Egophoricity: a set-based AGREE analysis[1]

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Egophoricity (see Bergqvist and Kittilä 2020 for an overview) is a grammatical phenomenon of a certain marker arising when the sentence is declarative and the subject is a 1st person NP and when the sentence is interrogative and the subject is a 2nd person NP (interrogative flip). Moreover, it is subject to a type of indexical shift when embedded under a speech predicate: the distributional pattern shifts from person-dependency to dependency on the subject referring to participants of the embedded speech act.

Semantics of this phenomenon are arguably well-understood (see Coppock and Wechsler 2018). The main point of that paper is that egophoricity encodes self-ascription (X says P about themselves knowingly), which requires the subject to be the person holding the epistemic authority. This helps to derive the interrogative flip (ibid.), because, after the question 'is it true that p' the hearer is expected to answer with either p, or not p, giving the hearer the epistemic authority and forcing them to self-ascribe if the proposition p contains a 2nd person pronoun.

I will use the Mehweb Dargwa language (see Daniel et al. 2019 for an overview) as an example of a language with egophoricity. Examples (1) and (2) show that the EGO marker is an egophoric one: it arises in declaratives when the subject is a 1st person pronoun and in interrogatives when the subject is a 2nd person pronoun.

(1) nu usaʔ-un-*(na)
I(ABS) (M)fall_asleep:PF-AOR-EGO
'I fell asleep.' (Daniel et al. 2019, 48, p.201)

(2) ħu dag kuda w-aˤq'-un-{*a/na}
you.sg(ABS) yesterday where M-go:PF-AOR-{Q/EGO + Q}
'Where did you go yesterday?' (Daniel et al. 2019, 51, p.202)

What is interesting about Mehweb is that it exhibits optional indexical shift, so we observe 'shifted' egophoricity with both logophoric long-distance reflexives (3) and shifted indexicals (4).

(3) rasul uruχ w-aˤq-ib sune-jni mašin
Rasul(ABS) be.afraid M-LV:PF-AOR self-ERG car(ABS)
b-uˤrʔ-aq{i-ra/*ib} ile
N-break:PF-CAUS-{AOR-EGO/AOR} COMP
'Rasul$_i$ feared that he$_i$ broke the car.' (Daniel et al. 2019, 99, p.214)

(4) rasul uruχ w-aˤq-ib nu-ni mašin
Rasul(ABS) be.afraid M-LV:PF-AOR I-ERG car(ABS)
b-uˤrʔ-aq{i-ra/*ib} ile
N-break:PF-CAUS-{AOR-EGO/AOR} COMP

[1]Abbreviations: ABS: absolutive; ADDR: addresee; AOR: aorist; AUTH: author; CAUS: causative; COMP: complementiser; EGO: egophoric; F: feminine; FUT: future; HAB: habitual; IPF: imperfective; LV: light verb; M: masculine; N: neuter; PART: participant; PF: perfective; SG: singular; Q: question

[2]The results of the project 'Interface phenomena in grammar of languages of Russia: a formal approach', carried out within the framework of the Basic Research Program at the National Research University Higher School of Economics (HSE University) in 2021, are presented in this work.

'Rasul$_i$ feared that he$_i$ broke the car.' (Daniel et al. 2019, 98, p.214)

This, however, just shows that Mehweb does have egophoricity. However, egophoricity in Mehweb is subject to syntactic locality, as shown by the so-called biabsolutive construction, exemplified in (5). Ganenkov (2019) argues that this construction is bi-clausal: the absolutive subject is in the upper clause, while the absoultive object is in the lower one.

(5) nu kung luč'-uwe le-w-*(ra)
I(ABS) book(ABS) read:IPF-CVB.IPFV AUX-M-EGO
'I am reading a book.' (Daniel et al. 2019, 148a, p.228)

However, it is possible to have both arguments in the lower clause, as shown in (6). Crucially, when that happens, the egophoric marker becomes ungrammatical. Since examples (5-6) constitute a minimal pair, the difference being only the syntactic position of the subject, I argue that egophoricity is sensitive to syntactic locality.

(6) nu-ni kung luč'-uwe le-w-(*ra)
I-ERG book(ABS) read:IPF-CVB.IPFV AUX-M-EGO
'I am reading a book.' (Daniel et al. 2019, 148b, p.228)

Thus, we need to give a morphological rule that captures the fact that the same morpheme arises in three contexts: when the subject is a 1st person pronoun in independent or shifted contexts, when the subject is a 2nd person pronoun in independent or shifted contexts, and when the subject is a logophoric reflexive in dependent unshifted contexts. Moreover, we need a principled way of tying together the morphosyntactic part of the phenomenon and its semantic-pragmatic interpretation.

To be more in touch with modern terminology, a theory of egophoricity should do three things: (a) give an account of how it transforms subject's person features into pragmatics; (b) accept a viable approach to shifty agreement phenomena; (c) combine them both in a principled way.

For that, I argue, one needs a primitive-based system of person features by Harbour (2016) and its set-based extension by Hammerly (2021). An example in (7): person features are binary, positive value means an intersection of sets, and negative one means subtraction.

(7) Set-based person system
   a. (i) [AUTH] = {I}; (ii) [ADDR] = {U}; (iii) [PART] = {I, U}; (iv) π = {I, U, O', O", ...} (the universal set of individuals)
   b. 'I' = [+AUTH, +PART, −ADDR](π) = $\pi \cap$ {I} $\cap$ {I,U} − {U} = {I}

I argue that in order to give a rule for egophoric marker we need a following reanalysis of person subfeatures. The superscripted letters *c* and *i* denote context and index, respectively. Both context and index are tuples of contextual information, the difference between them being that index is shifted by attitude predicates, while context may be shifted by monster operators only, see Deal (2020). Another important property is that the index is centered, meaning that an element denoting author in index is obligatorily interpreted *de se*, see Deal (2020).

(8) (a) [AUTH] = $\{I^c, I^i\}$; (b) [ADDR] = $\{U^c, U^i\}$

(9) (a) [PART] = $\{I^c, U^c\}$; (b) [PART-I] = $\{I^i, U^i\}$

Thus, pronouns will be encoded as follows.

(10) a. 1st: [+AUTH, +PART, −ADDR, −PART-I] = $\pi \cap \{I^c, I^i\} \cap \{I^c,U^c\} - \{U^c,U^i\} - \{I^i, U^i\} = \{I^c\}$

b. Logophoric pronoun (speaker): [+AUTH, −PART, −ADDR, +PART-I] = $\pi \cap \{I^c, I^i\} - \{I^c,U^c\} - \{U^c,U^i\} \cap \{I^i, U^i\} = \{I^i\}$

With these feature bundles it becomes possible to state a fairly simple realisation rule for egophoric verbal markers in (11). I also assume that egophoicity is a C-agreement phenomenon, since it is (a) interpreted[3] and (b) subject to constraints on AGREE such as locality (see Ganenkov 2019).

(11) [PART-I]↔ EGO

This rule captures the self-ascription generalisation since the index bears the same function as the logic for egophoricity in Coppock and Wechsler (2018): it is centered, giving us the de se requirement of egophoricity. The rule, however, raises a possibility of the I^i primitive being independent of the 1st person pronoun, which is usually considered to be I^c in current terms. The data appears to prove this prediction correct.

As Hale (1980) and Coppock and Wechsler (2018) notice, evidentiality where the speaker is not the source bleeds egophoricity, since it breaks the epistemic authority rule. I assume that such evidentials change the index, making I^i different from the 1st person pronoun. Another piece of data is the availability of egophoric marking with 3rd person NPs that are knowingly used by speaker to refer to themselves (like using 'mommy' while talking to a child). Lum (2020) reports that it is possible in Dhivehi. Thus, even with the index unchanged, 1st person pronouns are not the only ones that may be identified with I^i.

Thus my analysis seems to correctly unite the apparent syntactic nature of egophoricity with its semantic and pragmatic patterns.

References

• Bergqvist, H. and Kittilä, S. (2020). *Evidentiality, egophoricity and engagement*. Language Science Press. • Coppock, E. and Wechsler, S. (2018). The proper treatment of egophoricity in Kathmandu Newari. *Expressing the self: Cultural diversity and cognitive universals*. • Daniel, M., Dobrushina, N., and Ganenkov, D. (2019). *The Mehweb language: Essays on phonology, morphology and syntax*. Language Science Press. • Deal, A. R. (2020). *A theory of indexical shift: meaning, grammar, and crosslinguistic variation*, volume 82. MIT Press. • Ganenkov, D. (2019). Case and agreement in Mehweb. In Daniel, M., Dobrushina, N., and Ganenkov, D., editors, *The Mehweb language: Essays on phonology, morphology and syntax*. LangSci Press. • Hale, A. (1980). Person markers: Finite conjunct and disjunct verb

[3] A common trait of C-agreement, see McFadden and Sundaresan 2021.

forms in newari. *Papers in South-East Asian Linguistics*, 7:95–106. • Hammerly, C. (2021). A set-based representation of person features: Consequences for AGREE. In Farinella, A. and Hill, A., editors, *Proceedings of NELS 51*. Amherst, MA: GLSA. • Harbour, D. (2016). *Impossible persons*, volume 74. MIT Press. • Lum, J. (2020). An egophoric analysis of Dhivehi verbal morphology. *Evidentiality, egophoricity, and engagement*, page 95. • McFadden, T. and Sundaresan, S. (2021). Unifying species of c-agreement. In Farinella, A. and Hill, A., editors, *Proceedings of NELS 51*. Amherst, MA: GLSA.