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A MORPHOLOGICAL ANALYSIS
OF POLISH COMPLEX *NIE*-NOUNS:
A CASE OF A MORPHOSYNTACTIC HYBRID

INTRODUCTION

The aim of this paper is to explore the thus far unstudied territory of a class of Polish hybrid complex nouns with the initial negative morpheme *nie* (e.g., *niejadek* ‘fussy eater’, *niełot* ‘flightless bird’). The study seeks to determine the morphological structure of what seems to be a case of “syntax-inside-morphology” in the domain of Polish word-formation. We believe that our research may have far-reaching consequences for the descriptive adequacy of the Polish word-formation system and point to new directions in the discussion on the morphology-syntax interface.

In Polish, the morpheme *nie*, which in its fundamental sense carries the semantic load of negation (less often juxtaposition), combines with a variety of bases such as verbs, nouns, adjectives, adverbs, participles, numerals, and particles. As a prefix *nie-* corresponds exactly with the negative particle *nie* ‘not’ employed in the syntactic layer of the Polish language. Among the rich array of morphological structures in which the negative morpheme in question can be found, there is one word-formation type whose derivational base is, as will be argued below, a syntactic phrase. We wish to demonstrate conclusively that what appears to be sheer concatenation of morphological building blocks is, in fact, a complex noun built on a phrasal unit subjected to subsequent suffixation or paradigmatic conversion. We shall argue that the word-internal verb and the morpheme *nie* are constituents of the same maximal projection. This atypical combination of seemingly incompatible categories being part of

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separate grammatical domains, whose interdependence used to be questioned by the flagship rule of Lexicalism – the No Phrase Constraint – is today generally acknowledged and can be referred to as a morphosyntactic hybrid. Although hybridity has become an umbrella term for all kinds of blending and combining, the morphological phenomenon we wish to subject to scrutiny here seems to be best accounted for by the definition put forth by Pieterse: “hybridity concerns the mixture of phenomena which are held to be different, separate; hybridization then refers to a cross-category process”.¹

The controversy over the lexical phenomena exhibiting a degree of reciprocity between morphology and syntax has long surrounded the data-driven analyses of certain word-formation types across languages. Today, however, linguistics does no longer uncompromisingly question the morphology-syntax interface in the domain of word-formation. An already rich body of linguistic data amassed across various languages seems to strongly undermine the aprioristic separation of the two modules of grammar. In recent years there have emerged theories that belong to the current of the so-called mixed models of word-formation which allow for a limited intermodular interaction between morphology and syntax.² Our analysis draws on the theoretical assumptions inherent in the theories which are neither strictly lexicalist nor syntactocentric, in particular Lieber and Scalise’s *Firewall Theory*.³

In what follows we argue that Polish complex nouns with the initial negative morpheme *nie* should be recognised as a case of the morphology-syntax interface on a par with the already attested cross-linguistic material. The successive

¹ Jan Nederveen Pieterse, “Globalization as Hybridization,” *Global Modernities*, no. 2 (1995): 55-56.

² See, for instance, Ackema and Neeleman’s theory of Generalised Insertion: Peter Ackema and Ad Neeleman, *Beyond Morphology: Interface Conditions on Word Formation*, vol. 6 (Oxford: OUP, 2004); Ralli’s Nominal Formations Continuum and the de-syntacticisation theory: Angela Ralli, *Compounding in Modern Greek* (Dordrecht: Springer, 2013); Pafel’s theory of Conversion: Jürgen Pafel, “Phrasal Compounds and the Morphology-Syntax Relation,” in *Further Investigations into the Nature of Phrasal Compounding*, ed. Carola Trips and Jaklin Kornfilt (Berlin: Language Science Press, 2017), 233-59; or for a revised version of the Lexical Integrity Hypothesis advanced by Lieber and Scalise, see Rochelle Lieber and Sergio Scalise, “The Lexical Integrity Hypothesis in a New Theoretical Universe,” *Lingue e linguaggio*, no. 1 (2006): 7-32.

³ Based on a rich body of data reviewed in their paper, Lieber and Scalise argue that while syntactic rules cannot alter the lexical meaning of words (including argument structure), it is not true that syntactic rules have no access to the internal structure of X₀ categories. “We assume, then that the principles needed to construct phrases and sentences are distinct from the principles needed to construct complex words: ... let us say that Syntactic Merge is different than Morphological Merge. Syntactic Merge produces phrases and sentences, and Morphological Merge produces words. However, there is a point of contact between them, in that languages can allow word formation of certain sorts to Merge syntactic phrases. It is possible, as well, that sentences and phrases can be ‘downgraded’ to words as part of a process of grammaticalization.” Lieber and Scalise, “Lexical Integrity Hypothesis,” 28.

sections of the paper gradually build up the hierarchical structure of the nominals based on their morphological, semantic and morphosyntactic behaviour. It is argued that the complex nouns in *nie* demonstrate potential for two competing representations: left-branching and right-branching. Sections 4 and 5 are critical for establishing their ultimate hierarchical organisation as they juxtapose the two structures, pointing out the implications each of them will have for the grammatical and semantic well-formedness of the examined data.

The language material researched in this paper was abstracted from the National Corpus of Polish and a list of dictionary entries compiled by Polish Scientific Publishers PWN from the following dictionaries of the Polish language: *A Dictionary of a Hundred Thousand Words Needed*, *The Great Spelling Dictionary*, and the 11-volume *PAN Dictionary of Polish*. Next, the use of the gathered data was double-checked in the National Corpus of Polish. The search yielded approximately 50 nominals whose representative examples are discussed below.

1. SETTING THE SCENE: AN OVERVIEW OF POLISH COMPLEX *NIE*-NOUNS

The type we have chosen to subject to morphological analysis constitutes merely a fraction of a large collection of derivatives with the word-initial negative morpheme *nie*.⁴ Interestingly, however, it is the only type that exhibits a unique morphological structure in that its base belongs to the domain of syntax.

Nie may assume two orthographic forms to combine with a given syntactic category, namely the constituents may be joined to form a single unit (e.g., *niejasny* ‘unclear’) or maintain the status of independent words (e.g., *nie jedź* ‘don’t go’). As an integral part of a morphological structure, *nie* carries the meaning of negation or juxtaposition. In the latter case, it will serve the function of an uninflected negating particle. For reasons of space, the syntactic category which we bring to focus in this section does not extend beyond the class of complex nouns in *nie*.

We distinguish three subclasses of *nie* derivatives: (a) nouns derived from nouns (e.g., *niekompetencja* ‘incompetence’ < *kompetencja* ‘competence’), (b) nouns derived from *nomina actionis* in *-nie* and *-cie* known as transpositional formations⁵

⁴ See Mieczysław Szymczak, “Pisownia polska,” in *Słownik ortograficzny języka polskiego*, ed. Mieczysław Szymczak (Warsaw: PWN, 1994), 102-10.

⁵ Transpositional derivatives are often built on a verb subjected to nominalization (e.g. *tańczyć* ‘to dance’ > *tańczenie*_N ‘dancing’ as in *tańczenie jest przyjemne* ‘dancing is pleasant’).

(e.g., *nierobienie* ‘non-doing’ < *robienie*_N ‘doing’), and (c) nouns derived from verbal bases (e.g., *niejadek* ‘fussy eater’). We shall refer to the three subgroups as type A, type B and type C respectively. Despite the fact that both type B and type C have a verb in their morphological structures, it is the latter group that constitutes a case of syntax-inside-morphology and shall be the subject of our analysis in the following sections. As for the complex nouns derived from *nomina actionis*, the attachment of the negative morpheme takes place once the process of transposition has applied: *robić*_V ‘do’ > *robienie*_N ‘doing’ > *nierobienie*_N ‘non-doing’.

2. THE GRAMMATICAL STATUS OF *NIE*

Negativity is a category that we encounter in both syntax and morphology. For obvious reasons, in syntax this role will predominantly be performed by the negative particle *not* (in Polish expressed as *nie*) whereas in morphology by a prefix. Nagórko⁶ points out that negation in natural language concerns primarily sentence elements such as predication, subject, object, and adverbial. However, in a morphological environment, it will most likely function as a prefix. The classification of *nie* put forth by the dictionary of the Polish grammar (*Słownik gramatyczny języka polskiego*; henceforth SGJP) remains in line with Nagórko’s description in that the morpheme *nie* is subsumed under three main categories, depending on the function performed: (a) negative particle, (b) prefix, or (c) conjunction. Such a classification suggests that the phenomenon of negation has either morphological or syntactic nature, depending on the grammatical domain in which it operates.

In opposition to this stance, Kupść and Przepiórkowski argue in favour of verbal negation as a morphological phenomenon.⁷ It is worth noting, however, that Kupść and Przepiórkowski admit that “traditionally, the negative marker *nie* is called ‘particle’, e.g., Bąk (1984), Jaworski (1986), Bartnicka and Satkiewicz (1990), or ‘modulant’, e.g., Jodłowski (1976), which suggests its syntactic realisation. Also most theoretical approaches usually assume a syntactic realisation of *nie*, a clitic, e.g., Willim (1990), Borsley and Rivero (1994), Śpiewak and Szymańska (1995), Witkoś (1996).”⁸

⁶ Alicja Nagórko, *Podręczna gramatyka języka polskiego* (Warsaw: PWN, 2012), 153.

⁷ Anna Kupść and Adam Przepiórkowski, “Morphological Aspects of Verbal Negation in Polish”, in: *Current Approaches to Formal Slavic Linguistics*, ed. Peter Kosta and Jens Frasek (Frankfurt: Peter Lang, 1997), 337-46.

⁸ Kupść and Przepiórkowski, 337.

Saloni and Świdziński argue conclusively⁹ (distancing themselves from the earlier accounts¹⁰) that verbal negation in Polish cannot be considered a morphological phenomenon. They point out that the act of transition of the accusative verbs (i.e., non-negated verbs followed by accusative objects) into the genitive verbs (i.e., negated verbs followed by genitive objects) under the influence of negation is, in fact, syntactically, not morphologically, driven. Under such an account, *nie* cannot be considered a morphological modulant, i.e., a prefix giving rise to negated verbs recognised as separate dictionary entries. In effect, in our study, we choose to refer to the morpheme *nie* found in type C complex nouns as a syntactic negative marker (or particle) in contrast to type A and B derivatives, whose structures are based on the negative prefix *nie-*, namely a morphological category. For reasons of space, only a general description of the concept of verbal negation can be provided here.¹¹

Taking a cursory look at all classes of lexemes with the initial morpheme *nie* in Polish, it is difficult to avoid the impression that in all these cases we may speak of a negative prefix. However, upon closer examination of their so-called deep structure, it appears that this interpretation does not pertain to one fairly unproductive class, namely type C. This is due to the fact that the whole expression is a morphosyntactic hybrid. Strictly speaking, the derived noun is the result of a suffixal nominalisation operating on a syntactic unit Neg" (whose head is the functional category of negation) taking VP as its complement.¹² Thus, it can be argued that the morpheme *nie* found within the structure of type C complex nouns has a syntactic nature.

It is worth noting that of the three subclasses of the complex nouns with the initial morpheme *nie* described by Szymczak,¹³ there is only one word-formation type that the author considers to be derived from the verbal base, namely type C (e.g., *niewypał* 'unfired round' < *wypalić* 'fire', *nierób* 'loafer' < *robić* 'work',

⁹ Zygmunt Saloni and Marek Świdziński, *Składnia współczesnego języka polskiego*, 5th ed. (Warsaw: Państwowe Wydawnictwo Naukowe, 2012), 157.

¹⁰ Zygmunt Saloni and Marek Świdziński, *Składnia współczesnego języka polskiego*, 2nd ed. (Warsaw: Państwowe Wydawnictwo Naukowe, 1985); Adam Przepiórkowski and Marek Świdziński, *Polish Verbal Negation Revisited: A Metamorphosis vs. HPSG Account* (Warsaw: Prace IPI PAN, 1997).

¹¹ For an in-depth analysis of *nie* as a purely syntactic exponent of negation, see Saloni and Świdziński, *Składnia* (2012), 156-61.

¹² For the discussion of a functional category of negation projecting a phrase in X-bar Theory, see Caroline Heycock, "Generative Syntax with Prof Caroline Heycock. Generative Syntax 4.2-4.4: Sentence Structure," in *Linguistics and English Language at the University of Edinburgh*, filmed 2014, video, 30:41, accessed May 20, 2022, <https://www.youtube.com/watch?v=kWBEHF-SVsg>.

¹³ Szymczak, "Pisownia polska", 106.

niedorostek ‘immature boy’ < *dorastać* ‘grow up, mature’). This is entirely consistent with the line of reasoning adopted in the present paper. In contrast, in the case of type B transpositional nouns such as *niewygojenie* ‘non-healing’ or *nieprzybycie* ‘non-arrival’, Szymczak argues that their derivational bases are noun forms *wygojenie* ‘healing’ and *przybycie* ‘arrival’, as opposed to negated verbs *nie wygoić* ‘not heal’ and *nie przybyć* ‘not arrive’.

The classification of type C derived nouns as morphosyntactic hybrids, i.e., Neg” structures feeding morphology, leads to the exclusion of *nie* as a prefix and simultaneously stresses its syntactic status as a negative marker. This in turn rules out the possibility that the morphological structure in question could be derived via the parasynthetic word-formation process understood as the co-occurrence or simultaneity of both a prefix and a suffix – a specific type of circumfixation.¹⁴

3. COMPLEX *NIE*-NOUNS: A PRELIMINARY ANALYSIS

A cursory examination of the lexical material might suggest that the morphological structure of complex nouns in *nie* rests on two constituents: the negative prefix and the right-hand noun. Such an assumption seems fully justified as the bulk of all formations with the initial negative morpheme *nie* are either negations or juxtapositions of the input noun, adjective or adverb, e.g., *nieposłuszeństwo_N* ‘disobedience’ < *posłuszeństwo_N* ‘obedience’, *niemiły_A* ‘nasty’ < *miły_A* ‘nice’, *niedostrzegalnie_{Adv}* ‘imperceptibly’ < *niedostrzegalny_A* ‘imperceptible’ < *dostrzegalny_A* ‘perceptible’. Therefore, a strictly binary (i.e. two-constituent) structure shall serve as a starting point for our discussion to establish if there are any morphological analogies that can be drawn between type A and type C complex nouns, or more specifically, if the same morphological structure is applicable to both word-formation types. The creation of type A complex nouns, such as *niekompetencja* ‘incompetence’, *niedyspozycja* ‘indisposition’ or *nieład* ‘disorder’ boils down to a single derivational process, i.e., the formation of the opposite word via negative prefixation.¹⁵ Compare the following two sets of data:

¹⁴ Note that “the term *parasynthetic* is sometimes also used to refer to nouns and adjectives derived from compounds or in which both a prefix and a suffix are attached to a lexical base.” Claudio Iacobini, “Parasynthesis in Morphology,” in *The Oxford Research Encyclopedia of Linguistics* (Oxford: OUP, 2020), accessed July 2, 2023, <https://doi.org/10.1093/acrefore/9780199384655.013.509>.

¹⁵ The same direction of derivation holds true for the abovementioned complex adjectives and adverbs in *nie*.

(1) a. Type A complex nouns

*niekompetencja*_N ‘incompetence’ < *nie* + *kompetencja*_N lit. ‘not + competence’
*niedyspozycja*_N ‘indisposition’ < *nie* + *dyspozycja*_N lit. ‘not + disposition’
*nieład*_N ‘disorder’ < *nie* + *ład*_N lit. ‘not + order’

b. Type C complex nouns

*niejadek*_N ‘fussy eater’ < *nie* + *?jadek*_N ‘not + ?’
*nielot*_N ‘flightless bird’ < *nie* + *?lot*_N ‘not + ?’
*niekapek*_N ‘spillproof container’ < *nie* + *?kapek*_N ‘not + ?’

It can be inferred from the small sample evidence that the nouns *niejadek*, *niekapek* and *nielot* cannot be viewed as negations or juxtapositions of what is communicated by their right-hand nouns *?jadek*, *?kapek* and *?lot*. The reason why the surface structure interpretation fails is that in order for a word to act as a negation of the base there would have to exist such a base in the first place. Meanwhile, the nouns remaining after the truncation of *nie* are either absent from the Polish lexicon or constitute homonyms of other lexical entries. Admittedly, the noun *lot* is part of the lexical stock of the Polish language, but its meaning has little in common with ‘flightless bird’. The synthetic noun found in *nielot* is merely a homonym of the listed *lot* ‘flight’.

A logical conclusion to be drawn from the above examples is that *nie* has no other way but to select a base different from the synthetically formed right-hand noun to ensure that the morphological structure of the derivative reflects its authentic semantic makeup. It is therefore crucial that we gain a better insight into the synthetic nonce words, such as *?jadek* and *?kapek*, before we proceed with further analysis in sections 4 and 5. Consider the following:

- (2) *?jadek*_N ‘???’ < *jad-ać*_{INF} ‘to eat’ + *-ek*_{SG;M}
*?lot*_N ‘???’ < *lat-ać*_{INF} ‘to fly’ + *-Ø*_{SG;M}
*?kapek*_N ‘???’ < *kap-ać*_{INF} ‘to drip’ + *-ek*_{SG;M}

It can be argued that, formally, the examples quoted above represent the category of deverbal nouns. Interestingly, though morphologically well-formed, *?jadek*, *?kapek* and *?lot*, exhibit high semantic opacity. This, in turn, calls into question the precedence of the nominalization over the attachment of the negative morpheme *nie* (see sections 4 and 5) and seriously undermines the validity of a two-constituent structure of type C. Such an order of derivation is legitimate with reference to types A and B, where *nie* combines with the noun having an

established position in the Polish lexicon. As for type C however, the proposition that the derivational suffix takes the semantic scope over the preceding verbal root seems highly implausible.

If the right-hand noun is to be ruled out as the motivating base, an alternative configuration needs to be considered. In terms of the linear arrangement of *nie* derivatives, there is one more route that remains open, namely the premise that the nominals are in fact a sequence of three morphological ingredients: the negative morpheme *nie*, the verbal base, and the nominalizing suffix. The constituents may combine according to two competing hierarchical organisations: a right-branching structure or a left-branching structure. Notwithstanding the preferred model, the principal category of the examined nominals is the verb. Interestingly, as we shall demonstrate in sections 4 and 5, when the left-branching structure is adopted, the derivational base will be able to accommodate a unit larger than a lexical category.¹⁶

4. TOWARDS THE LEFT-BRANCHING STRUCTURE OF COMPLEX *NIE*-NOUNS

For the reasons given above, the present account predicts that type C complex nouns are combinations of three morphological building blocks. In such an instance, their structure may receive two opposing interpretations. Under the right-branching structure the internal verb would combine with the nominalizing suffix to yield a nonce expression. This synthetic deverbal noun would subsequently be subjected to negation by means of *nie*. Consider the right-branching analyses below:

- (3) right-branching analysis semantic interpretation of the synthetic noun¹⁷

niejadek ‘fussy eater’

¹⁶ For an in-depth analysis of Polish and English synthetic compounds as left-branching morphological structures, see Joanna Kolbusz-Buda, *Compounding in Polish and English. A Morpho-Semantic Analysis of Synthetic Deverbal Compound Nouns in Polish in the Light of Parallel Constructions in English* (Lublin: Wydawnictwo KUL, 2014); Kolbusz-Buda, *Złożenia syntetyczne w języku polskim. Analiza formalna* (Siedlce: Wydawnictwo Uniwersytetu Przyrodniczo-Humanistycznego, 2019).

¹⁷ Please note that the meaning of each synthetic noun given in our study is purely hypothetical and stems from the wish to make the analysis easier for the reader to follow. These “working definitions” have been put together by reference of the synthetic noun to the semantics of the entire expression. It should also be borne in mind that they are the result of the author’s linguistic intuitions as a native speaker of Polish, therefore they ought not to be uncritically accepted.

- [*nie*_{NEG} [*jad-ać*_V¹⁸-*ek*_{SG;M}]_N]_N > [*nie* [*?jadedek*]_N]_N, *?jadedek* ‘?eater’
 [not [eat_V-Af]_N]_N > [not [???]_N]_N
- niekapek* ‘spillproof container’
 [*nie*_{NEG} [*kap-ać*_V-*ek*_{SG;M}]_N]_N > [*nie* [*?kapek*]_N]_N, *?kapek* ‘?dripper’
 [not [drip_V-Af]_N]_N > [not [???]_N]_N
- nieródka* ‘med. nulliparous’
 [*nie*_{NEG} [*rodz-ić*_V-*kas*_{SG;F}]_N]_N > [*nie* [*?ródka*¹⁹]_N]_N, *?ródka* ‘?female giving birth’
 [not [give birth_V-Af]_N]_N > [not [???]_N]_N
- nieplaciciel* ‘debtor’
 [*nie*_{NEG} [*plac-ić*_V-*iciel*_{SG;M}]_N]_N > [*nie* [*?placiciel*]_N]_N, *?placiciel* ‘?payer’
 [not [pay_V-Af]_N]_N > [not [???]_N]_N
- nieudacznik* ‘loser’
 [*nie*_{NEG} [*ud-ać*_V-*nik*_{SG;M}]_N]_N > [*nie* [*?udacznik*]_N]_N, *?udacznik* ‘?successful person’
 [not [succeed_V-Af]_N]_N > [not [???]_N]_N

Based on the examples given above, there is clear evidence that the right-branching analysis gives rise to the same morphosemantic effect that we could observe for the two-constituent interpretation of *nie* derivatives presented in section 3. In both cases we obtain a word structure based on a semantically opaque synthetic noun absent from the lexicon of the Polish language which undergoes negative prefixation. Such a proposition defies logic and seems hardly viable for semantic reasons. Conversely, positing the left-branching structure which takes a phrasal category as an input into the morphological process of affixation brings positive results in that the morphological skeleton reflected in the paraphrase is fully consistent with the meaning of the complex noun. Consider the following left-branching counterparts of the nominals examined in (3):

¹⁸ For greater morphological transparency, we choose to represent the word-internal verb in the infinitive, marking the morpheme boundary between the verbal stem and its inflectional ending.

¹⁹ In Polish derivational processes, the base word may be preserved intact so the derived form is morphologically transparent (e.g., *lamp-a* ‘lamp’ > *lamp-k-a* ‘little lamp’) or it may vary in quality and/or quantity (e.g., *rę-k-a* ‘hand’ > *rącz-k-a* ‘little hand’; *prywatn-y* ‘private’ > *prywatn-k-a* ‘party, celebration’), see Renata Grzegorzczkowska and Jadwiga Puzynina, “Rzeczownik,” in *Gramatyka współczesnego języka polskiego. Morfologia*, ed. Renata Grzegorzczkowska, Roman Laskowski, and Henryk Wróbel (Warsaw: PWN, 1999), 364. Such qualitative or quantitative alternations will be commonly encountered among the examples quoted in this paper. However, since variability of the lexical base is not central to our research, we choose not to discuss it further in this work.

(4) left-branching analysis	paraphrase
<i>niejadek</i> ‘fussy eater’	
[[<i>nie</i> _{NEG} <i>jad-ać</i> _V] _{VP} - <i>ek</i> _{SG;M}] _N	
[[not eat] _{VP} Af] _N	one who (Af) does not (<i>nie</i>) eat (V)
<i>niekapek</i> ‘spillproof container’	
[[<i>nie</i> _{NEG} <i>kap-ać</i> _V] _{VP} - <i>ek</i> _{SG;M}] _N	
[[not drip] _{VP} Af] _N	one which (Af) does not (<i>nie</i>) drip (V)
<i>nieródka</i> ‘med. nulliparous’	
[[<i>nie</i> _{NEG} <i>rodz-ić</i> _V] _{VP} - <i>ka</i> _{SG;F}] _N	
[[not give birth] _{VP} Af] _N	one who (Af) does not (<i>nie</i>) give birth (V)
<i>nieplaciciel</i> ‘debtor’	
[[<i>nie</i> _{NEG} <i>plac-ić</i> _V] _{VP} - <i>iciel</i> _{SG;M}] _N	
[[not pay] _{VP} Af] _N	one who (Af) does not (<i>nie</i>) pay (V)
<i>nieudacznik</i> ‘loser’	
[[<i>nie</i> _{NEG} <i>ud-a</i> _V] _{VP} - <i>nik</i> _{SG;M}] _N	
[[not succeed] _{VP} Af] _N	one who (Af) does not (<i>nie</i>) succeed (V)

Under the left-branching analysis, the central category of the derivative is still the verb. However, the unit it selects is the negative marker *nie*. This derivational configuration is a carbon copy of syntactic relations holding between the negative particle *nie* and the verb in a corresponding syntactic construction: *niekapek* ‘spillproof container’ – one which (-*ek*_{3SG;M}) does not (*nie*_{NEG}) drip (*kapie*_{3SG.PRS}). The nominalizing suffix, assigned the function of the external argument of the verb, occupies a peripheral position in the structure of the derivative whereas *nie* and the verb, in terms of syntactic relations, belong to the same maximal projection Neg”. Thus, under the left-branching structure analysis the scope of the negative morpheme *nie* is over the verbal base rather than the right-hand synthetic noun while the scope of the nominalizing suffix is over the entire verb phrase and is not confined to the root verb alone.

In view of the foregoing, we want to argue that the first stage of derivation entails a merger of the morpheme *nie* and the word-internal verb to produce Neg” that serves the function of the base. This stage is followed by the nominalizing suffixation. Here we follow Lieber and Scalise’s Limited Access Principle which states that “Morphological Merge [understood as the capacity of the morphological component of grammar for producing words] can select

on a language-specific basis to merge with a phrasal/sentential unit.”²⁰ The MM is conceptualised as follows:

- Let there be items α , β , such that α is a base and β a base or affix. MM takes α , β (order irrelevant) and yields structures of the form $\langle \alpha, \beta \rangle \gamma$
- a. where γ is an X_0 , categorically equivalent to α or β , and
 - b. α or β can be null.

The proposition put forward by Lieber and Scalise is of paramount importance for our study as in the light of the abovementioned theory there is no need for a prior formation of an artificial deverbal noun whose meaning would be non-compositional. Owing to the left-branching structure interpretation we are able to attain congruence between the morphological and semantic layers. A similar effect cannot be achieved under the right-branching analysis due to the violation of the semantic compositionality criterion – see illustrative examples in (3).

5. THE PARADIGMATIC CONVERSION VARIANT OF COMPLEX *NIE*-NOUNS

The Polish language has two morphological variants of type C complex nouns: *nie* derivatives with an overtly expressed suffix and a twin structure, such as *nie-rób-Ø* ‘loafer’ or *nie-lot-Ø* ‘flightless bird’, being the output of paradigmatic conversion.

In Polish, *paradigmatic conversion* is used to refer to a suffixless word-formation process in which the difference between the input and the output forms boils down to the difference in their inflectional paradigms.²¹ Unlike in English, conversion in Polish is a phenomenon of greater complexity. It may involve (a) a change of the word-class in which case the input and the output share the same stem: *łam-æ*_{V-INF} ‘break’ > *lom*_{N-SG;M} ‘rock fragment’), (b) shifting a word from one inflectional paradigm to the other without the change of the syntactic category, for instance a neuter noun may be moved to the masculine declension pattern (e.g., *ucho*_{N-SG;N} ‘ear’ > *klap-o-uch-Ø*_{N-SG;M} ‘lop-eared person or animal’), or (3) it may bring an almost impalpable morphosyntactic effect – despite the unchanged declension pattern, the lexeme will exhibit a different grammatical gender

²⁰ Lieber and Scalise, “Lexical Integrity Hypothesis,” 28.

²¹ In Polish linguistic literature, the term *paradigmatic conversion* is used interchangeably with the terms *derywacja paradygmatyczna* ‘paradigmatic derivation’, *konwersja* ‘conversion’ and *derywacja zerowa* ‘zero-derivation’.

(e.g., $ta_{\text{DEM-SG:F}} \textit{broda}_{\text{N-SG:F}}$ ‘this beard’ > $ten_{\text{DEM-SG:M}} \textit{gol-i-broda} \cdot \emptyset_{\text{N-SG:M}}$ ‘this barber’). The third variant provides that the output is inflected according to the paradigm of the input category, but its grammatical gender alters which becomes readily visible in the type of the modifier the noun selects (cf. *broda* ‘beard’ vs *golibroda* ‘barber’ above).

As for complex nouns in *nie* formed via paradigmatic conversion, their surface structure is reminiscent of type A and may be regarded as negative prefixation operating on a nominal base. However, further analysis is to reveal that it is the verb enclosed in the right-hand synthetic noun that *nie* selects, thereby forming a unit modelled on a corresponding syntactic construction. Thus, similarly to *nie* derivatives with an overtly expressed suffix discussed in section 4, the base of the paradigmatic variant is the verb phrase which is subsequently downgraded to the category of a word for the process of conversion to apply. In reality, the right-hand nouns are either absent from the Polish lexicon (e.g., **roba* in *nieroba* ‘loafer’) or constitute mere homonyms of other lexemes (cf. *lot* ‘flight’, *wypal*²² ‘firing’, *wybuch* ‘explosion’ and *mowa* ‘speech’ and their homonyms *?lot*, *?wypal*, *?wybuch*, and *?mowa* in (5) below), hence cannot contribute to the overall meaning of the complex nouns. Consider the morphosemantics of the paradigmatic conversion variant under the right-branching structure interpretation:

(5) right-branching analysis		semantic interpretation
<i>nielot</i> ‘flightless bird’	vs	*‘not flight’
$[ni_{\text{NEG}} [\textit{lat-ac}_{\text{V}} - \emptyset]_{\text{N}}]_{\text{N}}$	>	$[nie [\textit{lot} \cdot \emptyset]_{\text{N-SG:M}}]_{\text{N-SG:M}}$
$[\text{not} [\textit{fly}_{\text{V}} - \emptyset]_{\text{N}}]_{\text{N}}$	>	$[\text{not} [\textit{flight}]_{\text{N}}]_{\text{N}}$
<i>niewypal</i> ‘unfired round’	vs	*‘not firing’
$[ni_{\text{NEG}} [\textit{wypal-ac}_{\text{V}} - \emptyset]_{\text{N}}]_{\text{N}}$	>	$[nie [\textit{wypal} \cdot \emptyset]_{\text{N-SG:M}}]_{\text{N-SG:M}}$
$[\text{not} [\textit{fire}_{\text{V}} - \emptyset]_{\text{N}}]_{\text{N}}$	>	$[\text{not} [\textit{firing}]_{\text{N}}]_{\text{N}}$
<i>niewybuch</i> ‘unexploded ordnance’	vs	*‘not explosion’
$[ni_{\text{NEG}} [\textit{wybuch-ac}_{\text{V}} - \emptyset]_{\text{N}}]_{\text{N}}$	>	$[nie [\textit{wybuch} \cdot \emptyset]_{\text{N-SG:M}}]_{\text{N-SG:M}}$
$[\text{not} [\textit{explode}_{\text{V}} - \emptyset]_{\text{N}}]_{\text{N}}$	>	$[\text{not} [\textit{explosion}]_{\text{N}}]_{\text{N}}$
<i>niemowa</i> ‘mute’	vs	*‘not speech’
$[ni_{\text{NEG}} [\textit{mow-ic}_{\text{V}} - \emptyset]_{\text{N}}]_{\text{N}}$	>	$[nie [\textit{mowa} \cdot \emptyset]_{\text{N-SG:F}}]_{\text{N-SG:F}}$
$[\text{not} [\textit{speak}_{\text{V}} - \emptyset]_{\text{N}}]_{\text{N}}$	>	$[\text{not} [\textit{speech}]_{\text{N}}]_{\text{N}}$

²² Synchronically, in Polish the noun *wypal* is understood as an act of heating a clay object to make it hard and strong. In English, we speak of firing pottery, bricks, etc. Please note that the form ‘fire’ we use in the English translation of *wypal*_N and the verb ‘fire’ employed in *wypalac*_V have different denotations.

<i>nierób</i> ‘loafer’	vs	*‘not ???’
$[nie_{NEG} [rob-ic_v -\emptyset]_N]_N$	>	$[nie [rób-\emptyset]_{N-SG:M}]_N$ N-SG:M
$[not [work_v -\emptyset]_N]_N$	>	$[not [???]_N]_N$
<i>nieroba</i> ‘loafer’	vs	*‘not ???’
$[nie_{NEG} [rob-ic_v -\emptyset]_N]_N$	>	$[nie [roba-\emptyset]_{N-SG:F}]_N$ N-SG:F
$[not [work_v -\emptyset]_N]_N$	>	$[not [???]_N]_N$
<i>nieuk</i> ‘dunce’	vs	*‘not ???’
$[nie_{NEG} [ucz-yć_v -\emptyset]_N]_N$	>	$[nie [uk-\emptyset]_{N-SG:M}]_N$ N-SG:M
$[not [study_v -\emptyset]_N]_N$	>	$[not [???]_N]_N$

The analyses in (5) clearly demonstrate that interpreting the structure of the paradigmatic type as right-branching would violate the coherence between the morphological and the semantic layers. The form of what *seems* to be the right-hand noun is in fact a side-effect of the nominalization that operates on the category of Neg" and ensures that the exponent of the paradigmatic conversion (represented here as the morphological zero) has the scope over the entire phrasal base. The analyses in (6) serve to illustrate that under the right-branching interpretation, particularly on the level of the paraphrasing, the artificiality of the right-hand noun becomes glaringly apparent:

(6) a. left-branching structure interpretation of *niemowa* ‘mute’

$[[nie_{NEG} mówić_{INF}]_{VP} -\emptyset]_N > niemowa-\emptyset_{N-SG:F}$
 $[[not speak_v]_{VP} -\emptyset]_N > muten$
 ‘one that does not speak’

b. right-branching structure interpretation of *niemowa* ‘mute’

$[nie_{NEG} [mówić_{INF} -\emptyset]_N]_N > [nie [mowa-\emptyset]_{N-SG:F}]_N$ N-SG:F
 $[not [speak_v -\emptyset]_N]_N > [not [speech]_N]_N$
 *‘not speech’

The morphological structure representation in (6a) shows conclusively that as long as the process of conversion has the scope over the phrasal base Neg", the morphological and the semantic layers overlap without violating the criterion of semantic compositionality. Consider the left-branching variant of the complex nouns presented in (5):

(7) left-branching analysis

niełot ‘flightless bird’[[*nie*_{NEG} *lat-ać*_{INF}]_{VP} - \emptyset]_N > [*niełot*· \emptyset]_{N-SG;M}[[not fly]_{VP} - \emptyset]_N > flightless bird_Nparaphrase: one who (\emptyset) does not (*nie*) fly (V)*niewypał* ‘unfired round’[[*nie*_{NEG} *wypał-ać*_{INF}]_{VP} - \emptyset]_N > [*niewypał*· \emptyset]_{N-SG;M}[[not fire]_{VP} - \emptyset]_N > unfired round_Nparaphrase: one that (\emptyset) does not (*nie*) fire (V)*niewybuch* ‘unexploded ordnance’[[*nie*_{NEG} *wybuch-ać*_{INF}]_{VP} - \emptyset]_N > [*niewybuch*· \emptyset]_{N-SG;M}[[not explode]_{VP} - \emptyset]_N > unexploded ordnance_Nparaphrase: one that (\emptyset) does not (*nie*) explode (V)*niemowa* ‘mute’[[*nie*_{NEG} *mów-ić*_{INF}]_{VP} - \emptyset]_N > [*niemowa*· \emptyset]_{N-SG;F}[[not speak]_{VP} - \emptyset]_N > mute_Nparaphrase: one who (\emptyset) does not (*nie*) speak (V)*nierób* ‘loafer’[[*nie*_{NEG} *rob-ić*_{INF}]_{VP} - \emptyset]_N > [*nierób*· \emptyset]_{N-SG;M}[[not work]_{VP} - \emptyset]_N > loafer_Nparaphrase: one who (\emptyset) does not (*nie*) work (V)*nieroba* ‘loafer’[[*nie*_{NEG} *rob-ić*_{INF}]_{VP} - \emptyset]_N > [*nieroba*· \emptyset]_{N-SG;F}[[not work]_{VP} - \emptyset]_N > loafer_Nparaphrase: one who (\emptyset) does not (*nie*) work (V)*nieuk* ‘dunce’[[*nie*_{NEG} *ucz-yć*_{INF}]_{VP} - \emptyset]_N > [*nieuk*· \emptyset]_{N-SG;M}[[not study]_{VP} - \emptyset]_N > dunce_Nparaphrase: one who (\emptyset) does not (*nie*) study (V)

From the above analyses in (5) and (7) we can reasonably infer that the right-hand synthetic nouns *?łot*, *?wypał*, *?wybuch* and *?mowa*, being part of the linear structure of *niełot* ‘flightless bird’, *niewypał* ‘unfired round’, *niewybuch* ‘unexploded ordnance’ and *niemowa* ‘mute’, and the listed *łot* ‘flight’, *wypał* ‘firing (of clay objects)’, *wybuch* ‘explosion’ and *mowa* ‘speech’, though orthographic doubles,

show glaring discrepancies in terms of meaning. In fact, in the case of the former group, it is hard to speak of meaning as such. As for the remainder of the synthetic nouns in (5), **rób*, **roba* and **uk* are not only absent from the Polish lexicon but also do not qualify as homonyms. We believe that the nominalizing formant (represented as the zero morpheme) serves the function of the verb's external argument. Ultimately, the first stage of derivation of both type C variants comes down to the combining of *nie* and the word-internal verb. The union is patterned on the syntactic relations that hold between the negative particle and the verb in the underlying verb phrase. The phrasal base, downgraded to the word-level category, is subsequently subjected to nominalization via paradigmatic conversion (*nierób-Ø* 'loafer') or suffixation (*niejad-ek* 'fussy eater').

CONCLUSIONS

The purpose of this paper has been to determine the morphological structure of a class of Polish complex nouns with the initial negative morpheme *nie* to ascertain whether it can be credited as a case of the morphology-syntax interface. We have argued that the linear structure of the nominals consists of three building blocks – the negative morpheme *nie*, the base form of the verb devoid of inflectional morphemes, and the derivational suffix. As a result, the nouns in question demonstrate potential for two alternative, though mutually exclusive, hierarchical structures – right- and left-branching. Our goal has been to analyse both representations with a view to establishing which variant could accurately reflect the hierarchical arrangement of the examined data.

The study has shown that the right-branching structure interpretation would strongly disturb the semantic layer of *nie* derivatives for it would presume the disintegration of the left-hand unit modelled on a corresponding syntactic construction Neg". This in turn would give rise to enforced nominalization and, consequently, the opacity of the synthetic deverbal noun due to the violation of the principle of compositionality. We have seen that the form of the alleged deverbal noun is, in truth, a by-product of affixation or paradigmatic conversion operating on a phrasal unit Neg". Ergo, type C cannot be regarded as a negation or juxtaposition of the right-hand synthetic deverbal noun if the internal organisation of the morphological building blocks is to show congruence with the semantic structure of the discussed nominals.

The analysis has demonstrated that the morphosemantics of Polish complex nouns in *nie* can successfully be captured by the left-branching structure which ensures

that the morphological and semantic representations of the derivatives cohere into a well-structured whole. We have argued that the semantic scope of the negative particle *nie* is over the verbal base while the nominalizing suffix (alternating with $-\emptyset$) extends its *scope* from a verbal modifying affix to a phrasal modifying affix.

We hope the study provides empirical evidence to prove the inter-modular collaboration of the morphological and syntactic tiers in the formation of complex nouns in *nie*. We firmly believe that researching this *sui generis* type of derivation seems not only a valid linguistic undertaking but also a project with important implications for the morphological and syntactic domains.

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A MORPHOLOGICAL ANALYSIS OF POLISH COMPLEX *NIE*-NOUNS:
A CASE OF A MORPHOSYNTACTIC HYBRID

Summary

The aim of this paper is to explore the thus far unstudied territory of a class of Polish hybrid complex nouns with the initial negative morpheme *nie*. The study seeks to determine the morphological structure of what seems to be a case of “syntax-inside-morphology” in the domain of Polish word-formation. Among a rich array of morphological structures in which the negative morpheme in question can be found, there is one word-formation type whose derivational base is, as will be argued below, a syntactic phrase. I wish to demonstrate conclusively that what appears to be sheer concatenation of morphological building blocks is, in fact, a complex noun built on a phrasal unit. This atypical combination of seemingly incompatible categories in separate grammatical domains can be referred to as a morphosyntactic hybrid. I believe that the study may have far-reaching consequences for the descriptive adequacy of the Polish word-formation system and point to new directions in the discussion on the morphology-syntax interface.

Keywords: morphology-syntax interface; left-branching structure; right-branching structure; Polish; complex nouns; the negative morpheme *nie*; hybrid

ANALIZA MORFOLOGICZNA POLSKICH RZECZOWNIKÓW ZŁOŻONYCH Z *NIE*:
PRZYPADEK STRUKTURY MORFOSYNTAKTYCZNEJ

Streszczenie

Celem niniejszego artykułu jest analiza morfologiczna niebadanego do tej pory terytorium polskich rzeczowników z *nie*- o charakterze hybrydowym w kontekście interfejsu morfologiczno-składniowego. Wśród bogatego wachlarza struktur morfologicznych, w których obecny jest negatywny morfem *nie*-, występuje jeden typ słowotwórczy, którego według autorki podstawą słowotwórczą jest fraza syntaktyczna. W artykule wykazano, iż to, co wydaje się czystą konkatencją składników morfologicznych, jest w istocie rzeczownikiem, którego struktura czerpie ze składni. Owo nietypowe połączenie pozornie nieprzystających do siebie kategorii, należących do odrębnych domen gramatycznych, można określić mianem hybrydy morfosyntaktycznej. Autorka wyraża nadzieję, iż niniejsze studium może mieć daleko idące konsekwencje dla opisowej adekwatności polskiego systemu słowotwórczego, a także wskazać nowe kierunki w dyskusji nad interfejsem morfologiczno-składniowym w dziedzinie słowotwórstwa.

Słowa kluczowe: interfejs morfologiczno-składniowy; struktura lewostronnie rozgałęziona; struktura prawostronnie rozgałęziona; język polski; rzeczownik; morfem *nie*-; hybryda