

    b. Janek   ulotnił się niepostrzeżenie.
        John.NOM escaped SE unnoticed
        'John escaped unnoticed.'

(36) a. Piknik   bardzo się udał.
        picnic.NOM very   SE went
        'The picnic went very well.'

    b. Janek udał się na wakacje.
        John   went SE on holiday
        'John went on a holiday.'

(37) a. Janek   daje się masować.
        John.NOM gives SE massage.INF
        'John is easy to massage.'

    b. Janek   nigdy nie daje się masować.
        'John.NOM never neg gives SE massage.INF
        'John never lets anyone massage him.'

Examples (34a)–(37a) above involve the expletive Voice, as in (14a), which does not allow the agentive interpretation. Thus, their unergative counterparts in (34b)–(37b) suggest that the NP is merged in the agentive VoiceP, as in (14b).[23] The claim is that the syncretism attested with those readings of the Middle arises as a function of different syntactic structures and cannot just be relegated to the LF. This is a consequence of the active syntax here and the attested syncretism is directly connected to the variety of roles and configurations that the SE-clitic participates in. Kaufmann (2007) argues that in languages with the reflexive-type voice, the inherent/body-grooming reflexive configuration is the basic one, and e.g., the anticausative reading is a secondary extension. Since the system has both structural possibilities in place, the attested ambiguities are directly related to those different structures, which is a typical scenario in syntactic structural ambiguities, in general.

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[23] Note that some examples above involve prefixed verbs (*u-lotnić się, wy-mknąć się, u-dać się*) which also opens the possibility that these structures don't involve the 'action' projection, but instead the structure is complex due to the presence of these prefixes, which add the resultative readings, analogical to English particles, which would make some of the functions of SE related to figure reflexives, as in Wood (2015) or Svenonius (2004), or along the lines of the analysis of Italian *si* in Folli and Harley (2004). What is important for us here, is that those options would also include agentive syntax as proposed here.

At this point, we could ask whether the agentive reading achieved exclusively via post-syntactic allosemy would not be more economical, and whether it is possible to assume a 'low' agent introduced in a 'VP-medial position', as e.g., argued by Grestenberger (2014 et seq.). Such low agents have been postulated for unergatives in Samoan (Tollan 2018), Plains Cree (Tollan and Oxford 2018), or Georgian (Nash 2021). Some morphosyntactic diagnostics in those languages indeed support that analysis. However, any similar evidence in Polish is lacking and this option seems unavailable in this language. Let us see why.

Assuming a structure like (14a), but with the agentive VoiceP (e.g., due to the LF allosemy, despite of having SE in its specifier), would amount to postulating something close to the passive, as it should also pass the agentivity diagnostics, like with our unergatives. This type of short passive is attested in Romance languages, and it involves semantics as below, with SE saturating the [D] feature of Voice (Schäfer 2017: 148):

(38) a. Trois   maisons se   sont louées hier.
          Three   houses SE   are rented yesterday
          'Three houses were rented yesterday.' (French; Schäfer 2017: 148)

    b. Transitive medio-passive Voice: {λe∃x [agent (e,x)], D}

However, Polish lost the ability to existentially bind the agent variable with SE (Willim 2020a) after the 17th century (Pisarkowa 1984), and sentences like (39) below are ungrammatical in Modern Polish (see also Holvoet and Linde-Usiekniewicz 2015).[24]

(39) Wydaje   się tedy ta   książka   pod   tytułem (…).
     publishing SE then this.F.NOM book.F.NOM under title
     'This book, titled (…) is being published then.' (Pisarkowa 1984: 43).

An alternative option could be to assume that the agentive reading is obtained via argument saturation, with a choice function that picks the theme and identifies it with the agent, as argued for Romance reflexive middle by Déchaine and Wiltschko (2017):

(40) $\lambda x \lambda y$ [R (x_{agent}, y_{Theme})], CF $(x) \approx y$

This option is hard to test but also seems to be blocked. Consider the sentence below, which may have the dispositional middle and agentive readings:

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[24] We can speculate that it is probably due to the loss of the SE-related passive head, which was responsible for binding the existential agent variable (Bruening 2013). This could also be responsible for the impossible agentive reading with Polish dispositional middle voice.

(41) Politycy   zwykle łatwo się korumpują {żeby   zrobić niezłe pieniądze}.
     Politicians usually easily SE corrupt   that.SUBJ make good   money

    a. 'Politicians corrupt easily (=it is easy to corrupt them) {*to make good money}.'
       (middle)

    b. 'Politicians often become corrupted {to make good money}.' (agentive)

As the dispositional adverbials lean the interpretation towards the disposi-
tional middle, the purpose clause is ungrammatical (a). Nevertheless, the al-
ternative agentive version can be accessed (b). However, if we add a dative-
case-marked applied argument, it can also be interpreted as a malefactive/
benefactive when combined with the agentive reading of the subject. This
is analogous to simple unergative predicates like 'dance' (42b), or 'sneeze',
where the high ApplP projection (Pylkkänen 2008) depends on the presence
of the agentive VoiceP. The same reading arises with the unergative *tantum*
(42c).

(42) a. Politycy   mi   się skorumpowali, żeby   się wzbogacić.
        politicians 1.DAT SE corrupted   that.SUBJ SE get.rich
        'Politicians became corrupted on me (=to my disadvantage) to become rich.'

    b. Jan mi   zatańczył.
       John 1.DAT danced.PFV
       'John danced for me.'

    c. Jan mi   się pomodlił.
       John 1.DAT SE prayed.PFV
       'John prayed for me.'

Finally, the support for the structural agentive analysis of some SE-reflex-
ives, in general, comes from some roots that do not appear as anticausatives
or middles due to strongly agentive entailments (43a), but which appear in
the reflexive and reciprocal contexts and create idioms (43b) (Marantz 2013a,
2013b; Wood 2015).

(43) a. *Stół się morduje.
       table SE murders
       '*Table murders itself.'

    b. Jan morduje się w tej   pracy, żeby   dostać podwyżkę.
       John murders SE in this job   that.SUBJ get   raise
       'John is suffering/standing this job to get a raise.'

Thus, the agentive syntax triggers the idiomatic reading.[25] This is consistent
with the observation that most idiomatic chunks involve combinations

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    [25] Some idiomatic extensions involve metonymic relations where the reflexive clitic re-
places a body part, as in *skulić ogon* 'tuck the tail': *skulić się* 'cuddle up/cower'. Rooryck and
Vanden Wyngaerd (2011) analyse such 'relational anaphors' expressed with the reflexive *zich*

within the *v*P/below VoiceP, with the agentive subjects rarely becoming idiomatically fixed (Marantz 1997). It is expected then to have a verb with SE, functioning as a fixed verbal chunk to the exclusion of the agent. In conclusion, a structural unergative analysis of the agentive SE-reflexives fares well here.

Nevertheless, post-syntactic allosemy seems to be available for SE-reflexives, just in different cases. Sentence (44) involves an NP in the spec of Voice, which obtains different readings, i.e. holder (a) vs agent (b), with the allosemy being triggered by the stative (a) or the eventive (b) interpretation of the *v*P.

(44) a. Dzieci się wściekły,   kiedy to usłyszały.
        John SE got.mad.PRF when it heard
        'Children got mad when they heard about it.'

   b. Dzieci się wściekały   cały wieczór.
      children SE got.mad.IMPRF all evening
      'Children were playing like crazy all evening.'

Overall, the syncretism connected with SE-reflexives (including *reflexiva tantum)* offers an extremely productive derivational strategy (vide Geniušienė's 1987 complex derivational histories associated with inherent reflexives), and this probably explains its fairly stable diachronic status. Taking the agentive diagnostics seriously forces us to assume the unergative syntax for some *reflexiva tantum,* similarly to some alternating SE-reflexives. As such, this also supports the analysis of SE-marking as involving the active syntax.

The unergative analysis seems also on the right track for the stative psychological *reflexiva tantum* like *bać się, obawiać się, or lękać się* 'to fear' (see also Willim 2020b). The external argument NP is generated in the stative [VoiceP-Spec] and it is assigned an experiencer/holder interpretation. We can adopt an analysis postulated for dative subject experiencers in Bondaruk (2020). If we assume that psych-alternations involve merging the subject in the VoiceP and the SE-reflexive in the specifier of the complex ergative VP (Bennis 2004), this structure can be adopted straightforwardly for the psych-*reflexiva tantum,* as well.

Finally, for the raising *reflexiva tantum* in (20), unless the agentive reading is involved, as in (46b), the unaccusative variant, as in (14a), seems to be on the right track.[26] However, the analysis of these constructions is also beyond the scope of the present paper, which has focused on the agentive SE-reflexives and *reflexiva tantum.*

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in Dutch as unaccusatives, as they fail agentivity diagnostics, unlike many Polish counterparts.

[26] The analysis along the lines of German *lassen*-middle*s* as in Pitteroff (2014) seems to be a viable option here.

Having argued for the active syntax and the availability of both unaccusative and unergative structures in Polish *reflexiva tantum,* as well as in the alternating SE-marked reflexives, let us see how the class of the non-alternating Middle-marked predicates looks outside Polish, in a wider cross-linguistic perspective.

5. Non-alternating Middles cross-linguistically: *media tantum* and deponents

The Middle-marked non-alternating predicates cross-linguistically fall into a few characteristic semantic classes, some of which we list below in (a), with some Polish *tantum* in (b):

(45) Psych-verbs or 'Emotion middle' (Kemmer 1993):

    a. *mat iθa:v* 'be angry' (Mohave), *vereo-r* 'fear' (Latin), *kurnò-t-in* 'be happy' (Old Norse) (Kemmer 1993: 23), *pendo-h-em* 'I regret' (Albanian; Kallulli 2021: 5)

    b. *lękać się* 'fear', *litować się* 'have mercy'

(46) Verbs of motion / change in body posturee / 'translational motion' (Kemmer 1993)

    a. *daga-adhi* 'sit down' (Guugu Yimidhirr), *oppin-o* 'squat' (Fula) (Kemmer 1993: 23), *es-ᵃ⁽ʳⁱ⁾* 'sit down', ar-ᵗᵗᵃ⁽ʳⁱ⁾ 'stand' (Hittite; Inglese 2020: 119), *mîkât-î* 'fight' (Meskwaki, Algonquian)

    b. *wymknąć się* 'sneak out', *przeżegnać się* 'to cross oneself'

(47) Verbs of speech and communication / Speech act verbs (Cennamo 1999)

    a. *misheyr-st* 'misheard' (Icelandic; Wood 2023), *përgjigj-em* 'I answer' (Albanian; Kallulli 2021: 5), kakanôn-eti- 'converse with somebody' (Meskwaki, Algonquian).

    b. *odezwać się* 'to speak', *żalić się* 'to complain', *awanturować się* 'to row', *chełpić się, szczycić się* 'to brag/boast'

(48) Verbs of cognition/perception

    a. *oblivisco-r* 'forget' (Latin; Kemmer 1993: 23), *man-ya-te* 'he thinks, believes' (Sanskrit; Kemmer 1993: 23); *hiim-o* 'think, reflect' (Fula; Kemmer 1993: 23)

    b. *dowiedzieć się* 'get to know', *zgodzić się* 'to agree', *starać się* 'to attempt/to try'

(49) Deadjectival and denominal stative and inchoative verbs

    a. *grøna-sk* 'turn green' (Old Norse; Kemmer 1993: 23), *is-in* 'become warm' (Turkish), *ā(i)-ᵃ⁽ʳⁱ⁾* 'be/become warm' (Hittite: Inglese 2020: 119)

    b. *pocić się* 'to sweat', *chmurzyć się* 'to get cloudy', *patyczkować się* 'to pull punches/to handle sb. with kid gloves', *ulotnić się* 'to evaporate/to vanish', *przykrzyć się* 'to get bored'

Identification of such natural classes of *media tantum* appears as early as in Delbrück (1897), where they are specified as aspectually stative, atelic, and conveying a change-of-state, while their subjects are characterized as fully involved, affected, and benefitting from the event (Clackson 2007: 143; Fortson 2010: 89). *Media tantum*, i.e., non-alternating verbs with the Middle marking, are argued to be a prototype of the Middle verb, with the alternating predicates employing but a subset of the prototypical characteristics (Zombolou and Alexiadou 2014; Inglese 2020: 12).

Historically, alternating verbs were in the minority, e.g., in Vedic Sanskrit and Hittite, while the inherently non-active *media tantum* and active-only *activa tantum*, constituted most of the roots (Stump 2007; Luraghi 2012; Inglese 2020). Valency-alternation processes, usually attributed to the existence of the oppositional pairs, seem to be a recent development. Importantly, there is also a substantial semantic overlap between *media tantum* and *activa tantum*, where many verbs denoting motion, bodily positions, or mental processes, like Ancient Greek *ethélō* 'want, be prepared', *geláō* 'laugh', *gēthéō* 'rejoice', *hérpō* 'creep', *khézō* 'ease oneself, *tréō* 'tremble, or *stillbō* 'shine, glisten' do not have their non-active counterparts (Allan 2014). As non-active morphology is not a necessary condition to encode those readings, RT realized via active syntax with a reflexive marker in Polish should not be surprising.

Analyzing a corpus of Modern Greek, Zombolou and Alexiadou (2014), report that most non-alternating verbs have experiencer meaning (89%) and most are deadjectival and denominal. Based on similar observations in Modern Albanian, Kallulli (2013, 2021) argues that *deponents* and their pseudo-reflexive counterparts are unified by the lack of the external argument. This approach extends the claim in Embick (1997) that the source of the syncretism between unaccusatives, passives, and reflexives is a non-filled specifier of the external argument-taking projection.[27] However, Zombolou and Alexiadou's (2014) corpus also includes a small number (11%) of non-active-marked predicates, which seem agentive, e.g., *ekmetalevome* 'exploit, benefit', or *metahirozome* 'handle, use'. For these verbs, the non-active morphological exponent is not expected.[28]

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[27] Embick (1997) proposes a rule on the post-syntactic Spell-out condition in (i) below, which specifies that non-active voice surfaces whenever the canonical external argument position is not occupied by any overt DP (Embick 1997: 22; Embick 2004: 150; Alexiadou et al. 2015: 101): Voice → Voice [NonAct]/__ No DP specifier.

[28] Zombolou and Alexiadou (2014) suggest analyzing these subjects as affected experiencers and benefactives. Alexiadou (2013) analyzes these DPs as experiencers. This issue is also picked up in Grestenberger (2014, 2018a, b), which is discussed below. See also Kallulli (2021) for the arguments against viewing these DPs as agents and analyzing such cases as instances of mismatch.

Also, the class of *deponent* verbs display agentive interpretation and active syntactic properties, such as a structural accusative case, despite their non-active (and non-alternating) morphology, and traditional deponency research within the Classical Indo-European analyzes this phenomenon in terms of the mismatch between morphology and syntax (Embick 1997, 1998, 2004; Baerman et al. 2007; Stump 2007; Grestenberger 2014, 2016, 2018a, 2018b, a.o.). Grestenberger (2014, 2018a) argues that such a non-active marking indicates real agentivity but a non-canonical agent placement. Assuming the mismatch approach, her analysis also goes back to Embick (1997, 1998, 2000, 2004), where the non-active marking surfaces in the absence of the external argument. Deponency in this account arises because of the mismatch between the agentive interpretation and the non-agentive placement of the subject. Building on the observations from Vedic and Classical Greek-type languages, where non-active morphology appears on verbs expressing actions whose subjects perform two roles: the doer of the action and the benefactive, Grestenberger argues for an analogical analysis of deponents, with the benefactive being first merged in ApplP (Pylkkänen 2008; see also Alexiadou 2013) and then moving to a canonical subject position in the specifier of TP. Some examples include Vedic *yaja-te* 'sacrifices (sth.) for one's benefit' or *bhára-te* 'takes/carries (sth.) for oneself'. In deponents, however, a benefactive/experiencer argument has been reanalyzed as an agent, but its placement has not changed, and it is still base generated below the agentive VoiceP.

(50) $[_{TP}$ DP-Agent$_i$ $[_{VoiceP}$ Voice$^0_{[-ext.arg]}$ $[_{XP}$ t $_{<DP-Agent>}$ X $[_{vP}$ vP$[_{\sqrt{P}}$ √ [DP-Theme]]]]]]

Grestenberger (2014, 2018a) confirms the agentive status of these deponents in Vedic Sanskrit, Latin, Ancient Greek and Hittite with a number of tests, including agentive noun formation, compatibility with agent-targeting adverbs, and passivization, as shown in Vedic (51):
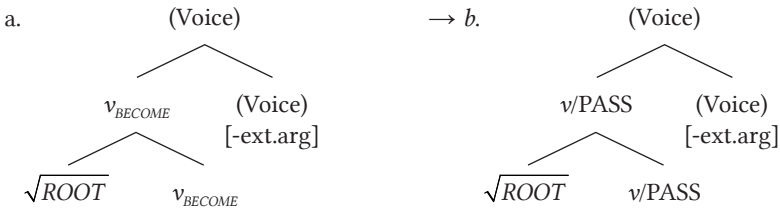
(51) a. rábh-a-**te**
          seize-V-3SG.PRS.**MID**
          'seizes'

      b. rabh-**yá**-te
          seize-**PASS**-3SG.PRS.MID
          'is being seized' (Vedic; Grestenberger 2018a: 497)

Hence, we have some evidence that a deponent/ non-alternating status of a predicate does not preclude its agentivity, and even possibly triggers this morphological non-active realization.

There is an additional aspect of Grestenberger's work that is relevant here. Note that the passivization in (51b) involves a second voice-related morphological marking with -*yá*-, as this process operates on already a non-active

predicate: *rábh-a-**te*** > *rábh-**yá-te*** 'is being seized'. A similar process of sec-
ondary synthetic passivization is reported for Ancient Greek. Grestenberger
(2018b) argues that we are dealing here with the non-active marking oper-
ating at two different heights along a verbal spine: the high *inflectional* pas-
sive/non-active morphology appearing in the Voice projection, and the low
derivational passive morphology which attaches below Voice, in the stem-
forming projection, i.e., in a verbalizing v head that combines with the root.
Grestenberger shows that the derivational passive marking takes its source
in the older intransitive stative/inchoative v head, which, e.g., in Ancient
Greek was always used with denominal and deadjectival verbs and reana-
lyzed as an additional passive morpheme only later. Its v-categorizing char-
acter is confirmed by the fact that it is in complementary distribution with
other verbal stem-forming suffixes – e.g., theme vowels, such as -*a*-, com-
pare (51) – and by its placement. The emergence of this lower passive mark-
ing is viewed as a diachronic reanalysis of one 'flavor' of v, namely stative/
inchoative v_{BECOME} (Alexiadou and Anagnostopolou 2004; Harley 2009, etc.)
into v_{PASSIVE}:

(52) Inchoative-to-passive reanalysis (Grestenberger 2018b: 23):

a.

$$\text{(Voice)}$$
$$v_{\text{BECOME}} \qquad \text{(Voice)}\ [\text{-ext.arg}]$$
$$\sqrt{ROOT} \qquad v_{\text{BECOME}}$$

$\rightarrow$ b.

$$\text{(Voice)}$$
$$v/\text{PASS} \qquad \text{(Voice)}\ [\text{-ext.arg}]$$
$$\sqrt{ROOT} \qquad v/\text{PASS}$$

Vedic -*ya*- is notoriously ambiguous between the passive and the anticausa-
tive, as evidenced by variations in translation of these elements. This ambi-
guity is present even in the case of the oldest texts like the *Rigveda*. In fact,
proposals have been made for both directions of change and reanalysis (i.e.,
also passive to anticausative) (see Kulikov 2011; Hock 2022). Nevertheless,
this ambiguity confirms the plausibility of the syncretism analysis for the
voice-related phenomena connected to the whole verbal domain, i.e., also
below VoiceP. Grestenberger compares the path of the low passive suffixes,
i.e., Vedic -*yá*- and Greek -*thé*-, to the semantic development of English *get*-
passives, which also involve a low v head (Alexiadou 2012). In a sentence
like *Samantha got hurt*, we are dealing with the ambiguity between the anti-
causative and the passive reading, which strongly reminds us of the patterns
attested in the diachrony of Vedic or Greek.

Overall, we see that *tantum* may also involve the inherent Middle expo-
nents connected to the lower verbal projections, which also play a role in the
attested Middle syncretism, analogically to SE-reflexives, which also do not

have to appear in the VoiceP projection. In fact, we have argued here that SE may appear in the specifier of a lower verbal projection in the unergative readings of both alternating and non-alternating SE-marked predicates, which we have just confirmed now is attested also outside Polish.

6. Conclusion

In a language like Polish, where the Middle is expressed with the active morphosyntax, the voice-related syncretism, attested cross-linguistically with a family of readings associated with the Middle marking (e.g., anticausative, antipassive, reflexive, reciprocal, middle, passive), arises due to the presence of the SE-reflexive, which appears in both unaccusative and unergative syntax. This paper focused on the agentive readings attested with Polish *reflexiva tantum*, arguing that those contexts involve active unergative syntax. It was shown that SE-marked constructions in Polish display a structural variety with SE being merged either in the specifier of the VoiceP or lower, with the vP projection. The former structure gives raise to the anticausative and the unaccusative readings, while the latter results in the agentive readings, where a nominative-marked NP is merged in the canonical agent position in the Spec of VoiceP. Thus, alternating and non-alternating SE-marked structures involve genuine unaccusative and unergative configurations, with the agentive reading being the result of the agentive structure, rather than post-syntactic allosemy (Arad 2003, 2005; Marantz 2013a, 2013b; Myler 2014; Wood 2015, 2016; Wood and Marantz 2017; Oikonomou and Alexiadou 2022).

I have shown that certain allosemy, characteristic for languages where the Middle is expressed with the non-active, mediopassive morphology (Oikonomou and Alexiadou 2022), is also available in Polish, but crucially, agentive interpretation cannot be obtained via unaccusative syntax in this language. This phenomenon could be similar to Bobaljik and Wurmbrand's (2012) *Scope Transparency principle*, which explains why languages that can derive inverse scope interpretations in the surface syntax lack the option of the covert raising, as in case of Japanese or Korean quantifiers, the scope of which is determined based on the overt movement only. Analogically, languages which obtain the agentive interpretation by a direct Merge of the agent argument into the VoiceP specifier do not have access to this alloseme at the LF via the expletive Voice, i.e., VoiceP with the reflexive SE in the specifier.

The evidence for postulating a low agentive position (Grestenberger 2014, 2018a; Tollan 2018; Tollan and Oxford 2018; Nash 2021) is also missing in Polish and the option for existential binding of the variable with a SE-reflexive,

as well as argument identification by a choice function with the SE-clitic playing a quantificational role is unavailable. This is evident in the fact that Polish does not have productive 'short' passives with SE (of the French type, as in Schäfer 2017) anymore, and both passive and impersonal readings with SE must involve additional functional projections responsible for such quantificational operations (Pisarkowa 1984; Willim 2020a; Bruening 2013; Legate et al. 2020). The possibility of passivization of the impersonal SE-reflexives confirms that we are dealing with the additional structure here:

(53) Jeśli zostało   się zaproszonym...
     If   was.3.SG.N SE invited...
     'If one was invited...'

I have also discussed Polish *reflexiva tantum* in cross-linguistic contexts of *media tantum* and deponents, and I have shown that we have evidence (e.g., from Vedic Sanskrit) for the role of the lower verbal projections in deriving some Middle and passive-related readings. This includes the contexts where agentivity is involved (Grestenberger 2014, 2016, 2018a, 2018b). Interestingly, some readings characteristic for non-alternating predicates are also encoded as *activa tantum*, hence non-active morphology does not have to be a prerequisite for the expression of such semantics.

In this context, it is also interesting to ask whether there are any options for voice syncretism that we do not predict we will find in Polish-type languages, due to their locus being a reflexive clitic in the active syntax.[29] The answer seems to be negative. Based on Oikonomou and Alexiadou's (2022) classification of the three types of the voice-related syncretism, each with the same consistent Voice-marking, Polish seems to be close to the type B, where the same marking is used for the reflexive, antipassive, reciprocal, and anticausative. Additionally, this type includes syncretic passives, which Polish used to have. As we discussed above, Polish passive is expressed in a periphrastic way, with the additional functional head above the Voice. The need for this extra structure may be taken as evidence of the progressive weakening and expletivization of SE. This could reflect a process which does not have to affect morphologically mediopassive languages to the same degree. The fact that many of these voice polysemies resort to the same marking within the same language, indicates possible deeper semantic and cognitive bases for grouping those readings together.[30] Diachronic changes, such as the loss of some syncretic reading and its replacement by a different

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[29] I would like to thank an anonymous SPL reviewer for raising this issue.

[30] At the same time, the issue of the rarity of certain groupings remains open, e.g., the type C in the typology of Oikonomou and Alexiadou (2022), i.e. syncretism of passive, anticausative and causative, as in Korean and Tungusic languages. See Oikonomou and Alexiadou (2022: 19–24) for a discussion of possible markedness and saliency effects here.

structural configuration, e.g., outside of the said syncretism, could be a consequence of a particular encoding strategy and its vulnerability when facing different pressures, such as language contact or obsoletion, rather than some inherent constraints on a syncretic realization. One important feature of Voice syncretism is that the syncretic interpretations arise in the same locality domain, e.g., delimited by syntactic phases, where the Voice locally interacts with both the *v*P and the root (Wood 2015; Oikonomou and Alexiadou 2022). However, with the locus of the syncretism being associated with a (to some extent) unbounded element (as it is the case in Polish), the locality domain can also be substantially expanded. Hence, the pool of syncretic readings does not have to be smaller, but instead can encompass additional possibilities, like Polish SE-marked impersonals.

Finally, the fact that the present study found more commonalities than important differences between *reflexiva tantum* and the alternating SE-marked predicates may be attributed to the fact that either such non-alternating reflexives lost their non-SE marked counterparts (Tabakowska 2003) or that they are yet to gain their non-reflexive versions. The latter scenario could be supported by the observation that the alternating predicates seem to be a more recent development. Either way, this would mean that there is nothing in the structure of RT that would preclude the existence of their non-SE alternants. I leave this issue for future scrutiny. In general, despite the literature of SE-reflexives being extraordinarily rich, more work is required in the domain of *reflexiva tantum*. This paper is another small step towards remedying this situation.

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