Extending the generic middle analysis to Slavic languages*

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SUMMARY

This paper discusses syntactic and semantic properties of generic middles in Slavic languages, a language family that has not been accounted for in existing analyses that derive the generic middle construction. I argue syntactically uniform and semantically uniform approaches have failed to successfully derive generic middles due to a significant amount of cross-linguistic variation. Crucially, I illustrate generic middle proposals do not extend to Slavic generic middles and therefore a reanalysis of generic middles properties in these languages is necessary.

RÉSUMÉ

Cet article parle des propriétés syntaxiques et sémantiques de la construction moyenne génériques dan les langues slaves, une famille de langues qui n'a pas été prise en compte dans les analyses existantes qui décrivent de la construction moyenne générique. Je soutiens que les approches syntaxiquement uniformes et sémantiquement uniformes n'ont pas réussi à décrire avec succès les constructions moyennes génériques en raisin d'une quantité importante de variation inter-linguistique. Essentiellement, je montre que les propositions traitant des constructions moyennes génériques ne s'appliquent pas aux langues slaves et donc une nouvelle analyse des propriétés des constructions moyennes génériques dans une micro-variation de langues est nécessaire.

1 Introduction

This paper introduces new Slavic data that challenges current theories of generic middles. In particular, I argue that existing syntactic approaches to deriving generic middles cannot account for a wide range of cross-linguistic variations. Even though semantic approaches seem to cope better with generic middles across languages, they still cannot account for the full range of the

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attested variations.

The so-called generic middle is a construction based on transitive verbs with only the internal argument being present in the surface structure, as illustrated in (1). This can be compared with the transitive sentence in (2), where the nominal phrase *the book* is the internal argument and surfaces in the direct object position.

- (1) The book reads easily.
- (2) Mary reads the book easily.

Cross-linguistically, generic middles all appear similar on the surface as they have a verb with reduced valency and yield a generic interpretation. Interestingly, generic middles have been analysed in two families of approaches: syntactically uniform (Fagan, 1992; Stroik, 1992; Hoekstra and Roberts, 1993; Ackema and Schoorlemmer, 1994, 1995; among others) and semantically uniform (Steinbach, 2002; Lekakou, 2005; among others). I pursue the idea that generic middles have resisted successful linguistic analysis due to the significant amount of cross-linguistic variation that has not been sufficiently analysed. Consequently, this paper argues for an exploration of a micro variation of closely related languages, which is essential for a controlled study on the fundamental properties of generic middles. The emphasis of this research is on Slavic languages. I show that some components of existing proposals do not correctly predict the attested properties of generic middles.

This paper is organized as follows: in Section 2, I will summarize the properties of generic middles in Slavic languages. In Section 3, I will extend syntactically uniform and semantically uniform analyses of generic middles to Slavic languages. In Section 4, I conclude with some future research questions.

2 Properties of Slavic Generic Middles

Generic middles exist in several Slavic languages including Czech (3), Polish (4), Russian (5), Serbo-Croatian (6), and Slovenian (7), Ukrainian (8).

(3) Tahle košile se dobře žehlí. this shirt-NOM REFL well irons-3.sg 'It is easy to iron the shirt.'

(Medová, 2009, p. 22 (37))

(4) Ksiazka czyta sie przyjemnie. book-nom reads REFL pleasantly 'The book reads pleasantly.'

(Lidz, 1996, p. 104 (158))

(5) Kniga čitaet-sja legko. book reads-REFL easily 'The book reads easily.'

(Guhl, 2010, p. 262 (4b))

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(6) Ovaj članak se lako čita. This article REFL easily reads 'This article reads easily.'

(Marelj, 2004, p. 3 (6f))

(7) Ta knjiga se lahko bere. This book REFL easily reads 'This book reads easily.'

(Rivero and Sheppard, 2003, p. 100 (12b))

(8) Knyžka lehko čytajet'-sja. book easily read-REFL 'The book is easy to read.'

Slavic generic middles appear to be similar as the verb undergoes valency reduction, the verb uses imperfect verbal morphology, an adverb is present, the internal argument of the verb surfaces as the subject, and the sentence denotes a generic interpretation. The surface structure for each language can be schematized in the following table:

Surface Structure

IA_{-ARG} V_{-AGR-REFL} ADV

Russian

IA_{-ARG} ADV V_{-AGR-REFL}

Ukrainian

IA_{-ARG} REFL ADV V_{-AGR}

Czech, Serbo-Croatian, Slovenian

IA_{-ARG} V_{-AGR} REFL ADV

Polish

Table 1: Generic middle surface structure by Slavic language

Across Slavic languages, generic middles have an internal argument, a verb, a reflexive marker, and an adverb. Notably, the reflexive marker can either be a verbal suffix as in Russian (5) and Ukrainian (8), or a clitic that is realized either before the adverb as in Czech (3), Serbo-Croatian (6), and Slovenian (7) or after the verb as in Polish (4). Moreover, the adverb appears pre or post verbally depending on the language. The question that immediately arises is whether the grammar of each individual language differs. For example, the reflexive markers in each language may not be of the same type. Déchaine and Wiltschko (2002) argue there are at least three proform types: pro-DP, pro- φ P, and pro-NP, each having a distinct syntactic projection. Each proform also varies in internal syntax, distribution, semantics, and binding theory status (Déchaine and Wiltschko, 2002, p. 410). Furthermore, the difference in the position of the adverb depends on the type of language and verbal form involved, which is at least seen in French and Italian (Cinque, 1999). 1

The objective of this research is to extend generic middle approaches to Slavic languages in order to determine whether existing approaches can account for a wider range of cross-linguistic variation. Crucially, the discussion of generic middles has focused mainly on Germanic and Romance languages, without carefully analysing the Slavic counterpart. This section sets out to

¹ I leave this question for future research.

describe properties of Slavic generic middles.

2.1 TRANSITIVITY ALTERNATION

Generic middle verbs are originally transitive verbs that undergo valency reduction and the internal argument surfaces as the subject. In a wide variety of Slavic constructions that have a verb with a reduced valency, reflexive markers appear in the structure, such as the following Russian examples: passives (9), antipassive (10), anticausative (11), reflexive (12), reciprocal (13), and impersonal (14).

(9) Dom strot-sja rabočimi. house build-REFL workers-INST 'The house is being built by workers.'

(Guhl, 2010, p. 262 (1b))

(10) Sobaka kusaet-sja. dog bites-REFL 'The dog is fierce.'

(Guhl, 2010, p. 262 (2b))

(11) Dver' otkryla-s'. door open-REFL 'The door opened.'

(Guhl, 2010, p. 262 (3b))

(12) Pacient breet-sja.
patient shaves-REFL
'The patient shaves.'

(Guhl, 2010, p. 262 (5b))

(13) Vanja i Olja obnimajut-sja. Vanja and Olja hug-REFL 'Vanja and Olja are hugging each other.'

(Guhl, 2010, p. 263 (6b))

(14) Mne segodnja ne čitaet-sja. I-DAT today not read-REFL 'I just cannot read today.'

(Guhl, 2010, p. 263 (7b))

It appears that the reflexive marker is realized when only one argument, either the external or the internal argument, of the transitive verb surfaces as the subject. Therefore, we expect to find a reflexive marker in the Slavic generic middle constructions whenever only the internal argument surfaces.

2.2 IMPLICIT AGENT

When a verb undergoes transitivity alternation to become the generic middle, the verb also changes in how it assigns its theta-role. For example, the verb *read* is a transitive verb, so it assigns an agent theta-role and a patient theta-role to the external argument and internal argument, respectively. In contrast, when *read* is in a generic middle construction, only the internal argument surfaces and the patient theta-role is assigned to the subject. The agent theta-role is not overtly realized in the syntactic structure. This raises the question whether the agent is not present at all, or whether there is a covert agent in the structure. We can test for the syntactic agentivity by inserting an agent-oriented adverb into the construction, as in Russian (15):

(15) *Kust podrezal-sja tščatel'no. hedge cut-REFL carefully Intended: 'The hedge trimmed carefully.'

(Jones and Levine, 2010, p. 302 (24a))

As we can see in (15), the construction with an agent-oriented adverb is illicit, and therefore, the agent of the generic middle is not syntactically represented, even covertly. Similarly, there is no evidence for a covert agent in Ukrainian either: as we can see in (16), generic middle construction cannot combine with an agentive by-phrase. Serbo-Croatian (17) and Ukrainian (18) demonstrate this cannot be a result of an independent ban on by-phrases in this construction; if the by-phrase is non-agentive, the structure is well formed.

- (16) *Knyžka lehko čytajet'-sja studentamy.
 book easily read-REFL students-INST *Intended*: 'The book is easy to read by the students.'
- (17)Mrlja od crnog vina lako skida belim-vinom. se easily removes white-white-INST stain of red wine REFL 'A red wine stain removes easily with white wine.'

(Marelj, 2004, p. 100 (2b))

(18) Knyžka lehko čytajet'-sja z okoljaramy. book easily read-REFL with glasses-INST 'The book is easy to read with glasses.'

I argue a non-agentive by-phrase is permitted in generic middles because it can exist as an adjunct to the verb phrase even when the agent is syntactically overt. Therefore, a non-agentive by-phrase does not influence the realization of the agent in syntax.

An additional piece of evidence for this argument comes from Jones and Levine (2010), who present a generic middle construction with a Genitive argument preceded by a preposition as in Russian (19).

(19) Ètot xleb režet-sja u Ivana legko. This bread cuts-REFL by John-GEN easily 'This bread cuts easily for John.'

(Jones and Levine, 2010, p. 325 (60a))

They state that this argument is either an agent or an experiencer that remains outside of the VP because an agent (or experiencer) cannot cause the internal argument *bread* to have the property of *cutting easily*. Essentially, the argument is extrinsic to the nature of the generic middle (Jones and Levine, 2010, p. 324).

In addition, a Dative (20) or a Genitive (21) argument can be projected in Ukrainian generic middles.

- (20) Knyžka studentam lehko čytajet'-sja. book students-DAT easily read-REFL 'The book is easy to read for the students.'
- (21) Knyžka lehko čytajet'-sja dlja studentiv.
 book easily read-REFL for students-GEN
 'The book is easy to read for the students.'
 ('The students find that the book is easy to read.')

I argue these generic middle constructions do not have an agent in syntax. Specifically, the Dative argument functions as a benefactor of the verb, whereas the Genitive argument functions as the experiencer of the verb. For these reasons, I argue the oblique arguments in the aforementioned Ukrainian generic middles are not agentive and therefore do not indicate that an agent exists in syntax.

Interestingly, not all Slavic languages are the same. According to Medová (2009), Czech generic middles have an agent existing in syntax, as seen in (22) with a Dative argument.

(22) Tahle košile se Karlovi dobře žehlí. this shirt REFL Karel-DAT well irons 'It is easy for Karel to iron the shirt.'

(Medová, 2009, p. 22 (39))

The Dative argument is licit in Czech as long as it possesses a [+HUM] feature and is agentive (Medová, 2009, p. 254). This proposal implies that the agent exists in the syntax of generic middles. This is different from (19), (20), and (21) that have oblique arguments that are non-agentive. Therefore, generic middles across Slavic languages seem to differ in whether the oblique argument can have agent-like properties.

The oblique argument also changes the surface structure configuration as summarized in the following table:

Surface Structure	Language
IA-ARG V-AGR-REFL OA-GEN ADV	Russian (Genitive argument)
IA-ARG ADV V-AGR-REFL OA-GEN/INST	Ukrainian (Genitive/Instrumental argument)
IA-ARG OA-DAT ADV V-AGR-REFL	Ukrainian (Dative argument)
IA-ARG REFL ADV V-AGR OA-INST	Serbo-Croatian (Instrumental argument)
IA-ARG REFL OA-DAT ADV V-AGR	Czech (Dative argument)

Table 2: Generic middle surface structures with an oblique argument by language

The Genitive oblique argument can appear either before the adverb as in Russian or sentence final as in Ukrainian. The Dative oblique argument in both Czech and Ukrainian appears before the adverb and verb. The Instrumental argument in both Serbo-Croatian and Ukrainian appears sentence finally. Evidently, there is a variation in the surface structure of generic middles with oblique arguments across Slavic languages, as well as within an individual language, such as Ukrainian. I attribute these differences to the syntactic distinctions between Slavic languages. In summary, I will assume that the agent does not exist in the structure of the generic middle and oblique arguments are extrinsic to the nature of the generic middle construction.

2.3 ADVERBIAL MODIFICATION

A noteworthy observation of generic middles is that the predicate seems to require adverbial modification. For example, in Russian, an adverbless construction (23) is illicit. Crucially the adverbless construction can be saved by negation (24), future imperfective (25), modal (26), and emphatic stress (27).

(23) *Kapusta narezala-s'.

Cabbage cut-REFL *Intended:* 'The cabbage cut.'

(Jones and Levine, 2010, p. 304 (26b))

(24) Ètot xleb ne rezal-sja. that bread NEG cut-REFL 'That bread didn't cut.'

(Jones and Levine, 2010, p. 318 (47a))

(25) Ètot xleb budet rezat'-sja. that bread will cut-REFL 'That bread will cut.'

(Jones and Levine, 2010, p. 318 (47b))

(26) Èto mjaso dolžno rezat'-sja. this meat should cut-REFL 'This meat should cut.'

(Jones and Levine, 2010, p. 318 (47c))

(27) Èto mjaso sejčas režet-sja. this meat now cut-REFL 'This meat cuts now.'

(Jones and Levine, 2010, p. 320 (50b))

The exact implications of an obligatory adverb are debated in generic middle proposals (Fagan, 1992; Hoekstra and Roberts, 1993; Ackema & Schoorlemmer, 1995; among others). Therefore, I will only acknowledge that in Russian, an adverbless sentence can yield a grammatically correct generic middle only when it is combined with negation, future imperfective, modal, and emphatic stress.

2.4 IMPERFECTIVE ASPECT

It is assumed in the literature that Slavic generic middles use imperfective aspect in the present simple tense (Marelj, 2004; Medová, 2009). Even though the reflexive construction, as seen in Serbo-Croatian (28), is obligatory with the perfective, the reading is not generic. As we see in Ukrainian (29) a generic middle cannot take a perfective form because the generic reading is not sustained.

(28) Max se ugrizao.

Max REFL bit-PERF

'Max bit himself.'

(Marelj, 2004, p. 283 (58b))

(29) *Knyžka lehko pročytala-s'. book easily read-PERF-REFL Intended: 'The book easily read itself.'

Therefore, generic middles are limited to imperfective morphology on the verb. Notice this is not surprising because present perfective is never interpreted to be in the simple present tense in Slavic languages, but rather the future tense. Thus, if generic middles require present tense, they should be semantically incompatible with perfective morphology.

2.5 GENERIC INTERPRETATION

The fact that Slavic generic middles have a generic interpretation is strongly agreed upon in literature (Lidz, 1996; Rivero and Sheppard, 2003; Marelj, 2004; Medová, 2009; Jones and Levine, 2010). However, the concept of a generic interpretation is not seen as a uniform property in Slavic languages, a point that has gone unnoticed in the literature. Specifically, generic middles typically yield a generic interpretation as seen in Russian (30). Interestingly Czech (31) and Ukrainian (32) exhibit a tough-construction interpretation (Rosenbaum, 1967; Postal, 1971; Chomsky, 1977).

(30) Kniga čitaet-sja legko. book reads-REFL easily 'The book reads easily.'

(Guhl, 2010, p. 262 (4b))

(31) Tahle košile se dobře žehlí. this shirt-NOM REFL well irons-3.SG 'It is easy to iron the shirt.'

(Medová, 2009, p. 22 (37))

(32) Knyžka lehko čytajet'-sja. book easily read-REFL 'The book is easy to read.'

Though these examples behave syntactically similar on the surface, the difference in translation is not innocent. Specifically, the distinct translations suggest differences in the semantic interpretation, which I argue is analogical to the difference described by Kuroda (2003). Though this observation may seem minute, the structural differences cross-linguistically for each interpretation are significant. For instance, let us examine the French syntactic structure when the semantic interpretation is parallel to Russian (33) and Ukrainian (34):

(33) Ce livre se lit facilement. this book REFL reads-3.SG easily 'This book reads easily.'

(Lekakou, 2005, p. 10 (1d))

(34) Ce livre est facile à lire. this book is easy to read 'This book is easy to read.'

The different semantic interpretations yield two very different syntactic structures in French, where (33) is a generic middle and (34) is a tough construction. A question that immediately arises is why does the same surface structure in Slavic languages yield two different translations: a generic middle and a tough-construction. I argue the two readings are reminiscent of the distinction between the generic interpretation of individual level (IL) and stage level (SL) predicates as described in Kuroda (2003).

Following Kuroda's (2003) analysis of Milsark's generalization, "IL predicates may only be predicated of generic NPs" and "SL predicates may be predicated of existential NPs" (Kuroda, 2003, p. 204). Kuroda (2003) argues a sentence with bare NPs is subject to either generic/universal or non-generic/existential readings depending on the domain of interpretation or pragmatics. Therefore, IL predicates can receive existential interpretations or SL readings and vice versa. I argue the sentence in (35) denotes a stative description that can be represented by the logical form in (36).

- (35) The book reads easily.
- (36) $\exists x [book(x) \& reads-easily(x)]$

Interestingly, when the logical form in (36) presupposes a bare NP, the reading can be either generic or existential. Compare (37) and (38), which should be logically equivalent:

- (37) Books read easily, therefore everyone buys books.
- (38) There are books that read easily; therefore, everyone buys books.

The logical form in (36) is not available for the sentence in (37) because *book* is universally quantified. It is difficult however to understand *book* in (38) as universally quantified. Therefore, the generic middle sentence in (35) can have both generic and existential readings depending on the domain of intended interpretation.

In contrast, the tough construction in (39) is an adjectival predicate that entails a permanent property of the internal argument. Thus, the interpretation is one in which the ease experienced is caused by some property of the book, such as font size or vocabulary.

(39) The book is easy to read.

Following Lasnik and Fiengo (1974), tough constructions are IL predicates with a generic interpretation only when the subject is indefinite. Thus, (39) receives an existential interpretation because the subject is definite. In summary, I argue pragmatics or the domain of interpretation ultimately determines the generic or existential interpretation of (35), whereas (39) is interpreted as existential because it has a definite subject.

3 EXTENDING THE GENERIC MIDDLE ANALYSIS

Beyond Slavic languages, generic middles exist in a variety of other languages such as English (40), Dutch (41), German (42), French (43), and Greek (44).

- (40) The book reads easily.
- (41) Dit boek leest makelijk. this book reads-3.sg easily 'This book reads easily.'

(Lekakou, 2005, p. 10 (1b))

(42) Dieses Buch liest sich leicht. this book reads-3.sg REFL easily 'This book reads easily.'

(Lekakou, 2005, p. 10 (1c))

(43) Ce livre se lit facilement. this book REFL reads-3.sG easily 'This book reads easily.'

(Lekakou, 2005, p. 10 (1d))

(44) Afto to vivlio δ iavazete efkola. this the book reads-NONACT.3.sg easily 'This book reads easily.'

(Lekakou, 2005, p. 10 (1e))

Intuitively, the generic middles in these languages are similar in that they appear with a verb with reduced valency, express an adverb post-verbally, and carry the same semantic interpretation. The surface structures for English, Dutch, German, French, and Greek, as well as the patterns seen in Slavic languages are schematized in the following table:

Surface Structure	Language
IA-ARG V-AGR ADV	English, Dutch
IA-ARG V-AGR-NON.ACT ADV	Greek
IA-ARG V-AGR-REFL ADV	Russian
IA-ARG ADV V-AGR-REFL	Ukrainian
IA-ARG REFL V-AGR ADV	French
IA-ARG REFL ADV V-AGR	Czech, Serbo-Croatian, Slovenian
IA-ARG V-AGR REFL ADV	German, Polish

Table 3: Generic middle surface structure by language

Cross-linguistically, generic middles all have the following elements in the surface structure: an internal argument realized as the subject, a verb, and an adverb. Strikingly, most languages express an additional component in the surface structure. Many of the languages introduce a reflexive marker, whereas Greek uses non-active verbal morphology. English and Dutch on the other hand lack a morphological marker, making the generic middle structure ambiguous when comparing it to another syntactic structure. Furthermore, the order of the elements in the surface structure does not pattern uniformly. A question that arises is whether a generic middle emerges via the syntactic structures alone, or syntactic structure and lexical content. A future analysis of the grammatical properties of each individual language may illuminate our understanding of generic middles.

An interesting subsequent question to ask is whether a different surface structure leads to a different approach to deriving a generic middle. A possible answer to this question can be found in recent proposals. Specifically, syntactically uniform approaches (Roberts, 1987; Fagan, 1992; Stroik, 1992, 1999; Hoekstra and Roberts, 1993; Ackema and Schoorlemmer, 1994, 1995; Medova, 2009) argue that generic middles in all languages are derived using the same syntactic mechanisms, whereas semantically uniform approaches (Steinbach, 2002; Lekakou, 2005) argue languages only share their semantic meaning of generic middles and differ in regards to the syntactic derivation. In this section, I will illustrate the crucial elements of each proposal and determine whether it can account for Slavic generic middles. Recall generic middles in Slavic

languages, under my analysis, undergo transitivity alternation, insert a reflexive marker in the construction, do not project an agent in syntax, permit oblique arguments, use imperfect verbal morphology, require adverbial modification, and can yield a generic or existential interpretation.

3.1 SYNTACTICALLY UNIFORM APPROACHES

The first family of approaches to deriving generic middles are the syntactically uniform approaches. These approaches argue that generic middles are syntactically the same across languages. However, the mechanism that is used differs in where the internal argument is first projected: either VP-internally (Roberts, 1987; Stroik, 1992; Hoekstra and Roberts, 1993; Medová, 2009) or in the subject position (Fagan, 1992; Ackema and Schoorlemmer, 1994, 1995).

Roberts (1987), for instance, argues that the Uniformity of Theta-Role Assignment Hypothesis (UTAH), given in (45), forces a syntactic derivation of generic middles.

(45) *Uniformity of Theta Assignment Hypothesis (UTAH)*Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure.

(Baker, 1988)

Specifically, generic middles exhibit thematic constancy, which involves the movement of a thematically assigned argument to the subject position (Roberts, 1987). Such a proposal permits only the internal argument, or patient, to move. Consequently, the external argument is not assigned a thematic role since it is suppressed in the generic middle construction, but is identified as an implied argument covertly in the structure. This proposal cannot hold for Slavic languages because I argue the agent does not exist in the generic middles even covertly because agentive byphrases are illicit.

Stroik (1992) and Hoekstra and Roberts (1993) propose the agent of the generic middle is syntactically realized as a null syntactic element. First, Stroik (1992) explores English and Dutch generic middles and argues PRO will be adjoined to the VP and is assigned the agent role that is demoted to a VP adjunct position (46).

(46)
$$[_{IP} \text{ walls}_i [_{I'} \text{ I } [_{VP} [_{VP} [_{V'} \text{ paint } t_i \text{ easily}]] PRO]]]]$$

(Stroik, 1992)

Stroik argues an implicit argument can be realized syntactically via *for*-phrases in the structure (47), which can occur with the preposition *for* or be Case-marked.

(47) Bureaucrats bribe easily for Bill.

(Stroik, 1999, p. 121 (5a))

He uses this as evidence of an agent that can be realized either as a PRO or as an overt argument that occurs in an adjunct position in generic middles. By contrast, I argue Slavic languages do not project an agent in syntax, but permit *for*-phrases as Case-marked oblique arguments as seen in Ukrainian (48) and (49)²

² I will put aside the evidence provided by Medová (2009), who argues Czech can have a Dative argument in the generic middle construction, which is interpreted as the agent of the event.

- (48) Knyžka studentam lehko čytajet'-sja. book students-DAT easily read-REFL 'The book is easy to read for the students.'
- (49) Knyžka lehko čytajet'-sja dlja studentiv. book easily read-REFL for students-GEN 'The book is easy to read for the students.' ('The students find the book is easy to read.')

Unlike Stroik (1992), I argue that the *for*-phrases exhibited in these examples do not serve as agents because the oblique argument remains outside of the VP and does not cause the internal argument to attain the property being described. Therefore, Stroik's (1992) proposal does not successfully account for the thematic role of the oblique argument in Slavic generic middles.

Similarly, Hoekstra and Roberts (1993) argue an implied agent can be syntactically realized as *pro*, an empty category that occupies the Spec VP position (50).

(50) $[_{IP} \text{ walls}_i [_{I'} \text{ I } [_{VP} pro [_{V'} \text{ paint } t_i \text{ easily}]]]]$

(Hoekstra and Roberts, 1993)

This indicates that the internal argument is generated in the direct object position and is assigned the patient theta-role before moving to the subject position. They also advocate for a process called Theta-identification, whereby an adverb licenses *pro* in generic middle constructions, which suggests adverbs are a mandatory component of the structure. Crucially, Hoekstra and Roberts's (1993) proposal does not account for Slavic data, as I argue the agent does not exist in generic middle syntax, suggesting there is no reason to project *pro*. Furthermore, I have shown that an adverb is not obligatory only when the construction saved by a model, negation, or emphatic stress.

Medová (2009) examines Czech generic middles (51) and argues the reflexive clitic is derived as the underlying agent in the generic middle construction.

(51) Tahle košile se dobře žehlí. this shirt-NOM REFL well irons-3.sG 'It is easy to iron the shirt.'

(Medová, 2009, p. 22 (37))

She assumes the Peeling Theory of Case (PTC), introduced by Starke (2005). Though Medová (2009) captures the generic middle pattern in Czech, she largely ignores the crosslinguistic facts as well as the properties of other Slavic generic middles. Specifically, the proposal does not explain how a generic middle is derived if the reflexive clitic surfaces after the verb, as in Polish (52) or if the reflexive marker is a verbal affix, as in Russian (53).

(52) Ksiazka czyta sie przyjemnie. book-NOM reads REFL pleasantly 'The book reads pleasantly.'

(Lidz, 1996, p. 104 (158))

(53) Kniga čitaet-sja legko. book reads-REFL easily 'The book reads easily.'

(Guhl, 2010, p. 262 (4b))

Furthermore, I argue Slavic generic middles do not have an underlying agent in syntax, thus my findings are unexpected under Medová's (2009) proposal.

In contrast to A-movement approaches, Fagan (1992) argues an implicit agent is not syntactically present in generic middles, and *arb*, an arbitrary operator that is equivalent to an agent, is present at level of the lexicon. Therefore, *arb* saturates the agent in the lexicon, which allows the internal argument to be externalized or base generated in the subject position. Interestingly, Fagan (1992) also acknowledges that the adverbial modification requirement in generic middles varies across languages. Crucially, she argues that generic middles do not necessitate adverbial modification as illustrated in German (54), English (55), and French (56):

(54) Dieses Kleid macht sich nicht zu. 'This dress won't fasten.'

(Fagan, 1992, p. 43 (72b))

(55) This dress buttons.

(Fagan, 1992, p. 57 (117a))

(56) Ce papier se recycle.'This paper recycles.'('This paper is recyclable.')

(Fagan, 1992, p. 62 (134b))

Based on these findings, Fagan (1992) argues adverbs are not a syntactic requirement, but one that provides pragmatic information. In contrast, Slavic generic middles without an adverb are illicit as seen in Russian (57) and Ukrainian (58):

(57) *Kapusta narezala-s'.
cabbage cut-REFL
Intended: 'The cabbage cut.'

(Jones and Levine, 2010, p. 304 (26b))

(58) *Suknja zakripljujet'-sja. dress fastens-REFL Intended: 'The dress fastens.'

Therefore, I argue this proposal does not hold for Slavic generic middles, as adverbial modification is required, otherwise the construction must be saved by negation, a modal, or emphatic stress.

Likewise, Ackema and Schoorlemmer (1994, 1995) argue that the external argument or the agent in generic middles is present only semantically by an arbitrary reference, or *arb*. They also maintain there is no evidence of a syntactically present agent. Since the agent is not projected in syntax, the internal argument is realized as the subject of the generic middle and no movement from VP occurs. Strikingly, Ackema and Schoorlemmer (1994) state: "in a language where a middle construction is not morphologically marked it is derived presyntactically" (fn.12). In other words, if a language has an unmarked generic middle then the agent is not realized in syntax. I argue this implication is unidirectional because generic middles in Slavic languages are morphologically marked with a reflexive marker and do no exhibit an agent in syntax. Consequently, this analysis does not successfully account for Slavic generic middles.

In summary, the commonality between Roberts (1987), Stroik (1992), Hoekstra and Roberts (1993), and Medová (2009) is the mechanism used to derive generic middles. In particular, they propose the internal argument undergoes A-movement, much like the derivation of passives, which results in a non-thematic subject position. I have argued these approaches cannot account for Slavic generic middles because the agent is not projected in the syntactic structure. Furthermore, Fagan (1992) and Ackema and Schoorlemmer (1994, 1995) both argue the underlying agent is saturated in the lexicon, which externalizes the internal argument. Though the derivation of the generic middle in these approaches seems to be heading the right direction, the specific properties of Slavic generic middles, which I previously described, cannot be accounted for. Therefore, syntactically uniform approaches to generic middles do not successfully account for all the Slavic data.

3.2 SEMANTICALLY UNIFORM APPROACHES

The second family of approaches to deriving generic middles are the semantically uniform approaches. Steinbach (2002) and Lekakou (2005) highlight the fact that semantic properties of generic middles should not be overlooked and argue that the syntactic structure of generic middles cross-linguistically are diverse.

Following Massam's (1992) view of English Middles, Steinbach (2002) argues generic middles have the same syntactic structure as inherent reflexives of the language in question. This implies that the inherent reflexive syntactic structure is heterogeneous cross-linguistically. When we look at a Ukrainian inherent reflexive with a Genitive argument (59) and a Czech inherent reflexive with a Dative argument (60) and compare them to generic middles with a Genitive argument, as in Ukrainian (61), and Dative argument, as in Czech (62), we find similar syntactic structures:

(59) Ivan boit'-sja ptakhiv.
Ivan fear-REFL birds-GEN
'John is afraid of birds.'

(60) Jan se mi směje. Jan REFL me-DAT laughs 'John laughs at me.'

(Kucerová, p.c.)

- (61) Knyžka lehko čytajet'-sja dlja studentiv.
 book easily read-REFL for students-GEN
 'The book is easy to read for the students.'
 ('The students find the book is easy to read.')
- (62) Tahle košile se Karlovi dobře žehlí. this shirt REFL Karel-DAT well irons 'It is easy for Karel to iron the shirt.'

(Medová, 2009, p. 22 (39))

Therefore, Steinbach's (2002) proposal seems to make correct predictions for generic middles in Ukrainian and Czech when an oblique argument is projected in the structure. However, to my knowledge, a thorough analysis of syntactic properties of Slavic inherent reflexives has yet to be conducted. Consequently, I cannot warrant that this proposal will sustain across all Slavic languages.

Steinbach (2002) also explores German generic middles, as in (63), and argues they are syntactically a transitive structure.

(63) Dieses Buch liest sich leicht. this book reads-3.sg REFL easily 'This book reads easily.'

(Lekakou, 2005, p. 10 (1c))

He argues that the internal argument is base generated in the subject position, while the reflexive marker *sich* occupies the VP-internal position. As a consequence, Steinbach (2002) proposes that a generic operator, Gen is able to saturate the underlying agent by binding to the argument, inhibiting it from being projected in syntax. Specifically, Gen functions as an unselective binder that enables the variable to be interpreted generically or as a universal quantifier (Steinbach, 2002). Interestingly, when we extend this approach to Slavic generic middles, the question that arises again is whether the reflexive marker in each language is of the same type. Recall the generic middles in Czech (64), Polish (65), and Russian (66):

(64) Tahle košile se dobře žehlí. this shirt-NOM REFL well irons-3.sG 'It is easy to iron the shirt.'

(Medová, 2009, p. 22 (37))

(65) Ksiazka czyta sie przyjemnie. book-NOM reads REFL pleasantly 'The book reads pleasantly.'

(Lidz, 1996, p. 104 (158))

(66) Kniga čitaet-sja legko. book reads-REFL easily 'The book reads easily.'

(Guhl, 2010, p. 262 (4b))

As we can see in Czech (62), the reflexive marker is a clitic that precedes the adverb and verb, in Polish (63) the reflexive marker is a clitic that follows the verb and precedes the adverb, and in Russian (64), the reflexive marker is an affix that attaches to the verb. It is not clear whether the reflexive marker in each of these languages occupy the VP-internal position; therefore, an investigation of the exact property of the reflexive markers in each Slavic language will determine whether this proposal is feasible. However, the latter part of this proposal may hold in Slavic languages, as the agent does not occur in syntax. Therefore, under Steinbach's (2002) analysis, Gen saturates the agent of generic middles in Slavic languages.

Another approach, proposed by Lekakou (2005) argues that generic middles are not defined by a syntactic structure, but rather semantics. She attributes the following properties to generic middles:

- (67) The core components of the middle interpretation:
 - a. The understood object is ascribed a dispositional property.
 - b. An otherwise eventive verb becomes a derived stative, and more precisely, receives a generic interpretation.
 - c. The agent is syntactically suppressed and receives an arbitrary interpretation.

(Lekakou, 2005, p. 99)

Specifically, a dispositional ascription is described to "expresses 'in virtue of generalizations; employ a VP-level Gen; and are subject-oriented" (Lekakou, 2005, p. 68). In Lekakou's (2005) proposal, Gen selects the internal argument of the verb to become the syntactic subject of the generic middle because the internal argument is the target of the dispositional ascription. She argues that languages differ in how Gen is realized in generic middles: either in the lexicon or in syntax. Specifically, Gen is realized in syntax only when a language can encode Gen in the imperfect verbal morpheme. Lekakou (2005) predicts Gen will bind to the underlying agent and absorbs it in syntax as a projection. This results in a syntactic structure that is parasitic on passives (Lekakou, 2005, p. 123). Slavic languages, such as Russian (68) and Ukrainian (69), use the imperfect verbal morpheme when constructing a generic middle.

(68) Kniga čitaet-sja legko. book reads-REFL easily 'The book reads easily.'

(Guhl, 2010, p. 262 (4b))

(69) Knyžka lehko čytajet'-sja. book easily read-REFL 'The book is easy to read.'

As such, we would expect Russian generic middles to be syntactically equivalent to passives, following Lekakou (2005). However, this proposal makes incorrect predictions because the unagreement of Russian generic middles with agent-oriented adverbs (70) as well as Ukrainian generic middles with an agentive by-phrase (71) serves as evidence for an agent being inactive in syntax.

(70) *Kust podrezal-sja tščatel'no. hedge cut-REFL carefully Intended: 'The hedge trimmed carefully.'

(Jones and Levine, 2010, p. 302 (24a))

(71) *Knyžka lehko čytajet'-sja studentamy. book easily read-REFL students-INST *Intended:* 'The book is easy to read by the students.'

Using Lekakou's (2005) mechanisms for generic middle derivation, I argue Russian generic middles must have the underlying agent licensed in the lexicon by Gen, in order for the agent to be absent in syntax. Therefore, I conclude aspectual morphology is not a reliable property to determine whether Gen is encoded in the syntactic structure or whether the agent is projected in syntax.

In summary, Steinbach (2002) and Lekakou (2005) derive generic middles using a semantic approach. In particular, Steinbach (2002) argues the generic middles will have the same syntactic structure as inherent reflexives in the languages of question. He also argues that the internal argument is base generated in the subject position, while the reflexive marker occupies the VP-internal position, which enables Gen to saturate the agent so it is not realized in syntax. Although Steinbach (2002) is able to capture the fact that an agent is non-existent in the Slavic generic middle construction, the proposals that argue generic middles are equivalent to inherent reflexives and the reflexive marker is realized in the VP-internal position require further investigation. On the other hand, Lekakou (2005) argues Gen selects the internal argument as the subject of the generic middle. If Gen is realized in the syntax instead of the lexicon, it is encoded in the imperfect verbal morpheme, and as such, the underlying agent will project in syntax. However, I argue that aspectual morphology does not successfully predict the syntactic structure of the generic middle in Slavic languages.

4 CONCLUSION

In this paper, I identified where existing analyses make incorrect predictions for generic middles in Slavic languages. I illustrated properties of generic middles in Slavic languages and described existing approaches to deriving generic middles as well as their shortcomings. I conclude that existing generic middle analyses inadequately account for Slavic data and the syntax and

semantics of generic middles need to be revisited. Crucially, the diagnostics used in the literature to determine the derivation of generic middles must be examined because it is often unclear what the tests actually diagnose. Under this view, it is evident that a thorough analysis of generic middles in a subset of languages, such as Slavic languages, is needed to build upon existing proposals. For this reason, I believe it has been difficult to describe the core components of generic middles such as transitivity alternations, theta role assignment, base generation, adverbial requirements, modality, and genericity. Moreover, the approach that would better account for the cross-Slavic and cross-linguistic variation of generic middles remains undiscovered. These issues go beyond the scope of this paper and therefore I leave them as interesting puzzles for future research.

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