

## Double plurals in Breton: Evidence for a split analysis of plurality

Dakota Robinson\*

**Abstract.** Traditional analyses of plurality situate number features within Num(ber)P between NP and DP projections. However, such an analysis does not easily account for all of the properties of plural forms cross-linguistically, particularly those that surface with multiple plural morphemes affixed simultaneously to a single stem. Kramer (2016b) proposes that number features can be exponed on the n category head in addition to on the Num head, generating plural nouns with either one or two plural suffixes. Yet, questions remain about the ability of this analysis to generate multiple plurals in other languages, such as Breton. In this paper, I test the predictions made by Kramer on Breton, which has a complex set of possible plural nominal forms. I present a morphosyntactic description of Breton noun phrases from the framework of Distributed Morphology (Halle & Marantz 1993), and I propose several adjustments to the theory of split *n*/Num plurality as presented by Kramer (2016a). This analysis is an alternative to previous descriptions of Breton number that situate double plurals within theories of lexicality (e.g., Acquaviva 2008) or that assume a strict dichotomy between inflectional and derivational morphology (e.g., Stump 1989, 1990).

Keywords. Breton; Distributed Morphology; morphosyntax; number

- **1. Introduction.** Number in Breton (ISO: bre) is (in)famously complex, with multiple morphological means of marking contrasts between singular, dual, and plural as well as between collective and singulative meanings. While existing literature (e.g., Trépos 1957; Trépos 1996; Le Besco 1997; Jouitteau & Rezac 2015) offers thorough descriptions of Breton number, the structure of nouns in Breton has rarely been the subject of generative analysis. In this paper, I present an analysis of Breton plurals with a focus in particular on double plurals within the frameworks of Distributed Morphology (Halle & Marantz 1993) and split plurality (Kramer 2016b).
- 1.1. Breton Plural Nouns. Singular count nouns are unmarked and can be pluralized by affixing one of several suffixes, selecting based on grammatical gender and animacy. The two most common regular plural suffixes are  $-ed^2$  (typically selects for animate roots) and -ou (typically selects for inanimate roots and accounts for up to two thirds of all plurals (Favereau 1997)):

<sup>\*</sup> I am grateful to Professors Peter Jenks and Hannah Sande (*UC Berkeley*) for their advising of this project. Additionally, I would like to thank Professor Ruth Kramer (*Georgetown University*) for her insights and feedback at multiple stages of this work. All errors are my own. Author: Dakota Robinson, University of California, Berkeley (dakota\_robinson@berkeley.edu)

<sup>&</sup>lt;sup>1</sup> A great deal of inter- and intra-speaker variation exists in Breton, though much of it not thoroughly documented. The extent of variation in production of the plural forms described here is not known, and similarly, it is possible that not all speakers from all dialect backgrounds would judge each example to be acceptable or grammatical. Examples attested in only one source are accompanied by a specific citation. Where no specific source is listed, it is safe to assume that the example is widely attested and uncontroversial.

<sup>&</sup>lt;sup>2</sup> Breton forms are transcribed using the Peurunvan orthography unless otherwise indicated.

(1)	a.	merc'h- ed	
		girl- PL.ANIM	
		'girls'	
	b.	breton- ed	
		Breton- PL.ANIM	
		'Bretons'	

c.	fenestr- où
	window- PL
	'windows'
d.	atant- où
	farm- PL

'farms'

Irregular plural markings can be grouped into two main types. The first type includes plurals formed by suppletion or ablaut:

Singular	Plural	English
buoc'h	saout	'cows'
ki	chas	'dogs'
louarn	lern	'foxes'
den	tud	'people'

Table 1. Examples of irregular plural nouns

Other irregular plurals do not undergo any change to the stem, but are formed by suffixation with one of many less frequent, lexically restricted plural suffixes:

(2)	a.	bleiz- i wolf- PL
		'wolves'
	b.	c'hoar- ezed
		sister- PL
		'sisters'
	c.	mevel- ien
		servant- PL
		'servants' (Trépos 1996)

d. marhadour- ien merchant- PL 'merchants'
e. laer- on thief- PL 'thieves'
f. Brest- iz Brest- PL 'persons from Brest'

In addition to singular and plural forms, a small number of dual nouns exists in Breton, formed by the prefixation of *daou*- (masculine) or *div-ldi*- (feminine) on an unmarked stem. The dual is semantically restricted to naturally-occurring pairs, such as body parts (e.g., *daoulagad* 'eyes'; singular *lagad*). Trépos (1957; 1996) considers this part of the larger plural paradigm, though others consider dual forms to be lexicalized roots (e.g., Acquaviva 2008).

b. div- skouarn
DU.FEM- ear
'(a pair of) ears'

Dual stems can be pluralized to denote multiple pairs, as in *daoulagadoù* 'pairs of eyes' or *daouarnoù* 'pairs of hands' (Favereau 1997:48). Other semantic duals are formed by the regular plural suffix *-où* and pluralized with *-eier* to denote multiple pairs:

(4) a. loer- où b. loer- eier sock- PL sock- PL 'a pair of socks' 'pairs of socks'

1.2. DOUBLE PLURALS. While the system of number morphology described above gives rise to a variety of questions about the structural and semantic properties of Breton plural nominals, one of the most significant concerns double plurals in particular. Double plurals, in the case of Breton, are those that have two plural exponents on a single stem without any semantic distinction from their simple plural counterparts. Examples of double plural count nouns are numerous:

Singular	Plural	Double plural	English
den	tud	tud <b>où</b>	'people'
loen	loened	loened <b>où</b>	'beasts'
merc'h	merc'hed	merc'hedoù	'girls'
park	parkoù	parkoù <b>ier</b>	'parks'
matelas	matelaoù	matelaou <b>ioù</b>	'mattresses'

Table 2. Common double plural nouns

Additional evidence of double plurals comes from the historical derivation of the plural suffix *-eier*, which is a portmanteau of the plural suffixes *-où* and *-ier*. In some varieties of Breton, the form still resembles the two suffixes more closely in its pronunciation as [owjər] or [awjər] (Favereau 1997:35), though it has over time been grammaticalized as a single morpheme.

**2. Proposed analysis: Split plurality.** The theoretical issue that double plurals present arises from the apparent redundancy of multiple plural exponents on a single stem. Previous work has attempted to account for double plurals and address this issue in languages unrelated to Breton. Among these accounts, the analysis provided by Kramer (2016b) of double plurals in Amharic within a Distributed Morphology (Halle & Marantz 1993) framework is generally well-suited to explaining the phenomenon in Breton.

In Amharic, Kramer observes, plurality can be regular (i.e., plural suffix on a noun stem) or irregular (i.e., suppletion or lexically selective suffix). All irregular plurals can optionally also bear regular plural marking, resulting in doubly pluralized nouns that are indistinguishable in meaning from their simple plural counterparts. Kramer suggests that both n and Num are implicated in the structure of these double plurals, with each bearing a plural feature. Double plurals occur when n's plural feature is uninterpretable, triggering the merge of a plural Num. The uninterpretability of n prevents simple and double plurals from differing in meaning, and when Num is null, its plural feature lowers to n, producing a simple irregular plural nominal.

Further exploration of plural nouns cross-linguistically has indicated that n, Num, or both can host number features (Kramer 2021). In light of this proposed typology, I suggest that Breton is among the languages in which number features can be located on n, Num, or both. Within this category of split plural languages there is variation in the productivity of n and Num plural features, in the values that they may have, and in the constraints that interact to result in how these features surface. The following section presents a description of how n and Num plurality are distributed in Breton.

2.1. DISTRIBUTION OF n AND NUM PLURALS IN BRETON. Double plurals in Breton parallel the Amharic data presented by Kramer (2016b), where plural morphology can be exponed on both n and Num heads. Unlike in Amharic, though, it is not only irregular plurals that can be doubly pluralized in Breton. Consistent with Acquaviva's (2008) description, all Breton plural morphemes can be inserted at either n or Num (see parkoùier in Table 2) However, it remains true that the plural morpheme with the greater number of selectional restrictions consistently appears closer to the root in all Breton nominals. For example, -ed, which is lexically restricted to semantically animate nouns, is always inserted closer to the root than -où in a double plural:

```
(5) a. paotr- ed- où b. *paotr- où- ed boy- PL.ANIM- PL boy- PL- PL.ANIM 'boys'
```

The wider range of plurals that can appear on n in Breton compared to those in Amharic (i.e., not only irregular plurals) motivates further examination of how n/Num plurals pattern and interact. Positing that some number morphemes surface at n requires evidence that plural features are indeed hosted on the nominalizing head, rather than in multiple Num projections. Kramer (2021) provides a set of diagnostic tests for distinguishing n plurals from Num plurals, which make specific predictions for Breton's double plurals.

First, a morpheme in n should be able to nominalize other categories. This is indeed the case, as in (6):

```
(6) reuzeud- ien unhappy.ADJ- PL.NMLZ 'unhappy people' (Trépos 1996)
```

Further evidence for plurals in n is their competition with other nominalizing morphemes, such as gender marking. In words where another morpheme is exponed on the n category head closest to the root, the plural -ed applies later, in Num:

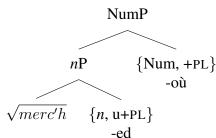
```
(7) saoz- ez- ed
English.ADJ- NMLZ.F- PL.ANIM
'Englishwomen'
```

A second diagnostic of n plurals outlined by Kramer (2021) is their ability to be selected by other category-changing affixes. We find examples in Breton of both the more selectionally restrictive plurals and the less selective  $-o\hat{u}$  feeding further derivation:

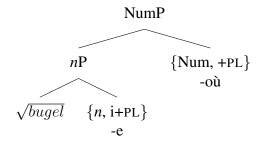
```
(8) a. aval- où- a apple- PL- VBLZ.INF 'to look for apples'
b. preñv- ed- iñ worm- PL.ANIM- VBLZ.INF 'to engender worms'
c. mein- ek rock.PL- ADJ 'rocky'
```

On the other hand, double plurals allow for neither derivational nor inflectional morphology to be added, consistent with the typology of plurals formed in Num. This is evidence for double plurals being formed by n and Num, rather than multiple projections of n, which would not be likely to block further derivation so consistently.

- 2.2. FEATURES OF n AND NUM. Kramer (2016b) argues that double plurals surface when n bears an uninterpretable +PL that triggers the merging of a Num[+PL]. This process is consistent with some double plurals in Breton, but not all. Crucially, many double plurals in Breton differ semantically from their simple plural counterparts. For example, while the double plural merc'hedoù is interchangeable with the simple plural form merc'hed 'girls', bugaleoù denotes multiple groups of children (cf. bugale 'children'). This pair of plural nominals are structurally similar, with the first plural morpheme realized at n and the second at Num. They differ, though, in the interpretability of the +PL feature on n. An uninterpretable +PL lacks semantic content and is checked by an interpretable Num[+PL]. On the other hand, n[i+PL] can be selected by a Num[+PL] head to result in forms like bugaleoù.
- (9) a. merc'hedoù 'girls'



b. bugaleoù 'children'



- 2.3. REPEATED MORPH CONSTRAINT. Further evidence of n plurals in Breton is found in plural diminutive nouns. The diminutive suffix -ig can be affixed to singular nominal stems:
- (10) a. ti- ig house- DIM 'little house'

b. bag- ig boat- DIM 'little boat'

Diminutives can be pluralized by the suffix  $-o\dot{u}$ . However, a plural diminutive must select for either a plural count noun or a mass noun:

- (11) a. ti- ez- ig- où house- PL- DIM- PL 'little houses' (cf. \*tiezig) (Hemon 1948)
  - b. bag- où- ig- où boat- PL- DIM- PL 'little boats' (cf. \*bagoùig)
  - c. chatal- ig- où cattle- DIM- PL 'small cattle' (cf. \*chatalig) (Stump 1989)

Though Kramer (2016b) claims that n can only bear a +PL feature or be unvalued for number, it appears from diminutives in Breton that the number feature on n is in fact always either

+PL or -PL. However, not all plurals surface as double plurals. A Repeated Morph Constraint (Menn & MacWhinney 1984; Hyman & Mchombo 1992) prevents two identical plural suffixes from surfacing consecutively (\*bagoùoù), but licenses the insertion of the same affix when a different morpheme, such as -ig, intervenes.

2.4. DISTRIBUTED MORPHOLOGY OPERATIONS. This description of n and Num features accounts for simple and double plurals in Breton, as well as singular and plural singulatives. However, we must also situate simple plurals within this analysis. To generate simple plurals, Kramer (2016b) argues that a Fusion operation allows n to be realized and Num to be null, resulting in a stem with only one irregular plural marking (which would otherwise be unexpected if the uninterpretable +PL of n is always checked by a Num[+PL]). Likewise, Fusion also generates simple n plurals in Breton, though these include both regular and irregular forms as described above. In words like *paotred* 'boys' where the animate-selecting suffix *-ed* is inserted at n and the Num[+PL] is null, Num's plural feature lowers to n to create a complex head and generate a simple plural nominal.

Differently from Amharic, though, Fusion is not the only means by which simple n plurals are derived in Breton. In cases where n's plural feature is interpretable, it does not need to be checked by a plural Num. Semantic differences between simple and double plural forms of the same noun (e.g., bugale vs. bugaleoù) demonstrate this fact. Words that can be doubly plural without any semantic distinction follow the same pattern of Fusion as their Amharic analogs, because of the uninterpretability of n's +PL feature (Kramer 2016b).

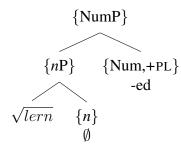
## 3. Alternative analyses.

- 3.1. PREVIOUS ANALYSES AND THEORETICAL ISSUES. Breton possesses a large inventory of number suffixes, which vary in the types of stems for which they may select. This complex number system has been the subject of numerous previous analyses from multiple perspectives, and has raised a variety of theoretical questions. In the following sections, I address some of the most prominent accounts of Breton plural nominals.
- 3.1.1. THE ELSEWHERE CONDITION (KIPARSKY 1982; ANDERSON 1986). In Anderson's (1986) description of process ordering, the case of Breton double plurals is presented as a potential challenge to the Elsewhere Condition as described by Kiparsky (1982). The Elsewhere Condition, and specifically the Subset Principle, is a crucial component of theories of disjunctive rule ordering, stipulating that "whenever one rule is more specific than another in the sense that the forms subject to the first constitute a proper subset of those subject to the second, the application of the more specific rule precludes the later application of the more general, less specific one" (Anderson 1986:4). Applied to morphosyntax, the Subset Principle prevents the merging of a feature to a stem that already bears an identical feature. The problem that Breton plurals pose for this condition is quite clear: when a head bears a plural morpheme, it should not be able to select for a stem that also possesses a +PL feature.

Anderson's proposed solution is that double plurals in Breton do not actually contain redundant features, and therefore do not violate the Subset Principle. Instead, he claims that in words that appear to be doubly pluralized, the first plural morpheme has been reanalyzed as part of the root in a historical morphological change, and that it no longer bears a +PL feature. As evidence for this claim, Anderson argues that words such as *lern* 'foxes', the irregular plural of *louarn*, have a collective or mass noun interpretation, and therefore when pluralized

again with the suffix -ed to produce lerned do not violate the Elsewhere Condition. According to Anderson's analysis, collective nouns never have a plural feature. Because of this, words like lern that are derived from clearly countable nouns behave identically to inherently uncountable nouns like dour 'water'. In Anderson's view, the structure of lerned would be represented as in (12), where the irregular plural lern is the root with which the n category head merges:

(12) lerned 'foxes'



However, verbal agreement patterns challenge this analysis, as collective nouns like *lern* control plural agreement (Jouitteau & Rezac 2015), while true mass nouns control singular agreement, as exemplified in (13):

(13) Aman ar arrebeuri n- eo ket din. here DEF furniture NEG- BE.3SG NEG mine 'The furniture here is not mine.' (Jouitteau 2009-2022)

Plural verbal inflection in agreement with collectives as described by Anderson (1986) (i.e., plural-seeming stems that can bear additional plural morphology) indicates that these collectives do indeed have a +PL feature, and therefore that the solution Anderson proposes to Breton's apparent conflict with the Elsewhere Condition is untenable.

Furthermore, double plurals that are less morphologically opaque (i.e., those with multiple regular plural affixes) behave identically to their simple plural counterparts with respect to agreement. For example, *merc'hed* 'girls' and *merc'hedoù* 'girls' show identical patterns of verbal and pronominal agreement: clear evidence against the suggestion that the simple plural lacks a plural feature.

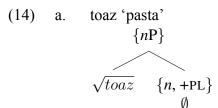
3.1.2. SPLIT MORPHOLOGY (STUMP 1989, 1990). In response to Anderson's (1986) proposal, Stump (1989) challenges the universality of the Elsewhere Condition, presenting double plurals and plurals of collective nouns as the result of successive application of the same morphophonological rule. Breton double plurals are problematic for the Subset Principle in particular: a rule that specifies a certain group of features should preclude the later application of a rule that specifies a proper subset of those features (Kiparsky 1982).

Stump approaches Breton plurals within the context of split morphology (Anderson 1982; Perlmutter 1988), illustrating the challenges that double plurals (among other Breton nominals) pose for a theory in which derivation occurs in the lexicon while inflection only applies postlexically. The ability of inflected forms, including plural nouns, to feed further derivation (i.e., to be selected for by a verbal or adjectival categorizing head) is at odds with the split morphology framework, unless reformulated to indicate that both inflection and derivation are lexical processes but differ only in the types of forms that are generated. A split *n*/Num anal-

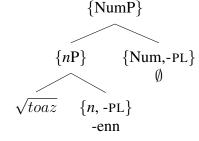
ysis is able to resolve the issues of process ordering highlighted by Stump (1989, 1990, 1991) and renders the inflection/derivation dichotomy irrelevant in the categorization of plural morpheme types.

- 3.1.3. LEXICAL PLURALS. Other analyses of Breton number morphology have also focused on the distinction between processes that occur in the lexicon and those that apply postlexically. Acquaviva (2008) diverges from Stump (1991) in his analysis of Breton double plurals as lexicalized plural roots modified by inflectional plural morphology. The ability of "all exponents... in principle [to have] a lexeme-forming function, albeit with obvious preferences and depending on the vocabulary of single dialects" (Acquaviva 2008:265) is a crucial observation about plural morphemes in Breton: they are unambiguously involved in both word-forming and grammatical functions. While Acquaviva's analysis presents solutions to Stump's (1989) inflectional/derivational dilemma, the structure of complex plural nominals in Breton is still not completely clear. A split *n*/Num approach can account for the featural differences between plurals in *n* and Num, and is better able to account for the existence of simple plural/double plural pairs that do and do not differ semantically, such as (9-a) and (9-b).
- 3.2. MULTIPLE EXPONENCE. Double plurals, including those in Breton, have previously been analyzed as cases of multiple exponence (e.g., Harris 2017). In such an account, the same semantic content is exponed in two separate nodes by copying a +PL feature from one head to another. However, multiple exponence cannot fully predict the ordering of plural morphemes, and does not adequately explain the different syntactic properties of plurals in n and Num, including the derivational abilities of n plural (Kramer 2016b).
- 3.3. Breton As An *n*-only language. Interpretable number features on *n* raise the question of whether a Num projection is strictly obligatory in Breton nominals, and if not, when it does and does not occur. The previous sections demonstrate Breton as a *n*/Num plural language according to the three-way typology presented by Kramer (2021), and Fusion is posited as a means of generating simple plurals (i.e., nominals with number overtly exponed only on *n*). However, while simple regular plurals in Amharic consistently arise from the combination of an *n* unspecified for number and a Num[+PL] head, the requirement for *n* to be specified as +PL or -PL in all Breton nouns means that it is the interpretability of this number feature that governs whether or not it must be checked by a matching Num head. The syntactic and semantic characteristics of bare nominals in Breton suggest the absence of Num in certain forms, situating Breton as a -PL language within the Plural Parameter established by Deprez (2005). A complete description of the semantic properties of Breton nominals is beyond the scope of this paper, but a few key examples highlight the possibility that bare nouns lack a NumP projection.

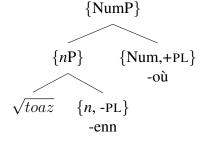
First, bare nominals (i.e., those without overt inflection), have access to basic kind denotation. *Toaz* 'pasta', for example, does not have to be construed as strictly singular simply because it lacks overt pluralization. Deprez's (2005) suggestion that countability/uncountability is a lexical feature, then, is consistent with the theory that the singulative *-enn* is an exponent of the *n* category head, and derives a count noun with a more specific reading. Singulative nouns thus require a Num projection that is either +PL or -PL, whereas bare nominal stems apparently do not.



b. toazenn 'noodle'



c. toazennoù '(types of) pasta'



However, though Num seems not to project in certain nominals, it is clear that not all Breton plurals are exponed on n. The inverse of Kramer's (2021) n-plural diagnostics can be applied to identify plurals that are definitively exponed in a NumP projection. First, not all plurals nominalize: adding  $-o\dot{u}$  to a singulative noun serves only an inflectional purpose, and does not create a different lexeme (e.g., koumoulenn 'cloud'  $\rightarrow komoulenno\dot{u}$  'clouds'). Moreover, the existence of double plurals (e.g.,  $merc'hedo\dot{u}$  'girls') suggests only one interpretable +PL feature, indicating that the two plural morphemes are not both projections of n. The majority of regular plurals of count nouns are also not likely to be exponents of a nominalizing head, given that they do not generally allow for further derivation and are not lexically selective. As Kramer (2021:8) emphasizes, it is also not always the case that an irregular or more lexically selective plural affix is an exponent of n rather than Num. The majority irregular plural affixes in Breton do not appear in double plurals, nor do they possess apparent nominalizing qualities—thus it is not impossible that they are simply cases of allomorphy in Num.

**4. Conclusion.** In this paper, I have presented a novel analysis of double plurals in Breton and tested the predictions that Kramer (2016b, 2021) presents for double plurals in Amharic on this data. Breton fits into the typological category of n/Num plural languages, as evidenced by the nominalizing abilities of plural morphemes and their ability to feed further derivation. Several key differences exist between the Breton and Amharic data, however. First, a wider range of plural forms can be exponed on n. This is accounted for by broadening the criteria for n plurals to include any plural morpheme that is comparatively more selective than the one spelled out in Num. Second, some double plurals do differ semantically from their simple plural forms. For this reason, I posit that a plural feature of n can be interpretable and therefore

result in a meaning change when merged with a Num head that also bears a +PL feature.

The analysis presented here has implications for the typology of number cross-linguistically and contributes to the description of Breton, which remains an under-documented language. Future work should continue to investigate the features of *n* and Num plurals in order to account for other facts of Breton nominal morphology, including the interactions of plural marking with singulative and collective stems.

## References

- Acquaviva, Paolo. 2008. *Lexical plurals: A morphosemantic approach* (Oxford Studies in Theoretical Linguistics 20). Oxford: Oxford University Press.
- Anderson, Stephen R. 1982. Where's morphology? *Linguistic Inquiry* 13(4). 571–612. http://www.jstor.org/stable/4178297.
- Anderson, Stephen R. 1986. Disjunctive ordering in inflectional morphology. *Natural Language & Linguistic Theory* 4(1). 1–31.
- Deprez, Viviane. 2005. Morphological number, semantic number and bare nouns. *Lingua* 115(6). 857–883. https://doi.org/10.1016/j.lingua.2004.01.006.
- Favereau, Francis. 1997. Grammaire du breton contemporain. Morlaix: Skol Vreizh.
- Halle, Morris & Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In Kenneth Hale & Samuel Jay Keyser (eds.), *The View from Building 20*, 111–176. Cambridge, MA: MIT Press.
- Harris, Alice C. 2017. Multiple exponence. Oxford: Oxford University Press.
- Hemon, Roparz. 1948. Grammaire bretonne. La Baule: Skridou Breizh 2nd edn.
- Hyman, Larry M. & Sam Mchombo. 1992. Morphotactic constraints in the Chichewa verb stem. *Berkeley Linguistics Society (BLS)* 18. 350–364. https://doi.org/10.3765/bls.v18i1.1579.
- Jouitteau, Mélanie. 2009-2022. Arbres: Wikigrammaire des dialectes du breton et centre de ressources pour son étude linguistique formelle. http://arbres.iker.cnrs.fr/.
- Jouitteau, Mélanie & Milan Rezac. 2015. Fourteen tests for Breton collectives: An inquiry on number and numerosity. *Lapurdum* 19. 565–597.
- Kiparsky, Paul. 1982. Lexical morphology and phonology. In The Linguistic Society of Korea (ed.), *Linguistics in the morning calm*, 3–91. Seoul: Hanshin Publishing Co.
- Kramer, Ruth. 2016a. The location of gender features in the syntax. *Language and Linguistics Compass* 10(11). 661–677. https://doi.org/10.1111/lnc3.12226.
- Kramer, Ruth. 2016b. A split analysis of plurality: Number in Amharic. *Linguistic Inquiry* 47(3). 527–559. https://doi.org/10.1162/LING\_a\_00220.
- Kramer, Ruth. 2021. Are plural features on Num and/or n?: Diagnostics and case studies. Manuscript.
- Le Besco, Patrick. 1997. Parlons breton: Langue et culture. Paris: L'Harmattan.
- Menn, Lise & Brian MacWhinney. 1984. The repeated morph constraint: Toward an explanation. *Language* 60(3). 519–541. https://doi.org/10.2307/413990.
- Perlmutter, David M. 1988. The split morphology hypothesis: Evidence from Yiddish. In Michael Hammond & Michael Noonan (eds.), *Theoretical morphology*, 79–100. New York: Academic Press.
- Stump, Gregory T. 1989. A note on Breton pluralization and the elsewhere condition. *Natural Language & Linguistic Theory* 7(2). 261–273. https://doi.org/10.1007/BF00138078.

Stump, Gregory T. 1990. Breton inflection and the split morphology hypothesis. In Randall Hendrick & Keir Moulton (eds.), *The syntax of the modern Celtic languages* (Syntax and Semantics 23), 97–119. Leiden: Brill.

Stump, Gregory T. 1991. A paradigm-based theory of morphosemantic mismatches. *Language* 67(4). 675. https://doi.org/10.2307/415074.

Trépos, Pierre. 1996. Grammaire bretonne (5th edition). Brest: Emgleo Breiz.

Trépos, Pierre. 1957. Le pluriel breton. Brest: Emgleo Breiz.