On the distinction between egophors and classical evidentials

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1 Introduction

- **Egophoricity**: "...the grammaticalised encoding of the personal or privileged knowledge or involvement of a potential speaker (the primary knower) in a represented event or situation." (San Roque et al. 2018: 2)
  - Areal in the Tibetosphere (Tibet, the Himalayas, Mongolia, Western China); genetic in Barbacoan (western South America); elsewhere in the Caucusus and Trans-New Guinea, et al.
  - Typically a verbal inflection: suffixal to verb complexes, or sometimes in paradigmatically contrasting copulas or auxiliaries (with some other minor, scattered coding).

- **Evidentiality**: "In quite a few languages one has to specify the information source on which a statement is based [...] This is the essence of evidentiality..." (Aikhenvald 2018: 1)
  - Hodgepodge, functionally defined category, likely not a semantic natural class: target narrowed to ‘classical evidentials’ in Section 3.
  - No good summary as to where it appears, and in what form: messy / incorrect / incomplete typologies.

Due to (i) intuitive semantic similarity, and (ii) being in (formal and pragmatic) paradigmatic contrast: are the categories related?

- Garrett (2001), San Roque & Loughnane (2012): egophoricity is a subtype of evidentiality, encoding a special kind of ‘information source.’
- Norcliffe (2018): the matter is language-specific: some languages encode egophoricity as a subtype of evidentiality, while others don’t.
- Widmer (2020): Though the two notions have conceptual overlap, neither contains the other, and they can enter into distinct hierarchical relationships with each other.
The goal: a formal (not descriptive) account of the basic distinction between egophoricity and (classical) evidentiality, in a schematic form that captures their similarities and differences, and is then adaptable to particular languages and the typology of egophoricity.

The hypothesis: both egophors and classical evidentials are markers of learning: they introduce, P-not-at-issue (Koev 2018), a proposition that there is an eventuality of the epistemic authority of the speech act(-like thing) coming to know the content of the clause marked by the learning operator, which is causally responsible for the authority (still) presently knowing it.

• Classical evidentials are complex markers of learning: they introduce a secondary learning eventuality (Koev 2017 a.o.), which is formally related to the main eventuality encoded by the clause. Roughly: a classical evidential marks that that there (is/was) an eventuality of a certain sort, of the authority coming to know about the eventuality encoded by the clause.

• Egophors are simplex markers of learning: they introduce no new eventuality, but rather equate the learning eventuality with the main eventuality encoded by the clause. Roughly: an egophor marks that the eventuality encoded by the clause is itself an eventuality of the authority coming to know about it.

2 Egophors

Egophoricity: a functional semantic category marking that the epistemic authority of a clause is committed to knowing about the eventuality denoted by that clause due to having ‘personal access’ to that eventuality (roughly, by being among its semantically-encoded participants).

Epistemic authority of a clause: the agent epistemically responsible for the speech act(-like thing) made or attributed using that clause. It is canonically:

1. The speaker, for matrix indicative clauses used for assertions;
2. The addressee, for matrix interrogative clauses used for canonical, non-biased questions;
3. The matrix subject, for clauses embedded beneath verbs of speech (and sometimes verbs of thought);
4. The matrix dative object, for clauses embedded beneath verbs of asking that refer to canonical, non-biased questions;
5. The presumed reportative source, for reportative-marked matrix clauses;
6. Split across the speaker and addressee, in matrix clauses used for split speech acts (e.g. confirmatories).

Ü-Tsang Tibetan. (examples constructed; cf. Garrett 2001)
(1) a. (nga) bde.po \{yin\^2/red\}  
    (I) fine \{be.EGO/be\}  
    “I’m fine.”

b. (khóng) bde.po \{#yin/red\}  
    (s/he) fine \{be.EGO/be\}  
    “S/he’s fine.”

(2) a. (khyed.rang) bde.po \{yin\^2/red\} pas  
    you fine \{be.EGO/be\}  
    “Are you alright?” (⇝ “How are you doing?”)

b. (khóng) bde.po \{#yin/red\} pas  
    (s/he) fine \{be.EGO/be\}  
    “Is s/he alright?”

(3) a. (khóng, gis) (khóng,) bde.po \{yin\^2/red\} ze lab pa.red  
    (s/hei, ERG) s/hei fine \{be.EGO/be\} QUOT say PFV  
    “S/hei said s/hei’s fine.”

b. (khóng) (khóng,) bde.po \{yin\^2/red\} bsam gyi.yod.red  
    (s/hei) s/hei fine \{be.EGO/be\} think IPFV  
    “S/hei thinks s/hei’s fine.”

(4) ngas bkra.shis.i la kho.rang,i ga.par phyin pa.yin dris pa.yin  
    I.ERG Tashi, DAT he where go.PST EGO.PFV.AG ask EGO.AG.PFV  
    “I asked Tashi, where hei/si went.” [Garrett 2001: 229, ex. 7]

(5) a. (khóng) bde.po yin za  
    (S/he) fine be.EGO HRS  
    “S/hei’s fine, s/hei says.”

b. (khóng) bde.po red za  
    (S/he) fine be HRS  
    “S/hei’s fine, it’s said.”

(6) (nga tsho) bde.po \{yin\^2/red\} pa  
    (I PL) fine \{be.EGO/be\} CONF  
    “We’re fine, huh?”

Kathmandu Newari (exx. from Hargreaves 2005)

(7) a. jīː a:pwa twan-ā  
    1.ERG much drink-PST.EGO  
    “I drank too much.” [15: 51]

b. wāː a:pwa twan-a  
    3.ERG much drink-PFV  
    “S/he drank too much.” [15: 56]

(8) a. chaːː a:pwa twan-ā lā  
    2.ERG much drink-PST.EGO ?  
    “Did you drink too much?” [15: 53]
b. \textit{wā: a:pwa twan-a lā}
3.ERG much drink-PFV?
“Did s/he drink too much?” [15, ex. 55]

(9) a. \textit{syām-ā wā: a:pwa twan-a dhakā: dhāl-a}
Syam-ERG 3.ERG much drink-PFV COMP say-PFV
“Syam said he drank too much.” [Hargreaves 2018: 83, ex. 8]

b. \textit{syām-ā wā: a:pwa twan-ā dhakā: dhāl-a}
Syam-ERG 3ERG much drink-PST.EGO COMP say-PFV
“Syam said he drank too much.” [Hargreaves 2018: 84, ex. 11]

(10) a. \textit{syām-ā a:pwa twan-a hā}
Syam-ERG much drink-PFV HRS
“It is said that Syam drank too much.” [17, ex. 62]

b. \textit{syām-ā a:pwa twan-ā hā}
Syam-ERG much drink-PST.EGO HRS
“Syam said that he drank too much.” [17, ex. 63]

Whether all of these distinctions surface depends on whether the language has the syntactic resources to encode egophoricity in a certain construction: where it does, the pattern is remarkably cross-linguistically consistent: egophoricity appears to be a genuine semantic natural class.

**Guambiano**: changes depending on clause type (exx. from Norcliffe 2018)

(11) a. (\textit{na}) \textit{ma-r}
(1SG) eat-EGO.SG
“I ate/eat.” [314, ex. 12]

b. (\textit{ñi/ni}) \textit{ma-n}
2/3.PROX/2/3.DIST eat-BPG
“You/s/he ate.” [314, ex. 13]

(12) a. \textit{chi mar-ku ?}
what do-EGO
“What are you doing?” [317, ex. 27]

b. \textit{mu ma ?}
who ate
“Who ate?” [317, ex. 26]

Hard to characterize as a syntactic phenomenon like agreement: compatible with any person value in principle, and not linked to a particular syntactic position in many languages / constructions (13), even construing peripheral roles for the authority not overtly represented (14). [cf. Floyd 2018 on egophoricity vs. agreement]

(13) a. \textit{demetrio=na tit-ma-ti-s}
Demetrio=TOP cut-COMP-PST-EGO.PAT
b. *khong gis nga la bzhas bslab.gnang gi.yod*  
s/he  ERG me DAT song teach IPFV.EGO  
“She is teaching me songs.” [Ü-Tsang Tibetan. Denwood 1999: 137]

(14) a. *bkra.shis la pa.sang gi deb yod*  
Tashi  LOC Pasang  GEN book exist.EGO  
“Tashi has Pasang’s books.” [Ü-Tsang Tibetan. Garrett 2001: 185, ex. 96]  
→ ...because I gave them to him [causer reading]

b. *ŋa35 j35 ci53 u35 tf3 a33 pa53 pu35 cy35*  
1SG just home come.PST rain  fall.PST EGO.PAT  
“Just as I came home it started raining.” [Baima. Chirkova 2017: 452, ex. 21]  
→ ...it rained ‘on me’ [ethical dative / malefactor reading]

Moreover: (lack of) egohoricity is triggered by the kind of speech act a clause is used to perform, even holding syntactic material utterly constant: viz. second-person assertions to oneself (15a); first-person unbiased canonical questions to oneself (15b); assertions about oneself in the third person (15c); non-canonical questions in quiz (15d) or rhetorical (15e) form.


b. *nga la lde.mig yod pas*  
I  LOC key  exist.EGO  
“Do I have the keys?” [Ü-Tsang Tibetan. Garrett 2001: 231, ex. 9]

c. *yang.chen dge.rgan yin*  
Yangchen teacher  be.EGO  
“Yangchen [me] is a teacher.” [Ü-Tsang Tibetan. Garrett 2001: 137, ex. 31]

d. *nu=na ricaurte=mal puz-ta ki*  
2SG.(NOM)=TOP Ricaurte=LOC go:out-PFPPART ?.DISJ  
“Did you go to Ricaurte?” [Awa Pit. Curnow 2002: 614, ex. 8]  
→ the questioner knows the answer, asking only for elicitation purposes

e. *ji ana wan-ā lā*  
I there go-PST.EGO  
“Did I go there? (I most certainly did not!” [Newari. Hale 1980: 100, ex. 30b]  
→ Not a request for information [rhetorical reading]

Finally, mismatching of person value and clause type is not ungrammatical, but triggers pragmatic reasoning as to why the ‘default’ form is not used.

(16) *nga lha.sar phyin pa.red*  
I Lhasa.LOC go,PST PFV  
“I went to Lhasa.” [Chang & Chang 1980: 17]

In determining if egophoric marking is appropriate, the question is not really about person value or clause typing, but:

- Who is the epistemic authority of the clause?
• Is that individual identified with a participant of the eventuality reported by the clause?
• Is the individual’s being such a participant (presumed to be) the reason that they currently know the content of the clause?

The goal is to give a schematic formal characterization of egophoricity that captures this distribution in relation to evidentiality. It will be a simplification in ignoring three things about the typology of egophoricity:

1. Egophors can assign the authority to a more specific participatory role, as in agentive or patientive egophors.
2. Egophors can appear as property-level (subject-only authority) or proposition-level (no restriction on syntactic position for authority).
3. Egophors can be wide in allowing not the participation of the authority in the eventuality, but intimate relation between the authority and one of these participants (cf. Widmer & Zúñiga 2017).

3 Classical evidentials

**Classical evidentiality**: a functional semantic category marking that the epistemic authority of a clause is committed to knowing about the eventuality denoted by that clause because of some distinct learning eventuality it participates in.¹ (cf. Fleck 2007 [Matses]; Lee 2011 [Korean]; Koev 2017 [Bulgarian], presaged by analyses of Sherpa [Woodbury 1986]; Ostyak [Nikolaeva 1999]).

Among classical evidentials, I include the bulk of verbal marking traditionally called ‘evidential’ in the Great Evidentiality Belt (Balkans - Caucasus); the Andes; West Amazonia; California; Korea; the Tibetosphere / Himalayas; Trans-New Guinea, etc. Excluded are:

- ‘Increased authority’ markers, or markers of ‘best possible grounds’ (cf. Faller 2002);
- Conjecturals or assumptives;
- Dedicated reportatives (cf. AnderBois 2014);
- Epistemic modals, including those with evidentially-restricted bases (cf. Matthewson 2007; Vokurková 2017);

A provisional typological space for classical evidentials:

1. **Time**: classical evidentials can either be:

¹Caveat here about reportative learning, which doesn’t require commitment to truth: no non-technical notion really captures what evidentials encode, but ‘learning’ is closest.
• **Finite**: the evidential ‘double-tenses’ the clause, introducing a *learning time* relative to the anchor / speech time (cf. Fleck 2007; Koev 2011; Smirnova 2013). This must stack with primary / ‘ordinary’ tense, which then relates the learning time to the topic / reference time.

• **Non-finite**: the evidential introduces no new time reference, so the learning time is predictable from the topic time and/or aspect (however it is established), combined with the overlap features of the evidential.

2. **Overlap**: classical evidentials can either be:

- **Overlapping**: The evidential requires the learning and topic eventualities to overlap spatiotemporally in a certain way, requiring the learning event to be one of the epistemic authority perceiving something.

- **Non-overlapping**: The evidential requires the learning and topic eventualities not to overlap spatiotemporally in a certain way, requiring the learning event to be ‘distanced’ from the reported eventuality (cf. Faller 2004; Koev 2017). Multiple ‘sources’ of evidence are typically allowed, depending (perception of results, report, etc.).

Caveat: sometimes visual learning in particular is isolated from other perceptual learning, as typologists have long known (cf. the summaries in Aikhenvald 2004).²

<table>
<thead>
<tr>
<th>Overlapping</th>
<th>Non-finite</th>
<th>Finite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tibetan</td>
<td>‘dug’</td>
<td>Korean</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘-te’</td>
</tr>
<tr>
<td>Quechuan</td>
<td>‘-sqa’</td>
<td>Bulgarian</td>
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<td></td>
<td></td>
<td>‘-l’</td>
</tr>
</tbody>
</table>

**Non-finite, overlapping:**

(17) *char.pa btang {gi.‘dug/‘gis}*

<table>
<thead>
<tr>
<th>rain</th>
<th>VBLZ</th>
<th>IPFV.PER</th>
</tr>
</thead>
<tbody>
<tr>
<td>“It’s raining(, as I learn now by perceiving it).”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“It was raining(, as I learned then by perceiving it).”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“It tends to rain(, as I learn by tending to perceive it as it happens).”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“It used to rain(, as I learned by tending to perceive it when it happened).”</td>
<td></td>
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</tr>
</tbody>
</table>

[Ü-Tsang Tibetan.]

**Finite, overlapping:**

(18) *pi-ka o-ass-te-la*

| rain-NOM | fall-PAST-TE-DECL |

²Genuine ‘visual evidentials’ are apparently rare, however – markers that take on visual meanings tend also to be associated with increased authority and egophoric / participatory marking. But rarely, the evidential system arranges itself so that there appear to be markers that genuinely encode just learning by vision, as in Guambiano (cf. Norcliffe 2018).
“It rained(, as I learned afterward by perceiving the results).”

[Korean. Lee 2011: 2, ex. 2b]

**Non-finite, non-overlapping:**

(19) \(\text{para-sha-sqa-n}\)
\(\text{rain-PROG-NX.PST-BPG}\)
“It rained(, as I learned[ed] at some other time / elsewhere).”

[(Cuzco) Quechua. Faller 2004: 56, ex. 13a]

**Finite, non-overlapping:**

(20) \(\text{maria pisal kniga}\)
Maria write.IMPERF.PAST.PLE book
“Maria was writing a book(, as I learned afterward, at some other time / elsewhere).”

[Bulgarian. Smirnova 2013: 497-498, exx. 32-33]

### 4 A descriptive comparison

The ways in which egophors and classical evidentials differ:

1. **Time reference:** Evidentials can introduce a time reference for a learning event, distinct from the time of the reported eventuality; egophors cannot.

(21) \(\text{nid-ak-o-¸ sh}\)
\(\text{go-REC.PAST.INF-REC.PAST.EXP-3}\)
“He left(, as I learned a short time ago, by perceiving the results a short time after it happened.)”

[Matses. Fleck 2007: 598, ex. 15b]

(22) \(\text{utre v sofia štja-l-o da vali}\)
tomorrow in Sofia will-EV-NEUT to rain
“Tomorrow, it will rain in Sofia(, as I learn[ed] elsewhere / at another time).”

[Bulgarian. Koev 2017: 9, ex. 17]

(23) \(\text{adam anla-m1š}\)
man understand-past-INDIR.EV-3SG
“The man understood(, as I learned elsewhere / at another time).”

[Turkish. Şener 2011: 11, ex. 3]

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3Lee’s own gloss is ‘[I inferred that] it had rained.’ She adds the context: ‘The speaker saw the wet ground yesterday.’

4Faller’s own gloss is: ‘sp[eker] was told/infers from the result that it rained.’

5Smirnova shows a ‘reportative’ and ‘inferential’ contexts in which this sentence can be used in *ibid.*, along with glosses such as ‘I heard,’ ‘I inferred,’ etc.

6Fleck’s own gloss is: ‘He (evidently) left (a short time ago, from a place I visited a short time ago).’

7Koev’s own gloss is ‘as I heard.’

8Şener’s own gloss is: ‘It was reported to the speaker that / speaker inferred that, the man understood / has understood.’
(24)  wanxe=si  wanxe=si=a  awat  x-t-ja
    a.lot=WITH  a.lot=WITH=EMPH  decorate.self  DO-PFV-PER.TODP.PL
    x-n-gopa=li=o
    be-PFV-VIS.FP.PL=REP=EMPH
    “(It was seen that) lots and lots (of people) had decorated themselves.”

The disallowance with egophors:

(25)  ngu  gu  chabi  da-pe-lio  ze-li
    1SG  that  teacup  hit-break-PRF  EXEC-SEN.INF
    “I’ve broken that teacup!” [Wutun. Sandman 2018: 186, ex. 21b]

(26)  ngas  sha  bzas  bzhag
    1.ERG  meat  eat.PST  PER.PRF
    “(Gosh!) I ate meat.” [Ü-Tsang Tibetan. Oisel 2017: 114, ex. 70]

A possible exception with future egophors?

(27)  na-pe  liti-min  tru-r
    1SG-TOP  answer-NEG  PROSP-ar

But two things here:

- Here egophors also differ from classical evidentials, which never project learning events into the future of the anchor time (this may be a linguistic universal).
- It may be that all future egophors must be agentive, with the interpretation that the authority not only predicts that they will intentionally do something in the future, but that that are presently planning to do it. [What one says here depends on how one construes the notion of knowing about a future planned event by being its projected agent].

(28)  bi  ri-kunang
    1SG  come-OBJ.FUT
    “I will come (someone else has decided for me).” [Mangghuer. Slater 2003: 200]

2. **Information source distinctions**: Evidentials always encode an ‘information source’ (overlapping / non-overlapping), while egophors make no such distinctions (and seem to have no fixed ‘information source’ of their own).

There are no ‘direct’ versus ‘indirect’ egophors, or any different ‘kinds’ w.r.t. ‘information source.’ Do they require ‘direct’ or ‘perceptual’ evidence? No, for three reasons:

- Egophoric and perceptual marking are in pragmatic *contrast* in languages that have both. Claiming perceptual evidence for something one was involved in is weird, and requires something semantically extraordinary:
Why! I am so useless (lit.: I set an example). I have poured all the ingredients.” [Û-Tsang Tibetan. Oisel 2017: 108, ex. 49]

- Egophorics are compatible with indirect marking where participation in the eventuality allows this: one can say the following just ‘by being the owner,’ even if one hasn’t seen the yaks in question, or bought them directly, etc.

“I have yaks in Tibet.” [Û-Tsang Tibetan. Hill 2013: 48, ex. 2a]

- Some egophorics have no apparent ‘information source’ at all, but are true merely ‘performatively’ or by ‘say-so’ (cf. Garrett 2001):

“If I have money, I will travel.” [Û-Tsang Tibetan. Oisel 2017: 116-117, ex. 78]

“This is your motorcycle (I am giving it to you).” [Wutun. Sandman 2018: 183, ex. 15b]

3. **New knowledge**: Evidentials are compatible with new knowledge, and favor mirativity in some contexts; egophors are incompatible with new knowledge, and can never have mirative readings.

- Some perceptual classical evidentials can grammaticize recent learning (like the Tibetan copula red.bzhag).

- There are two cases where classical evidentials prefer mirativity (as a sub-case of recent learning): (i) where egophors and perceptuals are in paradigmatic contrast, and the perceptual is used where the egophor is expected by default; (ii) where a non-overlapping evidential is used in a direct perception context.

“I have some money (to my surprise; I just checked my pocket).”

[Û-Tsang Tibetan. DeLancey 2018, ex. 23]
4. Participation: Egophors require the participation of the epistemic authority in the reported eventuality; evidentials do not.\(^{10}\)

(35) a. \((e)-ya i’-ya chinguiña-a ma mi’ke-’ mankalaa-ntsuyu\)
1-FOC 1-FOC banana.type-FOC again look.for-SR again.take.out-PROG-EGO
“I, I’m going to look for chinguiña bananas and take some more out [as an active, involved party].”

b. \(ju-tyu-ve\)
be-NEG-N.EGO
“There aren’t any. [as an uninvolved party].”
[Cha’palaa. Floyd 2018: 275, exx. 4.4-5]

And the ways in which they’re the same:

1. Learning effects: Both egophors and evidentials can only be used where the epistemic authority \textit{comes to know} about the existence of the reported eventuality in the relevant way – they are inappropriate where learning is absent, delayed, or forgotten (even if the other relevant conditions are met) [cf. Oisel 2017].

- Delayed learning:

(36) \(mdangs.dgong gnyid.lam nang la ngas gos.thung phid bzhag\)
last-night dream in LOC.1.ERG pants take-off PRF.PER
“I have taken off my pants in my sleep (lit.: in my dream) last night.”
[Ú-Tsang Tibetan. Oisel 2017: 113, ex. 69]

(37) \(kogato vljazo-x niksùn trie-še njakav-i zapis-i toj zaličava-l\)
when enter-PAST Nixon erase-PAST some-PL tape-PL he remove-EV
ulik-i-te
clue-PL-DEF
“When I walked in, (I saw) Nixon erase some tapes. He was covering up the clues,( as I learned later).” [Bulgarian. Koev 2017: 4, ex. 6]

- Forgetting:

(38) \(bkra.shis new.york la phyin pa.red nga bkra.shis yin byas.tsang\)
Tashi New-York LOC go.PST PFV I Tashi be.EGO therefore
nga new.york la phyin \{pa.red/#pa.yin\}
I New-York LOC go.PST \{PFV/PFV.EGO.AG\}
“Tashi went to New York. I am Trashi. Therefore, I went to New York.”
[Ú-Tsang Tibetan. Garrett 2001: 40-41, ex. 19]
(39) `macha-sqa-s imaymana-ta rimayu-sqa-ni
drink-PP-REP whateverACC say-NX.PST-1
   “Drunk, I said a lot of things.”
   [(Cuzco) Quechua. Faller 2004: 75, ex. 45b]

Also: perceptual evidentials in general tend to fade in felicity as the time of the perception retreats into the past, making its epistemic status less reliable (cf. Caplow 2017).

2. **Origo shift**: Egophors and evidentials ‘follow’ the epistemic authority based on the clause type and speech act in the exact same ways.

   - In interrogatives (cf. San Roque et al. 2017):
     
     (40) a. `mbaluta-na iwa-tia
         plane-SPEC land-PFV.VIS.P
         “The plane landed (I saw).”

     b. `mbaluta-na iwa-tia=pe?
         plane-SPEC land-PFV.VIS.P=Q
         “Did the plane land (you saw)?” [Duna. San Roque 2018: 409, ex. 1]

   - In speech reports / with reportative markers:
     
     (41) a. `juan trent-an misak amtru-shi sha
         Juan say-an people come-SENS.EV REP.EV
         “Juan said that people are coming (Juan knows because he can hear or feel them approaching).”

     b. `kha.lag ‘di bro.ba.chen.po ‘dug za
         food this tasty be.PER HRS
         “This food is tasty, they say, on the basis of having perceived [tasted this].”
         [Ü-Tsang Tibetan.]

   Caveat: I’m not sure if things always work this way with ‘indirect’ evidentials (Bulgarian examples).

3. **Not-at-issue content**: Both egophors and evidentials introduce a not-at-issue, discourse-new, semantically-encoded requirement on the epistemic authority.

<table>
<thead>
<tr>
<th>Semantic property</th>
<th>Egophors</th>
<th>Classical evidentials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allows distinct time reference</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Encodes information source distinctions</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Compatible with new knowledge</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Requires participation of epistemic authority</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Exhibits learning effects</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Undergoes origo shift</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Introduces not-at-issue content</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
5 The formal proposal, its results

The semantic primitive learn (cf. KNOW in Widmer & Zúñiga 2017; Faller’s 2004 notion of an m-trace):

(42) \[ \text{learn}(e, e', \odot) \text{ iff } e' \text{ is an eventuality in which } \odot \text{ comes to know about the existence of } e, \text{ which is causally responsible for } \odot \text{ presently knowing this.} \]

And the ur-denotations for EGO (an egophor) and EVID (a classical evidential), where the bullet separates at-issue / proffered from not-at-issue content:

(43) a. \[ \text{[EGO]}^\odot = \lambda p_{vt} \cdot \lambda e_v \cdot p(e) \bullet \text{LEARN}(e, e, \odot) \]
b. \[ \text{[EVID]}^\odot = \lambda p_{vt} \cdot \lambda e_v \cdot \lambda e'_v \cdot p(e) \bullet \text{LEARN}(e, e', \odot) \]

The predicated results for our seven observations, starting with the differences:

1. Time reference:
   Evidentials require the introduction of a reported eventuality \( e \), and a learning event \( e' \), each of which must have a timespan – these may not be identical. Egophors introduce only one event \( e \), which can have only one timespan.
2. Information source distinctions:
   If information source distinctions result from the spatiotemporal or mereological relations between two eventualities (cf. Speas 2010, Kalsang et al. 2013, Koev 2017), then evidentials can encode distinct sources by having distinct relations (overlapping vs. non-overlapping). For egophors:
   - There cannot be (information source-wise) different kinds of egophors, since only one relation between learning and reported eventuality is possible (identity).
   - The ‘information source’ that results is just whatever is made possible by learning from an eventuality itself that it exists by participating in it, which corresponds to no traditional typological notion of ‘information source.’

3. New knowledge:
   With two eventualities, there are time configurations that allow evidentials to report that the authority newly learns something. There are no such configurations with egophors:
   - In the past, the event must already have finished, and so must the learning;
   - In the present, there is no time at which the egophor can present the eventuality as occurring, and the authority not already knowing about it (the authority ‘always already’ knows about the eventuality);
   - In the future, the eventuality has not yet occurred.

Mirativity is ruled out, since a fortiori it requires new knowledge / ‘discovery’ (cf. Carol 2017).

4. Participation:
   The definition of learn requires the authority \( \odot \) to be a participant in \( e' \), which is an event of \( \odot \) learning about the existence of some eventuality. For evidentials, \( e' \) is not (need not be) the reported eventuality \( e \), so \( \odot \) need not participate in it; but for egophors, it must since, \( e \) itself is an eventuality of \( \odot \) gaining this knowledge (there is ‘nowhere else to go’ for the authority).

And for the cases where they’re the same:

1. Learning effects:
   Evidentials and egophors make equal reference to know, which encodes these learning effects in the same way.

2. Origo shift:
   Evidentials and egophors make equal reference to the parameter \( \odot \), the epistemic authority, so any operators that shift it do so equally for either sort of marker, in the same environments.

3. Not-at-issue content:
   It’s a semantic universal that all functional categories placing special commitments on the epistemic authority do so not-at-issue (epistemic modals, conjecturals, best-possible-grounds markers, evidentials, egophors, relative-authority markers, etc.).
6 A typology of egophoricity

The dimensions (I’m aware of) along which egophoricity varies cross-linguistically: the urdenotation should be modified to suit them (and their nature may reveal more about what egophoricity ‘fundamentally’ is semantically).

- **Scope**: Egophoricity can be either:

  - **Property-level**: The epistemic authority is identified with the subject of the clause.
    
    * e.g. Awa Pit -w (past egophoric marker): targets only the subject, regardless of participatory role.
    
    * (44) *nash-na=kima na=na kal*
      *afternoon-INF=until 'SG.(NOM)=TOP work*
      *ki-mtu-ata-w*
      *do-IMPF-PAST-CONJ:SUBJ*
      *“I was working till late.” [Awa Pit. Curnow 2002: 618, ex. 9]*
    
    (45) *payta-ma-ta-w*
      *sweat-COMP-PAST-CONJ:SUBJ*
      *“I sweated.” [Awa Pit. Curnow 2002: 618, ex. 12]*

  - **Proposition-level**: There are no restrictions on the syntactic role the authority occupies (and it may occupy none at all).
    
    * [\[EGO\]^\circ] = \lambda P_{v,e}. \lambda e_v. \lambda x_e. P(e)(x) • LEARN(e, e, \circ)
    
    * e.g. Ü-Tsang Tibetan *gi.yod* (imperfective egophoric marker): compatible with any syntactic position, and sometimes none (with a reconstructed role) [cf. (13b) above].

- **Participatory role**: The egophor may restrict the role the authority plays in the reported eventuality as follows:

  - **Agentive**: The authority must be a proto-agent-like (sometimes also active experiencer) participant in the eventuality, in the Dowtyan sense. Disallows the reconstruction of peripheral roles.
    
    * e.g. Newari -ā (past egophoric marker): not compatible with verbs whose agent cannot be construed as an agent, and with verbs that go either way, must have an agentive reading.
    
    * (46) *ji lakha-e dun-a*
      *1.ABS water-LOC submerge-PFV.DJ*
      *“I sank into the water.” [Newari. Hargreaves 2005: 14, ex. 45]*
    
    (47) *ji lakha-e dun-ā*
      *1.ABS water-LOC submerge-PST.CJ*
      *“I dipped into the water.” (intentional)*
      *[Newari. Hargreaves 2005: 14, ex. 46]*
– **Patientive**: The authority must be sufficiently proto-patient-like (not an agent), though exactly how proto-patient-like varies cross-linguistically. Allows for the reconstruction of peripheral oblique roles (benefactor / malefactor).

  * e.g. Guambiano *-tan* (used for both egophoric and perceptual marking, but when egophoric, must be patientive).

  * (48) *ishuk (nan) mucha-tan*
    
    woman (1SG.OBJ) kiss-*tan*
    
    “The woman kissed me.” [Guambiano. Norcliffe 2018: 332, ex. 73]

  * (49) *(nan) pesrik ki-tan piri-mu-ik-pe*
    
    (1SG.OBJ) bad be-*tan* bath-NEG-NMLZ-TOP
    
    “I feel bad/yucky when I don’t have a bath.”
    
    [Guambiano. Norcliffe 2018: 332, ex. 75]

– **Neutral**: The authority may occupy any role. If none is projected by the verb (or related to something projected by the verb by wide egophoricity), then some peripheral roles, like causer, may be reconstructed.

  * e.g. Ü-Tsang Tibetan *god* (egophoric attributive copula, used with adjectives):

  * (50) *kha.lag ‘di zhim.po yod*
    
    food this delicious.POS be.EGO
    
    “This food is delicious(, as I know because I made it).”
    
    [Ü-Tsang Tibetan]

  – **Wideness**: Egophoricity may be:

    – **Narrow**: The authority must itself be a participant of the reported eventuality.

      * (51) *nga’i bu ‘gro gi.yin*
        
        my son go FUT.AG.EGO
        
        Intended: “My son will go.”
        

    – **Wide**: The authority may sometimes be in a genitive relation to such a participant, and know of the eventuality *in virtue of* that genitive relation.

      * (52) *nga’i bu skam.po yod*
        
        my son thin.POS be.EGO
        
        “My son is thin.” [Ü-Tsang Tibetan. Garrett 2001: 179, ex. 82]

    – **Widest**: The authority may sometimes be in an intimate relation to such a participant (cf. intimacy as encoded in determiner and tense systems with distance relations), and know of the eventuality *in virtue of* that intimate relation.

      * (53) *pʰisā=ni nanī tsepā na:=tcu*
        
        child=DEF last.year very be.sick=PFV.EGO.UND
        
        “The child was sick often last year (the child belongs to the speaker’s family).”
        
        [Shigatse Tibetan. Widmer & Zúñiga 2017: 426, ex. 11b]