Voice Alternation with SE figure reflexives in Romanian: Evidence from a semi-artificial denominal paradigm

We investigate Romanian SE figure reflexives, i.e., structures as in (1) where the SE clitic occurs together with a verb followed by a body part PP (Cornilescu & Nicolae, 2017, 2021) and present experimental evidence in favor of the existence of two types of figure reflexives in Romanian: transitive and intransitive. Our experimental research employs a novel paradigm: semi-artificial denominal (SAD) verbs derived from existing Romanian nouns (e.g., a cireşi 'to cherry' from cireaşă 'cherry'). The interpretative patterns of the two types of SAD SE figure reflexives in (2) showcase voice alternation, suggesting that these differences in meaning are structurally derived. **Background: SE Figure Reflexives.** Like other Romance languages, Romanian exhibits SE syncretism: se clitics may be used as Voice markers (Dobrovie-Sorin, 1994, 2017). Romanian also makes use of special prepositional reflexive constructions as in (1), where the se clitic combines with an obligatory (though not always overt) locative PP which typically refers to an inalienably possessed object of the local subject; this PP is a small clause introducing the Figure-Ground relation. Building on work by Manoliu-Manea (1996), Schäfer (2008, 2009) and Wood (2012, 2014), Cornilescu & Nicolae (2017, 2021) refer to these construction as figure reflexives:

- (1) a. Maria s- a spălat pe față. *Transitive* Maria SE has washed on face 'Maria washed her face (lit. Maria washed herself on the face)'.
 - b. Maria s- a luminat la față. *Unaccusative* Maria SE has brightened at face. 'Maria's face brightened up (lit. Maria brightened herself in the face).'
- (i) PE & LA. Transitive figure reflexives are usually associated with the preposition *pe* 'on', while unaccusative figure reflexives are associated with *la* 'at'. Unlike in typical transitives where PE serves as a differential object marker (Tigău 2010, Irimia 2020), and, unlike in dative constructions, where LA can serve as a case marker, in figure reflexives, PE and LA are semantically interpretable ('on/at'). (ii) Voice. Cornilescu & Nicolae (2017, 2021) argue that transitive SE figure reflexives (1a) have a thematic Voice head: the subject is the Agent of the event. On the other hand, unaccusative SE figure reflexives (1b) have an expletive Voice head, which renders the sentence subject non-agentive. (iii) Lexical Aspect. Previous research on the causative alternation has shown that, although both causatives and anticausatives incorporate roots, causatives include a CAUSE projection, whereas anticausatives involve a BECOME projection and lack CAUSE. (Alexiadou, Agnastopolou & Schäfer 2006, Harley 2012, Schäfer 2008, 2009). Present Aim: To test whether the interpretative differences in (1) are due to a voice alternation (Cornilescu & Nicolae, 2021), we investigate the [+/-agentive] nature of Voice and the presence/absence of CAUSE in the aspectual make-up of SE figure reflexive predicates. Why the SAD paradigm? Few existing verbs (e.g. *albi* 'whiter') may occur in both types of SE

Why the SAD paradigm? Few existing verbs (e.g. *albi* 'whiten') may occur in both types of SE figure reflexive constructions; most verbs are only acceptable in one configuration (e.g. *înroși* 'redden' is only grammatical in SE LA configurations like (1b)). This fact casts doubt on the structural basis of the voice alternation, suggesting that interpretative differences are due to verb lexical bias. The SAD paradigm removes this bias and makes it possible to investigate the same verb in different configurations. An additional advantage of the SAD paradigm is that it sheds light on denominal verb interpretation. Denominals are known to vary in interpretation (Kelly 1998, Harley & Haugen 2007, Kiparsky 1997, Borer 2014, Bleotu & Bloem 2020). A SAD verb like *a cireși* 'to cherry' can have either (i) literal readings, involving canonical actions related to the fruit *cireașă* 'cherry' (e.g. eating, picking cherries), or (ii) figurative change-of-state

interpretations (e.g. becoming red like a cherry/blushing). Following Kiparsky (1997), we assume that literal readings are derived by noun-incorporation (typically with DO), while figurative readings are derived by root-incorporation into BECOME/ACT (Kiparsky 1997). We consequently expect participants to choose BECOME LIKE readings, i.e., change-of-state, more often for SAD unaccusative figure reflexives than for SAD transitive figure reflexives.

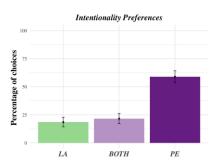


Fig 1. 'Intentionally' choices per structure type

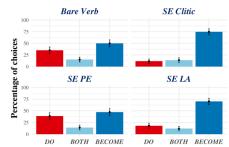
The Intentionality Experiment (N=36) tests the Cornilescu & Nicolae (2017, 2021) prediction that, unlike unaccusatives (2b), transitive figure reflexives (2a) involve agentivity.

SE PE figure reflexive (2) a. Alex sdovlecit mâini. a pe Alex SE has pumpkined on hands dovlecit b. Alex sla mâini SE LA figure reflexive a Alex SE has pumpkined at hands

Items: 9 critical items (sample item in (2)) and 18 fillers (all SAD verbs). Task: Participants were asked which of two sentences (e.g. (2a) or (2b)) is most compatible with the adverb *intenţionat* 'intentionally' as a continuation: participants could select (2a), (2b), or both. If SE PE figure reflexives are transitive and SE LA more likely unaccusative, we expect participants to select (2a) more often than (2b). Results: The results from logistic regression confirm this prediction: participants chose *intentionally* continuations more often for PE than LA sentences (p<0.001).

The Change-of-State Experiment (N=78) asks (i) whether SE LA figure reflexives are interpreted as change-of-state ('BECOME') more often than PE LA and (ii) whether simple SE

clitic structures give rise to more change-of-state readings than bare verbs. *Items:* 9 critical items in 4 conditions (sample item split in (2) and (3)) and 18 fillers (all SAD verbs). The 4 conditions were: bare verb (3a), verb with SE clitic (3b), SE PE figure reflexive (2a) and SE LA figure reflexive (2b). Each participant only saw one condition per verb. *Task:* Participants were asked to choose their preferred interpretation for a given sentence with a SAD verb. They could select a paraphrase of a



BECOME interpretation (x became like y), of a DO interpretation (x did something with y) or BOTH.

 $Fig\ 2.\ Interpretations\ per\ structure\ type$

(3) a. Alex a dovlecit. (*Bare Verb*) b. Alex s- a dovlecit. (*SE Clitic*) Alex has pumpkined. Alex SE has pumpkined.

The logistic regression analysis reveals: (i) when compared to SE PE figure reflexives, BECOME interpretations were chosen more often for SE LA (p<0.005), and (ii) when compared to Bare Verb, BECOME interpretations were chosen more often for SE clitic (p<0.005).

Discussion. Probing into SE figure reflexives by means of the SAD paradigm, we observe: (i) higher rates of intentionality continuations (*Exp 1*) with SE PE reflexives, and (ii) higher rates of change-of-state readings with SE LA reflexives (*Exp 2*). These trends support the existence of a *causative alternation* (Levin & Rappaport Hovav 1994) even in the domain of less frequent cross-linguistic constructions like figure reflexives (Cornilescu & Nicolae 2021). Our results show that these structures exist independently of lexical verb bias. Note that *pe* and *la* are not intrinsically (non)-agentive (both may surface in either agentive or non-agentive constructions). Thus, we surmise that the syntactic structures are [+/-agentive], not the prepositions.