

Language Change in Polish: From Genitive to Accusative Marked Objects. A Synchronic Corpus Study

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Abstract: Since the second half of the twentieth century, scholars have observed a growing tendency to use the accusative instead of the genitive as a case for the object of several Polish verbs. The study provides synchronic corpus data supporting the observation of an incremental shift in case government of certain Polish verbs (e.g. *potrzebować*: to need) and aims to illuminate the phenomenon based on the theoretical notion of transitivity. On the basis of empirical data gathered from a web corpus from 2019, the current state of the progression is outlined, indicating which semantic and morphological groups of verbs are affected, and, if so, to which extent. It is shown in this paper that, in the standard usage of Polish, the object is marked in the genitive when its affectedness is low (i.e. in events low in transitivity), whereas it appears in the accusative when its affectedness is high (i.e. in events exhibiting high transitivity). However, in colloquial Polish, there is a tendency to no longer indicate this distinction, and, in a process of analogical change, the use of the accusative as a structural case (i.e. mainly expressing the syntactic function of objecthood) becomes prevalent. The results of the corpus study suggest that only some groups of verbs governing the genitive case are affected, and that case government is also linked to the semantics of the object and the frequency of the collocation.

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Like the physical appearances of *homo sapiens* and other species on our planet, human (living) languages are constantly subject to change (Croft, 2000: 9 ff.). Most easily this can be observed with new words entering a language, de-

scribing e.g. concepts which did not exist before (Campbell, 2004: 64, 272). At the same time, words which are no longer relevant are not passed on to the following generation (Campbell, 2004: 279). However, similar to human evolution, language change often takes place so slowly that the development does not become apparent in the lifespan of a human (Croft, 2000: 49). For instance, this might be the case with sound shift, where one sound or a combination of sounds in a language comes to be pronounced differently over the course of many generations (Campbell, 2004: 17). Similarly, language change can be observed in the domains of morphology, e.g. when irregular grammatical forms are incrementally replaced by regular ones (Campbell, 2004: 106 ff.), and syntax (Hock / Joseph, 1996: 12 f.). An instance of the latter will be outlined in this article.

Language change is often thought of only as a diachronic phenomenon, but this assumption is not true: like human evolution, it is driven by innovations and synchronic variation at a specific point in time (Croft, 2000: 5, 63). A synchronic clue for an ongoing change within the grammatical system are alternations between the old form and an innovative form, as they can indicate an intermediate state of change in the morphosyntax of a language. Such an alternation in Polish is depicted in the examples (1) and (2), where in both sentences the verbs and objects are identical, but the object is marked once in the genitive case (1) and once in the accusative case (2).

(1) Polish (kameraakcja.pl)¹

A	więc	teraz	potrzeb-uję	jak-iego-ś
and	so	now	need-1SG	some-GEN.SG.M-INDEF

program-u,	który	podzieli-Ø	mi
program-GEN.SG²	which	split-3SG	PRON.DAT.1SG
ten	plik-Ø	na	mniejszy-e.
this.ACC	file-ACC	on	smaller-ACC.PL

So now **I need some program** which will split this file into smaller ones for me.

(2) Polish (elektroda.pl)

Potrzeb-uję	jak-i-ś	program-Ø
need-1SG	some-ACC.SG.M-INDEF	program-ACC.SG

do	tłumaczeni-a	stron-Ø.
to	translation-GEN.SG	page-GEN.PL

I need some program for the translation of the pages.

1 The example sentences in (1) and (2) were taken from the Polish web corpus *plTenTen19* (Jakubiček et al. 2013).

2 A list of all abbreviations used in this article can be found at the end of the article.

The innovation is often perceived as incorrect or *bad style*. However, its use can be observed in spoken language or in written language with less formal register, examples (1) and (2) stemming for instance from online forums. In terms of norm institutions, among the examined dictionaries only one bilingual dictionary (pons.com) allowed the accusative case after the verb *potrzebować* (to need), whereas all other mono- and bilingual dictionaries (sjp.pwn.pl; wsjp.pl; langenscheidt.com) as well as the valency dictionaries by Morciniec et al. (1995: 86), Mędak (2005: 346 f.), and the corpus-based online valency dictionary *Walenty* by Przepiórkowski et al. (2017) name the genitive case as the only correct case after *potrzebować*. In their article from 2014, Pastuchowa and Siuciak outline this “discrepancy between the codified norm and the use” and criticize the refusal of Polish norm authorities to accept the accusative case as a second alternative after *potrzebować* and other Polish verbs indicating a similar development.

However, while a shift is acknowledged in many sources (Fisiak et al., 1978: 85; Holvoet, 1991: 105; Mazur, 1993: 387; Muszyńska, 2009; Czardybon, 2017: 138 ff.), a potential pattern behind the shift is seldomly discussed (Croft, 2000: 121 ff. for a similar development in Russian). Thus, the present study not only provides further empirical data capturing the current status of the case alternation (and probable future shift towards the accusative case) in Polish, but also aims to shed light on the underlying pattern of the shift by means of the theoretical notion of transitivity.

In the following, the example from above will be related to the semantic notion of prototypical transitivity. Due to the scope of this article, we need to limit the analysis to the most relevant transitivity parameter, namely the semantics of the verb (Haspelmath, 2001: 58). In the first section, it will be shown that the government of the genitive with Polish verbs is a means to reflect less transitive events morphosyntactically (the term *event* refers to the semantic content of a sentence). The second section contains a short outline of the methodology and setup of the corpus study and a summary of the results. Finally the implications of the findings for the study of language change and the understanding of the notion of transitivity will be discussed.

Verbs low in transitivity in general and in Polish

The terms *transitive* and its antonym *intransitive* are used commonly to describe whether a verb can appear together with an object or not (Tsunoda, 1994: 4670 f.). Example (3) depicts a typical intransitive verb, *to sleep*, which cannot be combined with an object; in (4), the transitive verb *to whip* occurs with an obligatory object, *the cream*.

- (3) Zosia is sleeping.
- (4) Marek is whipping the cream.

Yet this simple classification falls short when describing varying behavior within the group of so-called *transitive* verbs under specific circumstances, e.g. passivization (Jurkiewicz-Rohrbacher, 2022). This is illustrated by the examples (5), where the sentence can easily be converted from active to passive, and (6), in which this is not possible. Therefore, the possibility of passivization is often named as a further criterion for transitive verbs (Onishi, 2001: 13). As the sentence in (6) fulfills the criterion of a present object, but not the one of passivization, it can be assumed that there must be intermediate stages of transitivity.

- (5) Marek is whipping the cream.
The cream is whipped (by Marek).
- (6) Zosia has a pencil.
Ø

So far, only the syntactic behavior of the verbs was considered. However, the term *transitive* (from Latin *transire*: go across) also implies the importance of semantics, i.e. the meaning of the individual components involved in the sentence. At the level of syntax, these components are commonly called *subject*, *verb* and *object*. At the level of semantics, we will not make use of the terms *subject* and *object* but apply the more concise terminology by Onishi:

- A: the core argument of a transitive clause, which prototypically denotes the controller or initiator of the activity described by the verb;
- O: the other core argument of a transitive clause, which prototypically denotes the participant affected by the activity described by the verb;
- S: the sole argument of an intransitive clause. (Onishi, 2001: 1)

According to Tsunoda (1994: 4671), with a typical transitive verb there is an action *going across* from the A to the O, and moreover, the action causes a change in the O. In example (5) above, which depicts a typically transitive event, *Marek* is considered the A, as he is the one who carries out the action (*whipping*), and *the cream* is the O, which in the course of the action changes its state from liquid to whipped.

Based on the notion of prototypical transitivity first described by Hopper and Thompson (1980: 251 f.), Tsunoda makes out *affectedness of O* as a crucial parameter to determine the level of transitivity of an event (1985: 386; for a detailed account Perschke, 2024: 9 ff.). Consequently, he developed the affectedness scale, as depicted in (7), by means of which verbs with one object can

be ranked in terms of transitivity according to their semantics (1985: 386 ff.). In the scale, group 1 includes verbs indicating a high *affectedness of O*; towards group 7, the *affectedness of O* as indicated by the meaning of the verb steadily decreases; among the subgroups, *a* is always higher in transitivity than *b*. (Tsunoda, 1985: 388).

- (7)
- | | |
|--|---|
| 1. Direct effect on the patient [i.e. the O, remark by the author] | |
| a. Resultative | <i>kill, break, bend</i> |
| b. Non-resultative | <i>hit, shoot, kick, eat</i> |
| 2. Perception | |
| a. Patient more attained | <i>see, hear, find</i> |
| b. Patient less attained | <i>listen, look</i> |
| 3. Pursuit | <i>search, wait, await</i> |
| 4. Knowledge | <i>know, understand, remember,</i>
<i>forget</i> |
| 5. Feeling | <i>love, like, want, need, fond, fear,</i>
<i>afraid, angry, proud, boast</i> |
| 6. Relationship | <i>possess, have, lack, lacking,</i>
<i>resemble, similar, correspond,</i>
<i>consist</i> |
| 7. Ability | <i>capable, proficient, good</i> |

As can be seen now, example (5) from above can be located in the first, most transitive category, whereas example (6) belongs to the sixth category *Relationship*, which is rather low in transitivity, since there is no action *going across* from the A to the O and no change of state in the O. Returning to Polish, it becomes visible that the verb *potrzebować* (to need) belongs to category five *Feeling*, thus it is, according to Tsunoda, also rather low in transitivity.

What is the use of determining the level of transitivity of an event? Hopper and Thompson outline that high and low transitivity can be reflected in morphosyntactic marking, the extent and concrete realization depending on the specific language (1980: 254 f.). Tsunoda defines this more precisely as transitive and non-transitive case frames (1985: 387). In nominative-accusative languages (such as German or Polish), sentences in which the A appears in the nominative and the O in the accusative reflect a transitive case frame (e.g. Polish *Piotr=NOM wyprowadza psa=ACC*. Piotr walks the dog). They can be said to denote a prototypical *normal* event. On the other hand, sentences in which the two main arguments are marked in other cases than nominative and accusative express a non-transitive case frame (e.g. Polish *Jola=NOM potrzebuje pieniędzy=GEN*. Jola needs money). The event they refer to deviates from a prototypically transitive event by denoting a low *affectedness of O*. Thus, verbal government of the genitive can be considered a morphosyntactic reflection of low transitivity in Polish.

In the style of Tsunoda's affectedness scale, Polish verbs governing the genitive case have been grouped according to their semantics. In addition, two morphological features closely associated with the government of the genitive have been considered in the analysis: namely the presence of the prefixes *do-* or *na-*, which are not necessarily linked to low transitivity (Perschke, 2024: 27), and the presence of the middle marker *się*, which is sometimes also called a *de-transitivizer* (Onishi, 2001: 7, for the Russian equivalent *-sja*) and denotes the *affectedness of the A* (or the S) – instead of the O (Bakker, 1994: 24). Interestingly, the two morphosyntactic features just named often appear together, e.g. in the verbs *domagać się* (to demand) or *napić się* (to drink one's fill, to have a drink) (Zagorska Brooks, 1975: 256; Perschke, 2024: 28 ff. for a detailed analysis of this circumstance).

As a result, in (8) five groups of verbs governing the genitive case in Polish have been elaborated, of which the last was split into two subgroups. The groups comprise varying numbers of verbs and the order of the list does not necessarily reflect the hierarchy in terms of transitivity. Also, it is important to note that due to spatial limits, not all verbs governing the genitive in Polish can be included here as examples³. However, those mentioned most frequently in grammars of Polish (Zagorska Brooks, 1975: 379; Bartnicka et al., 2004: 330; Sadowska, 2012: 75; Skibicki, 2016: 32) and secondary literature (Richardson, 2007: 242 f.; Pastuchowa / Siuciak, 2014: 78 f. Czardybon, 2017: 137 ff.) have been covered. Also, the verb *brakować* (to lack) governing an S in the genitive as well as several two-place verbs (i.e. verbs allowing two objects) have been included, since they consolidate the proposed semantic groups. Eventually, it needs to be emphasized that the classification undertaken in this study may be subject to further debate.

(8)

1. Verbs of perception

- sensual perception *śłuchać* (to listen)
- experience *doświadczać* (to experience), *doznawać*
(to sustain)

2. Verbs of pursuit

- searching *szukać* (to look for), *doszukiwać się* (to
want to find out)
- (a)waiting *czekać*⁴ (to wait), *doczekać się* (to wait
until), *oczekiwać* (to await), *spodziewać
się* (to expect)

3 Not included are Polish verbs exhibiting double government depending on the semantics of the O, e.g. verbs governing the partitive genitive or the genitive of superficial or temporary affectedness (for a detailed analysis Perschke, 2024: 15 ff.).

4 The verb *czekać* (to wait) for used to govern the genitive case but now occurs with the preposition *na* and the accusative case (Richardson, 2007: 242).

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- necessity *potrzebować* (to need), *żądać* (to demand), *domagać się* (to demand), *wymagać* (to require), and possibly also *wzywać* (to call for)
 - desire *chcieć* (to want), *pożądać* (to desire), *pragnąć* (to long for), *łaknąć* (to crave), *życzyć komuś*(=DAT) *czegoś*(=GEN) (to wish someone something)
3. Verbs with negative semantics
- absence *brakować* (to lack, to miss; governs an S in the genitive)
 - avoidance, escape *unikać* (to avoid), *wystrzegać się* (to beware of), *uchodzić* (to escape)
 - deprivation, loss *pozbawiać komuś czegoś* (to deprive someone of something), *pozbywać się* (to get rid of), *zapominać* (to forget; alternatively with the preposition *o* + locative)
 - refusal, denial *odmawiać* (to refuse, to deny, to cancel)
 - prohibition *zabraniać komuś czegoś* (to prohibit somebody from doing something)
 - regret *żałować* (to regret)
 - envy *zazdrościć* (to envy)
 - hatred *nienawidzić* (to hate), *nie cierpieć* (to be unable to bear), *nie znosić* (to be unable to bear)
4. Prefix verbs
- with the prefix *na-* *nanosić* (to bring a great amount of), *naprosić* (to invite many)
 - with the prefix *do-*
 - addition *dolewać* (to add by pouring)
 - reaching a temporal or physical boundary *dopełnić* (to fulfill, to accomplish), *dobiegać* (to reach an age), *dotykać* (to touch physically)
5. Verbs with the marker *się*
- a. Emotion middle verbs *bać się* (to be afraid), *brzydzić się* (to be disgusted), *obawiać się* (to fear), *wstydzić się* (to be ashamed)
- b. Prefix verbs with *się*
- with *na...się* *najadać się* (to eat one's fill), *napić się* (to drink one's fill, to have a drink), *napalić się* (to smoke a lot)

- with *do...się* *doczekać się* (to wait until), *domagać się* (to demand), *domyślać się* (to assume), *dopominać się* (to require), *dorabiać się* (to obtain), *doszukiwać się* (to want to find out)

Out of these six groups, eleven exemplary verbs have been chosen for the corpus analysis in order to find out whether there are deviations in case government, i.e. government of the accusative instead of the genitive. The results are presented and discussed in the following section.

Outline and results of the corpus study

The study was conducted in the *plTenTen19* corpus (Jakubiček et al., 2013), which consists of entries in the Polish web from the year 2019. Normally, written language is unfavorable for the study of linguistic innovations as writing happens less spontaneously and language norms have a greater impact. Unfortunately, it takes a great effort to rely on spoken language as empirical data, as it needs to be transcribed first. Thus, a web corpus can be a good solution here: on the one hand, it contains a larger number of tokens than corpora of spoken language (4,253,636,443 in *plTenTen19* versus 2.8 million in the spoken section of the Polish National Corpus *NKJP*; Pęzik, 2012: 39), but at the same time, the register in online forums tends to resemble spoken language with regard to spontaneity and adherence to language norms.

Above, the focus was on verbs only. In reality, however, verbs do not appear on their own but within sentences (from the syntactic point of view) or events (from the semantic point of view). A sentence (or an event) consists of further obligatory components, namely the A, the O, and certain features modifying the meaning at sentence-level. As Tsunoda (1985: 393) states, the semantics of the A generally do not impact the level of transitivity of a sentence (i.e. *affectedness of the O*), which is why they will be neglected in the corpus analysis. On the other hand, the semantics of the O and the parameter of negation have a significant impact on the level of transitivity and are reflected morphosyntactically in Polish: Os may be marked in the partitive genitive when they are not fully affected, which is often the case with mass nouns as in (9); they may occur in the genitive when they have an abstract meaning as in (10a), contrasting with the concrete meaning in example (10b); and as a rule in Polish, Os marked in the accusative in affirmative sentence are marked in the genitive in negated sentences (the so-called *genitive of negation*, Sadowska, 2012: 61, 75), as can be seen in (11).

- (9) Polish (Sadowska, 2012: 77)
- | | | | |
|----|-----------------------------|---------------|-----------------|
| a. | Daj | mi | win- a . |
| | give.IMP | PRON.DAT.1SG | wine-GEN.SG |
| | Give me some (of the) wine. | | |
| b. | Daj | mi | win- o . |
| | give.IMP | PRON. DAT.1SG | wine-ACC.SG |
| | Give me the wine. | | |
- (10) Polish (home.pl)
- | | | | |
|----|--|--------------------|------------|
| a. | Chc-emy | realizacj-i | klarown-ej |
| | want-1PL | implementation-GEN | clear-GEN |
| | polityk-i | Państw-a; [...]. | |
| | policy-GEN | state-GEN | |
| | We want the implementation of a clear state policy; [...]. | | |
- Polish (emebel.pl)
- | | | | |
|----|---|------------------------|------------|
| b. | Chc-emy | mebel- Ø | prost-y, |
| | want-1PL | piece.of.furniture-ACC | simple-ACC |
| | klasyczn-y [...]. | | |
| | classic-ACC | | |
| | We want a simple, classic piece of furniture [...]. | | |
- (11) Polish (personal knowledge)
- | | | | |
|----|--|--------------------|--------------------|
| a. | Natalia | rysuj-e | kwiat-y. |
| | Natalia | draw-1SG | flower-ACC.PL |
| | Natalia is drawing flowers. | | |
| b. | Natalia | nie rysuj-e | kwiat- ów . |
| | Natalia | NEG draw-1SG | flower-GEN.PL |
| | Natalia is not drawing (<i>or</i> does not draw) flowers. | | |

Thus, it is not possible to make a statement on an alternation and potential shift in the case government of a verb without taking into consideration these additional factors.

In order to gather valid percentages, it was necessary to reduce confounding factors: First, all negated sentences were excluded from the hits in the corpus, as in negated sentences it would no longer be possible to determine whether the O is marked in the genitive as a consequence of verbal government or as a consequence of negation, and in general, the statistics would be distorted in favor of the genitive. As a second step, the hits for each verb under scrutiny were limited to five different collocations, i.e. five different combinations of the verb with different, purposefully selected Os. This way, the percentages of accusative and genitive government could be contrasted within each collocation and across the collocations, making visible the impact of the features of O on case government. The Os selected for each verb were supposed to vary in terms of their semantics and hits in the corpus, since it

can be assumed that, due to automation, the shift happens more slowly with very frequent collocations. The results across the collocations allow to draw tentative conclusions on the impact of semantics and frequency of the collocation on the progression of the shift.

In Table 1 below, the case distribution with the verb *potrzebować* (a verb of pursuit) in five different collocations is presented. As can be deduced from the table, the percentage of the accusative as a case for the O varies between 0.21% and 35.25%. Examples (1) and (2) from the introduction are concrete instances (i.e. tokens) of the fourth collocation with the O *program* (program). More precisely, (1) belongs to the fourth column and (2) to the fifth, with the latter accounting for 35.25 % of the valid results.

<i>Potrzebować</i> (to need) with lemma...	Total num- ber of results	Number of ex- cluded results	Occur- rences of O in the GEN	Occur- rences of O in the ACC	Frequency of the ACC (in %)
<i>Pomoc</i> (help)	34,472	20	34,380	72	0.21
<i>pomoc drogowa</i> (roadside assis- tance)	56	0	54	2	3.57
<i>dostęp</i> (access)	542	0	506	36	6.64
<i>program</i> (pro- gram)	524	4	371	149	28.65
<i>plik</i> (file)	125	3	79	43	35.25

Table 1: Distribution of the genitive and the accusative with the verb *potrzebować*

In order to compare the six groups of verbs outlined in the previous section, Table 2 depicts the frequencies of the accusative after the eleven exemplary verbs as a range (for the detailed results like in table 1 and an extended discussion of the verb-internal variation. Perschke 2024: 35 ff.).

Group of verbs	Exemplary verb	Range of the frequency of the ACC (in %)
Verbs of perception:	<i>śłuchać</i> (to listen)	0.78% – 2.06%
Verbs of pursuit:	<i>szukać</i> (to look for)	0.33% – 3.68%
	<i>potrzebować</i> (to need)	0.21% – 35.25%
	<i>chcieć</i> (to want)	0.44% – 91.43%
Verbs with negative semantics:	<i>unikać</i> (to avoid)	0.00% – 0.12%
Prefix verbs:	<i>dotykać</i> (to touch)	1.26% – 29.41%
	<i>dopełnić</i> (to fill)	0.00% – 32.00%
Emotion middle verbs:	<i>bać się</i> (to be afraid)	0.00% – 0.00%
Prefix verbs with <i>się</i> :	<i>doczekać się</i> (to await, to wait until)	0.00% – 0.27%
	<i>dorobić się</i> (to get, to obtain)	0.00% – 0.00%
	<i>najeść się</i> (to eat one's fill)	0.00% – 0.00%

Table 2: Summary of the results of the corpus analysis

Regarding the severely varying ranges in table 2, a few tentative assumptions can be made: with *śłuchać* as a verb of perception as well as with *szukać* and *potrzebować* as verbs of pursuit, first indications of a shift towards the accusative were detected, most advanced with the verb *potrzebować*. The verb *chcieć* stands out in the group of verbs of pursuit, as it displays a split in government depending on the feature *abstractness of O*, with abstract Os clearly favoring the genitive and concrete Os favoring the accusative (Richardson, 2007: 45). With *unikać* representing verbs with negative semantics, the occurrences of the accusative are so few that they could also be mistakes by speakers whose first language is not Polish. Thus, no shift can be proclaimed here. *Dotykać* and *dopełnić* both display collocations with a significant percentage of Os in the accusative indicating an ongoing shift in case government with prefix verbs. With all of the verbs featuring the marker *się*, i.e. *bać się* as an emotion middle verb, and *doczekać się*, *dorobić się* and *najeść się*, few to none occurrences of accusative government were detected, thus leading to the assumption that this group is not affected by a shift in case government.

Summary of the findings and prospects for further research

The general results of the corpus study confirm the existence of an alternating case government with several low-transitivity verbs in Polish, which indicates a likely future shift towards accusative government with these verbs. However, some groups do not display an alternation and thus no signs of a shift: namely those featuring the marker *się*. To consolidate these results, further verbs representing the different groups need to be examined.

On the basis of the five collocations examined for each verb (for the detailed results of the study Perschke, 2024: 35 ff.), one can also make careful assumptions on the progression of language change: i.e. high frequency seems to retard a shift in case government, and regarding the feature *abstractness of O*, a tendency towards abstract Os in the genitive and concrete Os in the accusative is visible. Yet in order to support both findings, for each verb more collocations need to be analyzed.

In terms of transitivity marking, the results of the corpus study suggest that low transitivity is, unlike envisaged by prescriptive organs, no longer marked consistently by the government of the genitive case in the actual usage of Polish. Speakers do not perceive a distinction in meaning between the two cases anymore but treat genitive government as an irregularity, which is slowly replaced by a form perceived as more regular. Thus, in the future, the accusative is likely to become the prevalent case for the marking of the O with high- and low-transitivity verbs alike. It will no longer imply high transitivity, but will only express the syntactic relation of objecthood, and consequently functions as a structural case. In order to back up this finding with further evidence, it is necessary to ascertain the current statuses of the genitive of negation and the partitive genitive, which are also morphosyntactic reflections of low transitivity in Polish. Another matter excluded in this study is a second direction in the development of transitivity marking in Polish: the government of an O in the genitive may also be replaced by analytical constructions with a preposition and an oblique case (Muszyńska, 2009: 4), such as with the verb *czekać* (to wait), which used to govern the genitive case but now appears together with the preposition *na* and an O in the accusative case (Richardson, 2007: 242). A more detailed analysis of the two patterns in comparison remains subject to further research.

Abbreviations

1	first person
3	third person
A	core argument of a transitive clause (actor or initiator of the activity described by the verb)
ACC	accusative
DAT	dative
GEN	genitive
IMP	imperative
INDEF	indefinite
M	masculine
NEG	negative particle
NOM	nominative
O	the other core argument of a transitive clause (participant affected by the activity described by the verb)
PRON	pronoun
PL	plural
S	sole argument of an intransitive clause
SG	singular

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