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3RD INTERNATIONAL SYMPOSIUM OF MORPHOLOGY 09/23/2021

A DIACHRONIC APPROACH TO THE Formal anomalies of indexes

INDEXES

- Pronouns
- Agreement markers
- Everything in between
- Here: no possessives

MOTIVATION

- Zingler (2020) investigates "wordhood issues" (mismatches between criteria of phonological and morphological wordhood)
- Exponents of (a) definiteness, (b) case, (c) indexation, and (d) tense in 60 unrelated languages from five macro-areas
- One finding: indexes constitute particularly strong challenge to wordhood, both phonological and morphological

MOTIVATION

- Tallies with idea that indexes are most diverse/heterogeneous grammatical class (e.g., Julien 2002: ch. 5; Fuß 2005: 62-67)
- Wordhood not only complicated by specific constructions (e.g., MWEs) or languages (e.g., Munda) but also by entire grammatical categories crosslinguistically
- Warning: small sample size

OUTLINE

- "Extrametricality"
- "Mobility"/Free variation
 - Word-internal
 - Word-external
- "Duality"

"EXTRAMETRICALITY"

- Fwe (Atlantic-Congo; fwe; Gunnink 2018: 272)
- (1) ndi-a-**endí**-end-i=ko

1SG-PST-RDP-go-PST=LOC₁₇

'I kept going there.'

Locative indexes (classes 16-18) exempt from RDP, unlike all suffixes

"EXTRAMETRICALITY"

- Similar pattern in Jarawara (Arawan; jaa) for 1SG and 2SG, differs from all (other) prefixes – cf. Dixon (2004: ch. 9)
- > No such reduplication effects found for markers of the other three categories
- Fwe markers fully integrated into morphological word but not into phonological word – anti-clitics (Zúñiga 2014)?

- Ability to occur in different slots of otherwise identical morphological or syntactic constructions, <u>without</u> impact on resulting semantics
- Word-internal ~ "free placement" (Crysmann & Bonami 2016)
- In my sample: two indexes, only one marker from the other three categories combined

- San Francisco del Mar Huave (Huavean; hue; Kim 2008: 347)
- (2) (a) m-e-chutu-r (b) chutu-m-ia-r
 - SB-2-sit-2.INTR sit-SB-2-2.INTR
 - 'that you (SG) sit' 'that you (SG) sit'
- Similarly: 3PL object marker in Yeri (Nuclear Torricelli; yev; Wilson 2017: 360) alternates between suffix and infix variant with some stems

- Previous examples illustrate the same word because the relevant forms have the same meaning (cf. also Dixon & Aikhenvald 2003); also Kim (2008: 346)
- Violates idea that word-internal constituents follow rigid order (e.g., Dixon & Aikhenvald 2003; Haspelmath 2011)

- Word-external = index can appear on one of several members of the predicate
- > Again: no semantic differences between the alternatives
- No perfectly analogous examples among the definiteness, case, and tense data

Lillooet (Salishan; lil; van Eijk 1997: 153)

(3) wa'-wit-ás=ma4=λ'u' 'íλ'əm
AUX-3PL-SBJV=HORT=well sing

'Let them sing/they might as well sing.'

(4) wa'-as=má $4=\lambda'u'$ ' $\lambda' = m-wit$

AUX-SBJV=HORT=well sing-**3PL**

'Let them sing/they might as well sing.'

- Similarly for Kharia (Austroasiatic; khr; Peterson 2011: 59) 2SG on verb or on preceding NEG
- Unclear what form class such indexes belong to:
 - Not affixes because hosts from different word classes
 - Not second-position/phrasal/simple clitics, etc.
 - Not words because phonologically integrated with adjacent lexical elements

"DUALITY"

- Index is apparently free phonological and morphological word in one context, but apparently affix in another context
- Not the same as English GEN "clitic" 's, which shows same phonological and morphological behavior across all contexts, i.e.:
 - NP-final
 - voicing feature copied from immediately preceding segment

"DUALITY"



Cf. also 3SG in Hup (Naduhup; jup; Epps 2008)

INTERIM SUMMARY

- Indexes present major challenge to definitions of phonological and morphological wordhood
- Problem is considerable but perhaps not caused by other types of grammatical markers to the same extent
- So, why might indexes be different?

17

POSSIBLE EXPLANATIONS

- "Extrametricality" possibly due to probabilistic/diachronic interaction
- Indexes often at margins (Bybee 1985), only place where extrametricality can manifest itself
- Indexes don't support suffixing preference (Siewierska 2004: 165), and preposed material less integrated (e.g., Himmelmann 2014)
- Higher probability to "delay" full fusion with word domain

18

POSSIBLE EXPLANATIONS

- "Duality:" pronouns often divide into emphatic and reduced variants, unlike case/tense markers
- Emphatic variants are preferably prosodically heavy, which prevents fusion over time
- Reduced variants are probably more token-frequent, which contributes to fusion over time

POSSIBLE EXPLANATIONS

Word-internal "mobility:" perhaps reanalysis of "exuberant agreement," as in Batsbi (Nakh-Daghestanian; bbl; Harris 2008: 265)?



POSSIBLE EXPLANATIONS

- Word-external "mobility:" perhaps because agreement is ultimately with mental entity (referent), not with formal element (Kibrik 2019)
- Indexation compatible with every member of the predicate because all of them mentally tied to the referent in some way (iconic marking)
- How many indexes are actually found? Competition between economy and iconicity (Croft 2003: ch. 4)
- Diachronic path from iconic to economical? Cf. Haiman (1985)

CONCLUSION

- Indexes present a major challenge to wordhood, perhaps more so than exponents of other categories
- Causes seem to be their potential for emphasis and multiple marking suggests interplay between diachrony and usage/communicative patterns
- More data, and from more categories, needed
- More nuanced and consistent terminology required

REFERENCES

Bybee, Joan. 1985. Morphology. Amsterdam: Benjamins.

Croft, William. 2003. Typology and universals. 2nd ed. Cambridge: Cambridge University Press.

Crysmann, Berthold & Olivier Bonami. 2016. Variable morphotactics in Information-Based Morphology. Journal of Linguistics 52, 311-374.

Dixon, R. M. W. 2004. The Jarawara language of southern Amazonia. Oxford: Oxford University Press.

Dixon, R. M. W., & Aikhenvald, Alexandra. 2003. Word: A typological framework. In R. M. W. Dixon & Alexandra Aikhenvald (eds.), Word, 1-41. Cambridge: Cambridge University Press.

Epps, Patience. 2008. A grammar of Hup. Berlin: De Gruyter.

Fuß, Eric. 2005. The rise of agreement. Amsterdam: Benjamins.

Gunnink, Hilde. 2018. A grammar of Fwe. PhD dissertation, University of Gent.

Haiman, John. 1985. Natural syntax. Cambridge: Cambridge University Press.

Harris, Alice. 2008. Explaining exuberant agreement. In Porhällur Eythórsson (ed.), Grammatical change and linguistic theory, 265-283. Amsterdam: Benjamins.

Haspelmath, Martin. 1993. The diachronic externalization of inflection. Linguistics 31, 279-309.

Haspelmath, Martin. 2011. The indeterminacy of word segmentation and the nature of morphology and syntax. Folia Linguistica 45, 31-80.

Himmelmann, Nikolaus. 2014. Asymmetries in the prosodic phrasing of function words: Another look at the suffixing preference. Language 90, 927-960.

Julien, Marit. 2002. Syntactic heads and word formation. Oxford: Oxford University Press.

Kibrik, Andrej. 2019. Rethinking agreement: Cognition-to-form mapping. Cognitive Linguistics 30, 37-83.

Kim, Yuni. 2008. Topics in the phonology and morphology of San Francisco del Mar Huave. PhD dissertation, University of California, Berkeley.

Peterson, John. 2011. A grammar of Kharia. Leiden: Brill.

Reh, Mechthild. 1985. Die Krongo-Sprache (Niinò Mó-dì). Berlin: Reimer.

Siewierska, Anna. 2004. Person. Cambridge: Cambridge University Press.

Van Eijk, Jan. 1997. The Lillooet language. Vancouver: University of British Columbia Press.

Wilson, Jennifer. 2017. A grammar of Yeri. PhD dissertation, State University of New York at Buffalo.

Zingler, Tim. 2020. Wordhood issues: Typology and grammaticalization. PhD dissertation, University of New Mexico.

Zúñiga, Fernando. 2014. (Anti)-cliticization in Mapudungun. Morphology 24, 161-175.