Here, there, and everywhere?
Patterns of partially superfluous extended exponence

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Abstract

Many patterns of extended exponence have been documented across languages (Harris 2017, Caballero & Harris 2012). While there has been less of a focus on possible and impossible patterns of extended exponence, Grofulović & Müller (2023) propose that among exponents that share features, the less specified exponent is always realised closer to the stem. In this paper, we test this hypothesis by surveying a number of languages with extended exponence and we discuss potential counterexamples.

1. Within You Without You: Introduction

In extended (or multiple) exponence, a category is realized by more than one exponent in an expression (see a.o. Matthews 1972, Harris 2017, Caballero & Harris 2012, Fenger 2023, Müller 2007). A single category can be exponed more than once, for example PL in (1a), where both the Umlaut (*Hals* [hals] vs. *Hälse* [ˈhɛlzə]) and the suffix *-e* ([ə]) mark the plural of the noun.

In other cases, multiple exponence can show a **partial** overlap of features, such that in addition to a feature shared with another exponent, a particular exponent realizes an additional category. This is illustrated by the German dative plural form *Kindern*, (1b), in which the plural is exponed both by *-er* and *-n*, with the suffix *-n* additionally expressing dative case.

(1) a. *Hals* — *Häls-e* German
neck neck<PL>-PL

*Being for the Benefit of Mr. Müller! We dedicate this paper to Gereon whose work on formal aspects of grammar and their cross-linguistic validity we admire. Here we test how one such formal aspect plays out across languages. It seems that the predictions hold up, which is of course great news for the recipient of this festschrift, as we have tried our hardest to come up with clear counterexamples. Happy birthday!

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(1) b. *Kind* — *Kind-er* — *Kind-er-n* German
child child-PL child-PL-DAT.PL

In (1a), then, both exponents express the same feature PL, while in (1b), the exponent *-er*, closer to the stem, expresses only PL and the exponent *-n* expresses PL and DAT. This type of multiple exponence is called "partially superfluous" because there is a partial overlap in features (PL in this case) with one exponent expressing an additional feature (DAT).

Grofulović & Müller (2023) argue that the distribution of features in such partially superfluous multiple exponence is not random, but restricted as described in (2) (see also Anderson 1986, Müller 2007).

(2) *Distribution of Partially Superfluous Extended Exponence* (Grofulović & Müller 2023: 6)
If there are two exponents /a/ $\leftrightarrow$ [f_1] and /b/ $\leftrightarrow$ [f_1, f_2] in a word, /a/ is realized closer to the stem than /b/.

Patterns such as **Kind-n-er* are not expected by (2), because the exponent *-n* would realize DAT and PL while *-er* would only realize PL and thus the exponent with more features would be closer to the stem than the one with fewer features. While Grofulović & Müller (2023) focus on how (2) can be modelled in different frameworks, such as Optimality Theory (OT) and Distributed Morphology (DM), the aim of this paper is to explore the empirical landscape of multiple exponence in order to determine whether the distribution of partially superfluous extended exponence (PSEE) holds. We specifically focus on the interaction of verbal agreement with the subject and object, as multiple exponence has been attested for these configurations but the actual distribution of features over the various morphemes is not clear.

Before discussing our typology, we elaborate on the patterns Grofulović & Müller predict (not) to be attested. After this we discuss potentially problematic data in Section 3. We explore how these data fit with the proposed distribution for PSEE in Section 4.

1.1. Predictions

Section 1 schematically illustrates patterns that are and are not, respectively, compatible with (2). The patterns are to be understood as follows: V, f_1, and f_2

refer to the verb (stem) and two features (exponed by agreement markers). The bracketing reflects the hierarchical organisation of the stem and where these features are expressed. In the patterns predicted not to exist, [f_1, f_2] are expressed closer to the stem than [f_1].

Predicted to exist	Predicted not to exist
[[[V] f_1] f_1,f_2]	*[[[V] f_1,f_2] f_1]

Table 1: Schematic representation of PSEE (2).

Crucially, the hierarchical representation covers various linear orders in which features are expressed in these configurations. This means that a pattern such as [f_1 [[V] f_1,f_2]], linearised as X[f_1]-V-Y[f_1,f_2] is also predicted not to exist, as the exponent expressing two features is hierarchically closer to the stem. Throughout the paper we discuss diagnostics to determine which feature is expressed closer to the stem.

While the patterns in Table 1 represent (un)predicted patterns for any type of feature combination, in this paper we limit ourselves to the interaction of verbal subject and object agreement, for the following reasons. Firstly, PSEE has been reported for these feature combinations in languages from varying families. Second, this will allow for more careful comparison of the interaction of features, as complete paradigms are available to determine whether we are in fact dealing with extended exponence.

2. Across the Universe: Typology

Table 2 shows the languages surveyed for this paper, ordered by their genetic affiliation, and which patterns of extended exponence shown in Table 1 they exhibit. Table 2 reflects a convenience sample based on the existing literature on extended exponence as well as both authors' previous work. The languages in our sample can all show agreement with the subject and the object in transitive structures and the patterns of extended exponence investigated here concern combinations of person and number features of these arguments.

	[[[V] f1] f1,f2]	*[[[V] f1,f2] f1]
Algonquian		
Arapaho (Cowell & Moss Sr. 2008)	✓	✓
Ojibwe (Valentine 2001)	✓	✓
Athabaskan		
Hupa (Campbell 2012)		✓
Carib		
De'Kwana (Hall 1984, 1988)	✓	✓
Chukotko-Kamchatkan		
Chukchi (Bobaljik & Branigan 2006)	✓	✓
Itelmen (Bobaljik 2000)	✓	?
Kiranti		
Camling (Ebert 1997)	✓	
Chintang (Paudyal 2015)	✓	
Dumi (van Driem 1993, Trommer 2006)	✓	
Limbu (van Driem 1987)		✓
Yakkha (Schackow 2015)	✓	✓
Totonacan		
Misantla Totonac (Mackay 1999)	✓	✓
Ulem		
Normalem Ulem (Arkayisi 1990)	✓	✓

Table 2: First look at a non-exhaustive typology of overlap and PSEE patterns.

3. Fixing a Hole: Potential confounds

As Table 2 indicates, several unpredicted patterns based on PSEE seem to be attested. In this section we take a closer look at these patterns, to determine whether they are in fact counterexamples. We discuss three considerations that need to be taken into account before determining whether a data point in fact shows extended exponence: (i) whether or not the morphemes are in the same (word-)domain; (ii) considering the feature make-up of each morpheme in relation to the complete paradigm; (iii) the interaction of Agree and exponence. We illustrate each of these issues on the basis of some data from the typology.

For reasons of space, we cannot discuss patterns of extended exponence in Hupa (Campbell 2012) and Normalem Ulem (Arkayisi 1990).

3.1. The Word: Exponence across words

Frequently reported examples come from Algonquian languages, where there is an abundance of person and number marking throughout the verbal complex. An example from Arapaho is shown in (3), where the preverbal marker encodes person information of one argument, and multiple suffixes encode information of both the subject and the object. This is the case both for the suffix which is glossed as the 'A»P', since it encodes voice morphology, including which argument encodes person/number information that is higher on a specific hierarchy, and the outer suffix which only encodes information of two arguments (that the agent is 2PL, and the patient 1SG). This pattern is quite common across the family, even though the formation of the combination of the S/O suffix differs per language on the exact feature combinations.[1]

(3) *hé=íhoow-nohoob-í -be* Arapaho
2= NEG- see -A»P-2PL>1
'You$_{pl}$ don't see me.' (Cowell & Moss Sr. 2008: 488)

What matters here is the order of the prefix and the (outer) suffix in this case, since they would form a counterexample to the generalization if the prefix is further away from the stem than the suffix is. This is in fact what has been reported in the literature on the status of the preverbal and the postverbal agreement marker (Newell & Piggott 2014, Russel 1999). Based on phonological and syntactic factors, the preverbal marker is phonologically less integrated into the verb stem, and can also be hosted by so-called pre-verbs, that seem to have auxiliary like behaviour. If it is true that the preverbal marker is further away from the stem than the postverbal marker, this would make this type of pattern a counterexample to the distribution of PSEE.

However, there are reasons to assume that these examples are not true instances of extended exponence, and therefore do not form a counterexample to PSEE. As mentioned, the preverbal marker seems to be less integrated into

[1]There is a similar pattern in intransitives, where the suffix encodes both person and number, but the prefix only encodes person. Moreover, in other cases there is an additional morpheme expressing phi-features of one argument, which occurs after the outer suffix.

the verb than the postverbal marker. This raises the question whether both are in the same domain in which the application of extended exponence applies.[2] Specifically, Harris (2017) argues that the domain of application for deriving extended exponence is the (morpho-syntactic) word, and is not present on the clausal level, even though there can be doubling of a marker on different words. Since there is evidence that the data in Arapaho, and many other Algonquian languages, do not constitute a single morpho-syntactic domain, it might be that these are not true counterexamples to PSEE.

Similar reasons might be at play for the Chukotko-Kamchatkan and Carib languages, but are not discussed here for reasons of space. This means that these languages do not form a counterexample to the distribution in (2).

3.2. Glass Onion: Ambiguity and underspecification

Many reported patterns have not been investigated in detail, and specifically have not been discussed in terms of the complete paradigm the morphemes fit in. In order to determine whether a pattern is in fact a case of multiple exponence, it is important to understand the complete feature make-up of the complete paradigm. In this section, we provide a few examples from complex agreement paradigms investigated in detail which might provide counterevidence to the distribution of PSEE in (2).[3]

3.2.1. Kiranti

Kiranti languages show several different patterns of extended exponence, some of which appear to provide counterevidence to the proposed distribution of PSEE and some of which do not contradict it. In Camling, Chintang, Dumi, and Yakkha, there are patterns of overlap or PSEE which are unproblematic. An example from Dumi illustrates. In (4), the verb has three suffixes. *-Ø* is a zero allomorph of the 1SG.A>2.P suffix *-n* while *-si* is an (optional) copy of the suffix *-sti*, both expressing a dual non-first person.

(4) *kaŋki-bi* *na:m* *-Ø* *-si* *-sti* Dumi
water-LOC dunk.underwater-1SG.A>2.P-DU.2.3-DU.2.3(NON.PRT)
'I'll dunk you (DU) underwater.' (van Driem 1993: 147)

[2]Moreover, both affixes occur independently of each other, depending on the other elements.
[3]Full paradigms have been investigated, but are not included for reasons of space.

1SG.A>2.P is fully specified, expressing the person and number of the agent and the person of the patient. The suffix *-si*/*-sti*, however, is underspecified with respect to whether it expresses 2DU or 3DU. PSEE holds in this case: while both suffixes express features of the object (overlap), the first one expresses just its person and the second one its (underspecified) person and number. In Limbu and Yakkha, in contrast, the combination of underspecified and fully specified suffixes gives rise to apparent counterexamples. We discuss the two languages in turn.

Limbu Limbu (Kiranti; van Driem 1987) verbs show extended exponence of features relating to the subject and object. In (5), both *-n* and *-tchi* spell-out of features of the subject. *-n* is a portmanteau for first person subjects acting on second person objects, while *-tchi* marks the transitive subject's number.

(5) *mɛt-n -ɛ -tchi -ge -ø.* Limbu
tell-1>2-PRT-NON.SG.A-EXCL-PFV
'We.EXCL told you.' (van Driem 1987: 100, (122))

In (6), *-baŋ* marks the 1SG subject acting on the third person object in the context of negation and the preterite. *-baŋ* thus expresses the person and number of the subject and the person of the object. The more peripheral marker *-ŋ*, in contrast, only expresses person and number of the subject.

(6) *mɛ- n- hu? -baŋ -si -ŋ -ø.* Limbu
NEG-NEG-bring.and.give-1SG>3/PRT-NON.SG.P-1SG.A-PFV
'I did not bring and give it to them.' (van Driem 1987: 98, (107))

Is this a counterexample to proposed distribution of PSEE? The features expressed by the portmanteau marker *-baŋ* come from two sources while the more peripheral marker *-ŋ* only expresses features of a single source. If the PSEE generalisation only concerns features $f_1, \ldots, f_n$ associated with one phrase, (6) is not a counterexample. If the source of features does not matter, however, the order of *-baŋ* and *-ŋ* contradicts (2).

However, van Driem (1987: 98) points out that *-baŋ* also appears in *intransitive* contexts in the negated preterite. In those cases, *-baŋ* only expresses a 1SG intransitive subject in the preterite. It is possible to analyze

-baŋ as only expressing a 1SG argument in (6) without specifying whether there is a third person object argument or not. This underspecification would make *-baŋ* compatible with intransitive and transitive contexts if the latter have a third object person argument. For other configurations of subject and objects, Limbu has more specific exponents. If *-baŋ* is underspecified, example (6) also conforms to the proposed distribution of PSEE (ignoring PRT, as our focus lies on agreement markers).

Yakkha Yakkha presents a similar case. In (7), the suffix *-i* is closer to the stem than *-g(a)* but Schackow's glosses suggest that *-i* expresses more features, [2PL], than *-g(a)*, which expresses only [2]. On this analysis, with f_1 being person and f_2 being number, *-i* expresses [f_1, f_2] and is closer to the stem than *-g(a)*, expressing [f_1], giving rise to a potential counterexample to PSEE.

(7) *khe-i-g=ha* Yakkha
go[PST]-2PL-2=NMLZ.NON.SG
'You went.' (Schackow 2015: 222)

But Schackow (2015: 222) points out that *-i* can be interpreted as 1PL.EXCL if it co-occurs with *-ŋ*, 2PL if it co-occurs with *-g(a)* (as in (7)), or 1PL.INCL on its own. The three possible interpretations have in common that they refer to a plural speech act participant (SAP). This way, the two suffixes can be analysed as *-i* exponing [SAP, PL] and *-g(a)* exponing [2]. On this analysis, while [SAP] and [2] are both (values of) person features, they are not identical.

The suffix *m-* is similar. Schackow (2015: 225) writes that it codes "first or second person plural agents acting on third person", as shown in (8).

(8) *cek -met -u -m-ci -m -ga=m …* Yakkha
speak-CAUS-3.P-N-3.NON.SG.P-2PL.A-2 =ALT
'Did you make them speak …?' (Schackow 2015: 235)

The relevant markers are the second instance of *-m* and, directly following it, *-ga*. If *-m* expresses 2PL.A, then the analysis of (8) shown in the glosses again contradicts the proposed distribution of PSEE because *-m* expones more features than *-ga* and *-m* is closer to the stem. But *-ga* can also express other participant plural agents, as shown in (9), where it is glossed as 1PL.A.

(9) *pi -wa -m =na.* Yakkha
give-NON.PST[3.P]-1PL.A=NMLZ.SG
'We (pl., incl.) give it to him.' (Schackow 2015: 224)

If *m-* expresses an underspecified plural SAP acting on a third person patient, the sequence of *-m-ga* in (8) need not violate the the proposed distribution of PSEE, as the two suffixes do not express identical feature values.

Yakkha is thus similar to Limbu where, too, the analysis of particular morphemes determines what kind of PSEE we observe. While an analysis in terms of underspecification is more economical than assuming several homophonous morphemes which differ minimally in their feature specifications, it is interesting that the validity of the proposed distribution of PSEE should depend on a particular analysis of morphemes. If (2) reflects a principle of grammar, does it rule out that a reanalysis of *-i* and *-m* as [2PL] and [2PL.A(>3.P)], respectively, could take place?

3.2.2. Totonacan

Person and number agreement in Misantla Totonacan (Mackay 1999) involves both prefixes and suffixes. 1PL plural object agreement marking is realised in different ways depending on the properties of the subject. When the subject is third person, a 1PL object is expressed by a prefix and a suffix, as in (10a). If the subject is second person, the 1PL object is marked by two markers, glossed as 1.OBJ=3.OBJ.PL. In the presence of these markers, there is no second person subject marking, leading to ambiguity regarding the number of the subject, unless the subject is expressed overtly. An example is shown in (10b).

(10) a. *ut kin- tị̃hwan -yaa -na* Misantla Totonac
s/he 1.OBJ-look.for.X-IPFV-2.OBJ
's/he looks for us'

b. *wịš kin= laa- tị̃hwan -yaa*
you.SG 1.OBJ=3.OBJ.PL-look.for.X-IPFV
'you look for us' (Mackay 1999: 175)

kin- and *laa-* can appear independently of each other, see (10a) and (11).

(11) *ta- laa- tɨ̨hwan -la(ɬ)* Misantla Totonac
3.SBJ.PL-3.OBJ.PL-look.for.x-PFV
'they$_1$ looked for them$_2$/each other$_1$' (Mackay 1999: 183)

With respect to PSEE, the relevant example is (10b), where *kin=* and *laa-* co-occur. There is a single first person plural object, so both prefixes appear to be linked to it. Both express person, but *laa-* expresses number in addition. In terms of *features* being expressed by the two markers, the result is a configuration in which a marker closer to the stem expresses two features [f_1, f_2] (person and number), while a more peripheral maker expresses only one feature [f_1]. Again, this goes against observation (2).

However, the values of the person features differ, so it is not clear whether the combination of *kin=* and *laa-* really reflects *partially superfluous* exponence.

The prefix *laa-* could be underspecified for person, being interpreted as contributing PL in the context of *kin=*. In that case, the two prefixes in (10b) do not show any PSEE with the first prefix providing a person feature and the second a number feature. Note, though, that the PL contributed by *kin=* is not necessary for first person plural objects either, as shown by (10a).

While the sequence *kin=laa-* could also be interpreted as a single marker that expresses 1PL.OBJ, (12) shows that the sequence can be interpreted as consisting of two markers, co-indexed with two arguments. In (12), *kin=* cross-references to the first person recipient while *laa-* refers to the theme argument. Given that the sequence can cross-reference two arguments and both parts can appear independently, it seems less likely that *kin=laa-* acts as one marker in some cases. If *laa-* is underspecified for person, the agreement patterns in (10)–(12) conform to the proposed distribution of PSEE.

(12) *Juan kin= laa- įšk̨i -la(ɬ)* (*hun-libru*) Misantla Totonac
Juan 1.OBJ=3.OBJ.PL-give.X.to.Y-PFV DET-book
'Juan gave them to me (the books).' (Mackay 1999: 190)

3.3. Come Together: Agree and extended exponence

Grofulović & Müller (2023: 20–22) discuss forms of extended exponence in Itelmen that do not conform to (2) but argue that these do not pose a problem, because what looks like extended exponence actually reflects two separate

instances of the same features. Chukchi, a closely related language, shows similar patterns of extended exponence. One affix expresses features of the subject and the object, while another expresses features of the subject only (see e.g. Bobaljik & Branigan 2006, Dunn 1999: 179–181). (13) illustrates. The relevant markers are *n-*, a 3SG agent marker in intentional mood, and *-nin*, a portmanteau marker for 3SG subjects and objects.

(13) *ŋelwəl* *ɣən-in* *murəɣ-ŋelwəlʔ-e* Chukchi
herd.3SG.ABS 2SG-POSS.3SG.ABS 1PL-herd-ERG
n-ə-tenti-cqə-jəw-nin
INT.3SG.A-EP-stamp.down-PURP-INTS-3SG.A>3SG.OBJ
'Our herd will stamp your herd flat.' (Dunn 1999: 189)

Bobaljik & Branigan (2006) locate the prefix in C and the suffix in T. The suffix is thus closer to the stem than the prefix. The suffix expresses properties of both arguments, while the prefix expresses the properties of only one, giving rise to the structure [f_1 [[V] f_1,f_2]]], contradicting the proposed distribution of PSEE. (14) shows how does this structure is derived. Bobaljik & Branigan (2006) assume that T agrees with both the subject and the object, both of which move to TP, and C only agrees with the most local argument, the subject.

(14) [$_{CP}$ **C** [$_{TP}$ **SBJ OBJ** [$_{T'}$ **T** … ~~SBJ~~ … ~~OBJ~~]]]

This analysis differs from the copying mechanism Grofulović & Müller (2023: 21) discuss for Itelmen, but the derivation sketched in (14) does not result in the spell-out of a single set of features (the SBJ's ϕ-features) in two places either: the two markers are rather the result of two Agree relations operating cyclically. Because the languages are so closely related, it is not clear which analysis is on the right track and while neither pattern is a problem for (2), the nature of Agree relations is crucial to determine whether certain patterns are in fact extended exponence.

4. We Can Work it Out: Discussion

Three considerations need to be taken into account to determine whether a pattern is a true counterexample or not: (i) the domain of application; (ii) consider the whole paradigm to see if there is underspecification; (iii) the

nature of Agree (which is specific to agreement only potentially). Importantly, these considerations are not only relevant when investigating counterexamples, but also the patterns that seem to fit with the proposed distribution.

To illustrate this more concretely, consider the agreement paradigm of De'Kwana (Carib). De'Kwana has an active alignment split, and marks in intransitives whether the verb agrees with the external argument (EA), on the right of Table 3, or the internal argument (IA), at the bottom of Table 3. In transitive clauses the choice of agreement depends on the interaction of the features. For example, when there is a 3.IA, the features of the EA always are expressed (see the last two columns). All affixes are prefixes.

EA / IA	1	12	13	2	3	INTR.EA
1	–	–	–	mən-	w-	w-
12	–	–	–	–	k-	k-
13	–	–	–	nña:-mən-	nña:n-	(nña:)-n-
2	kə	–	nña:-kə-	–	kə/m-	m-
3	∅	k-	nña:-∅	ə(d)-	n-/∅	n-
INTR.IA	∅/(y-)	k(ɨ)-	(nña:)-∅	ə(d)-	n-	

Table 3: De'Kwana (Hall 1984, 1988: 151, 287, 327).

Of specific interest are the combinations of a first person acting on a second person, and vice versa. In these cases the marker is a new morpheme: Thus 1.EA+2.IA is not a combination of *w*+*əd*, but *mən*. There is a doubling of first person features in case of 1PL.EA+2.IA, since both *mən* and the marker that also appears in the intransitive, *nña:*, are used. This would constitute a counterexample to PSEE, since the more general marker is expressed further away from the stem than the more specific marker. However, this cannot be the full story, since this also happens when the features are on different arguments: 2.EA+1PL.IA: in this case there is partial multiple exponence of first person features again, and again the general marker is further away from the stem.

Are both cases counterexamples, is one of them, or is neither? This question arises because it is not clear what the hierarchical structure of the features in this language is, and whether both morphemes have the same status. If the structure is [EA[IA[V]]], then 2.EA+1PL.IA would not be a counterexample when one analyses the surface position of the IA morpheme as a type of

movement. But this would mean 1PL.EA+2.IA is still a counterexample. If in both cases *nña:* is a clitic and not due to an Agree operation, then neither case constitutes a pattern in favour or against the PSEE.

This then means that in order to make one pattern fit with the generalization, another part of the pattern is lost, or will constitute a counterexample. We have not gone carefully through all the patterns that fit with the generalization. However, at this point it seems that, even though cases such as Carib (and the Chukotko-Kamchatkan languages) might be lost as evidence in favor of the hypothesis, more patterns exist that fit with the proposed distribution of PSEE than those that are counterexamples.

5. The End

We tested the predictions of Grofulović & Müller's (2023) proposed distribution of partially superfluous extended exponence in (2). We looked at a set of 13 languages from 7 language families that have been argued in previous literature to instantiate cases of extended exponence, and we focused on the interaction of subject and object agreement. We arrive at a preliminary conclusion suggesting that patterns of partially superfluous extended exponence in the realm of subject/object verb agreement fit with the hypothesis proposed by Grofulović & Müller (2023).

However, we would like to end on a note of caution. The expected patterns do not seem to be as widely attested as might be initially thought. This raises several questions we conclude with. It is possible that investigating subject/object–verb agreement does not highlight the right type of features to study. However, if there is a general mechanism of creating extended exponence (as proposed by for example Grofulović & Müller 2023), it should not matter which features do or do not show extended exponence. It might be worthwhile to investigate clearly restricted cases of specific features to determine if there are any correlations to be found for which cases extended exponence exist more readily. Even though it thus still has to be seen whether there should be a mechanism that allows for (a)symmetries in extended exponence, it is clear that the proposal made by Grofulović & Müller (2023) and Müller (2007) leads to finding interesting new patterns.

Abbreviations

1 = first person, 2 = second person, 3 = third person, A = agent-like argument of a canonical transitive verb, ABS = absolutive, ALT = alternative, CAUS = causative, DAT = dative, DET = determiner, DM = Distributed Morphology, DU = dual, EA = external argument, EP = epenthetic vowel, ERG = ergative, EXCL = exclusive, IA = internal argument, INCL = inclusive, INT = intentional mood, INTR = intransitive, INTS = intensifier, IPFV = imperfective, LOC = locative, NEG = negative, NMLZ = nominalization, NON = non-x, OBJ = object, OT = Optimality Theory, P = patient-like argument of a canonical transitive verb, PFV = perfective, PL = plural, POSS = possessive, PRT = preterite, PSEE = partially superfluous extended exponence, PST = past, PURP = purposive, SAP = speech act participant, SBJ = subject, SG = singular.

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