

Split indexicality

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Introduction. Since Kaplan (1977), it is generally assumed that indexicality should be conceived as an inherent property of a discrete subclass of context-dependent elements such as *I*, *you*, *here* or *now* - namely, those elements referring directly to (some parameter of) the utterance context. Focusing on two different phenomena involving the morphological category of person - shiftable indexicals (SIs) and logophoric pronouns (LPs) -, I argue that indexicality is not a property of lexical forms, but the property of a morphological feature, [ACTUAL], that can combine with other features in the person paradigm in a constrained fashion. On this account, inspired by Schlenker (2003), indexical pronouns in languages such as English are elements which morphosemantic makeup involves the feature [ACTUAL], restricting their potential referents to those of the utterance context. By contrast, SIs and LPs in languages such as Tigrinya or Ewe lack an [ACTUAL] feature, allowing their referents to be participants of reported contexts in attitude reports. Combined with the appropriate competition mechanism, the present account is able to explain most of the semantic properties of both SIs and LPs, such as their distributional and interpretive similarities, as well as their common inference-triggering profile, where the choice of a standard, 3rd person pronominal element over either a LP or a SI leads to a disjointness inference about its referent.

Pronominal features and person split. Across the world's languages, pronouns form a rather uniform class. On the morphological side, every pronoun is endowed with a set of ϕ -features such as PERSON, NUMBER and GENDER, which can compose further in the syntax (Noyer 1997; Corbett 2006; Ackema and Neeleman 2018); on the semantics side, features are interpreted as presuppositions (Cooper 1979; Heim 2008; Sauerland 2008; Sauerland and Bobaljik 2022). However, indexicals challenge both of these assumptions: being directly referential devices acting as pointers towards various parameters of the context of utterance, they are by default taken to be atomic lexical items not subject to further decomposition and therefore, distinct with respect to other pro-forms. However, there is supportive evidence for the fact that first- and second-person pronouns are indeed complex forms as well; for instance, in languages marking a clusivity distinction, activation of a DUAL feature can cause the person paradigm to 'split', displaying four distinct first-person forms:

| | Person | SG | DUAL | PL | |
|-----|---------------|-----------|-----------|-------------|---|
| (1) | [1] inclusive | - | <i>ta</i> | <i>tayo</i> | [Ilocano (Austronesian), Bobaljik 2008: (12)] |
| | [1] exclusive | <i>co</i> | - | <i>mi</i> | |
| | [2] | <i>mo</i> | - | <i>yo</i> | |
| | [3] | <i>na</i> | - | <i>da</i> | |

The question we therefore ask is the following: given the observation that indexicals are not atomic, could there be languages that have first (or second) person forms that are not inherently indexical?

Split indexicality. Some languages can 'shift' indexicals such as *I* and *you* under attitude predicates, and use them to refer to participants of the event being reported (Schlenker 2003; Anand 2006). Other languages make use of a dedicated set of logophoric pronouns that fulfill the same function, i.e. refer back to reported authors and addressees, excluding the use of standard 3rd person forms in similar environments:

- (2) *Ramil min / am eʃl-im dip ejt-e*
 Ramil 1SG/3SG work-PST.1SG COMP say.PST.-3SG
 'Ramil_i said that I_{i/s(c)} / he_{*i/j} was working.' [Kazan Tatar (Turkic), personal fieldwork]
- (3) *Asia nyɔnu la xɔse be é / yè bú*
 Asian woman DEF believe.3SG COMP 3SG/ LOG be
 'The asian woman_i believes that she_{*i/j} / she_{i/*j} is lost' [Ewe (Niger-Congo), Bimpeh (2019): (15)]

Both classes seem to share a great deal of distributional and interpretative properties. First, both shiftable indexicals (SIs) and logophoric pronouns (LPs) occur exclusively in attitude reports, with a clear preference for speech predicates, captured by an implicational scale holding for both class of languages (Culy 1994; Deal 2020); second, both classes unambiguously express *de se* readings, i.e. interpretations where the matrix subject has to consciously be self-ascribing the relevant property described by the report (Schlenker 2003; Anand 2006), and iii) both classes exhibit pronoun-agreement mismatches, where third person controllers can trigger first person agreement on the embedded predicate, (4):

- (4) Oumar [inyeme jɛmbɔ paza bolum] min tagi
Oumar LOG sack.DEF drop left.1SG 1SG.OBJ inform.PST

‘Oumar_i told me_{s(c)} that he_i had left without the sack.’

[Donno So (Niger-Congo), Culy 1994: 123]

Building on previous insights from both typological and formal approaches to LPs and SIs, the present work offers a unified analysis of the two classes of pronouns, arguing for their relative morphosemantic uniformity. We propose that both elements consist of an [AUTHOR] feature referring to the speaker of some context, the key difference between SIs and LPs being that the latter have grammaticalized reference to the actual context in a way SIs have not; in LP-systems, the first person spells out a bundle consisting of an [ACTUAL] feature restricting its referent to the utterance context, while the logophor, being devoid of such feature but still specified with [AUTHOR], is interpreted as first person and referring to the speaker of the reported context. The present analysis is shown to be able to capture the aforementioned similarities between the two classes, as well as further data patterns involving disjointness effects and various person restrictions in attitude reports.

Lexical competition through featural variation. We suggest to rethink the featural makeup of both first person SIs and LPs as involving a conservative feature [AUTHOR], allowing them to refer back to authors (holders) of attitudes. ‘Genuine’ first person indexicals such as English or Ewe first person are, by contrast, equipped with an additional feature [ACTUAL] of type $\langle k, k \rangle$ that restricts their referent to the utterance context (glossed as c^*). Attitude verbs are treated as quantifier over contexts, and first and second person forms as complex entities consisting of a pronominal index pro_i and a context pronoun c_i (Schlenker, 2003), (7). We assume the feature sets in (5) for SI-systems and (6) for LP-systems, where person features are interpreted as presuppositions that restrict the domain of interpretation of the expression they are associated with, (8).

(5) **Features of SI systems**

- a. 1: [PART(ICIPANT), AUTHOR]
- b. 2: [PART]

(6) **Features of logophoric systems**

- a. 1: [PART, AUTHOR, ACTUAL]
- b. LOG: [PART, AUTHOR]
- c. 2: [PART]

(7) **Morphosyntax of pronouns:**

- a. 1st: $[[pro_i c_i] \text{ [PART [AUTHOR [ACTUAL]]}]]$
- b. SI/LOG: $[[pro_i c_i] \text{ [PART [AUTHOR]]}]$
- c. 2nd: $[[pro_i c_i] \text{ [PART]}]$

(8) **Semantics of features:**

- a. $\llbracket \text{ACTUAL} \rrbracket^g = \lambda c : c_i = c^*.c_i$
- b. $\llbracket \text{AUTHOR} \rrbracket^g = \lambda c.\lambda x : s(c) \sqsubseteq x.x$
- c. $\llbracket \text{PART} \rrbracket^g = \lambda c.\lambda x : s(c) \sqsubseteq x \vee a(c) \sqsubseteq x.x$

When the [ACTUAL] feature is lexicalized, as in LP-systems, this causes the pronominal paradigm to split, just as in the Ilocano example above for number; the system therefore has two first person forms, only one of them being an indexical in Kaplan’s sense. This accounts for the fact that in most IS-systems, the first person is ambiguous in reference between the reported and the actual speaker, the c_i pronoun being able to be bound or free in attitude reports. The present system also accounts for examples such as (4), where a LOG forms trigger first person agreement, being equipped with an [AUTHOR] feature. The featural hierarchy being asymmetric (features are ordered in terms of logical strength), it naturally allows for a competition account along the lines suggested by Heim (1991) and Sauerland (2008), where semantic markedness predicts that features and their use are subject to the *Maximize Presupposition!* principle; specifically, the use of a feature F in the scale will trigger the antipresupposition that its stronger, higher ranked alternative F' does not hold, deriving disjointness effects in examples like (2)-(3), as well as unattested *I/LOG patterns in LP-systems, explaining why LOGs cannot be used in reports where the subject is first person (Hyman and Comrie, 1981).

1. Ackema, P. and Neeleman, A. (2018). *Features of person: From the inventory of persons to their morphological realization*. MIT Press.
2. Anand, P. (2006). *De De Se*. PhD thesis, MIT.
3. Bimpeh, A. A. (2019). Default de se: The interpretation of the ewe logophor. In *Proceedings of Triple A5*. Universität Tübingen.
4. Bobaljik, J. D. (2008). Missing persons: A case study in morphological universals. *The Linguistic Review*, 25(1-2):203–230.
5. Cooper, R. (1979). The interpretation of pronouns. In Heny, F. and Schnelle, H., editors, *Selections from the Third Groningen Round Table, Syntax and Semantics*, volume 10, pages 61–92. New York: Academic Press.
6. Corbett, G. G. (2006). *Agreement*, volume 109. Cambridge University Press.
7. Culy, C. (1994). Aspects of logophoric marking. *Linguistics*, 8.
8. Deal, A. R. (2020). *A Theory of Indexical Shift*. The MIT Press.
9. Heim, I. (1991). Artikel und definitheit. In *Semantik: Ein Internationales Handbuch*, pages 487–535. Berlin: de Gruyter.
10. Heim, I. (2008). Features on bound pronouns. In Harbour, D., Adger, D., and Béjar, S., editors, *Phi theory: Phi-features across modules and interfaces*. Oxford University Press.
11. Hyman, L. M. and Comrie, B. (1981). Logophoric reference in gokana. *Journal of African Languages and Linguistics* 3: 19-37.
12. Kaplan, D. (1989[1977]). Demonstratives. In Almog, J., Perry, J., and Wettstein, H., editors, *Themes From Kaplan*, pages 481–563. Oxford University Press.
13. Noyer, R. R. (1997). *Features, positions and affixes in autonomous morphological structure*. New York: Garland.
14. Sauerland, U. (2008). On the semantic markedness of phi-features. In Harbour, D., Adger, D., and Béjar, S., editors, *Phi theory: Phi-features across modules and interfaces*. Oxford University Press.
15. Sauerland, U. and Bobaljik, J. D. (2022). Cumulative conjunction and exhaustification in morphology. *Ms., ZAS & Harvard University*.
16. Schlenker, P. (2003). A plea for monsters. *Linguistics and philosophy*, 26(1):29–120.